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Ready for Implementation

**Technical and Legal Aspects of a
Currency Transaction Tax
and Its Implementation in the EU**

Bruno Jetin / Lieven Denys

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Technical and Legal Aspects of a Currency Transaction Tax and Its Implementation in the EU

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ABBREVIATIONS

BIS	-	Bank for International Settlements
CLS Bank	-	Continuous Link Settlement Bank
CTT	-	Currency Transaction Tax
EC	-	European Community
ECB	-	European Central Bank
EEC	-	European Economic Community
EMS	-	European Monetary System
EMU	-	Economic and Monetary Union
ERM	-	Exchange Rate Mechanism
ESCB	-	European System of Central Banks
EU	-	European Union
EUC	-	European Union Constitution 2004
ECJ	-	European Court of Justice
Eurogroup	-	Group of member states of the European Union whose currency is the euro
FATF	-	Financial Action Task Force
FOREX	-	Foreign Exchange
GATS	-	General Agreement on Trade in Services
GNP	-	Gross National Product
ML Directives	-	European Union Directives on Money Laundering
MDG	-	Millennium Development Goals
MS	-	Member States of the European Union
NDF	-	non-deliverable forwards
NGO	-	Non Governmental Organisation
IMF	-	International Monetary Fund
KYC	-	Know Your Customer
ODA	-	Official Development Aid
OTC	-	Over-The-Counter
OECD	-	Organisation for Economic Cooperation and Development
OLAF	-	Office Européen de Lutte Anti-Fraude (European Anti-Fraud Office)
RTGS	-	Real-Time Gross Settlement
SFSD	-	Solidarity Fund for Sustainable Development
SWIFT	-	Society for Worldwide Interbank Financial Telecommunication
TEC	-	Treaty establishing the European Community
TEU	-	Treaty of the European Union
UN	-	United Nations
VAT	-	Value-added tax
WTO	-	World Trade Organisation

EXECUTIVE SUMMARY

This study brings the important technical and legal details of the Currency Transaction Tax (CTT) to the debate table. It proves explicitly the feasibility of a CTT implementation and clarifies its political, technical, institutional and legal aspects. It is, so far, the most in-depth analysis of the possibilities of an implementation of the CTT and the challenges emerging from this implementation.

Eventually the implementation of a CTT depends on the political will and especially the pressure by the global justice movement on governments and decision makers. The technical feasibility of a sound project does not ensure its implementation, as politics are shaped by interest groups and power struggles. However, this study shows that there are no more formal, legal or technical excuses behind which opponents or hesitant supporters of a CTT can hide.

PART I: TECHNICAL, INSTITUTIONAL AND POLITICAL ISSUES

1. Chapter: THE CASE FOR A CURRENCY TRANSACTION TAX

In the first chapter, Bruno Jetin introduces the concept of the Currency Transaction Tax (CTT). After the Bretton Woods system of fixed exchange rates was abolished and substituted by a non-system of freely-floating currencies, the volatility of currencies and financial markets became one of the major sources of crises, especially in the developing world. James Tobin's idea of a currency transaction tax ("Tobin tax") was aimed at curbing volatility and preventing financial crises. More generally, the CTT is designed to restore national policy autonomy by governing the international foreign exchange market.

The author comes to the conclusion that "exchange rate volatility matters" because it negatively affects economic growth, international trade, investment, employment and wages. This is not only the case for developing countries with weak currencies, but also true for huge markets with strong currencies like the Euro zone.

Exchange rates can be stabilized in different ways: by international cooperation in economic policies, by creating a "world currency", by creating "target zones" for currencies, by capital controls and finally, by a CTT. The pros and cons of each method are discussed. The idea of a world currency is rejected as politically problematic and a step back from a perspective of social justice and democracy. The concept of target zones for currencies is supported as an important instrument, but defending the target zones by central banks without any restriction to capital mobility is seen critically because currency volatility might be substituted by interest rate volatility. By limiting inflows and outflows of capital, the CTT turns target zones into a viable instrument of exchange rate policy. Capital control is also a concept that is supported, but rather as a part of a new international financial system than as a measure for short term reforms that any country could enforce unilaterally indefinitely.

The CTT is an effective concept to curb currency volatility and to fight speculation. In contrast to nationally applied capital controls it also has the advantage that it is an international tool that can open a perspective for more international political cooperation in order to govern economic globalization.

When talking about the CTT the study more precisely refers to the two-tier currency transaction tax, which is a modification of the Tobin tax by Paul Bernd Spahn. The first tier is equivalent to the classical Tobin tax, with a very low tax on all currency transactions (e.g. 0.01%) focussed on the day-to-day currency speculation that derives profits from

market volatility. This first tier is the main creator of revenues from the tax. However, the first tier is not able to prevent speculation during currency crises, because these huge currency fluctuations allow gigantic profits that would not be substantially diminished by such a low tax. This is where the second tier proposed by Spahn comes into action.

The second tier is a flexible tax rate that is only applied in the event of a currency crisis. It is used to tax away the profits from speculation and the windfall profits from large currency appreciations or depreciations. Following Spahn's definition, the tax is automatically applied when a currency leaves a defined exchange rate band. In combination, both tiers can effectively curb speculation, reduce the volatility on the currency market and prevent currency crises.

But the study makes departures from P. B. Spahn's proposal in several aspects. The first tier should be much higher, up to 0.1%, even for currencies such as the euro, to more efficiently tackle the short-term volatility of currencies. The second tier should also be much higher, and even reach prohibitive rates in case of currency attacks. In such exceptional circumstances, the CTT could lead automatically to a temporary shutdown of the foreign exchange markets. This is especially important in developing countries. CTT rates must also be higher if one wants to keep alive the original reason why James Tobin invented the so-called "Tobin tax": preserving the autonomy of monetary policy. In today's global financial markets, deviating from the international interest rates that markets have decided condemn countries, and especially developing countries, to capital outflows and currency attacks. If a democratically elected government chooses an alternative economic policy based (among other elements) on low interest rates, it will be sanctioned by financial markets. The same is true for the EU member states if they opt for the "new economic policy" defended by some European radical economists. There is no other solution to this problem than endorsing the fact that market freedom, excessive liquidity and unconstrained arbitrage must be restricted. Higher CTT rates are a part of these restrictions.

Otherwise, there is no "sand in the wheels" at all, and these wheels are already far too well greased.

2. Chapter: THE FEASIBILITY OF THE CURRENCY TRANSACTION TAX

The second chapter deals with the feasibility and the technical implementation of the CTT. It offers the most detailed insight into the working of the forex market and the possibility of levying the taxes that have been published so far. It introduces some new innovations, like an electronic tag that is applied to all currency transactions and makes them identifiable through all stages of the transaction. As a currency transaction involves several actors, stages, monitoring and clearing systems, the tag helps to identify each transaction and ensures that the tax is paid. Thus each currency transaction can be identified and monitored at a very early stage and the tax can be paid at each stage or at the final one, when currency transactions have already been netted and are settled through an electronic system.

It is important to realize that the introduction of the CTT benefits from technical progress and the centralization of the forex system. Today, the electronic brokerage platforms EBS and Reuters handle nearly all the forex trade. Such a centralisation has always been suggested by proponents of the CTT and previously seemed unrealistic – but has now been achieved by market forces. Nowadays, collecting the CTT would be as easy as paying the commercial fees for the use of these private electronic platforms. Other electronic systems like SWIFT manage the exchange of information between the trading parties, provide the necessary information for the netting (also called clearing) of transactions, and their settlement in national payment systems, European payment systems like Euro 1 or

TARGET, or international payment systems like CLS. Institutions that trade currency, or settlement institutions like the CLS bank have to cooperate with the central banks, and thus can be committed to levy the tax.

Legal issues are also discussed. As the business of forex transactions is considered to be an investment business by European law, it is no problem to tax the transaction in legal terms. However, it does not make sense to levy the tax just in one country – rather, an implementation at the EU level would be appropriate. The already existing EU legislation could be mobilised in this perspective. Although tax evasion might still be possible, it is shown that this would be a minor difficulty at most. It would be possible to move the forex market somewhere else, but to put this into reality is not easy. London is the most important marketplace for currency transactions, and one of the most expensive cities in the world. Would a small tax like the CTT make a difference? The forex market needs a good infrastructure which only a few cities can offer. Most importantly London has the geographic advantage of having overlapping working hours with the two other important economic regions: North America and East Asia. This is crucial for an effective and inexpensive settlement process.

Another argument supports the feasibility of the tax, and that is the Security Transaction Tax (STT) that is levied by several EU member states like the UK, Ireland and Belgium. The STT is automatically collected through the settlement systems - a method that could be used by the CTT as well. It is important to know that the EU institutions are not asking these countries to suppress STT taxes, but to let foreign firms compete in collecting the tax in an increasingly efficient way. Finally, anti-money laundering measures can be used to identify currency transactions, as shown in a detailed analysis by the recommendation of the G7 Financial Action Task Force (FATF). In this field again, it is important to observe that the EU has adopted a comprehensive legislation against money laundering, which goes deep into the practical details of forex and other financial transactions that take place in the EU. SWIFT, the major information conveyor of forex transactions, had to change the content of its message to respect this EU legislation. Due to these changes, all the information needed to tax currency in the EU is already at the disposal of member states.

3.Chapter: FISCAL REVENUES, THEIR MANAGEMENT AND USE

The third chapter estimates the revenues of the CTT and offers proposals on how to manage and spend them. The original purpose of the CTT was not to create revenues, but to curb speculation and stabilise the currency market. However, as with taxes on tobacco or alcohol there is no principle contradiction between creating revenues and sanctioning behaviour with negative consequences for the society. A huge number of studies are presented that estimate the potential revenues from the CTT. Different scenarios and calculations are used that estimate the revenue worldwide from \$19 billion to \$31 billion for a tax rate of 0.01%, and \$34 billion to \$125 billion for a rate of 0.1% in 2004. For the Euro zone, the estimates range from \$6 to \$10 billion for 0.01% and \$10 to \$46 billion for 0.1% in 2004. The author also calculates revenues for split tax rates of 0.02% for banks and 0.1% for customers, as banks would have a very high elasticity on the CTT. This scenario would result in revenues of US\$ 97.4 billion at world level and between \$29 and \$38 billion in the Euro zone.

Revenues should be used to finance global public goods and development in the poorer countries, not to consolidate national accounts in the industrialized countries. The author proposes to spend the revenues for the establishment of a reserve currency fund in

order to achieve the public good of more exchange rate stability, as well as for the funding of ecological and social programmes in order to achieve the public good of sustainable development and social security.(e.g. the fight against tuberculosis and malaria would cost around \$2 billion, and against AIDS \$7-10 billion). The UN estimates that satisfying the needs in global public goods would probably require a minimum of \$20 billion a year. The author also pleads for an international emergency fund for disasters.

The third part of chapter 3 deals with the important institutional aspects of who will collect the CTT and distribute the revenues. It is argued that the tax should be collected by established institutions on the national level. For the management of the revenues, different existing organisations like the UN, UNSOC, UNDP, UNCTAD, IMF, World Bank and BIS are discussed and rejected. The solution proposed is to establish a new organization, which could be called the “Solidarity Fund for Sustainable Development”, and which cooperates with national governments and the BIS concerning the levying of the tax. and with UNDP and UNCTAD concerning the distribution of the revenues. A detailed concept of the governance structure of the fund is presented.

The principle should be that poor countries receive more funds in the beginning. However, funds would be linked to performance criteria, such as an improvement in human development, gender related development and ecological sustainable development.

PART II: LEGAL ISSUES

4.Chapter: THE IMPLEMENTATION OF THE CURRENCY TRANSACTION TAX IN THE EU LEGAL CONTEXT

The fourth chapter by Lieven Denys deals with the implementation of the CTT in the legal context of the EU. It also elaborates on the opportunities available at the EU level to ensure correct application of the tax and prevent fraud. The conclusion of this chapter is that a CTT is in line with European law.

First of all, it inquires on possible contradictions of national CTT laws and EU law. This is done for the case of the Belgian CTT law passed by the Belgium parliament on July 1st 2004 and in whose formulation the author participated. The author disproves criticism on the Belgian CTT by the ECB and the European Commission. From the institutional perspective, it can be concluded that the EU has no exclusive competence in indirect taxation and that Member States are thus free to introduce a CTT. Tax disparities are not prohibited by EU law. The Member States have indeed in principle the right to introduce new indirect taxation, until the EU enacts measures in that area.

Since the EU has exclusive competence in the area of monetary policy for the Euro Member States, the second tier of the CTT would need approval of the EU. The second tier of the CTT is a monetary surcharge in order to prevent harmful currency fluctuation and thus an intervention in monetary policy. Therefore, it would have to be regulated by the EU.

The author proves that the CTT is compatible with the European non-discrimination principle. The CTT is not discriminatory because it taxes all currency transactions regardless of the currencies involved and regardless of the nationality or residence of the trading parties.

The second potential problem is the compatibility with the Internal Market's four fundamental principles of freedom of movement. It is argued that the first tier of the CTT does not restrict capital flows as it does not distinguish according to the origin of the currencies involved nor their use (or destination). The legal principle of the free movement of capital is moreover not an absolute freedom: the first tier CTT is justified under the rule of reason by

one of the fundamental EU objectives, i.e. (funding) development cooperation. Moreover the first tier does not affect access to the capital market, and the levy is too negligible to cause a restriction of free movement or to hinder the free internal market because of its very low rate of 0.02 or less. Indeed the financial markets can smoothly absorb the low rate levies. However, the case is different for the second tier of the CTT that restricts capital flows through a very high tax in the event of a large harmful currency fluctuation. Provided it is implemented as an EU monetary instrument, this second tier is justified in order to stabilize currencies and the economy. As a tool for monetary policies at EU level it is not in contradiction to EU law as international monetary stability is an important aim of the EU.

Next to the stabilization of currencies, financing development from the CTT revenues is the second important goal of the CTT. To improve financing for development is not only an important aim of the EU, but furthermore, the EU has explicitly committed itself to increase spending on developmental aid in order to achieve the UN Millennium Development Goals for 2015.

Finally the author proposes to introduce the CTT through an EU directive, similar to the EU VAT directive. This would bind EU member states to the introduction of a CTT but leave the details of implementation, as well as the administration, to the individual states. National and EU institutions like the central banks and the ECB could be instrumental in the implementation and expansion of the CTT to non-Euro member states of the EU and third states, including offshore centres and others, through a cooperation with multinational private financial institutions and settlement organisations, which they license to operate in the EU. EU anti-money laundering measures and the cooperation of Europol and Eurojust in criminal matters can effectively serve as the deterrent against the evasion of the tax.

Thomas Kalinowski

Berlin, November 2005

PART I

BRUNO JETIN*

TECHNICAL, INSTITUTIONAL AND POLITICAL ISSUES

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1 THE CASE FOR A CURRENCY TRANSACTION TAX

1.1 INTRODUCTION: “TIME FOR TOBIN?”

“Since 1992, crises in world financial markets have been the norm rather than the exception. In 1992-1993, The European Union (EU) experienced the virtual collapse of the European Exchange Rate Monetary Mechanism (ERM) despite its tentative defeat speculation. In 1994-95, the Mexican currency and financial crisis saw the collapse of the peso with negative contagion effect on Argentina and Brazil (the so-called “Tequila effect”). In 1997 came the East Asian crises, which started somewhat innocuously with a run on the Thai Baht, but spread swiftly to a number of other regional currencies. The five crisis-hit Asian economies (Indonesia, Korea, Malaysia, Thailand and, to a lesser extent, the Philippines) suffered a single year capital reversal of about \$105 billion between 1997-98. Socio-political repercussions in the East Asian economies have been far reaching. In January 1999, the Brazilian Real was devalued, and lost over 40% of its value relative to the US dollar within two months”. This chronicle of financial and economical disasters was made by G. Bird and R. S. Rajan in 1999. Unfortunately, the story is not finished. We can add to the list Turkey in 2000, and Argentina in December 2001. Argentina, who had decided to peg its currency to the US dollar under the form of a currency board, was running out of dollars and was forced to float its currency. The currency collapsed immediately, triggering a catastrophic economic and socio-political crisis.

The economic and social losses of these crises have been dramatic, especially for the developing world. Table 1-1, (IMF 1998, p 79) shows that between 1975-1997, there have been: 158 currency crises ⁽¹⁾, of which 116 were in emerging countries; 55 currency crashes ⁽²⁾, of which 42 were in emerging countries; 54 banking crises ⁽³⁾, of which 42 were in emerging countries; and 32 currency and banking crises, of which 26 occurred in emerging countries. Even if the average recovery time is usually short, (between one to two years) the cumulative loss of output is severe: 7.1% of GNP when a currency crisis occurs, 10.1% in case of a currency crash, 14.2% for a banking crisis, and 18.5 % when currency and banking crises are linked.

These recurrent economic crises are the bitter fruits of the globalisation process that has suppressed nearly all public controls on financial markets. The renewed liberty of movement of financial capital will provoke new crises in the near future. Something must be done. We cannot wait for the next crisis and witness its disastrous consequences.

The proposals of the international institutions (i.e the IMF, World Bank, and the Bank for International Settlement, among others) and of the banking community are not only pointless, but they point in the wrong direction. Basically, they rely on prudential regulations and self-control by banks. Prudential regulations can be useful but have never impeded a financial crisis (D. Felix, 1999). Self-control by banks is hypocrisy. Banks are now allowed to define their own norms of control and are responsible to control themselves, instead of being controlled by public authorities according to transparent common criteria. After the long list of financial scandals (Enron, Global Crossing ...) who can believe that

¹⁾ “A currency crisis may be said to occur when a speculative attack on the exchange value of a currency results in a devaluation (or sharp depreciation) of the currency, or forces the authorities to defend the currency by expending large volumes of international reserves or by sharply raising interest rates” (IMF, 1998, p 74).

²⁾ “Currency crashes are identified by crises where the currency component of the exchange market pressure index accounts for 75% or more of the index when the index signals a crisis” (IMF, 1998, p 79).

³⁾ “A banking crisis refers to a situation on which actual or potential bank runs or failures induce banks to suspend the internal convertibility of their liabilities or which compels the government to intervene to prevent this by extending assistance on a large scale” (IMF, 1998, p74-75).

private banks and corporations can seriously control themselves? Not to mention that some important financial agents like hedge funds are not liable to any control, and that no effective decisions have been taken against tax havens, these lawless territories where legal and illegal finance meet.

Table 1-1: Cost of Crises in Lost Output Relative to Trend

	Number of Crises	Average Recovery Time ¹ (in years)	Cumulative Loss of Output per Crisis ² (in percentage points)	Crises with Output Losses ³ (in percent)	Cumulative Loss of Output per Crisis with Output Loss ⁴ (in percentage points)
Currency crises	158	1.6	4.3	61	7.1
Industrial	42	1.9	3.1	55	5.6
Emerging market	116	1.5	4.8	64	7.6
Currency crashes⁵	55	2.0	7.1	71	10.1
Industrial	13	2.1	5.0	62	8.0
Emerging market	42	1.9	7.9	74	10.7
Banking crises	54	3.1	11.6	82	14.2
Industrial	12	4.1	10.2	67	15.2
Emerging market	42	2.8	12.1	86	14.0
Currency and banking crises⁶	32	3.2	14.4	78	18.5
Industrial	6	5.8	17.6	100	17.6
Emerging market	26	2.6	13.6	73	18.8

¹Average amount of time until GDP growth returned to trend. Because GDP growth data are available for all countries only on an annual basis, by construction the minimum recovery time was one year.

²Calculated by summing the differences between trend growth and output growth after the crisis began until the time when annual output growth returned to its trend and by averaging over all crises.

³Percent of crises in which output was lower than trend after the crisis began.

⁴Calculated by summing the differences between trend growth and output growth after the crisis began until the time when annual output growth returned to its trend and by averaging over all crises that had output losses.

⁵Currency “crashes” are identified by crises where the currency component of the exchange market pressure index accounts for 75 percent or more of the index when the index signals a crisis.

⁶Identified when a banking crisis occurred within a year of a currency crisis.

Source: “World Economic Outlook”, May 1998, Chapter 4, p 79, IMF.

It is the great merit of James Tobin (1918-2002) to have anticipated these repeated crises right after the breakdown of the International Monetary System in 1972. Clearly, he had rightly anticipated the global financial process that would emerge from Bretton Woods’ ruins. He feared that key economic variables like interest and exchange rates would be submitted to the whims of speculation on financial markets and no longer subject to the public interest.

The so-called Bretton Woods agreements, signed in 1944, had established a world-wide system of exchange rates based on semi-convertible currencies managed by a new institution, the International Monetary Fund (IMF). International capital mobility and the exchange of currencies were restricted to achieve exchange rate stability.

The articles of the IMF did not, and still do not, require its members to make their currency wholly convertible. They only require that foreigners be free to convert any of a country’s currency they earn in trade of goods and services, what is called “current account convertibility”. But it was not required that any holder of a currency, resident or non-resident, would be free to buy foreign-currency assets, what is called “capital account convertibility”. Currency convertibility was then linked to the needs of international trade, and capital controls restricted the international mobility of financial capital

This monetary system enabled relative exchange rate stability while allowing a necessary flexibility. All currencies had a fixed but adjustable rate with the US dollar which was then convertible in gold at a fixed price (\$35 an ounce). Countries’ peg to gold and the

dollar were adjustable and devaluations were frequent for some currencies. For some economists (J. Eatwell and L. Taylor, 2000), it is not a coincidence that the Bretton Woods system was contemporary with the most prosperous period of growth that the world has registered, the so-called “golden age” (1950-73). Financial and monetary stability is favourable to high growth and catching up for the developing world.

However, James Tobin was not a nostalgic of Bretton Woods (J. Tobin, 1993, 1998). His purpose was not to return to a new Bretton Woods system. He recalled that Bretton Woods was an asymmetric system which had also its weaknesses and constraints.

Countries with current account deficit were faced with the choice of reducing their rate of growth and increasing their unemployment to eliminate their deficit, or to defend their fixed exchange rate until they ran out of reserves and international credit. They were then forced to devalue and suffered an economic crisis to the great benefit of speculators who had anticipated the change in the exchange rate. Countries with current account surplus could accumulate indefinitely foreign reserves and there was nothing to stop them. The Bretton Woods system engendered inequality between weak and strong countries.

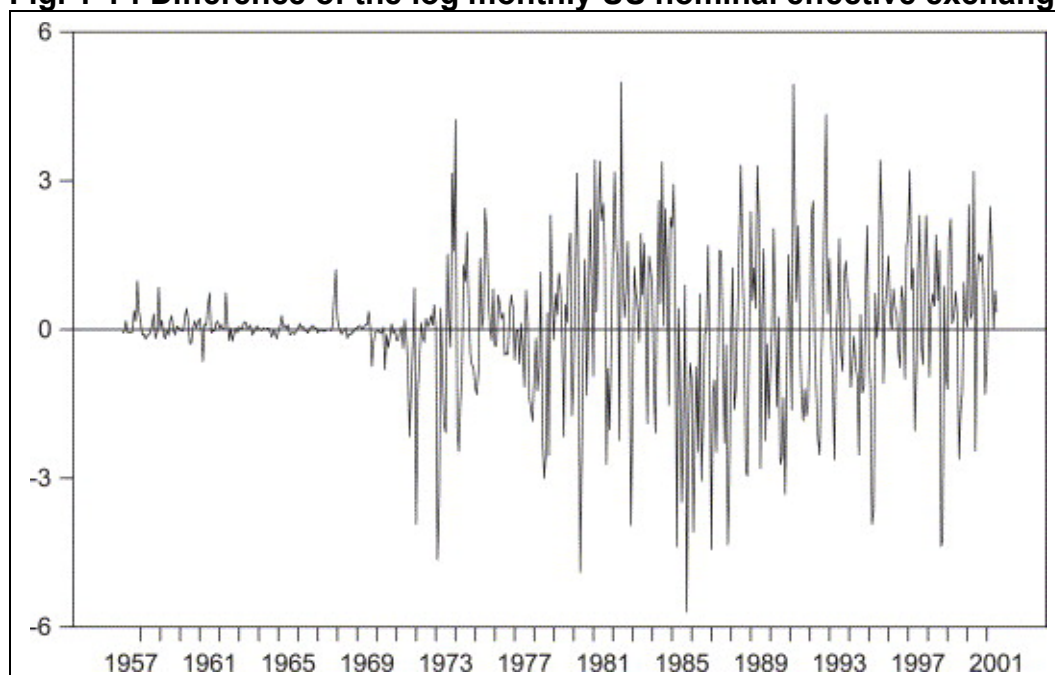
This is why J.M. Keynes had defended a far more ambitious international monetary system during the Bretton Woods negotiations. Surplus countries should be compelled to finance deficit countries through the intermediary of an international clearing system that would issue an international currency. There would be no more incentive for a country to accumulate surplus at the expense of others. Competition would be substituted by cooperation. Post-Keynesians like P. Davidson (1992) have kept on developing Keynes’s proposals and these are certainly the core principles for a new international system based on equality between nations.

But when the Bretton Woods system disappeared in 1971-72, there was no political will to establish such a new international monetary order; and with the exception of developing countries, the new direction was quite to the contrary. The American government had sabotaged the Bretton Woods system because it was no longer useful for them and soon, after some attempts at collective action, all rich countries decided to engage in the individual adventure of floating rates.

James Tobin had a mixed feeling about floating rates. On the one hand he acknowledges that they allow desirable currency adjustments without currency crises (J. Tobin, 1998, p 3). As opposed to fixed rates that make speculation so easy in case of excessive and unsustainable appreciation of the exchange rate. On the other hand, since the demise of Bretton Woods floating rates have been very volatile (See figure 1-1) because they are also prone to speculation and do not guarantee the necessary short-term autonomy for macroeconomic policy.

1.2 The original objectives of the tax: Reducing short-term speculation and increasing national policy autonomy

James Tobin wants exchange rates to reflect more precisely long-run economic determinants rather than the reaction to short-term news. He thinks that speculators concentrate on how “the market” will respond to news, not on basic economic meanings. Taxing currency transactions would diminish excess volatility of the exchange rates (See Fig. 1-1), insofar as speculators have shorter horizons and holding periods than market participants oriented to long-run determinants, the so-called “fundamentalists”. Taxing currency transactions would also reduce capital mobility that gives considerable power to speculators, creating room to manoeuvre for national economic policy.

Fig. 1-1 : Difference of the log monthly US nominal effective exchange rate

Source: G. Karras et al. (2005), "Sources of exchange-rate volatility: Impulses or propagation?", *International Review of Economics & Finance*, Volume 14, Issue 2, 2005, Pages 213-226.

Autonomy for macroeconomic policy is James Tobin's real concern ⁽⁴⁾. As a Keynesian, J. Tobin believes that the State has a legitimate role to play to achieve full employment through active fiscal and monetary short-term policies. In case of recession, the State must stimulate growth with an appropriate combination of expansionary fiscal and monetary stimulus, the so-called "policy mix". Fiscal policy includes increased public spending or tax rebates while monetary policy is mainly implemented through interest rate decreases. With the demise of Bretton Woods, J. Tobin fears that states lose their ability to intervene in the course of economic affairs.

International capital mobility is at the root of the loss of economic policy autonomy.

Standard economic theory has demonstrated in the early sixties that in a world of international capital mobility, domestic monetary policy is inhibited when exchange rates are fixed and domestic fiscal policy when exchange rates are flexible. Moreover, the remaining instrument of economic policy in either regime is frequently constrained by domestic institutional, political and economics factors ⁽⁵⁾. As a consequence, states lose one policy instrument and retain maybe half of the last one.

Standard economic theory also demonstrates that countries cannot simultaneously maintain independent monetary policies, fixed exchange rates, and capital account convertibility. This result due to R. Mundell (1961) is known as the "impossible trinity" or "open-economy trilemma". Even if this trilemma is questionable as we shall see below, it is useful as a starting point to organise discussion.

A country has to choose two of the three possible objectives (see the top panel figure 1-2 below). For instance, a government and a central bank that wish to reduce unemployment by raising aggregate demands for the goods its country produces may cut interest rates to stimulate consumption and investments and make its products more competitive abroad. But it is not possible with fixed exchange rate and full international capital

⁴⁾ "In any case, the principal purpose of the tax is to expand the autonomy of national monetary policies". J. Tobin, (1996, p 496).

⁵⁾ See J. Tobin 1978, p 155.

mobility. Capital will flow abroad forcing the central bank to devalue. The government will have to choose between floating the currency or to impose capital controls. Bretton Woods was a combination of (semi) fixed exchange rates and monetary autonomy. The post Bretton Woods world and the ongoing process of financial integration are now based on capital mobility ⁽⁶⁾ and theoretically, monetary autonomy. As a consequence, countries had to renounce fixed exchange rates.

Advocates of floating rates had argued that they would free the remaining instrument of economic policy, i.e. monetary policies, from constraints imposed by commitments to defend official parities. Exchange rates could be left completely to private markets, governments practising an official neglect of them. But this neoliberal claim is in large degree illusory for at least two reasons.

First, governments cannot be indifferent to currency markets because, as we shall see in part one, volatility in exchange rates induced by speculation and free capital flows can have real economic consequences devastating for particular sectors or whole economies.

And second, floating rates do not guarantee monetary autonomy. The main reason is arbitrage on interest rates.

Arbitrage is the opportunity to buy an asset (or a currency) at a low price and then immediately sell it on a different market for a higher price. Strictly speaking it involves no risk because the arbitrageur is only exploiting an opportunity that already exists to buy cheap and sell at a higher price. Under a fixed exchange rate, when a central bank reduces its interest rate under the foreign rate to stimulate the economy, arbitrageurs will borrow in the national currency, exchange it into foreign currency and apply the money abroad to benefit from the higher interest rate. When the central bank runs out of international currency, it is forced to devalue. Floating rates do not resolve the problem but make it more difficult. "If similar financial assets denominated in two different currencies are perfect substitutes in private portfolios, they cannot bear different interest returns in their domestic currencies unless those differences are offset by expected exchange rate movements" ⁽⁷⁾. In other terms, if the foreign interest rate is 2% higher than the domestic one, arbitrageurs will sell the national currency and buy the foreign currency until it costs 2% more to buy the foreign currency, which offsets the difference in interest rate.

In J. Tobin's terms "... the boundless resources of private arbitrageurs will just erase any rate differentials the national authorities try to create and sustain" ⁽⁸⁾.

Integration of international financial markets due to innovations in computation and communications, together with deregulation, has made arbitrage very easy and costless. The same holds true for speculation, which only differs from arbitrage insofar as the speculator deliberately takes a risk to make a profit.

1.3 How to resolve the problem of arbitrage and speculation?

According to J. Tobin, there are two ways to go ⁽⁹⁾.

1.3.1 A world currency

With a world currency, in fully integrated financial and capital markets, "... movements of funds to exploit interest rate arbitrage or to speculate on exchange rate fluctu-

⁶⁾ The last remaining capital controls were dismantled in Europe in the eighties.

⁷⁾ J. Tobin, 1996 p 495.

⁸⁾ J. Tobin, 1998, p 4.

⁹⁾ See J. Tobin's seminal paper: "A Proposal for International Monetary Reform", 1978, p 154-55. The alternative between a world currency on the one hand, and a degree of financial segmentation on the other hand will be present in numerous papers he wrote later on the CTT.

ations cannot be sources of disturbances and painful interregional adjustments” (J. Tobin, 1978, p 155). This solution has a cost because it means going to the end of the road of international economic and financial integration, i.e. full globalisation.

In a certain way, the Euro zone materialises this proposal at a small scale. In the European Union, the euro was created after the achievement of the common deregulated market, as a kind of corner-stone. The economic policy is subordinated to “price stability”, meaning that governments can no longer use monetary policy to stimulate growth and that fiscal policy is strictly bounded by the objective of surplus budget and limited indebtedness.

At the world level, that means achieving the free trade process organised by the World Trade Organisation (WTO), completing the deregulation of labour markets, and coordinating fiscal and monetary policies between at least the G7 countries in order to keep inflation at a low level. The loss of political sovereignty and of democracy, not to say the social consequences, would be tremendous.

To convince oneself of this fact, let’s make a political fiction exercise. D. Rodrik (2000, p180) extrapolates from the economical trilemma presented above to consider what he calls “the political trilemma of the world economy” (See box. 1-1 and the bottom panel of figure 1-2). The theoretical exercise is worthwhile as it illustrates what would remain of politics with full globalisation. It is also useful to shed light on the present crisis of politics.

Box 1-1 : The Political Trilemma of the World Economy

“The three nodes of the extended trilemma are international economic integration, the nation-state, and mass politics. I use the term “nation-state” to refer to territorial- jurisdictional entities with independent powers of making and administering the law. I use the term “mass politics” to refer to political systems where:

a) the franchise is unrestricted; b) there is a high degree of political mobilization; and c) political institutions are responsive to mobilized groups.

The implied claim, as in the standard trilemma, is that we can have at most two of these three things. If we want true international economic integration we have to go either with the nation-state, in which case the domain of national politics will have to be significantly restricted, or else with mass politics, in which case we will have to give up the nation-state in favour of global federalism. If we want highly participatory political regimes, we have to choose between the nation-state and international economic integration. If we want to keep the nation-state, we have to choose between mass politics and international economic integration”.

Source: D. Rodrik (2000, p 180), “How Far will International Economic Integration Go?”

As in the economical trilemma, we cannot achieve the three objectives simultaneously. International economic integration, i.e. full globalisation, has to go either with the Nation-State or else with “mass politics”, in which case Nation-State will have to be abandoned in favour of global federalism. If highly participatory political regimes are the priority, a choice has to be made between the Nation-State and international economic integration. If the preservation of the Nation-State is the priority, either mass politics or international economic integration must be sacrificed.

Consider the hypothesis of a perfectly integrated world economy. Nations could no longer interfere with arbitrage in markets for goods, services or capital. “Transaction costs and tax differential would be minor”. The CTT would then be outlawed. Convergence in prices, wages and profit would be almost complete. Global federalism would be necessary “to align jurisdictions with the market and remove the “border effects”. “... The entire world – or at least the parts that matter economically – would be organised along the lines of the U.S. system. A world government would take care of a world market” (p 181-182).

Instead of global federalism, international economic integration could cohabit with Nation-States provided that “they do not get in the way of economic transactions”, and try

“...to appear attractive to international markets”. “The only local public goods provided would be those that are compatible with integrated markets” (p 182). In summary, the price to pay for the survival of Nation-States in this neoliberal dream and citizen nightmare is that politics are reduced to nearly nothing. T. Friedman (1999, p 87, cited by D. Rodrik) calls it the “golden straitjacket” (see box 1-2). One is free to decide if he recognises some features of its own country.

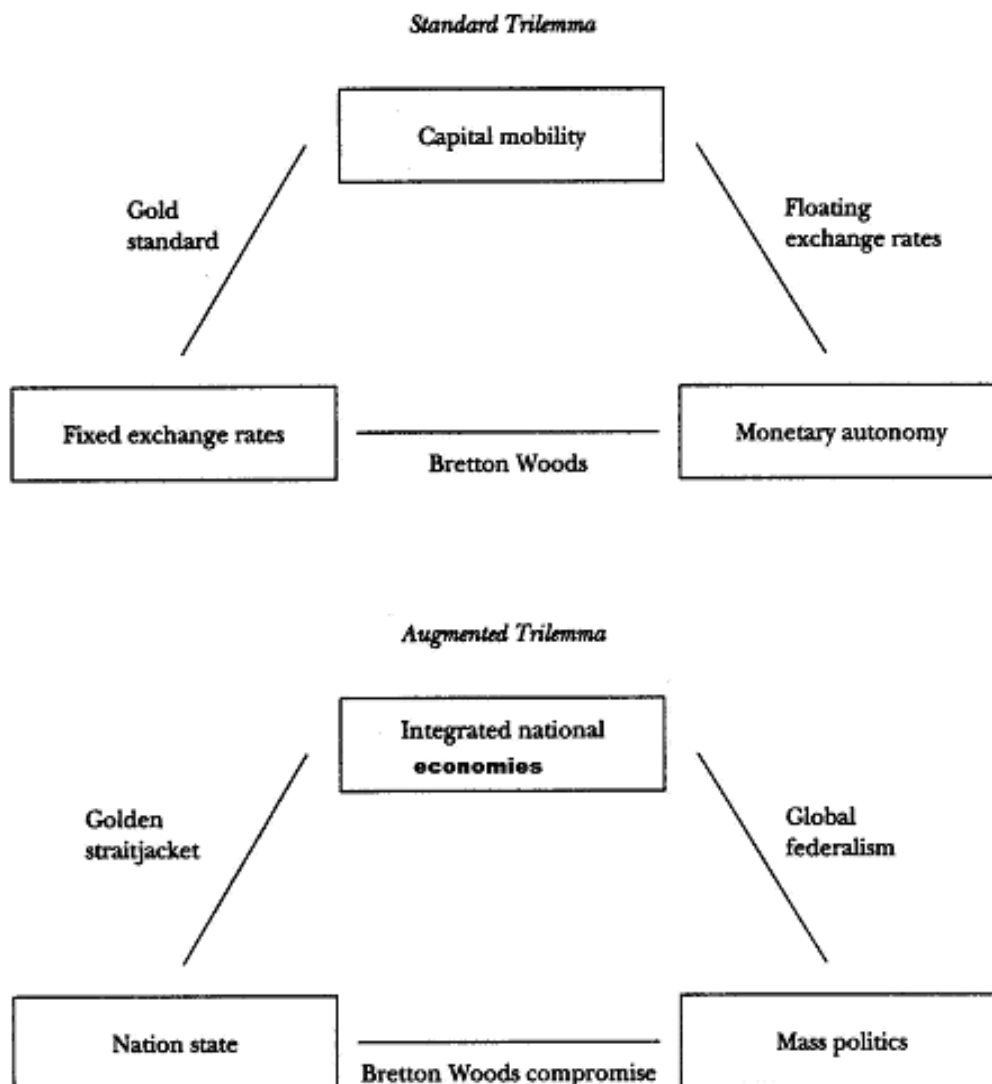
Box 1-2 : The Golden Straitjacket: The End of Politics?

“As your country puts on the Golden Straitjacket, two things tend to happen: your economy grows and four politics shrinks. . . . [The] Golden Straitjacket narrows the political and economic policy choices of those in power to relatively tight parameters.

That is why it is increasingly difficult these days to find any real differences between ruling and opposition parties in those countries that have put on the Golden Straitjacket. Once your country puts on the Golden Straitjacket, its political choices get reduced to Pepsi or Coke- to slight nuances or tastes, slight nuances of policy, slight alterations in design to account for local traditions, some loosening here or there, but never any major deviation from the core golden rules”.

Source: T. Friedman (1999, p 87, cited by D. Rodrik, 2000).

Fig. 1-2 : The political trilemma of the world economy



Source: D. Rodrik (2000).

The shrinkage of politics means that economic policy-making bodies (central banks, fiscal authorities and so on) should be insulated from political participation and debate, the disappearance (or privatisation) of social insurance, and the replacement of development goals with the need to maintain market confidence.

“The essential point is this: once the rules of the game are set by the requirements of the global economy, the ability of mobilised popular groups to access and influence national economic policy-making has to be restricted” The experience of the gold standard during the interwar period shows that “... as the franchise was fully extended and labour became more organised, national governments found that they could no longer pursue gold standard economic policy”, D. Rodrik, (2000, p 183).

Some may argue that the creation of a world currency could originate from a less ambitious project ⁽¹⁰⁾ and that it is not necessary to go to full globalisation. A two tier monetary system would be sufficient. The first tier would a fixed exchange rate between the hard currencies, the US dollar, the euro and the yen. The second tier would be constituted by fixed rates between the currencies of the rest of the world, and in particular those of the developing countries, and one of the “hard” currencies. The dollarisation process and the more modest “euroisation” process are already under way in lots of European, transition and developing countries giving some credibility to this scenario.

The trouble is that countries pegging their currencies, establishing a currency board (like Argentina until its recent collapse), or even adopting the dollar as the means of payment and unit of account (like Panama), surrenders completely their independent monetary policy and acknowledges vassalhood. It is nothing less than the return of colonialism in financial forms. “Unfortunately Federal Reserve policy-makers are not going to weigh macroeconomic problems in Patagonia even as much as those in Idaho. But this is the destination to which financial globalisation is taking developing countries, whether the IMF, the U.S. Treasury, and the lords of International finance acknowledge it or not” (J. Tobin, 1998, p 10-11).

The lesson is clear: if countries want to preserve not only economic autonomy, but more fundamentally democracy and the right to choose at the national level where democracy is exercised, then the process of complete international integration should be slowed up in favour of what D. Rodrik calls a new “Bretton Woods compromise”.

During Bretton Woods, it was decided that the economic integration process should be partial. In the trade area, before the WTO, the GATT recognised that developed and developing countries were not submitted to the same rules. The right to erect trade barriers (tariffs being preferred to quantitative restrictions), and financial barriers (capital controls, taxes on interest rates) was also accepted and exercised.

J. Tobin comes also to this conclusion but only for the financial integration process. He welcomes free trade for transactions on goods and services, but not for financial transactions.

If governments want to restore some autonomy to monetary policy, there is no escape from the necessity to reduce in some way the international mobility of financial capital and the integration of financial markets.

“The other way is toward greater financial segmentation (we underline) between nations or currency areas, permitting their central banks and governments greater autonomy in policies tailored to their specific economic institutions and objectives” (J. Tobin, 1978, p 154). The world currency, however theoretically appealing for J. Tobin, is not a viable option for the near future. He therefore “regretfully recommends the second, and his proposal

¹⁰⁾ We will return to the world currency in more details in part 1, section 3, by discussing R. Mundell’s proposal who is one of its most prominent proponent.

is to throw some sand in the wheels of our excessively efficient international money market”.

The objective is clearly to allow different interest rate levels by impeding full arbitrage on money markets (we underline), and thereby restricting international capital mobility⁽¹¹⁾.

1.3.2 Capital controls and the Currency Transaction Tax (CTT)

Restricting the international mobility of capital could be done in a radical way by returning to the limited convertibility of currencies that prevailed during Bretton Woods.

After all, China has escaped from the contagious 1997-98 financial crisis precisely because it allows no exchange of currencies linked to financial transactions (capital account convertibility), only exchange of currencies due to international trade (“current account convertibility”) like European countries in the early days of Bretton Woods. Taiwan and India were also immune from the contagion because they were still applying in some ways restrictions to financial transactions. These capital controls have not impeded China in becoming the most important beneficiary of Foreign Direct Investments (FDI) with \$ 53.3 billion in 2003, ahead the USA and European countries.

But China is a very special case. Not only because of its historical heritage as an ex-planned economy, but also because it now enjoys a huge current account surplus and has a currency pegged to the dollar. The vast majority of developing countries have trouble with their current account balance and cannot sustain for a long time a fixed exchange rate with a hard currency.

Any new desirable international monetary system will have to restrict and control international financial transactions, but until then it is necessary to conceive intermediary steps that allow countries to live in a world of floating exchange rates without suffering from its dangerous drawbacks: loss of policy autonomy and instability due to speculation.

The CTT is one of these intermediary steps between the present state of globalised and deregulated financial markets and a future new international monetary system.

The basic idea is to tax foreign exchange transactions at a small rate in order to separate financial transactions motivated by arbitrage and speculation from those related to international trade and productive investments.

Foreign exchange (forex) transactions related to international trade and Foreign Direct Investments (FDI) are medium (3 months to 6 months) and long term transactions (once per year or more). Trade and FDI would not be subject to the tax frequently and hence would not be inhibited. But arbitrage and speculation, insofar as they are short-term transactions would be penalised because they would frequently pay the tax.

The CTT has some advantages that capital controls applied at the country level do not have. As an international measure to slow down flows of “hot money” it has a collective and cooperative dimension that capital controls at national level don’t have. It offers a solution to countries who don’t want to peg their currency nor practise pure floating. As we shall see, with the CTT they can manage the floating of their currency more easily and protect it against speculation.

¹¹⁾ The link between interest rate arbitrage on money markets and the tax on currency transactions is even more explicit in the first paper that J. Tobin dedicated to monetary autonomy in 1972. “The most important barrier to flexible monetary autonomy is the ever-increasing international mobility of capital. The Eurodollar market is unifying the short-term money markets of the major countries on both sides of the Atlantic”. “... It is clearly desirable to preserve some possibilities of autonomy in national or continental monetary policies and to defend them against the growing internationalization of money markets”. “... How can some international monetary autonomy be preserved? Some sand has to be thrown into the well-greased channels of the Eurodollar market”. See J. Tobin, 1974.

The CTT delivers its full potential if applied at a regional level between countries from the same continent who want to establish a common protection against speculation and who want to stabilise the exchange rates of their currencies in order to avoid beggar-my-neighbour policies.

The example of the Mercosur is illustrative. Argentina and Brazil, the two major Mercosur countries, had pegged their currencies to the dollar during the nineties. In the case of Argentina, the objective was to tie tightly and permanently the peso to the US dollar, while in Brazil, the peg was more flexible and temporary. In reaction to the 1997-98 Asian financial crisis, Brazil untied its currency from the dollar in 1999, and the real soon depreciated by 30%. The consequence for Argentina was dramatic. Argentinean exports to Brazil plummeted, while Brazilian products invaded the Argentinean market.

These events could have been avoided if Mercosur had created a regional monetary system stabilizing the exchange rates of their currencies and establishing a common floating of their currencies in relation to hard currencies such as the US dollar, the euro and the yen. The CTT could have protected this regional monetary system against speculation.

In fact, the CTT offers an alternative to “dollarisation”, “yennisation” or “euroisation” and its complete loss of sovereignty, and to pure float that ties a country’s fate to the whims of private markets. That is the essence of the contribution of the CTT to an exchange rate policy that targets stability. This exchange rate policy has to be some type of managed float, or “dirty floating”, with or without an explicit band of fluctuations. The CTT will help to protect this exchange rate policy from speculation with the help of capital controls.

1.4 The additional objective of the CTT: financing development and global public goods

As we have seen, the primary goal of the CTT was the autonomy of economic policy. As J. Tobin says, his proposal made in 1972 and renewed in 1978 “did not make much of a ripple” and “sank like a rock” because most professional economists simply ignored it as they ignore anything coined as an interference with market competition. Since then, the CTT was taken out of oblivion by the chronic crises of globalisation, by the growing inequalities that globalisation has increased, and by the emergence of “global bads” that country-states cannot resolve on their own.

In fact, public opinion’s support for the tax swings between the necessity to do something against speculation and financial crises, and the urgency to find new funds for financing development and global public goods.

The crisis of the European Monetary System of 1992-93 had clearly shown that the power of speculation overwhelms the power of even rich countries’ central banks. The Mexican crisis of 1994-95, and especially the Asian crisis of 1997-98, were flat denials that free global finance could contribute positively to development. Quite to the contrary, the public opinion (re)discovered that when investors anticipated a serious economic difficulty, they would take their money out of the country as quickly as possible and leave ruins behind them. These repeated crises had renewed the interest in the CTT, but as J. Tobin says “the interest would then die out when the crisis passed from the headlines” (1996, p 10).

This was not exactly the case with the 1997-98 Asian crisis. A new social movement, soon to be called “anti-globalisation” by the media, had grown in the meanwhile, and since 1998-99 has turned the so-called “Tobin Tax” into one of its major demands, among many others such as the free trade dispute and the contestation of the WTO, the IMF and

the World Bank. In Europe first, then in other continents, NGOs have been campaigning with some significant success for the CTT as a simple and efficient solution against the noxious activity of financial speculation. During the years 1998-2001, the motivation for supporting the CTT was clearly the need to curb speculation, in line with the preoccupations of J. Tobin himself. In the USA, the bursting of the speculative bubble in March 2000 and the ensuing financial scandals created resentment against "Wall Street", and the idea of a "Security Transaction Tax" (STT) was more appealing than the CTT, which appeared too abstract and remote. However, these two taxes are related and complementary.

But after 2001, the interest in the CTT shifted from speculation to its potential as a generator of revenues. This does not mean that speculation had disappeared from people's minds, but the dramatic events of the Asian crisis were fading out while another perennial issue, poverty, was growing in importance. The centre of gravity had changed because there were new opportunities on the political agenda to make new progress. In a certain way, the CTT curse – "the interest dies out when the crisis passes from the headlines"- was repeating again, but not completely, because the CTT had sprung up again as a levy for development.

The debt cancellation campaign, the pandemic of AIDS, the first "world social summit" organised by the United Nations in Copenhagen in 1994, the second summit held in Geneva in 1999, the "Millennium Development Goals" ⁽¹²⁾ decided in New York by heads of government under the auspices of the United Nations, and finally the "financing for development" summit in Monterrey in 2002, organised by the UN as a follow-up of the Millennium Declaration, brought to public attention that new stable sources of financing had to be found.

This time it seems that the feeling that "something has to be done" to reach the Millennium Development Goals (MDG) is not dying out. Since 2001, the Official Development Aid (ODA) is increasing again after years of decrease and official "aid fatigue". The year 2001 is certainly not an accident. Governments have more or less admitted that terrorism is built upon poverty and that it was also in their interest to achieve the MDG. This explains why some countries, such as France and Belgium, have passed a law in favour of the CTT, and why some governments like France, Germany, Spain, Brazil and Chile, have officially proposed the creation of "global taxes", including the CTT, at an international conference organised at the United Nations in New York in 2004. The United Nations itself has not dismissed the "global taxes" as alternative sources of financing due to the perseverant action of NGOs that insist on keeping them on the agenda.

The necessity to finance the global common good is a new justification for global taxes such as the CTT. Ecological problems such as pollution, green house gas emissions, deforestation, and biodiversity are international problems in essence. So is the preservation of natural resources such as pure water. Epidemics like AIDS, foot and mouth disease; and SARS have reinforced the idea that borders are no longer protections. Emergency aid to the growing number of refugees, victims of war, drought, or natural disasters, calls for international action. On a different ground, the contagious character of the last financial crises is another example of the international dimension of major problems.

When this kind of problem arises at the national level, it is the duty of the State to provide a solution. In rich countries, the State can do it because of the fiscal revenues coming from the various taxes and duties it levies. The common good is the justification to taxes, just as paying taxes is one attribute of citizenship.

¹²⁾ The Millennium Development Goals were signed by 189 countries in September 2000. 8 objectives have been selected due to be realised in 2015. Among them: reducing by half the proportion of the world population whose revenue is one US dollar per day, guaranteeing access to "basic social services", stopping the diffusion of AIDS and other widespread diseases like malaria, protecting the environment through "sustainable development", and creating world partnership for development.

At the international level, there is neither state nor taxes. Global taxes managed by international institutions should fill this gap. At the national level, taxes have two functions. They can reduce a problem, like pollution, and generate revenues. At the international level, they should do the same.

This raises old and new questions: The old one is that it would be impossible for one policy instrument to tackle two problems. The CTT could not at the same time curb speculation and generate revenues. The more efficient the tax is against speculation, the less revenues are generated or conversely.

The contradiction holds in theory but not in practice. No one imagines that speculation would reduce to nothing, unfortunately, because it is inherent to private markets. So, the CTT can reduce to some degree speculation and simultaneously generate revenue, like “sin taxes” in the US generate revenues and contain alcoholism and nicotine addiction without eradicating them.

Furthermore, as we shall see below, the original CTT imagined by J. Tobin has profoundly evolved thanks to P.B. Spahn (1995, 2002) and is now conceived as a two-tier transaction tax. A first tier would be an ordinary tax at a very small rate dedicated to revenue generation. A second tier would be a surcharge, at a high rate, to curb speculation. So, there would be actually two instruments for two objectives.

The new question is that if the CTT is now exclusively conceived as a revenue generator, one loses completely its first objective: reducing short-term speculation and increasing national policy autonomy. A balance must be found between the two objectives. After the creation of the CTT, learning by doing will help to fine-tune the appropriate rates of the two-tier CTT. But this will be only possible if the two objectives are maintained. The present temptation is to abandon the struggle against speculation, which opposes directly the formidable interests of the financial community, with the hope that a nearly zero tax presented as a levy for development would be more politically acceptable.

If that was the case, those who support this project would miss the point. Unfortunately, sooner or later, there will be another financial crisis that will spread like an epidemic. The CTT, as an instrument against speculation, more than a levy for development, will then come to the fore. And if the CTT is set too low, it will prove its inefficacy.

That is the reason why the set purpose of this report will be to analyse the CTT as a policy instrument, against speculation and for national policy autonomy on the one hand, and as levy for development and global public goods on the other hand, without giving priority to the one to the detriment of the other.

This report will not be written in a polemic nor a consensual tone. We will stress what makes consensus between the proponents of the tax, but also what is still a subject of disagreement and debate. For instance, we have stressed our agreement with J. Tobin’s view about the importance to reduce the international capital mobility and speculation. But that does not mean that we agree with J. Tobin when he welcomes free trade, recalls his trust in the IMF and the World Bank. In the last months of his life, he took care to make a clear difference with him and the “anti-globalisation” movement. He was probably misinformed about the reality of the vast galaxy of NGO’s, but he was right to recall that he was in favour of the neo-liberal globalisation led by the WTO, the IMF, and the World Bank, while the majority of NGOs are in favour of another globalised world, based not on competition but cooperation.

This last point leads to another divide. Some proponents of the CTT want to interfere as little as possible with the free working of markets, either because they think that on the whole, private markets work well and only need some slight regulations, or because they think that it will be more politically acceptable. The CTT should therefore slip into the

mould cast by financial markets. This bounds profoundly the limits of the intellectual reasoning, and also the ambition, of the project.

If “another world is possible”, it will probably not be with the markets the way they are. Financial markets perform badly. They are plagued by numerous failures. They do not efficiently satisfy social needs, because that is not their object. We will not bind our minds with the dogma that markets are untouchable. If not, it would not be possible to realise a greater financial segmentation between nations.

The first part of this study will be organised as the following: In chapter one, we will study the root of the problem: why exchange rate volatility matters for the economical and social situation (chapter 1.5), with a special emphasis on the euro (chapter 1.5.5). We will then review various propositions to stabilise the exchange rate to show their limits (chapter 1.6). We will then present in detail and discuss the CTT and its improvements due to P.B Spahn (1995, 2001), (chapter 1.7). Although the now called “Spahn tax” is a major conceptual breakthrough that makes the CTT more powerful, it has some limitations if we want the CTT to contribute positively to an alternative economic policy in the European Union. We will address these limitations by presenting our own views (chapter 1.8).

Chapter two is dedicated to the feasibility problem in the international and European context. We will show that the CTT is technically feasible. We will draw upon previous studies on the subject, especially Rodney Schmidt’s proposal to use the core of a national system of payments, managed by central banks, i.e. the Real Time Gross Settlement system (RTGS) (chapter 2.1). We will focalise on the E.U. case, and present how the European system of payment works, to show that it can really be done (chapter 2.2). But unfortunately, collecting the tax through the central bank network does not solve all problems. We will propose a more pragmatic and more comprehensive view, i.e. to mobilise the order message carriers like SWIFT, and also private networks like international clearing houses, CLS and others like the Banking Union for the euro, based in Paris (chapter 2.4).

Chapter three provides some estimation of the fiscal revenues. We will review the previous estimations and their methodology at the international and European level (chapter 3.1). We will then present our own methodology and estimation. We will turn to the social and ecological needs that could be financed and their cost (section 3.2). And finally, we will discuss the question regarding the institutions that should manage the revenues. There are various propositions at the international level, and a few at the European level. We propose a new institution at the international level, or at the European level in the case that the EU is the first region to implement the tax. This new institution would be far more democratic than the present EU institutions to the extent that it should include representatives of the civil society (chapter 3.3).

1.5 Why does exchange rate volatility matter?

If they were naturally stable, the question of volatility would not exist. But as R. MacDonald (2000) puts it, there are some stylised facts attached to flexible exchange rate that raise the question of its volatility.

“First, when exchange rates are flexible, they tend to be highly volatile. This volatility is gauged in a number of ways: on an historical basis when comparing the recent flexible rate experience with fixed but adjustable such as the Bretton Woods regime. Exchange rates are volatile relative to some measure of the expected exchange rate, such as the forward exchange rate or the expectation implied by survey data. Exchange rates are volatile relative to certain fundamentals such as relative prices and money supplies”. (op cit p 5).

The latter has been demonstrated in a number of studies: there appears to be no corresponding volatility between the exchange rate and the so-called fundamentals that are supposed to be the driving forces of the exchange rates (above all inflation rate, interest rates, current account balances, fiscal deficits, growth rates of real GDP or money stocks).

“A second stylised fact is that there is a close correspondence between real and nominal exchange rates”. (op cit p 6). Although it is controversial, R. MacDonald argues that it is the nominal exchange rate which drives the real exchange rate and not the level of prices, which tends to be very low and stable in rich countries since the generalisation of anti-inflation policies that took place in the eighties. It means that the market forces that drive the nominal exchange rate are primarily responsible for the volatility of the real exchange rate, with potential negative effect for the productive sphere.

“A third stylised fact about the behaviour of real exchange rates is that once a real exchange rate change occurs that change tends to be highly persistent, or indeed permanent”. (op cit p 6) It means that the “law of one price”⁽¹³⁾ which is often taken as a reference to determine equilibrium exchange rates is systematically violated, and the return to this equilibrium is so slow, that it never happens. For instance, the exchange rate of the dollar rose steadily from the end of 1980, to peak 50% above its Purchasing Power Parity (PPP) level in 1985. It did not return to the original level until the end of the decade. And it was probably a statistical freak.

In these circumstances, J. Williamson (1999, p 1) summarizes clearly why it is not possible to adopt free floating: “The case for rejecting floating is based on the evidence that asset markets in general, and the foreign exchange markets in particular, are driven by herd behaviour rather than rational expectations”.

In summary, the volatility of exchange rates is defined by the short and medium-term movements that push the exchange rates away from their tendencies. Volatility is thus defined in relation with what is supposed to be a “normal” level or evolution of the exchange rate, whatever it is, but also by erratic fluctuations that generate uncertainty.

One has to make a distinction between very short-term volatility, which occurs during the day and is called intra-day volatility, and medium-term volatility, which is registered on a monthly or quarterly basis. This medium-term volatility is much more relevant for the macro-economic evolution because it may affect decisions to invest or to consume.

The importance of exchange rates for growth is not immediately apparent. The idea that a financial price can influence the productive sphere can seem odd at first glance for those who believe that the financial sphere is subordinated to the productive sphere. Indeed some economic theories analyse exactly the reverse causality: how the growth process determines the exchange rates⁽¹⁴⁾. But both approaches are not contradictory and can even be complementary. The growth process determines the exchange rate in the long run, but not on the short and medium term, and this opens the possibility for ex-

¹³⁾ The law of one price supposes the existence of a unified world market with pure and perfect competition that would determine one unique world price for each good and service thanks to the interaction of supply and demand. Exchange rates should only reflect the amount of units, in each currency, to buy the same quantity of goods and services. At these rates, a consumer with a given amount of money would find his or her purchasing power identical, no matter in which currency the sum was denominated. For instance, the Purchasing Power Parity rates are those at which the real price of a standard “Big Mac” is the same in all countries.

¹⁴⁾ For instance the so-called “Balassa-Samuelson effect” posits that a country which has a relatively high productivity in its traded goods sector, compared to its non-traded goods sector, will have an overvalued currency relative to its trading partners. An alternative perspective is the so-called “Houthaker-Magge-Krugman” (HMK) hypothesis. It suggests that countries with different long term growth rates, relative to their trading partners, may suffer secular changes in their real exchange rates (for further details see R. MacDonald, 2000).

change rates to influence the growth process. "... Under flexible exchange rates even a reverse causation is possible, in a way the "fundamentals" are determined by the developments of the exchange rate" (Euro parliament, 1999, p 21).

How can the exchange rate volatility dampen growth? Through two main channels: volatility will affect the profitability of international trade, and it will also affect the profitability of investment.

If the link between investment and growth is uncontested, the link between trade and growth is controversial. For supporters of free trade there is no controversy: trade allows an efficient allocation of scarce resources through specialisation in comparative advantages, and this specialisation stimulates productivity, which is a major engine for growth. Trade also enhances the ability of a country to exploit increasing returns due to the access to larger markets, allows the transfer of technology, and increases the incentive to undertake research.

In reality, free trade, by promoting competition between countries of very different economical strengths and political powers, increases inequality between winners and losers. Not every country benefits from trade. The annual UNCTAD report (2003) has shown that some countries that have recently opened their market to trade have suffered a reduction of their growth rate. The World Bank has also produced a study showing that the promises of free trade are inflated. The gains for the developing world if rich countries were to eliminate all of their subsidies, and open all of their markets completely to every export – manufactured as well as agricultural goods – from low and middle-income countries would turn out to be an extra 0.6% of income. In other words, a country with an income of \$ 1,000 per capita would move up to \$ 1,006.

Nevertheless, for those countries that do possess the minimum conditions to benefit from trade, the question remains: how does the exchange rate affect international trade and therefore growth?

1.5.1 A negative impact on international trade

Traditional economic research has encountered difficulties in determining the effect of exchange rate volatility on trade. The adverse effect, if any, was supposed to be minimal. The debate dried up without any firm conclusion. But new theoretical approaches and new empirical studies have renewed the debate.

"Recent literature estimates data with panel techniques modelled in a gravity-like functional form. Pugh and al. (1999) estimates 16 OECD countries in the period 1980-1992 and find that exchange rate volatility leads to a decrease in the level of trade by about 8%. Dell Ariccia (1998) also finds a significant and substantially negative effect of exchange rate volatility on bilateral flows of the fifteen actual countries and Switzerland. By taking the Standard deviation of the real exchange rate and the forward error as proxies for exchange rate uncertainty, the resulting trade gains from the elimination of the exchange rate volatility are respectively 13% and 10%" (cited by D. Taglioni, 2002).

For developing countries as well, exchange rate volatility is a concern for trade. For instance, K. Doroodian (1999) found that exchange rate volatility has a negative and significant effect on trade flows in the case of India, South Korea and Malaysia. Another recent study shows that "... the rise in exchange rate volatility had adverse consequences on both exports and imports of Thailand with the Japanese market, and the imports of Thailand from the US during the period of two decades before the break of the 1997 East Asian financial crisis" (T. Rahmastyah et al., 2002). However less conclusive evidence was found for Thailand's exports to the US market.

The dollarisation of some developing countries economies and the creation of the euro have also given a new impetus to the debate. How much would the radical elimination of exchange rate volatility (materialized by the adoption of a single currency) enhance international trade?

A.K. Rose (2000) for instance, using a so-called gravity model and data on trade between some 186 countries, dependencies, colonies and territories in five separate years from 1970 to 1990, estimates the effects of a number of variables on trade flows between two countries. Besides a common currency and exchange rate volatility, these variables include such factors as distance, economic size, per-capita output, and political and linguistic ties.

Other things being equal, he finds that reduced exchange rate volatility increases trade between two nations. Sharing a common currency has a far more potent effect. Nations with the same currency trade three times as much with each other than they would with different currencies.

To many economists, this effect looked implausibly large. Historical ties between countries creating a currency union would simply generate higher trade volumes even before the creation of the currency union. Leaving them out would exaggerate the estimates of the effect on trade of currency-union membership. Subsequent research by A.K. Rose and others has sought to overcome these criticisms. The general conclusion has confirmed that currency unions boost trade, but tempered the order of magnitude. But the fact that a permanent zero volatility, i.e. a single currency, has a positive effect on trade is widely accepted and customarily known as the "Rose effect".

1.5.2 A negative impact on foreign and domestic investment

Theoretically, the impact of the volatility of the exchange rate on Foreign Direct Investment (FDI) is ambiguous. Volatility can discourage FDI because of the uncertainty pending on the profitability of this investment. But volatility can also encourage foreign investment because localizing its activity abroad can be an efficient way for a firm to hedge against losses due exchange rate fluctuations. But empirical analyses have shown a negative influence of exchange rate volatility on foreign direct investment.

As far as domestic investment is concerned, empirical studies are less clear cut. Studies at the aggregate level tends to conclude that the volatility of the exchange rate have no significant impact on domestic investment. But studies that make a distinction between competitive sectors and non-competitive sectors do establish a negative effect of volatility on domestic investment. Firms are more sensitive to exchange rate volatility when they are exposed to foreign competition and when they sell on a competitive market where profit margins are rather thin. The degree of competition can be evaluated by taking into account the kind of international trade that characterizes a country (J.L. Guerin, A. Lahrèche-Révil, 2001). The international trade can be intersectoral, i.e. the exchange of different products, or intrasectoral, i.e. the exchange of differentiated but similar products. The impact of the exchange rate volatility on the trade of different products is a priori neutral. The impact on similar products depends on the kind of differentiation. If products are of different quality, for instance a popular car versus a luxury car of the same size (what is called vertical differentiation), again the impact of the exchange rate volatility should be neutral. But if the products are differentiated but very close (what is called horizontal differentiation), for instance two popular cars of the same size but from two different brand names, then the difference in price becomes crucial for the choice of the consumer. Firms will have to compete on price and their profit margins will be thin. They will be sensitive to the volatility of the exchange rate because it can make their product more expensive. If the

exchange rate appreciates, then they will have to choose between reducing their profit margin or losing their customers. If the volatility of the exchange rate is high, then the firm will decide that it is not worth investing because profit is at risk. The more the importance of the intrasectoral horizontal trade in the global trade of a country, the more this country is sensitive to exchange rate volatility.

Empirical results confirm this theoretical reasoning (J.L. Guerin, A. Lahrière-Révil, 2001, p 17-19). 14 members of the European Union are analysed (the 15 previous members less Luxemburg) for the period 1980-1996). The volatility of the exchange rate has a negative impact on domestic investment. The more a country is open to international trade, the more volatility has a negative impact for domestic investment. For a given level of volatility, investment is even more affected if the country is open to international trade and if firms are specialized in intrasectoral horizontal trade. In different terms, the more a country trades similar products for which price competition is high, the more volatility is negative for investment, for a given degree of openness. To the contrary, for a given degree of openness, the volatility of the exchange rate has no significant impact on domestic investment when the intrasectoral vertical trade is only considered.

These results show that countries have an interest in stabilizing their exchange rate if they want to stimulate investment and therefore growth and employment, provided they are mutually open to each other and close enough to dedicate a significant part of their trade to the exchange of similar products.

As for developing countries, an empirical study by L. Serven (2002) finds that exchange rate volatility has a strong negative impact on domestic investment (after controlling for other standard investment determinants). The empirical investigation draws on a large sample of 61 developing countries, spanning the years 1970 to 1995. The impact of uncertainty is not uniform, however. Uncertainty only matters when it exceeds some critical level and is significantly larger in economies that are highly open and in those with less developed financial systems.

As low income developing countries are characterised by weak financial systems, this suggests that their investment is more affected by the exchange rate uncertainty. Conversely, in less-open economies with well-developed financial systems, the impact is significantly positive. This suggests that these countries can limit the negative side of exchange rate volatility and benefit from the opportunities that it presents at times.

1.5.3 A negative impact on employment

If exchange rate volatility negatively affects trade and investment, and therefore growth, it should negatively affect employment.

Some studies have tried to evaluate the impact of exchange rate volatility on employment. The point has been investigated for different parts of the world: the US, the European Union (EU), the EU candidate countries, and the South American cone (Mercosur countries).

The rationale is similar to the preceding rationale presented on the impact of exchange rates on investment. Recruitment decisions, like investment decisions, have some degree of irreversibility. To create jobs, firms have to pay a start-up cost which reflects the cost of hiring, training and the provision of job-specific capital. These costs will be lost if a firm decides not to produce after all, for whatever reasons. In Western Europe, where workers cannot be fired immediately thanks to job protection legislations, export-oriented firms will decide not to create jobs and wait for more propitious times if they fear an appreciation of the exchange rate. The value of waiting is increased by the fact that wages and

social protection are rather high compared with the US and developing countries. So exchange rate volatility will reduce job creation in high social standards countries like Western Europe. But advocating for flexible labour markets- the right for firm to recruit temporary workers and to fire them without notice- is no solution. In this case exchange rate volatility will increase job destruction. In so far as the labour force is increasing each year, job destruction and the lack of job creation will increase unemployment.

Empirical investigations of this theoretical reasoning lead to the following results:

- “For Euroland, a decrease of one percentage point in the variability of the effective nominal exchange rate¹⁵ is associated during the same year with a decrease in the Euroland unemployment rate of nearly two-thirds of a percentage point ; and this is followed two years later by another reduction in the unemployment rate of 0.82 percentage point” (A. Bleke, L. Kaas 2002, p 16). Job creation is increased by 0.63% and by 1.21% the second year. This is modest but non negligible. The effect is weaker when the bilateral exchange rate¹⁶ between the euro and the dollar is taken into account but still significant: the unemployment rate is reduced by 0.41% and job creation enhanced by 0.57% in just one year.
- For the US, the results are quite opposite. A decrease of 1% of the effective nominal exchange rate leads to a reduction of the unemployment rate of 0.50% the first year and an increase of employment of 0.28% (A. Bleke, L. Kaas 2002, p 16). But the bilateral exchange rate between the euro and the dollar has a stronger effect. Unemployment rate is reduced by 0.41% but employment is increased by 0.69% one year later. These differences between Europe and the US could be explained by the fact that the share of trade in national income is weaker in the US than in Euroland and therefore the US are less exposed than Euroland to the volatility of their currency. Another explanation is that the US labour market is more flexible: hiring and firing costs are lower than in Euroland. The degree of irreversibility of job creation being lower, job creation is less discouraged by the volatility of the exchange rate.
- For the new European members of the EU, « ... exchange rate variability has a statistically significant negative impact on the unemployment rate in a number of countries, among them the Visegrad countries (Poland, Czech Republic, Hungary and Slovak Republic), ... and the outliers Bulgaria and Rumania (A. Bleke, R. Setzer 2003, p 27). For instance, a decrease of 1% of the volatility of the nominal effective exchange rate reduces the unemployment rate by 1.99 percentage points in Poland, 1.78 in Slovakia, 0.85 in the Czech Republic and 0.43 in Hungaria during the first year, with cumulative effect the second year (op cit p 42). For these countries, reducing the volatility of the exchange rate would have a much stronger positive effect on the unemployment rate than in western Europe.
- In the case of Mercosur countries there is also a negative impact of exchange rate volatility on unemployment, and employment (A. Belke, D. Gros, 2002, p 26-27). Foreign exchange volatility is much higher than in Europe. The average variability of nominal dollar exchange rate of the Argentinean peso during the whole period under study (1970-2000) has been 7.32%, that of the Brazilian real 3.69% and 2.11% and 2.52% for Paraguayan and Uruguayan currencies. Also in nominal terms, interest rate variability reaches the aberrant level of 31.87% in Argentina, 28% in

¹⁵ The effective nominal exchange rate is the average exchange rate of the major trading partners of a determined country pondered by the weigh of each partner in the total exports of the country, or in the total imports of the country or both of them. Nominal means that inflation is not discounted from the value of the exchange rate.

¹⁶ Contrary to the effective exchange rate, the bilateral nominal exchange rate measures the value of a country's currency to the value of another country's currency.

Brazil, 11% for Paraguay, and 4.57% for Uruguay. The variability of the real exchange rate is much lower than the nominal one, but still high by European standards, at 6.38% for Argentina and 2.54% for Brazil.

However, the whole period (1970-2000) includes very different episodes in terms of volatility. For example, Argentina suffered a period of extreme instability at the end of the 1980's, followed by a period of extreme stability during the first years of the currency board in the nineties. Brazil also experienced high instability in the eighties until the stabilization plan creating the Real in 1994. It is therefore necessary to split the sample for each country and focus on episodes of high volatility. With such high level of volatility one might expect strong negative impact on employment and unemployment. In fact, it is not the case. For Argentina during the period 1973-1990⁽¹⁷⁾ a decrease of 1% in the variability of the exchange rate between the euro and the US dollar would have reduced the unemployment rate by 1.38% percentage points and increased employment by 0.52% after one year. For Brazil the dollar/euro exchange rate is not as important due to the difference in the geographical distribution of exports. But a decrease of 1% of the nominal bilateral exchange rate volatility of the real vis-à-vis the US dollar is associated during the period up to 1993 with a reduction of 0.11% in the unemployment rate and an increase of employment by 0.5% with a delay of one year. The result is slightly stronger vis-à-vis the euro. These negative impacts on unemployment and employment may seem weak for such instable countries. One explanation brought by the authors is that Brazilian and Argentinean firms have learnt to cope with macroeconomic uncertainty and especially foreign exchange volatility. It is true that these firms try to rely exclusively on internal funds, leaving in a kind of financial autarchy, limiting as much as possible the use of banking credit or corporate bonds.

Another consequence of the foreign exchange volatility during the period under review (the eighties) was the fall in the investment rate and the obsolescence of the productive capacities. Indeed, the high volatility of the foreign exchange rate, the interest rates and domestic prices (hyperinflation) during the eighties lead to a prolonged economic downturn known as the "lost decade" in the southern cone. It is only with the temporary come back of stability at the beginning of the nineties that investment recovered. But unemployment remained high because the new investments were very intensive in capital and technology and because firms maintained their efforts of adaptation to macroeconomic uncertainty. They introduced new organizational productive models more fitted to economic instability. For instance, externalisation was pushed to the extreme together with labour flexibility. In such conditions, the negative impact on employment is structural, and it is not surprising that short-term variables such as foreign exchange volatility have a weak effect on employment.

1.5.4 A negative impact on real wages

The volatility of the exchange rate has a negative impact on real wages because it stimulates inflation. This phenomenon is known as the "pass-through" effect. Exchange rate "pass-through" can be defined as the degree to which exchange rate changes are reflected in domestic prices of a particular country. Imported goods cost more when the domestic currency depreciates, and this is passed on through producer prices and then consumer prices, reducing the purchasing power of wage earners. Even worse, an "independ-

¹⁷⁾ i.e. before the establishment of the currency board in 1991, which created a fixed exchange rate of the Argentinean peso against the dollar.

ent” blind-minded central bank like the ECB can react with an increase of the interest rate if it fears so-called “secondary effects”: wage earners will ask nominal wage increases to compensate for the increase of consumer prices and this can degenerate into general inflation. Citizens are then doubly punished: first by the inflation, and second by the economic slowdown and the subsequent loss of jobs.

The “pass-through” effect varies across countries. It is generally significant, but is more modest in developed countries and much higher in developing countries, because these countries generally import more critical goods such as consumer goods, intermediary products and capital goods.

How important is the pass-through for the E.U? Anderson analyses the pass-through of changes in the effective exchange rate of the euro to extra-euro area import prices to manufacturing. His results indicate a pass-through of around 50% to 70%. At least half of the impact is passed through within one quarter, while most of the effect occurs after about five quarters.

In a recent paper, Elke Hahn (2003) estimates a total pass-through of exchange rate shocks on import prices of 50% (after three quarters). These results are broadly in line with the findings of Anderson (2003). He also finds a total effect of exchange rate shocks on the Harmonized Inflation Consumer Price Index of the E.U. of 16%.

Overall, even if the results are different from one country to another, they show that there is a case for stabilizing the exchange rate. Trade, investment and growth, purchasing power and employment would be favoured.

1.5.5 Is the volatility of the euro exchange rate important?

“No”, would answer a majority of those who strongly supported the creation of the euro. The exchange rate of the euro is not to be considered important because the Eurozone countries trade mostly between themselves in euro. The euro should preserve the country members from the adverse effect of exchange rate fluctuations, because trade with external countries is now a minor share of total trade of the Eurozone countries. The GDP share of the euro area’s trade with other countries is now about 16% compared to 30% before the euro. This ratio is comparable with the figures for the US (10%) and Japan (9%). With the entry of newcomers, the share of external trade should lower still, and if the UK, Sweden and Denmark join the euro area, the ratio should fall to about 10%.

In 1997, when the exchange rates of the majority of the European currencies were already fixed, the euro was presented in France as a “monetary shield” against the aftermaths of the Asian crisis. In 2001 Didier Reinders, Belgian Ministry of Finance at the time, declared that the euro was “our Tobin tax”. In other terms, because of the self-centred character of the euro area, country members could benefit from internal stability and, like the US, could afford the luxury of a benign neglect policy for the external value of the euro. In the medium-long term, the euro should become as strong as the dollar, providing the euro area the same privileges than the US are enjoying since the dollar has replaced the sterling pound as the major currency. These privileges include the possibility to pay a significant share of its imports in its own currency, which strongly reduces the balance of payment constraint, and the possibility to determine the interest rate on world financial markets. For the moment, the euro has not yet replaced the US dollar, and will probably never do it (B.J. Cohen, 2003).

The European Central Bank (ECB) has fully agreed with the idea that the exchange rate of the euro is not important but for different reasons. Not because it shares the project of grandeur for the euro, but because it leaves the bank free to decide what should be the appropriate interest rate for price stability. The ECB does not want to be constrained by

any exchange rate policy. It would only take into account the exchange rate of the euro if it threatens price stability.

The primary and unique objective of the ECB's monetary policy, laid down in the Maastricht Treaty (Article 105, paragraph 1.) is indeed to preserve price stability, i.e. the internal purchasing power of the euro. The bank has defined this as a rate of inflation, as indicated by the EU's Harmonized Index of Consumer Prices (HICP), of less than 2% per annum. The ECB ruled out any exchange rate policy, even before its official creation in 1999, for fear that it could endanger price stability.

"An exchange rate policy is not considered appropriate since, for an area potentially as large as the euro area, such an approach might be inconsistent with the internal goal of price stability" (European Monetary Institute, 1997) For instance, if the ECB had to reduce its interest rate to help depreciate the exchange rate, it could be contradictory with the necessity to increase the interest rate in order to reduce inflation.

This attitude was reaffirmed in 1999: "As the Eurosystem's monetary policy does not embody an exchange rate target for the euro, the task of focusing on the maintenance of price stability in the euro area is facilitated" (ECB, 1999, p 42). In other terms, the ECB feels free to increase or reduce its interest rates without taking into account its consequences on the exchange rate of the euro.

Officially, the ECB neglects the exchange rate of the euro: "Not having an exchange rate policy - and we have no policy - does not mean that there is benign or malign neglect. For the time being there is neglect" (Wim Duisenberg before the European Parliament's Economic and Monetary Committee in April 1999).

But in early 2000 however, the ECB was obliged to change its position. "Combined with the sharp rise in oil prices, the falling parity of the euro was putting an "upward pressure on import and producer prices". This, in turn, threatened to trigger secondary effects, notably increased wage demands." (European Parliament, 2000, p 10). By March 2000, the inflation rate had reached 2.1%, exceeding for the first time the 2% definition of price stability, and 2.4% in June. The ECB reacted by raising its interest rates in February 2000, and again in March, April, June and August.

These interest rate rises had no apparent effect on the exchange rate of the euro that continued to depreciate vis-à-vis the US dollar, but it did slow down European growth.

In summary, the EU growth is plagued by a policy of benign neglect for the external value of the euro consistent with neo-liberal economic policy on the internal front.

If neo-liberal policies sanctified by the Maastricht Treaty and the Amsterdam stability pact were rejected and replaced by a "alternative" economic policy¹⁸, would it be still possible and desirable to pursue a policy of neglect for the exchange rate of the euro?

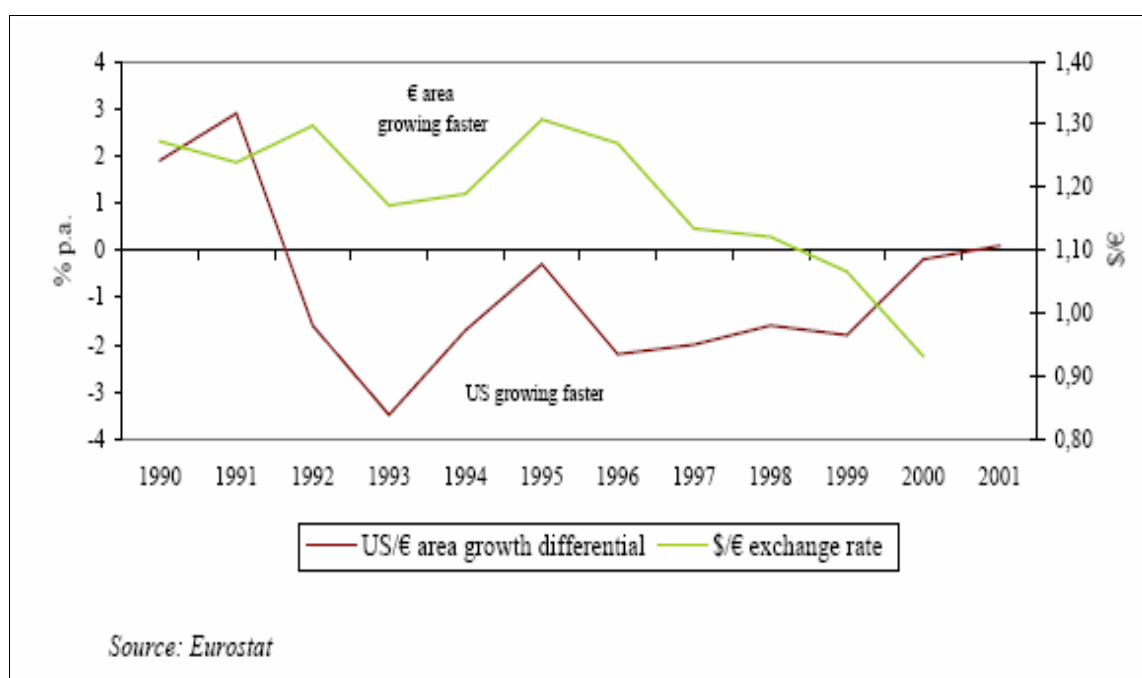
No, because the policy of "benign" neglect is flawed. The relatively low share of extra eurozone trade does not mean that the euro exchange rate fluctuations could be neglected.

Even a relatively closed economy remains sensitive to its exchange rate value. The case of Japan is illustrative.

"Incessant pressure-implicit and explicit- from the United States to make the yen appreciate from 360 to the dollar in 1971 to just 80 in 1995 is the historical origin of Japan's deflationary psychology today" (R.Mc Kinnon, 1999, 77).

For the EU too, exchange rate volatility of the euro has a direct impact on growth and employment. The following chart shows this impact by comparing the growth differential between the US and the euro area (left scale) and the exchange rate between the euro and the US\$ (right scale). (See figure 1-3)

¹⁸ What we call a "progressive economic policy" is defined and discussed in "European Economists for an Alternative Economic Policy in Europe" 2001, 2003.

Fig. 1-3 : Euro Area and US Economic Growth (%), and €/ \$ exchange rate, 1990-2000

Source: B. Patterson, D. Sienkewicz, X. Avial, 2000, p 48.

As long as the (proto)euro remained above 1.10 euro per dollar, the US grew faster. But we can see that after 1993, the growth differential in favour of the US tends to decrease in response of the declining tendency of the euro. After the launch of the euro in 1999, the euro decline accelerates, boosting export and growth in the euro area. In Germany, for instance, during the first quarter of 2000, exports were at a level over 20% higher than in 1999.

According to a simulation of the OECD using its interlink model (J. Coppel, M. Durand, I. Visco, 2000), a 30% decline in the effective exchange rate of the US\$ relative to its baseline from 2000 onwards, would subtract 0.75% to real output growth in each of the first two years of the simulation, which is really high in comparison to the small rate of growth in the euro area (between 1.5-2% on average). In Japan, the impact is substantially larger, with real growth almost 1.5% lower in the two following years.

This simulation was one among many that were done in this period because lots of economists and institutions were predicting in 1999-2000 that the fiscal and current account of the US were unsustainable and incompatible with the "strong dollar" policy and that a depreciation of the US\$ between 30% to 40% was necessary to correct them.

This correction started in June 2002 and the sharp appreciation of the euro against the dollar reached 45% at the end of 2003, from 0.85 US\$ to 1.26 US\$. In effective terms, the appreciation has reached 30%.

This appreciation appears to be the main factor behind Euroland's shallow recession in the first half of 2003. The INSEE quarterly econometric model ⁽¹⁹⁾, built and estimated for the euro area taken as a single entity, shows that Euroland's GDP would typically react with almost no lags to a currency shock, the maximum impact (a temporary 1% GDP decline following a 10% rise of the euro) being recorded only two quarters after the shock

¹⁹⁾ The Institut de la Statistique et des Etudes Economiques (INSEE) is the main public institution of economic research in France.

(0.6% the first quarter after the shock, 0.4% the second quarter). Another interesting result of the INSEE model is that a change in short-term interest rate takes much longer to feed through the euro zone economy than a change in currency rates would do. For instance, a 1% cut in short-term rates would eventually add 0.8% to GDP (comparable to the effect of a 10% of the euro) but only 20% of the full effect would appear after two quarters, versus 100% for the exchange rate. Currency fluctuations have immediate effects on output, whereas monetary policy works with considerable inertia.

Another estimation, realized by the French Bank, Société Générale, shows that the sharp appreciation of the euro has led to a significant reduction of exports and profit margins, but not of inflation (V. Riches-Flores, 2004). Since 2002, the market shares of European exports have fallen by 8% with a subsequent direct reduction of growth by 1.1% (0.55% each year)⁽²⁰⁾. But in the hypothetical case that the euro reaches US\$1.40 in 2004, i.e. another 20% increase relative to 2003, there would be an extra fall of European export market shares of 0.8% to 1.1% and another direct effect on growth between 0.63 to 0.66% according to the hypotheses.

Even if the euro does not reach such a historical level, the preceding figures show how much a policy of benign neglect for the euro would also be a benign neglect of growth and unemployment.

There is another reason why a relatively closed economy is not immune of exchange rate fluctuations. Even if the importance of its trade is reduced, its exposure to international financial flows can be high. Since the beginning of the financial globalisation process in the eighties that generalised free capital movements, a majority of countries, the EU and developing countries included, are financially integrated. International portfolios and direct investments can dramatically change the exchange rate and fix it at values incompatible with the necessities of trade.

Chile for example experienced in the eighties an increase of its exchange rate because of excessive portfolios and direct investments. This appreciation of the Chilean currency was a bad news for Chilean exporters that saw their products becoming too expensive for foreign customers. This led the Chilean government to create a one-year non-remunerated 30% mandatory deposit for each new capital inflow with the aim to curb short term capital but not FDI.

In 1997, Asian countries suffered a major currency crisis due to large capital outflows. Net private capital to Asia that had reached a record peak surplus of US \$ 99 billion in 1996, fell to US \$ 28 billion surplus in 1997, and then turned into an abyssal deficit of US \$ – 44 billion in 1998 (IMF, chapter 2, September 1998). As a consequence exchange rates experienced a dramatic fall. Within the 14 months to September 1998, the Real effective exchange rate of Korea, Malaysia, the Philippines, and Thailand declined by 18-28% and that of Indonesia by 60% (IMF, Chapter 2, September 1998).

1.6 How can we stabilize the volatility of the exchange rate?

If we agree that there is a case for stabilizing the exchange rate, the question pending is: what is the best way to achieve this stability? Is the CTT the best solution? Is it more or less realistic than other proposed solutions?

To answer these questions, it is necessary to review some other proposals. We will begin with the more simplistic and modest proposal, apparently a more realistic one: it consists of coordinating economic policies and monitoring foreign exchange markets. We will then return to a proposal presented in the introduction that appears as far more ambi-

²⁰⁾ The difference with the INSEE result is that in the Société Générale estimation, the induced effect on growth is not taken into account.

tious and radical: the creation of a single world currency that would tackle the problem to its root: with a single currency, there would be no more speculation and no more instability.

Between these two extremes, we will consider what we call the “intermediate solutions”, e.g. the “target zone” proposal. To our view, the target zone is the solution best suited to deal with the present dangers of financial globalisation, provided it is designed in a cooperative way and relies on instruments of protection against speculation and financial instability in general.

This is where the CTT comes in. It can be one of the instruments of protection, but probably not the only one. In period of crises, it can be combined with other instruments of capital control.

1.6.1 Coordinating economic policies and monitoring foreign exchange markets

Under the promising title “the case against benign neglect of exchange rate stability” (B. Coeuré, J. Pisani-Ferry, 1999) the authors present what was more or less the position of the French government at the end of the nineties. It consists of a “two handed approach”.

The first “hand” coordinates responses to macroeconomic shocks. If responses were coordinated and known in advance by market participants, exchange rate would be more stable. For instance, during the Russian crisis of August 1998, the market knew in advance that the US would react by cutting its interest rate and that the EU would keep its interest rate stable. The dollar depreciated by more than 10% in a few weeks. The EU finally cut its interest rate on December 1998 and April 1999, and it helped to reverse the depreciation of the dollar. By the spring of 1999, the euro-dollar exchange rate had returned to the level of the previous summer. If the US and the EU had cut their interest rate at the same moment in reaction to the Russian crisis, these exchange rate swings could have been avoided.

To systematise this kind of coordinated response to international macroeconomic shocks such as the Russian crisis, Europe, Japan and the United States should agree in advance on a “core set of broad macroeconomic policy principles” that would sort out the roles of fiscal and monetary policy in responding to shocks. Neither the exchange rate nor numerical exchange rates targets should be included as policy tools.

The basis for such a convergence is the “common economic philosophy” developed over the years by the Group of Seven countries. This common philosophy has come to favour a monetary policy with a single main objective: domestic price stability. “As a result, monetary policy can be used to coordinate policies at the international level only if external objectives are consistent with domestic monetary strategies” (we underline).

Under these conditions, the effective action decided collectively by the G7 in response to shocks can only be very limited. For one, because the monetary policy is the main instrument considered, it presupposes that exchange rates are always sensitive to the interest rate, which is not the case.

Second, each time a country decides that it cannot change its monetary policy for domestic reasons, it will not join the collective response. In the previous example, why did the EU not cut its interest rate together with the US? Because it thought that it was bad for European price stability. And when the ECB finally cut its interest rate, it was not to help Russia, but because the devaluation of the US\$ was interpreted as a threat to price stability.

What’s worse, it is hard to imagine that “the core set of broad macroeconomic policy principles” could be applied when the EU, Japan or the US are victim of a unilateral shock. Especially because these principles, “would not be binding rules but, rather, tools for redu-

cing uncertainty and cutting transaction costs, and they would provide a structure for policy discussion". In case of unilateral shock, each country would have to react on its own through monetary policy and there would not be any coordinated response nor exchange rate stability. The use of monetary policy can even amplify the effects of shocks on exchange rates. For instance, if Europe suffers a demand shock, followed by capital outflows that migrate to the US to exploit better profit opportunities, the euro will depreciate. If the ECB increases its interest rate for fear of inflation, it can stimulate the depreciation of the euro instead of raising its value. This is what happened in the EU in 2000 (B. Patterson, D. Sienkiewicz, X. Avila, 2000, p 42).

The second "hand" monitors foreign exchange markets in order to improve the flow of information to market participants so as to limit market-induced volatility. For example, "aggregate information on positions and return expectations would be released to the markets on a regular basis and without delay" to help explaining the timing and magnitude of portfolio shifts. The chairman of the Financial Stability Forum "... could confidentially signal to the Group of Seven the existence of an abnormal risk exposure, so that ministers and governors could issue appropriate warnings to the market" (B. Coeuré, J. Pisani-Ferry, 1999).

These proposals are welcomed but one cannot expect too much of them. First, it may be possible that transparency is more destabilising than stabilizing. Knowing the timing and magnitude of portfolio shifts may accelerate these shifts because of herding behaviour.

Second, better information is an already old proposal that did not prove very efficient until now. D. Felix (1999) tells the story. In 1979, two years before the Third-World countries' "debt crisis", there was already much joy over the fact that better economic information published by the BIS, IMF and World Bank had allowed banks to improve their decision-making process for foreign loans and credit risk assessment, with the result that no countries had yet been forced to default. Working for improved transparency was also the G7 countries' response in 1995 after the 1994-95 Mexican crisis, when they asked the IMF to publish the relevant economic information. Two years later, the Asian crisis led the BIS to note "that despite BIS statistical data being available beforehand, showing the increasing vulnerability of several countries to a sudden withdrawal of short-term international capital, the volume of loans granted by banks never ceased to increase" (BIS 1998). The story goes on with the proposals, made in particular by the IMF, G22 and the "Forum for International Stability"⁽²¹⁾, which emphasises the need for increased transparency and prudential controls.

In synthesis, better information to public authorities is useful if they are decided to take action and not only issue "appropriate signals to the market". When the FED chairman warned the market of the existence of "irrational exuberance", it did not deflate the speculative bubble; rather, it kept on inflating for two more years, for the simplest reason that market participants had an interest in continuing to speculate.

In conclusion, we would say that this first proposal lacks so much ambition that it is condemned to inefficiency. At the opposite of the span, R. Mundell makes a very ambitious proposal: creating a world currency.

²¹⁾ The "Forum for International Stability" was created in February, 1999 at the G7 countries' request with the purpose of drawing up proposals for reforming the international financial system. It is made up by the finance ministers, central bank directors, OECD representatives, national supervisory authorities, IMF, World Bank and BIS (Bank for International Settlement).

1.6.2 Creating a world currency

The design for a new global exchange rate system advocated by R. Mundell (2000) is the most ambitious and the exact opposite of the previous proposal that only pleaded for economic policy coordination with no binding rules. Given the high degree of inflation convergence among the major currency areas ⁽²²⁾ he argues that some sort of monetary union between the US, Europe and Japan (the G3), that produces 60% of world output is desirable and feasible. This monetary union would be desirable because it would foster monetary stability of the G3 countries and this would be beneficial for outsider countries too.

A fixed exchange rate is a monetary rule, one approach to price stability. The other monetary rules are inflation targeting and money supply targeting. A big country like the US, or Japan, or the EU, has no other choice than to adopt an inflation or money supply target, because there is no point in fixing its currency to the currency of a smaller state. But an intermediate or a small country has the option of fixing exchange rates as an alternative to inflation or monetary targeting. "Austria, Holland and Belgium-Luxembourg, for example, achieved inflation rates comparable with the best in the world by fixing their currencies to the mark" (p 287). The same is true for Canada and Mexico, during periods when they fixed their exchange rate with the US dollar. The stabilization of the G3 currencies would benefit the rest of the world, and in particular developing countries. "A stabilization of the yen-dollar rate would be a great benefit for the rest of Asia, just as a stabilization of the dollar-euro rate would be a great benefit to Europe and Africa" (R. Mundell, *op cit*, p 289).

The key initial condition is a commitment of countries to price stability, which also appeared in the previous proposal as the primary objective of economic policy.

When inflation is similar between countries, there is no need for significant exchange rate changes. If exchange rates fluctuate enormously, as the yen-dollar rate during the nineties, it is not to fulfil any economic function except for "... stuffing the socks of hedge funds..." (p 295). Fixing the exchange rates between the core currencies, to start with, then creating a true single world currency, would eradicate speculation on these currencies. For the small countries (meaning the rest of the world) "... the best way to protect their currencies from speculative attacks is to fix their currencies to one of the big three currencies, making sure that the money supply is allowed to - and is perceived to be allowed to - move with the balance of payments without sterilization" (*op cit*, p 285).

According to R. Mundell this monetary union between the G3 is feasible. The creation of a real single world currency among the Big Three right from the start would be the best solution but would not be politically feasible. "National egos would get in the way in the case of the United States and Japan, and Europe would not be willing to scrap a new currency that it worked so long to prepare" (p 297-298). Instead of creating a single world currency the Big Three could fix their exchange rate, taking one of the currency, say the dollar, as a pivot currency. For example, 100 yen = 1 US dollar = 1 euro. "The three currencies would be simply different denominations of the same currency. The new name of the cent or centime would be the yen!" (*op cit* p 293)

To manage this monetary system based on fixed rates of the G3 countries, a world central bank should be created, producing an international asset backed by reserves of dollars, yens, euros and gold. This world central bank would target an agreed inflation index, common to the three countries and try to achieve it through the management of the single currency money supply. A fair distribution of international seigniorage should be agreed. Other countries could then decide to fix their currencies to the new world currency and benefit from monetary stability. The world central bank initially composed by a trium-

²²⁾ Between 0-2% for Europe and the US, 0-3% for Japan.

virate of the Federal Reserve, the European Central Bank and the Bank of Japan, could then admit new members from other countries. At the final stage, the world central bank and the world single currency would be the property of all nations.

Mundell's proposal has triggered an ongoing academic debate about the desirability of a single world currency. Rogoff (2001) for instance identifies a number of fundamental reasons against a global currency unification, including: (i) no adequate checks and balances on the global central bank due to the absence of a global government; (ii) international decision making could make it difficult to agree on appointing central bankers who place a strong weight on inflation; (iii) global currency competition provides a check on inflation.

In our view, the creation of a single world currency managed by a world central bank in the present process of globalisation of capitalist economies would be a major step back from a social and democratic perspective.

1. We have already discussed the importance of price stability for neo-liberal policies. Price stability is an ideological justification for refusing wages increases and more generally what is called the labour cost which includes contribution to social security. Price stability is necessary to guarantee the real gains of bond holders and stockholders. In today's world, adopting price stability as the primary objective of economic policy is nothing less than fixing for eternity the increasing inequality of revenues between wages earners and rentiers.
2. The creation of a single world currency in the present circumstances where competition between nations and workers is already systematically organised by the World Trade Organisation through the pretext of free trade would worsen this competition with negative consequences on wages and employment. The comparison can be made to a certain extent with the creation of the euro. The euro was created as the corner stone of the single European market that institutes competition as the driving force of growth and social progress. Without the possibility to change the exchange rate, and in a context of low inflation, the full weight of economic adjustment falls on wages and employment. It is not by chance that the euro area scored the lowest growth rates among rich countries. A single world currency would have the same negative effect for labour, but with an aggravating factor. Most of the EU countries are welfare states, but it is not the rule, rather the exception in developing countries. In the poor countries there is no social safety net. The negative effect of a single world currency for workers would be devastating. With free trade, Indian peasants that produce corn in the Mexican state of Chiapas have to compete with big North American producers that use capital-intensive means of production. With a single world currency (the dollar?) they could not even count on a weak peso to reduce some of their competitive lag. This is not to say that a single world currency is a bad idea in itself. The euro is not a bad idea in itself too ⁽²³⁾. The question is on which economic ground and to serve which social purposes a single currency is created.
3. The creation of a world central bank poses a real problem of democracy. Here again the comparison with the ECB is enlightening. The ECB has an enormous power in the EU: the right to determine the monetary policy in an area where the budget policy is corseted by the "stability pact". This power is not democratically legitimated by any citizen choice. The governors of the ECB are appointed by the EU states without any consultation of the European Parliament. The ECB is not accountable to the Parliament or the European Commission, or the European Council

²³⁾ We can say on the same line that the majority of NGO that critics globalisation is not against globalisation in itself but against neo liberal globalisation.

as it is institutionally independent if not politically independent. It counts no representatives of trade unions in its rank to defend the interests of wage earners and unemployed. Lots of criticisms have been raised against this bureaucratic institution in Europe. Now let's imagine how democratic an institution of this type at the world level could be, without any "world government", nor "world parliament" to give account to? How would the governors of this world bank be designated? How could this institution appear legitimate to decide the future of citizens of very different countries?

A world bank to manage a world currency in the present situation can only be a new instrument of power for the interest of the rich countries. As R. Mundell recalls it himself, previous historical examples of nearly "world currency" are to be found in the currency of empires that dominated parts of the world like the Roman Empire. In today's world, "dollarisation" or "euroisation" is nothing more than monetary colonialism. It is hard to imagine why the merger of these currencies and their geographical extension would serve the cause of multilateralism and power sharing. A world central bank would be dominated by the US, or a modern triumvirate of the big three.

R. Mundell's proposal is not only totally unrealistic and far more demanding than the CTT, but it is also socially and democratically dangerous. This is one reason to reject it and to defend an alternative. It is a right for each country or group of countries to possess their own currency or monetary system to preserve margins of autonomy to decide their own policies and future. This involves the possibility to change the exchange rate when necessary, which does not mean that exchange rates should be totally flexible and fully determined by the market. Exchange rates should be allowed to fluctuate around a targeted average determined by economic policy. The target zone is a first step toward this direction.

1.6.3 The Target zone

A number of proposals advocate the creation of a target zone for bilateral (nominal) exchange rates. Target zone proposals can vary regarding the size of the band and the rules for intervention and of course the appropriate exchange rate that should be targeted. A "Target zone" in its broad sense is simply a system of limited flexibility in the sense that the exchange rate vary inside a wide band without any reference to a central parity. The crawling band and the monitoring band do have a reference to a central parity (see box 1-3).

Box 1-3 : The crawling band and the monitoring band

“A crawling band involves a central bank undertaking a public obligation to maintain its country exchange rate within a wide, publicly-announced, band around a parity that is periodically adjusted in relatively small steps in a way intended to keep the band in line with the fundamentals. The band width has typically been envisaged as something like +/- 10% around a parity... The principal cause of the change of the parity – the crawl – is typically the inflation differential to ensure that domestic inflation does not lead to a progressive erosion in international competitiveness... The parity changes must be made in incremental small steps in order to avoid speculators to anticipate correctly an impending parity change.

The key difference between a crawling band and a monitoring band is that the latter does not involve an obligation to defend the edge of the band. The market expects it, but the authorities may choose to allow the rate to go outside the band. The difference with a floating regime is that traders know the band in advance and that the central bank may intervene to defend the band. The fear of the intervention may refrain the traders from pushing to the exchange rate too far.“

Source: J. Williamson, 1999.

The main advantage of bands, according to J. Williamson, is that they perform “... the function of crystallising market expectations of where the equilibrium lies, and thus makes expectations stabilizing at the time horizons relevant for influencing market behaviour. This is the fundamental reason for preferring a band system, rather than allowing the exchange rate to float” (1999).

The requirement is that the band must be at least partly credible, and that implies choosing the right parity, the right band, and a central bank that appears capable of defending the band by judicious interventions. As long as the band is credible, the central bank has no necessity to intervene. But in case of a macroeconomic shock, intervention is unavoidable.

The problem is that a central bank can try to defend its currency in the situation of a depreciation of its currency up to a certain limit. This limit is the budget constraint of a given amount of foreign exchange reserves. As the speculators are able to anticipate the running out of reserves, or even provoke it by selling the currency, the central bank is vulnerable to speculative attacks

“But the situation is completely different if a central bank tries to limit the appreciation of its currency. In this situation, the central banks buy foreign exchange against central bank deposits (denominated in its own currency) that it can supply without any quantitative limit. As there exists in principle no budget constraint, speculative attacks by the markets are no longer a real threat”. (P. Bofinger, 1999).

The only problem is that if the ECB buys foreign exchange from a commercial bank, it credits the equivalent of the bank’s ECB account in euros. As a result, the euro area monetary base increases, pushing the interest rate down with possible inflationary consequences. We find here again the price stability argument. As the OECD (J. Coppel, M. Durand, I. Visco, 1999) puts it:

“Such interest rates moves may not necessarily be consistent with price stability and thus there is a risk that credibility of monetary policy may be lost, raising the risk premia and undoing part of the benefits of monetary unions” (p 11).

The solution is for the central bank to “sterilise”, i.e. neutralise, the effect of interventions on the monetary base in such a way that the domestic money market rate remains constant. “This can be done by reducing the credits that the central bank offers to commercial banks, or/and by offering commercial banks interest-bearing deposits with the central bank that cannot be used for domestic credit expansion. The ECB, for instance, has the

newly created instrument of a “deposit facility” at its disposal for that purpose” (P. Bofinger, 1999).

The main problem with sterilisation is that it can impose losses to central banks. It occurs when the domestic interest rate is higher than the foreign one. It may not be a problem for rich countries which sometimes have lower interest rates than abroad, for instance Japan during the nineties with the zero interest rate, or the US which have most of the times lower interest rates than the EU. But for the EU, and last but not least for developing countries that generally suffer from higher interest rates, it can be a real problem. In this case, the interest income that the central bank obtains from its foreign assets is lower than the interest costs of the deposit facility. Many central banks have been confronted with this problem in the past. As such costs cannot be borne without limit, especially by central banks of developing countries, sterilised intervention is again confronted with a budget limit and the intervention policy is again vulnerable to speculative attacks.

The solution is to match the interest income loss with a profit coming from the difference of value between the two currencies. “This requires that the central bank targets the exchange rate in such a way that the home currency is depreciated vis-à-vis the foreign currency according to the prevailing interest rate differential” (P. Bofinger, 1999). For instance, let’s assume that the FED would have been willing to prevent the euro from depreciating against the dollar in the first half of 1999, fixing a limit of 1 \$ = 1 euro. With an interest rate differential of 1.75% to 2.25% in favour of the dollar the FED would have incurred losses. “This could have been avoided by adjusting the exchange target rate in a way that it allows a depreciation of the dollar vis-à-vis the euro which exactly corresponds to the interest rate differential. For instance, the FED adjust this limit after one year to about 1.02 dollar” (op cit p 21). It would have been possible since a central bank is always able to depreciate its own currency with sterilised interventions.

To summarise, if a central bank targets its exchange rate along a path that is determined by the interest rate differential, sterilised interventions are profitless and costless and do not endanger the price stability objective.

The advantage of such proposals is that it proves that countries can intervene efficiently even against supposedly overpowered markets. And of paramount importance, they can do it on their own without asking the permission of the US, for instance.

The weak point is that it provides no rules in case of swings in the opposite direction, i.e. a sharp devaluation of the euro or the yen. It may not be a concern for the EU and Japan, but it is a major point for developing countries who are especially confronted with speculative attacks that destroy their currency. The second disadvantage is that it alienates again the interest rate and the monetary policy to the defence of the exchange rate target.

One solution to the problem of sharp devaluation is a bilateral or even multilateral agreement on bilateral target rates (T. Palley 2003, P. Bofinger, 1999). The EU and the US could agree on an exchange rate band with the following division of labour:

The ECB intervenes to defend an upper limit of the euro’s dollar exchange rate, say 1.20 dollar per euro. The FED intervenes to defend a lower limit of the euro’s dollar exchange rate, which is equivalent to an upper limit of the dollar’s euro exchange rate, say at 1.00 dollar per euro.

Defining the appropriate exchange rate and the width of the band is still pending. P. Bofinger proposes again the interest rate differential. T. Palley (2003) proposes to take into account the Fundamental Equilibrium Exchange Rate (FEER), which raises some problems.

The basic notion of the FEER, proposed by J. Williamson (1994) is that participating countries select a set of exchange rates consistent with their targeted current account and

GDP outcomes. The FEER differs from Purchasing Power Parity by emphasising real macroeconomic factors rather than the nominal factors of monetary aggregates, inflation and exchange rates. The aim is calculating the real exchange rate consequences of trend developments in demand, GDP growth, competitiveness, fiscal policies, etc.

The problem with the FEER is conceptual and empirical. First, it is necessary for participating countries to agree on a consistent set of national current account targets as not all countries can run surpluses. Some countries will have to accept deficits of their current accounts. This implies a high degree of political agreement and economic coordination that does not exist presently at least between the big three.

R.Dornbusch (1999) explains it brutally: "There is no chance that America will join a scheme that limits its flexibility and puts responsibility for US economic performance in the hands of financially inexperienced and statist-minded socialist governments. Equally remote is the chance that the US will agree with Japan on narrow exchange rate margins; the Japanese can't manage their own economy, so why should America tie itself to their misfortunes?"

We are again confronted by the unwillingness of the US government to do anything collectively, because it enjoys a monopoly rent situation.

The second problem is empirical. The empirical investigations give a wide range of estimates, reflecting large uncertainty, and are of little practical use. For instance, a report of the French council of economic advisers (CAE, 1999) calculated a range of \$ 1.07 to \$ 1.43 against the euro depending on the assumptions based on past behavioural relationships.

But more decisive is the following criticism against target zones and any attempt to stabilize or even fix exchange rates.

"Some claim that under a regime of fixed exchange rates, monetary policy itself can become a genuine source of policy shocks (C.M. Reinhart, V.R. Reinhart, 2001). With free capital movements, G3 authorities have to use domestic monetary policy as a tool to stabilise exchange rates.

As a result, the variability of interest rates and monetary induced changes in domestic income and demand may rise. Against this background, the benefits for emerging countries from stabilising exchange rates between the G3 countries are therefore not clear cut.

While under a system of target zones, the relative prices for emerging market economies may become more stable as G3 exchange rates become more predictable, the increased variability of interest rates and G3 income may increase uncertainties for emerging economies related to external financing and external demand. ... To the extent that an emerging market economy is vulnerable to high and volatile world interest rates, the consequences of the trade-off implied by a G3 target may be considerable" (EU Commission Report, 2002).

G.A. Calvo and C.M. Reinhart (2000) apply a similar argument directly to emerging market economies. Because of a "fear of floating", governments of emerging countries adopt monetary policies aimed at stabilising the exchange rate, but thereby increase the interest rate volatility.

The answer to this decisive point is twofold: First, according to J.A. Aizenman, (2001), the existing literature is sceptical about the existence of a trade-off between exchange rate and interest rate volatility. Flood and Rose (1995, p 17) failed to find such trade-off. O. Jeanne and Rose (1999) develop a model of a pure floating exchange rate with an endogenous number of noise traders that can generate multiple equilibria of high and low exchange rate volatility. The same macro fundamentals are consistent with a "good equilibrium (low exchange rate volatility and a low number of noise traders) or an inefficient equilibrium, (high exchange rate volatility and a high number of noise traders). "In

such an economy, a target zone may eliminate the inefficient equilibrium, by restricting the feasible range of exchange rate volatility. In this case there is “free lunch” in the sense that there is no trade off between exchange rate volatility and interest rate volatility- the good equilibrium is associated with lower exchange rate volatility as well as with a lower risk premium and lower interest rate volatility” (J.A. Aizenman, 2001, p 3).

Second, the arbitrage hypothesis can also be contested empirically. Even if one admits the existence of a trade-off for the G3 countries, this may not be the case for developing countries where exchange rates and interest rates are driven by specific factors such as the confidence in the ability to serve external debt, the solidity of domestic political institutions, and the inflow of foreign capital. This last factor in particular implies that exchange and interest rates volatility move together, contradicting the existence of a trade-off described by G.A. Calvo and C.M. Reinhart (2000). During the Mexican, Asian, Russian, and other crises, exchange rates usually depreciate and interest rates increase together. A. Belke and D. Gros (2002) found in the case of the Mercosur countries, though subject to speculative attacks and bouts of hyperinflation, that exchange and interest rates volatility do move together although the relation is less tight during periods of calm.

They also found that the dollar and the euro exchange rates are not strongly correlated with interest rate volatility in the Mercosur countries, which gives no support to the existence of a trade-off between G3 currencies volatility and emerging market interest rate volatility.

To summarize, there is a case for stabilizing the exchange rate through a band of fluctuations. There is concrete evidence that target zones achieved exchange rate stability, at least in some cases, and that a more volatile exchange rate is not the price of foreign exchange stability.

But target zones have also some flaws that cannot be ignored:

There is no autonomy for the monetary policy since the interest rate must be mobilized to maintain the exchange rate inside the band. The exchange rate stabilization is fragile. The target zone is always under surveillance by market operators, and if there is any sign of macroeconomic difficulties, speculation will start destabilizing the exchange rate. In case of a speculative attack, there is no efficient defence instrument and public authorities often have to abandon the exchange rate target.

The CTT can help resolve these two problems: The risk that the volatility can be shifted from the exchange to the interest rate can be suppressed either by the CTT or capital controls. This is acknowledged by C.M. Reinhart and V.R. Reinhart (2001) but disregarded because “restricting capital mobility is against the consensus”. But if public authorities have the courage to restrict capital mobility then monetary autonomy can be restored. For this purpose, a CTT can “... drive a wedge between short-term interest rates in different national markets” (J. Tobin, 1998, p 5).

The CTT can protect a target zone against speculation more efficiently than mere central bank intervention or even an interest rate change. This possibility is criticised with irony by J. Williamson (1999), for whom fending off speculation with reserve requirements (such as in Chile) is “pie-in-the sky”. “It is even more difficult to imagine that a Tobin tax (...) would make epsilon’s worth of difference in stemming a speculative run in which the potential gains are perceived as hundreds or thousands of basis points” (op cit).

This may be true if one considered the original J. Tobin’s proposal of a uniform tax on currency transactions. But as we will now explain in the next section, proponents of the CTT have improved the original proposal to take criticisms into account and to adapt J. Tobin’s idea to the much more integrated financial markets of today’s world.

1.7 The efficiency of the two-tier currency transaction tax

The major innovation to improve and actualise the “Tobin tax” has been made by Paul Bernd Spahn (1995, 2002) with the two-tier Currency Transaction Tax (hereafter CTT). A small CTT could curb ordinary speculation that occurs during “normal times” and a high prohibitive tax would be applied to deter big speculative attacks that strike especially, but not exclusively, developing countries. This innovation is now widely accepted by proponents of the CTT.

But it does not mean the end of the debate, because P.B. Spahn makes policy decisions that not everyone can share and we would like to open the debate by bringing in some different choices.

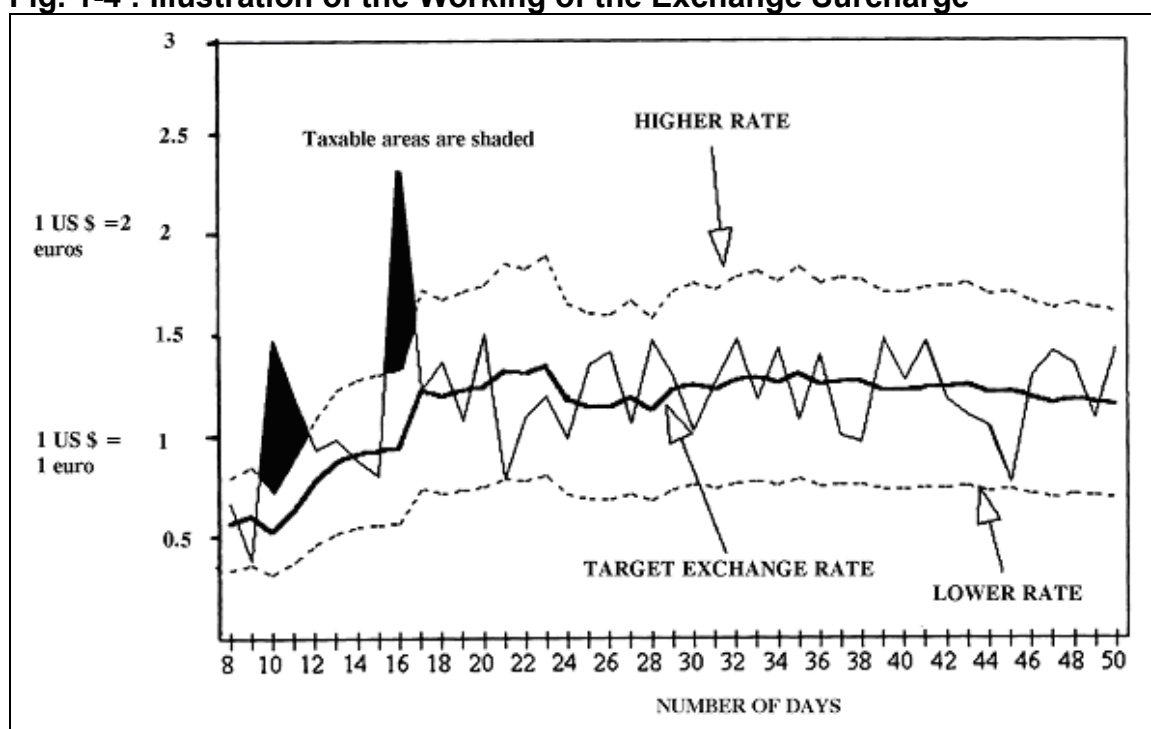
Furthermore, the two-tier CTT has to be adapted to the economic and political context of developing countries. For instance, a fine tuned two tier CTT could discourage, if not suppress, capital flights that plague fragile developing countries before and after the burst of an economic crisis.

And finally, one has to admit that a CTT cannot do everything, and it is important to determine its limits and complete the CTT by a set of complementary measures including capital controls. Rather than looking for the magic wand, it is wiser to combine a full array of instruments at hand to reconstruct a safe financial environment for progressive economic policies.

1.7.1 P.B. Spahn’s two-tier CTT proposal

The basic principle is the following: as long as the daily fluctuations of the exchange rate remain small, a small tax is applied to the currency transaction. If the daily fluctuations go beyond a predetermined threshold, a surcharge is applied.

The following chart illustrates how it works. (See fig. 1-4) Let’s consider the US dollar against the euro market. The foreign exchange rate between the two currencies fluctuate everyday as it is shown. It is possible to calculate the average on the last 20 days, 30 days, or for even longer spans. As the foreign exchange fluctuates anew every day, the average will change in accordance (hence the name “mobile average”). From then it is possible to determine each day an upper limit of say 2.5 % above the average and a lower limit of 2.5 % under the average that creates a band of fluctuations of 5%. As long as the exchange rate determined by the market stays inside the band, a small “normal” tax is applied on each transaction.

Fig. 1-4 : Illustration of the Working of the Exchange Surcharge

Source: Spahn (2002)

1.7.2 What would be the purpose of the “normal” tax?

The “normal” tax is the main source of fiscal revenues because it is levied on ordinary transactions that occur every day. If the CTT is appropriately designed, the surcharge must not be triggered frequently and therefore cannot generate much revenue. At the extreme, if the surcharge leads to a market closure, the fiscal revenues will be null. So the normal tax will provide the bulk of the fiscal revenues.

But the ordinary tax would also smooth the daily fluctuations of the foreign exchange rate. As we have seen, most of the transactions are not justified by customer orders but by the interpretation of news that fuels speculation and bandwagon effects. “This has the following consequence: a rise in price generates a larger rise in expected price; leading to increased demand now in anticipation of higher future prices, thereby exacerbating the rise in price. This phenomenon of destabilizing speculation can be observed at short terms horizons, a few hours up to 3 to 6 months, according to empirical surveys of the foreign exchange markets (J. Frankel, 1996) ⁽²⁴⁾. After the 3 to 6 month period, there is a switch in traders’ anticipations. Traders expect a depreciation in the coming months toward a “fundamental value” in the very broad sense ⁽²⁵⁾.

The CTT is expected to work in the following manner: “a rise in the exchange rate above its “norms” would not lead agents to expect further rises (...) because they would see the tax as operating as a disincentive to the market activity necessary to produce such a rise” (P. Arestis, M. Sawyer, 1997, p 760, see also J. Frankel, 1996, pp 54-59). Short-term speculators would be affected by the tax but not long-term investors who would bene-

²⁴⁾ For empirical surveys, see J. Frankel and K.A. Froot, 1987, 1990; K.A. Froot and T. Ito, 1989, M. Chinn and J. Frankel, 1994, Y.-Wong Cheung, M. D. Chinn, I. W. Marsh, (2000).

²⁵⁾ As we have already said, fundamental values and equilibrium are two different things. This leaves much room for a Keynesian interpretation where the “fundamental value” is nothing else than what average opinion believes what average opinion to be.

fit from stability. This is exactly the objective pursued by J.M. Keynes and J. Tobin. The CTT can be seen as an “uncertainty-reducing-institution” (P. Arestis and M. Sawyer, 1997, p 760), stemming destabilization through its effect on agents’ expectations.

1.7.3 How does the surcharge work?

If the “normal” tax proves insufficient because speculators bet on big profits in the coming three or four weeks, and not on small profits coming from intraday fluctuations between the euro and the US dollar each day of the year, then a surcharge will be automatically applied. This will be the case when the daily foreign exchange rate reaches the upper or the lower limit of the band. The surcharge (50%, 100%, or more) will be calculated on the difference between the exchange rate outside the band (for example 1 \$ = 2.4 euros on the 16th day on the chart) and the upper limit of the exchange rate (around 1.3 euros for 1 \$ on the chart) multiplied by the amount of money traded this day by the speculator.

Speculation is defined precisely as trading outside the band and the objective of the surcharge is to hold back speculation with a high tax that will rip the speculative profit. In Spahn’s words (2002, chapter 2, p 20): the surcharge “... is not applied to the value of the transaction as such (...) but only on the externality, i.e. that part of the price that lies outside the corridor”. The surcharge “... increases with the degree of deviation from the target zone” from 50% to 100% for instance.

If the mechanism is announced in advance it should discourage speculators and if not, it will punish them until they trade inside the band. At the extreme, the surcharge can lead to a temporary closing of the foreign exchange market in much the same way as the circuit breakers in force on the US stock exchanges. Since 1989, computers are automatically disconnected whenever the share prices move up or down by more than 10%. It avoids a crack and gives time to economic agents to change their mind. But the difference with the stock exchange circuit breakers is that in this case speculators on the foreign exchange markets who trade outside the band have to pay a prohibitive tax.

For these reason we think that the surcharge will act strongly as an anchor for medium/long term expectations about the future exchange rate. Because strong deviations from the medium/long term conventional exchange rate are prevented by the surcharge, traders will know that short-term volatility will be confined inside the band. This will uphold the credibility of the ordinary tax.

1.7.4 How well does the two-tier CTT contribute to James Tobin’s objectives?

The two-tier CTT as proposed by P.B. Spahn himself fits nicely with at least one of James Tobin’s objectives: curbing speculation and stabilizing exchange rates. But one can be more sceptical about improved monetary autonomy.

➤ **Speculation and exchange rate volatility should be reduced**

There is no central parity that the central bank is committed to defend, since the average exchange rate is defined by the market itself. This eliminates the possibility that the exchange rate could be progressively overvalued and contribute to an unsustainable current account deficit. Any medium and long-term move toward an appreciation or depreciation of the exchange rate will be progressively incorporated into the mobile average. This includes foreign exchange transactions induced by trade and foreign direct investment and long term portfolio investment. But short-term speculative transactions and short-term portfolio investments should be reduced and would not influence the exchange rate as much

as they used to. Short-term exchange rate volatility should shrink without impeding medium and long-term fluctuation of the exchange rate. As we have explained previously, this is what James Tobin had in mind when he declared “let the currency float” (1998, p 11) but not freely.

The speed of variation of the medium/long-term exchange rate will depend on the course of macroeconomic events (bad or good unanticipated or anticipated news, shocks etc...) and on the definition of the period of reference of the moving average. The longer the period, the slower the speed of variation for the medium/long-term exchange rate. The exact period will have to be defined pragmatically but there is room to manoeuvre for the monetary authority, to delay the incorporation of news and to smooth the medium/long term fluctuations of the exchange rate. This would give time for policy makers to define the appropriate response to macroeconomic shocks and to private firms to revise their business plans.

This should also oblige traders, at least in part, to stop trying to guess what their colleagues are expecting and leads them to pay more attention to medium/long-term economic analysis. In more conventional terms, chartists’ influence on exchange rates will decrease in favour of fundamentalists’⁽²⁶⁾. This is exactly what J. M. Keynes and J. Tobin had in mind.

➤ **But monetary autonomy would not increase much**

Theoretically, the two-tier CTT should allow more autonomy to monetary policy. If the surcharge is an effective and credible deterrent to speculative attacks, then the ordinary small tax can operate as it was primarily conceived by J. Tobin: “To create room for differences in domestic interest rates, allowing monetary policies to respond to domestic macroeconomics needs” (J. Tobin, 1996a, p 496).

But the magnitude of this room depends on the level of the ordinary tax, on who bears it, and on the stabilizing joint-effect of the ordinary tax and the surcharge on expectations. We will develop this point further below but first we would like to present P.B. Spahn’s own ideas.

P. B. Spahn’s conceptions on these points are the following. The level of the ordinary tax should be determined in relation to the level of transaction cost practised by banks and wholesale dealers on the interbank market. Concretely, the tax rate should be somewhere between 50% and 100% of this transaction cost. Due to technical progress and competition this transaction cost between the dollar and the major currencies has fallen from 1% in the seventies, to 0.05% in 1995 and 0.01% in 2002 for the dollar/euro market for instance. Therefore the ordinary tax should be somewhere between 0.005 to 0.01%.

The rationale is that a higher ordinary tax would make it difficult for bank traders to sell the currencies they have just bought from other traders according to the “hot potato chain” principle. These market makers activities would be hit, and the liquidity of the market, identified to the volume of the market, would shrink. This would be contrary to the objective of stabilizing the exchange rate as a less liquid market is said to be more volatile.

The question is what remains of the “principle purpose of the proposed tax which is to expand the autonomy of national monetary regime” to quote J. Tobin (1996a, p 496)? According to P.B. Spahn (chapter 2, p 22), the surcharge will “procure the necessary room for monetary abstinence by the central bank and allow it to focus mainly on domestic objectives”. And this non intervention is even mandatory when the surcharge is applied “... because traders would otherwise attempt to shift the burden of the tax onto the central bank” (idem). In other terms, when a non prohibitive surcharge is triggered, and speculat-

²⁶⁾ this point will be further developed in a following section.

ors are still trading, they could sell their currency to the central bank that would have to pay the tax.

This is a very important progress because it means that central banks will not have to defend their currency while under attack by a massive increase of the interest rate. And these extraordinary increases in interest rates recommended by economic orthodoxy and its obedient servant the IMF, is a major cause of recession.

But what about monetary autonomy when the country is not confronted with a speculative attack? In periods of tranquillity, the surcharge is not enforced and it falls to the ordinary tax to assure margins of autonomy.

It is clear that with an ordinary tax so close to zero, the margins of autonomy are non-existent. If the central bank decides to lower its interest rate to stimulate the growth rate, a nearly zero ordinary tax will not be sufficient to refrain capital outflows in search of arbitrage. The exchange rate will probably hit the band and the surcharge will then be applied too frequently.

1.7.5 Diverging paths

If the objective is to protect a country against speculative attacks, but also to promote more autonomy for economic policy after the crisis is overcome, we think it necessary to consider a higher ordinary tax for the euro/dollar transactions, and higher still for developing countries. It is not a mere question of numbers even if numbers do matter.

More fundamentally, the question is the following: must the CTT be feasible under the present characteristics of financial markets that have been recently deregulated? Do we have to limit our ambition in order to avoid any disturbance of markets that are not efficient, are prone to crisis, and left to themselves do not achieve fundamental objectives such as full employment and increase revenues?

Because markets are given more power and unregulated freedom to decide, the scope for political reform is narrowing if we do not question the prerogatives they have received. Financial markets are getting even more integrated and frictionless. One can follow this process by observing that transaction costs between banks and wholesale traders are nearly equal to zero. Capital mobility is far more important now than in the seventies.

The mere application of a Keynesian economic policy advocated by James Tobin, which used to be orthodox economic policy in the sixties, now appears as a radical move, given that the neo-liberal ideology and tool box have shifted the centre of gravity in favour of unregulated markets “who always know best”, and away from suspect policy makers “who always do worse”.

But such a move is necessary, as the objective is not only to deprive speculation of its harmful power, but to reopen room to manoeuvre for alternative economic policies, giving priority to full employment, sustainable growth and social justice ⁽²⁷⁾. We will now present the basic elements of this more ambitious proposal.

1.8 A two tier CTT for an alternative economic policy

Let's begin with a simple question. What should be the level of the ordinary tax? As we know, the exchange rate is free to fluctuate inside the band of fluctuation. So, it is possible that the exchange rate depreciates – say, 2%. In case of a round trip, it means that

²⁷⁾ See, for instance, in the European context, the “New Economic Policy” advocated by the “the European Economists for an Alternative Economic Policy, (2001, 2003) and the “Full Employment, Growth and Stability Pact” formulated by P. Arestis, K. McCauley and M. Sawyer (2001).

an investor who sends this money abroad and invests it with a return of i^* (say 6%) after some period (one day, one week, one month, etc...), will also gain from the exchange because when he repatriates his money he will have 2% more of his domestic currency. Given the level of the domestic interest rate i (say 4%), we can calculate the level of the ordinary tax t required to rip the profit that the investor can make by sending his money abroad (see box 1-4) (B. Jetin 2001).

Box 1-4 : What is the required level of the ordinary tax to provide some autonomy to monetary policy?

The basic formula is the following:

$$(1+i)^{1/p} = (1-t)^2 (1+i^*)^{1/p} (1 + \delta e)$$

Where i is the annual domestic rate of interest, i^* is the annual foreign rate of interest, t is the rate of the CTT, δe is the anticipated variation of the exchange rate during the period of investment in the foreign asset. ($\delta e > 0$ means a depreciation of the domestic currency). p is the number of transactions per year, and $1/p$ is the duration of the investment for which a foreign investment is held. The basic unit is 1 year meaning that if the investment is held for 1 year, $1/p = 1$. If it is held for 6 months, $1/p = 1/2$, and $p = 2$ gives the number of transactions per year. If the investment is held one month, $1/p = 12$, and the number of transactions per year is $p = 12$, etc...

From this equation, we can rearrange the term to calculate to express t , the level of the CTT, in function of the other parameters, $i = 4\%$, $i^* = 6\%$, $\delta e = 1\%$ to 10% .

$$t = 1 - \left[\left(\frac{1+i}{1+i^*} \right)^{\frac{1}{2p}} \times \left(\frac{1}{1+\delta e} \right)^{\frac{1}{2}} \right]$$

The results are presented in table 1-2.

Table 1-2: Required CTT Rate to Curb Speculation in Case of an Anticipated Depreciation of the Exchange Rate, in %

FOREX DEPRECIATION, IN %	FREQUENCY OF ROUND TRIPS BETWEEN THE TWO CURRENCIES					
	1 DAY	1 WEEK	1 MONTH	3 MONTHS	6 MONTHS	1 YEAR
1	0,50	0,51	0,58	0,73	0,97	1,44
2	0,99	1,00	1,06	1,22	1,46	1,92
3	1,47	1,49	1,55	1,70	1,94	2,40
4	1,95	1,96	2,02	2,18	2,41	2,87
5	2,41	2,43	2,49	2,64	2,87	3,34
6	2,88	2,89	2,95	3,10	3,33	3,79
7	3,33	3,34	3,40	3,56	3,79	4,24
8	3,78	3,79	3,85	4,00	4,23	4,69
9	4,22	4,23	4,29	4,45	4,67	5,13
10	4,66	4,67	4,73	4,88	5,11	5,56

NOTES : $i = 4\%$, $i^* = 6\%$, 240 DAYS.

Source: B. Jetin (2001).

One can see, for instance, that for a depreciation of the exchange rate of only 1%, the ordinary rate must be around 0.5% if the round trips are daily, weekly or monthly ones, and between 0.7% and 1.4% if the round trips are made every 3 months, twice or once a year. This is an expected result because when the transactions are made very frequently, the taxpayer pays very often the tax and a small ordinary rate, but yet much higher than considered by P.B. Spahn, will offset the gain of the depreciation of the exchange rate.

One can check why the surcharge is necessary. A speculative attack will anticipate a significant depreciation of the exchange rate, say 5% or 10% in one month or three months. Table 1-2 shows that if a country whose currency is attacked wants to keep its domestic interest rate 2% below the international level, it must raise the CTT at 2,5% if the anticipated depreciation of the forex is 5% in one month, and to 4,7% if the anticipated depreciation of the forex is 10% ⁽²⁸⁾. Clearly, one cannot raise a currency transaction tax at such a high level without shutting down for good the foreign exchange market. The surcharge conceived by P.B. Spahn offers the solution by taxing the part of the price that lies outside the band ⁽²⁹⁾.

These results confirm the previous one. In case of even a small depreciation of the exchange rates, a small ordinary rate, inferior to 0.1% is too low to guarantee an interest rate differential of 2%. The volatility of the big three countries being between 2% to 3% ⁽³⁰⁾ an ordinary tax of 1% appears to be the minimum to offset short term fluctuations.

Monthly fluctuations of developing countries' currencies vis-à-vis the dollar are superior to 5%. In this case a higher ordinary rate of around 2.5% must be considered in relation with the surcharge. Clearly, a small CTT of the magnitude of the transaction costs on the interbank wholesale exchange market cannot perform the job. But is it possible to consider a high CTT rate?

1.8.1 The leverage effect of the ordinary tax

The problem is how to reach a high level of CTT without provoking the disappearance of the exchange market? The answer will depend on who will pay effectively the CTT, the banks or their customers (multinational firms, pension funds, hedge funds, mutual funds, insurance companies, etc...)? ⁽³¹⁾ What are the existing transaction costs of these economic agents? Is there a cumulative effect of the CTT and how to figure it?

The interbank commission fees are between 1 and 2 basis point (0.01% to 0.02%), and these figures are often taken as the relevant starting point to analyse the impact of the CTT on the volume and the structure of the exchange market. These transaction costs only cover the technical transactions costs between two banks. When banks sell currencies to their (big) final customers, they charge around 0.1%.

We think that taking these figures as the relevant references to judge the impact of the CTT is misleading.

First, it is obvious that banks will try to shift at least a fraction of the CTT to their final customers. It is a bit like the value added tax principle, but not exactly. Due to the fact that the banking sector is a competitive one, banks will have to charge a fraction of the CTT. Exactly how large their share of the burden will be is difficult to say.

²⁸⁾ These results are not sensitive to the levels of the interest rates. If $i = 6\%$ and $i^* = 5\%$, the required levels for the CTT rates are nearly the same until the one month horizon, but fall a bit for the longer horizons.

²⁹⁾ If the lower band is 2% away from the average exchange rate and a speculative attack expects a 8% decrease the surcharge applies to the difference, i.e. 8%.

³⁰⁾ Source : T. Berglund, S. Honkapohja, A. Mikkola, A. Suvanto, 2001, p 45, quoted in Conseil Supérieur des finances de Belgique, 2001.

³¹⁾ J. Tobin's view (1996) is that banks should be exempted of the tax and would only pay the tax on their net daily open positions, the bulk of the tax being paid by their customers.

Second, it follows that we have to consider the accumulated taxation along the whole chain of transactions: one customer order engenders between 4 and 5 transactions between banks before another final non bank customer is found.

Third, these figures correspond to developed countries during “ordinary” periods. For developing countries and in periods of tension, the transactions costs are much higher because they include search costs and risk premia that are much higher than in developed countries.

According to D. Felix and R. Sau (1996), the pre-tax transaction costs are around five to ten times higher (0.05% to 0.1%) than the ones frequently assumed in the literature based on the interbank commission fees (0.01% to 0.02%).

“The scope of transaction costs should, we believe, include the cost of carrying out the full array of financial exchanges needed to complete a primary transfer, as well as search cost and risk premia” (we underline). Hence the relevant pre-tax transactions costs are much higher than the interbank commission fees. This is why the authors pledge for a phased-in 0.25% tax in four years.

But even if the CTT level is fixed to 0.1%, its final effect on speculation would be higher than expected. This is due to what is called the “hot potato principle” to which the underlined part of the previous quotation refers: dealing banks typically engage in multiple follow-up trades with other dealing banks (4 or 5), after a primary foreign exchange trade has unbalanced the proportions of different currencies they want to maintain on their books.

These follow-up exchanges fraction the initial transfer and restore the desired balance. “The fractions would likely, on average, to sum to more than one, so that the total impact of a 0.1% Tobin Tax would likely be superior to 0.2%. If the bank’s pre-tax charge to a hedge fund or multinational corporation were 0.05%, a 0.1% tax would raise the charge to an amount superior to 0.25%. For currency speculation, a similar cost would apply to the repatriated funds, which raises the cost of the speculative round trip from a pre-tax 0.1% to a post-tax 0.5%. For large volume-low margin covered interest rate arbitraging that’s a substantial deterrent; for open speculative attacks perhaps less so” (D. FELIX, 2001).

This is what we call the “leverage effect” of the ordinary tax. It will be useful to ensure monetary autonomy while the surcharge will deal with speculative attacks. In effect, Table 1-2 shows that a 0.5% ordinary tax is efficient in case of a depreciation of 1% for daily and weekly transactions (and for longer terms when the interest rates are equal).

Paul De Grauwe (2000), who opposes the Tobin Tax, used a microstructure model developed by A. Lyons (1999) to reach the same kind of conclusion but with stronger results. He thinks that the impact of a 0.1% ⁽³²⁾ would be much higher. He takes the example of a speculator who buys dollars and sells euros to a dealing bank. The first dealer obtaining the euros will want to unload them, but not the full amount. Because of the drop of the price of the euro, the dealer has an incentive to hold a fraction of these cheap euros. Suppose he holds 5%. He then unloads the other 95% to another dealer, who has the same incentive to hold a fraction and to unload the rest.... After five dealers, the rest is unloaded to another speculator willing to take a reverse position. The chain of taxes (assuming an ordinary Tax of 0.1%) will be:

$$100 \times 0.001 [1 + 0.95 + 0.95^2 + 0.95^3 + 0.95^4] = 0.45\%$$

³²⁾ In his paper, Paul De Grauwe takes the example of a 1% CTT and assumes that there are two different speculators making a one way trip. We have modified his example, assuming that the CTT rate is 0,1% and that there is only one speculator making a round trip.

This means that the last bank buying the rest of the euros would be taxed at a rate of 0.45%. If the bank's pre-tax charge to a hedge fund or multinational corporation is 0.05%, the final charge for a one way trip is $0.45\% + 0.05\% = 0.50\%$, and 1% for a round trip ⁽³³⁾.

This level of taxation is sufficient to curb speculation on a monthly basis in case of a depreciation of the exchange rate of 2%, and when the domestic interest rate is 2% below the foreign interest rate (see Table 1-2).

But this is not the same for an ordinary tax of 0.01% (one basis point) which would lead to an accumulated taxation for the last bank of 0.045%, 0.050% for the customer, and 0.1% for a round trip. This is clearly insufficient to reduce short-term volatility of exchange rate inside the band.

In synthesis, the leverage effect of the CTT on the whole chain of exchange transactions allows an ordinary rate, say 0.1%, to be efficient to offset a 2% depreciation of the exchange rate. We will take this as a reference for the ordinary tax level in developed countries.

1.8.2 Is it fair to tax all transactions?

Yes because banks and their big customers such as multinational firms, insurance companies, mutual, pension and hedge funds engage frequently in speculation. Speculators are not an easily identifiable group of villains. So the ordinary tax should be paid by all of them. Only small firms and households should be exempted of the tax if their transactions do not exceed a certain amount.

To better understand the importance of each category of economic agents on the foreign exchange market it is useful to size the relative importance of transactions made by banks and their customers (See table 1-3).

As we can see, the relative share of banks has been decreasing strongly during the nineties (-24% between 1992 and 2004) and especially in the end of the period. The relative share of "non financial institutions" which are industrial companies and non financial service companies has also been decreasing significantly on the period (-21%) even if the trend is not as regular and if the share has stabilized at 13-14%. On the contrary, the "other financial institutions" which are insurance companies, mutual funds, pension funds and hedge funds, have more than doubled their share on the whole period, from 12.5% in 1992 to 33% in 2004.

³³⁾ If dealing banks sell 100% of the euros, the final speculator would pay $0.5\% + 0.05\% = 0.55\%$ for a one way trip, and 1,1% for a round trip). This does not change the results significantly.

Table 1-3 : The Evolution of the Relative Share of Banks and Customers on the Foreign Exchange Market (as a percentage of global turnover)

YEARS	1992	1995	1998	2001	2004	% CHANGE (2001/1998)	% CHANGE (2004/2001)	% CHANGE (2004/1992)
TRADERS								
BANKS	69,8	64	64	59	53	-8	-10	-24
CUSTOMERS								
WITH OTHER FINANCIAL IN- STITUTIONS	12,5	20	20	28	33	40	18	164
WITH NON-FIN- ANCIAL CUS- TOMERS	17,7	16	17	13	14	-24	8	-21
TOTAL	100	100	100	100	100			

Source: Survey of the foreign exchange market, various issues, BIS.

The volume of forex transactions realised by financial companies is now more than two times superior to the volume of transactions realized by industrial and non financial services companies.

1.8.3 How can we explain these evolutions?

The decreasing share of banks is explained by the merger and acquisition process and their cost reduction strategy in a context of fierce competition. In the 2001 BIS survey on the foreign exchange market there were 2,772 reporting banks from 48 countries down from 3,087 reporting banks in 1998 from 43 countries.

At the same time, competition has led to a reduction of spread between bid and ask prices that determines their profit margin on each transaction, while risks and costs stayed at a high level because of risks and strong investments in information technology (B. Estecahandy, 2002). They have centralised their market making activity in one place per time zone, for instance only one in Europe, holding only secondary trading rooms in cities where they deal with their customers. Some have even abandoned some of their market making activities to specialise on some products where they hope to increase their market share, realising economies of scale. Increasing volume is the only way to make a profit because it is impossible to increase spreads. The other advantage of being big is that it allows in real time to better understand what is going on, what the competitors are doing, and that can be determinant to take the right decisions when banks are engaged in proprietary trading, which is nothing less than pure speculation ⁽³⁴⁾.

One cannot find a better example than Deutsche Bank, the biggest German bank, which will soon not be much of a bank but rather a "giant hedge fund" to quote the review "the Economist", ("A giant hedge fund", August 28th, 2004) and which cannot be suspected of sympathy for anti-globalisation protesters. The Deutsche Bank wants to create a 25% return on equity. "if that cannot be done by serving customers, domestic or otherwise, the it must be reached by trading for its own account- by becoming, in other words, a hedge funds". At least 30% of its trading positions were taken for its own account. Deutsche Bank has lent money to independent hedge funds, but it runs also its own in-house hedge funds, and provides seed money to talented traders to set up hedge funds outside the bank, even when they are previous in-house hedge funds managers who left Deutsche Bank to create

³⁴⁾ In 1999, a survey among US traders, show that 50% of respondents believed that the pound/dollar market is dominated by a few big players, and 60% indicated that big players exert dominance on the Swiss Franc/dollar market. See Cheung Y., Chinn, M.D. (2000)

their own company. And the article concludes: "The biggest problem with Deutsche's metamorphosis into a trading firm is that everybody else is doing the same, and the number of strategies and talented traders is limited".

In sum, because of their high investments and the profit they make in speculative activities, banks have a vested interest in growing and volatile currency markets, disguising it as "more liquid" markets. With stable markets they would lose money. It is clear that they should be taxed.

Industrial and non financial service companies have also joined the merger and acquisition trend and rationalise their corporate treasury activities at the international level. Big multinational firms have centralised their treasury management by continent or even in a unique world centre. The movement has been particularly strong in the EU with the introduction of the euro. Together, these trends explain why the number of transactions has decreased by 36%. It seems that fewer companies use their treasury to speculate on currencies because of heavy losses experienced by some of them and because of new accounting rules (IAS 39 in Europe and FAS 133 in the US) oblige them to document precisely each hedging operations. However, when firms have a particular view on the evolution of the exchange rate they do try to profit from it. In a recent survey, G.M. Bodnar and G. Gebhardt (1998) show that "25% of German firms alter the timing or size of the hedge based upon their market view whereas only a small group of US firms follow such active strategies. In addition to altering time and size hedges, a considerable number of German firms (50.6%) and US firms (41.2%) indicated that they at least take active position based on their market view" (p 16).

Finally, we turn to the strong trading increase of financial institutions. This is explained by the important role played by hedge funds, by the growing internationalisation of portfolio management and the attention they pay to the foreign exchange market per se.

At the end of the eighties, the so-called macro hedge funds appeared as new big players on the foreign exchange market. They played a major role, allied with banks, in the collapse of the EMS in 1992-93 where they gained huge profits, and tried to renew the score during the Asian crisis. But some of them lost also a lot of money, and from this it seems that macro hedge funds withdrew from the foreign exchange in favour of the equity market where the volatility and profit opportunities were higher. At the time, some concluded that speculation on the foreign exchange market was part of history. The situation has changed once again with the burst of the equity bubble and hedge funds are back on the foreign exchange market.

The fashion is "alternative management" and it materialises by the creation of numerous small and medium hedge funds (from tens of millions of US dollars to some hundred of millions of US dollars of capital). They use the "technical analysis" and other sophisticated statistical models to speculate. Meanwhile, there is a growing international diversification of portfolios investments and a more active currency management in order to improve the return on investment. To state it more clearly, they speculate more on currency markets.

In sum, the evolution of the trading activity of banks and their customers confirm that it is not only fair but legitimate and necessary to tax them all if the objective is to curb speculation and restore some monetary autonomy.

1.8.4 Is the 0.1% ordinary rate so high that the market could shrink too much and disappear?

Yes, if it is demonstrated that the banks won't be able to shift a sufficient part of the burden of the tax to their final customers. In this case, the foreign exchange market would evolve quickly from the present price-driven market to an order-driven market like the ones that exist in the stock markets. It is not proved that markets driven by orders are less liquid, and less efficient for risk spreading.

No, if it is accepted that part or the total of the tax will be passed along to the final customers. In this case, banks are not fully taxed even if the rate is set to 0.5%. There would be some shortening of the multi-dealer chain and some centralisation of the market but without a total transformation of the structure of the market.

It is important to make this point clear. If the burden of the tax is in part shifted by banks, who play the role of market makers on the foreign exchange market, to their customers, it is not possible to say at the same moment that a reasonably high ordinary tax, 0.1% for the big three currency, will smash up the market. The experience of the Value Added Tax (VAT) is again illustrative, because like the CTT, it is included in price. When it was first introduced in France, all companies complained that it would hit the market. It did not. The difference between the CTT and the VAT is that it would be paid by private companies and not households.

By the way, as we said, the market will not disappear, but its way of working will change. How? We can have an idea by observing what is already going on as a consequence of technical and organisational innovations. The impact of the tax would probably be to accelerate the pace of change. These innovations are driven by the progress of electronic trading.

According to G. Galati and K. Tsatsaronis (2001), in 2000, 85%-95% of interbank trading in the major currencies was said to be conducted using electronic brokers, up from about 50% in 1998 and 20%-30% in 1995. Before electronic brokerage, dealers tended to execute small trades regularly throughout the trading session to gather information about the current price and be continuously informed. "In 2001, any dealing room with an EBS terminal instantly knows the current dollar price of the euro and yen, certainly for trades of the size typically dealt through EBS" ⁽³⁵⁾ (A. Chaboud, S. Weinberg, 2003). This means that the decrease in volume implied by the CTT won't alter the price discovery process, because this one has already changed by itself through the implementation of technical progress.

As a consequence, trading is moving from a bilateral over-the-counter (OTC) relationship towards a market place with more centralized price discovery and transparency (BIS, CGFS, 2001, p 1). So far, these trends have only affected the interdealer market (banks and brokers) and not much the dealer-to-customer market.

But this could change. Electronic trading makes it technically feasible for the market structure to move to a centralized order book where final customers can transact directly with each other. Trading platforms ⁽³⁶⁾ have appeared on the dealer-to-customer market. Banks are resisting this trend because they have a vested interest in the current segmented market but the balance of power seems to be shifting in favour of final customers. We

³⁵⁾ Electronic Broking Service (EBS) is an electronic broker formed by a large group of dealing banks in 1993. It covers mostly trades in the dollar, euro, yen and Swiss franc. The other electronic broker, Reuters, covers mostly transactions involving sterling.

³⁶⁾ A trading platform is an infrastructure or mechanism aimed at facilitating securities or foreign exchanges transactions between those who wish to buy and sell. A trading platform could be a legal entity recognized as an exchange or an integrated part of a stock exchange.

are seeing a move from single- to multiple-dealer sites, where dealers are put in more direct competition with each other for customer business.

“Some market participants noted it is a matter of time before trading in these products (foreign exchange and sovereign bonds) takes place on a platform to which dealers and end-users have equal access” (BIS, CGFS, 2001, p 15). If so, a centralized customer-driven market could expand at the expense of the present decentralized dealer-driven market. The foreign exchange market would become closer to a stock exchange. The provision of liquidity by customers through limit order books would substitute for the current interdealer mechanism of risk-sharing. The “hot potato chain” would shorten even more, with customers getting into contact more directly, although dealers would not disappear totally.

The CTT would accelerate this trend because each participant would want to reduce the number of transactions to reduce the times they pay the tax (J. Frankel, 1996, p 66). One important feature of this evolution is the shift of power from banks to customers and towards a more transparent market. This evolution is important to determine how the burden of the tax can be shared between banks and customers. In so far as customers have more power and can more easily compare the price offered by banks, they will be in a more favourable situation to ask banks to pay a higher share of the tax.

Would a much more centralized market be for the better or for the worse? It is difficult to answer this question because the theoretical literature is inconclusive. One may say that a lower number of dealers, especially market-makers, will reduce liquidity especially in times of stress. “However it is not so obvious from previous examples of market turbulence that market-makers did provide liquidity when it was required. There have been cases in various volatile markets where market-makers simply stopped answering their phones. Ultimate liquidity may be provided by those end-users able to take a long-term view because they are neither leveraged nor subject to daily marking to market” (BIS, CGFS, 2001, p 20).

The CTT has exactly this objective of increasing the weight of long-term horizons propitious to stability.

1.8.5 The protected monetary zone

We advocate for what we call a “protected monetary zone”, by which we mean a target zone coupled with a mechanism that does not oblige a country to use the interest rate instrument to stabilise the exchange rate and keep it inside the band of fluctuations. This relative disconnection between the exchange rate and the interest rate is precisely what J. Tobin had in mind when he conceived his tax on currency trade.

But it is possible to go one step further and contemplate a more cooperative and administered version. A group of East Asian countries, or African countries, or the Mercosur, could decide to follow an explicit exchange rate policy targeting semi-fixed foreign exchange rates for economic and social reasons. Governments would meet regularly to establish the targeted foreign exchange rates and coordinate their economic policies. The band of fluctuations would turn into a target zone protected by the CTT⁽³⁷⁾. There have been experiences of target zones in the past like the “European Monetary Snake”, from 1971 to 1973, which, not only created a target zone for European currencies but also tied the target zone to the dollar. The “European Monetary System” (EMS, 1979-1999) maintained the target zone for the European currencies but without any attempt to stabilize the fluctuations between them and the US dollar. It has been a real success in term of stability.

³⁷⁾ For more elaboration on this proposal see D. Felix (1999), J. Grieve Smith (2002, pp 146-148) and B. Jetin (2002, pp 206-213).

In Asia, under the “Chiang Mai Initiative”, 13 countries have agreed arrangements to monitor foreign exchange markets and to aid currencies in difficulty. All these experiences were more or less successful, but their weakness is that they were only based on pooling official reserves, on swaps and repurchase agreements. And these mechanisms were never sufficient against the power of speculation. The EMS broke up in 1992-93 under the pressure of a major speculative attack despite the combined efforts of the European central banks to resist. The same happened to the Thai Baht in 1997 despite Asian central banks support of the Bank of Thailand. But it was not a fatality. Was the EMS defeated by speculation because it was insufficiently protected by anti-speculative instruments?

“Would a Tobin tax have saved the EMS”? asked O. Jeanne (1996). The answer is positive. The author studies a target zone “à la Svenson” where a government is faced with a trade-off between a foreign exchange objective and a domestic interest rate objective. When the Tobin tax is introduced, it stabilises the fixed exchange-rate system through two different channels. “First the Tobin tax allows the monetary authorities to insulate (to some extent) domestic monetary policy from external shocks that the system is able to withstand. The second, more indirect, effect of the tax is to reduce the size of realignment expectations” (O. Jeanne, op cit p 504), that is the expectations that the currency be devalued, because speculators know that it is less costly for the government to defend the currency. The model is tested with data on the French Franc in 1991-93. The author shows that a 0.1% tax would have allowed France to keep its interest rate much closer to the desired level. And the expected devaluation of the French Franc vis-à-vis the Deutsche Mark would have been divided by five. The 0.1% tax has a sizeable stabilising effect on a fixed exchange rate system. This proves that a regional monetary zone can be efficiently protected by a CTT.

The advantages could be the following:

1) Part of the tax revenues, maybe 20%, could be used to create an intervention fund to help the monetary authorities to counter-speculate in the foreign exchange markets. The rest of the revenues would be used for financing global public benefits, the universal access to social basic services defined by the millennium development goals, and the financing of national economic, social and ecological development plans in poor countries.

2) There will be an enhanced autonomy at the national level to implement full employment and other welfare goals without being immediately sanctioned by anticipatory capital flight. This comes from the fact that the tax widens the interest rate differentials across currencies required to make arbitraging profitable.

3) The creation of “regional protected monetary zones” could be a transition from the present deregulated capital markets toward a new international monetary system based on multilateral cooperation and capital controls. One cannot simply jump from the present globalised capital markets to the international clearing union defended by Keynes in 1944.

The market friendly “protected monetary zone” could be implemented unilaterally. The EU, for example, does not need US permission to enforce it. This is because the band of fluctuations is defined in relation to flexible exchange rates without any explicit target rates. Whatever the fluctuations of the US dollar, the band of fluctuations defined by the EU will incorporate and smooth them according to the period of reference of the moving average. If the moving average is defined on a long range, say 3 months, a very volatile US\$ would trigger very often the surcharge. But this is a purely empirical and political question. The way of calculating the average, the limits of the band, the level of the surcharge can be modified in accordance with experience and the objectives of the exchange and monetary policies. But in any case, there is no need to wait for a universal treaty to put the CTT in place.

The managed version requires a higher degree of cooperation between countries. In principle, each country must coordinate its fiscal and monetary policy in order to keep its interest rates in accordance with the targeted foreign exchange rate. The Louvres Agreement in 1987, between the USA, Japan and the European Union is a good example of an attempt to reduce the exchange rate volatility between the US\$, the Yen and the European Currencies. And it failed, after a significant period of success, for lack of will to further coordinate economic policies and because of rampaging capital flows. But with a CTT properly defined, the need to coordinate economic policy would be substantially reduced thanks to the possibility to maintain different interest rates and because speculation would be held at bay. These characteristics leave open the possibility for a group of countries to create a target zone in order to stabilize their exchange rate in relation to the US dollar even without the cooperation of the US government with a much greater chance of success. For Latin American countries, it offers an alternative to the "dollarisation" process where the autonomy of the monetary policy totally disappears in favour of the American monetary policy.

But of course, the higher the cooperation between all countries, the more efficient will be the protected regional monetary zone. The financial stability created by the CTT is an additive process. The more countries and regions join in, the more efficient it becomes.

2 THE FEASIBILITY OF THE CURRENCY TRANSACTION TAX

Usually, governments, whether they are friendly to the tax or hostile, agree to declare that it is unfeasible on technical and political grounds. The major criticisms are the following:

1. Offshore financial places and tax havens would allow evading the tax quite easily.
2. Financial engineering would quickly create new financial products to avoid paying the tax, in particular by avoiding making transactions on the foreign exchange market. It is the case for instance of over-the-counter (OTC) derivatives.
3. Like every tax, the CTT would create a costly bureaucracy and corruption.

To answer these criticisms, it is now necessary to precise about how the tax could be collected. The basic idea is that the tax should not be collected by a new fiscal institution but through the financial system itself as it is now. Financial markets are introducing technical progress intensively to gain time and reduce costs. Financial transactions are now nearly totally dematerialised and rely extensively on computer networks. Automation of all steps of a transaction is nearly completed. The consequence is that financial transactions need robust audit trail reporting just to prove that a transaction has been made, and who owns what. This same powerful technical progress can be used to collect the tax. It will be secure and cost efficient.

Let's see how the foreign exchange market works and how a transaction on currency is executed from the moment it is traded until the moment when it is definitively settled. We will have also to distinguish the different types of transactions, how the foreign exchange market functions, and to explain how the national system of payment works in modern economies, especially in the EU.

2.1 The specific nature of the foreign exchange markets

Financial markets differ according to the kind of assets they trade and to national rules and traditions. Stock exchanges like Wall Street or the London Stock Exchange that trade equities are the best known. On these markets, prices are posted and appear on large screens; everyone can see them and trade in consequence. The market is centralised and said to be order-driven meaning that prices follow orders. Orders are sent to a central location (the computer system of the stock exchange) and prices are derived from the interaction of these order flows.

Currencies markets, like fixed-income market (bonds) differ in the sense that currencies are not traded on a centralised market and prices are not made public. Until recently, traders had to make orders just to discover which prices were being practised minute by minute. These are Over-The-Counter (OTC) markets and they are usually quote-driven, meaning that orders follow prices. Dealers quote prices at which they are willing to buy and sell securities or currencies. The willingness of the customer to transact at these quotes determines market prices. Prices result from a bilateral interaction, and not from a multilateral interaction as on a centralised market. Transparency is limited.

Foreign exchange markets are also segmented. End-users, i.e. the customers, do not trade directly with each other, but do so through intermediaries, the dealers. Customers are corporations and non-bank financial institutions such as pension funds, mutual funds, hedge funds, and insurance companies. Dealers are exclusively banks and brokers. Dealer-to-customer transactions form the retail market. This is where banks meet their customers' needs. Interdealer transactions form the wholesale market.

Figure 2-1 shows that the wholesale market has lost nearly 10% in relative proportion to the benefit of the retail market. It represents now 53% in 2004, down from 64% in 1995. The reason is the on-going process of concentration in the banking sector and the growing importance of electronic trading. A closer look shows that the growth of the retail market is due to the strong increase of non-bank financial institutions (called “other financial institutions” on Chart 1) from 20% in 1995 up to 33% in 2004. Corporate customers accounts for a meagre 14%.

The increase of the non-bank financial institutions is explained by the return of speculative opportunities on currencies since the bubble burst on equity markets in March 2000, the presence of clear trends and the renewed volatility of currencies, and the interest rate differential that supported carry trades (see G. Galati and M. Melvin, 2004).

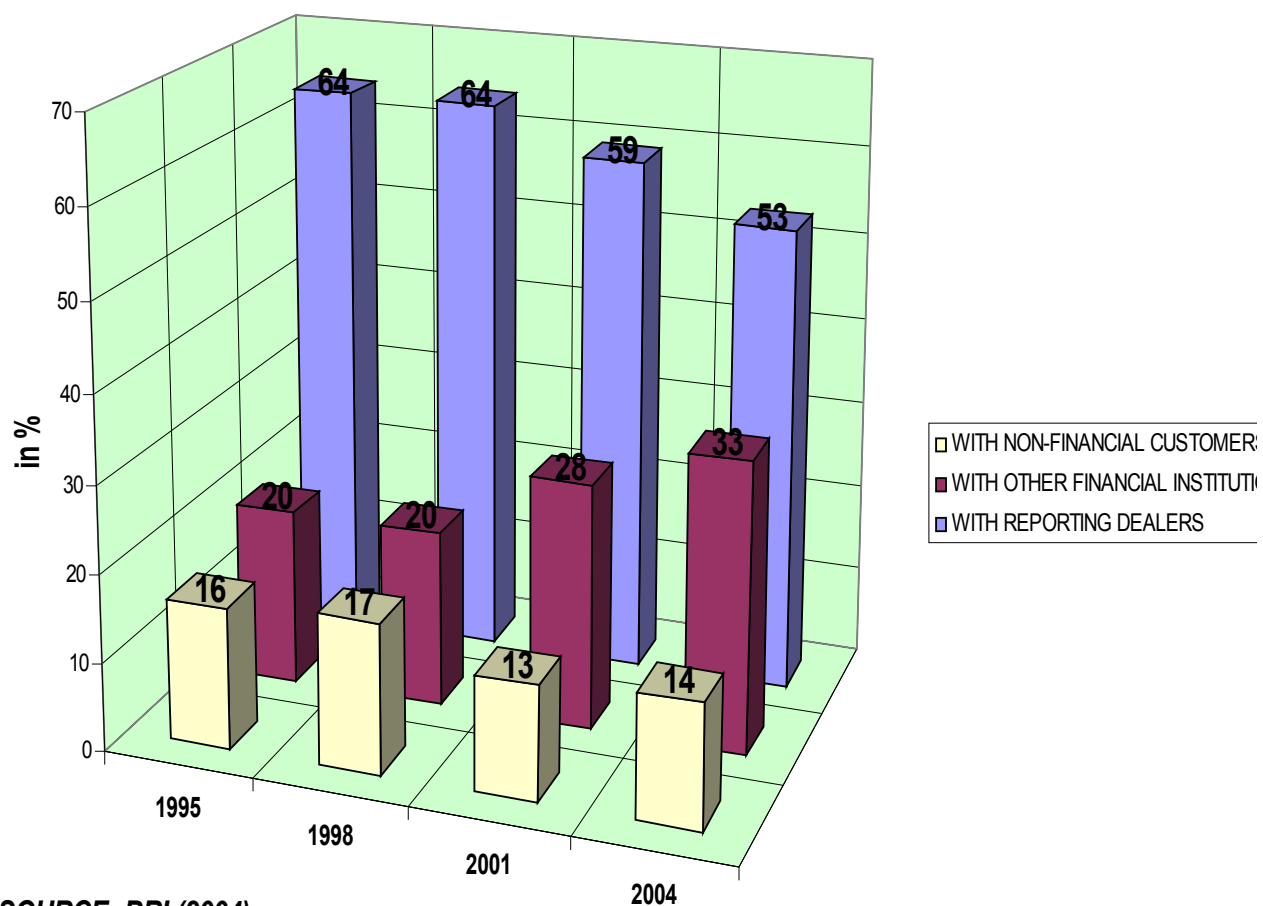
The foreign exchange market being divided in nearly two equal parts, one has to consider a way to collect the tax on both markets. In terms of currency composition of turnover, the dollar was on one side of 89% of all transactions in 2004, followed by the euro (37%), the yen (20%) and the pound sterling (17%)⁽³⁸⁾. Dollar/euro continued to be by far the most traded currency pair with 28% of global turnover, followed by the dollar/yen with 17%, and dollar/sterling with 14%. The share of trading in local currencies in emerging markets increased slightly to 5.2% in 2004.

If the CTT was created inside the E.U., its currencies would then cover around 58%⁽³⁹⁾ of world turnover and 64% with Switzerland (for a total of 200%). This is a good starting point in the perspective of further enlargement to other countries.

62% of the transactions are cross-border in nature, i.e. involving traders located in two different countries, against 54% in 1995, reflecting the growing international integration of foreign exchange markets. The remaining 38% of global turnover are transactions between two counterparties located in the same country. This means that the CTT cannot be levied only on transactions whose counterparties are located on the national territory, but also on transactions which involve a foreign counterparty. If not the major share of the transactions would not be taxed.

³⁸⁾ “Because two currencies are involved in each transaction, the sum of the percentage shares of individual currencies totals 200% instead of 100%”, (BIS, 2004).

³⁹⁾ This figure is the sum of the euro share (37%), the Sterling share (17%), the Swedish Krona (2.3%), the Danish Krone (0.9%), the Polish Zloty (0.4%) and the Czech Koruna (0.2%). The Swiss Franc amounts to 6.1% of global turnover. Source, BIS 2004.

Fig. 2-1 : Evolution of Foreign Exchange Turnover by Counterparty

SOURCE: BRI (2004)

Foreign exchange transactions are of different types. There are spot transactions, swaps, straight forward transactions, futures and options (See box 2-1 for definitions).

Box 2-1 : The Different Categories of Foreign Exchange Transactions and Their Definitions

Foreign exchange spot and derivatives transactions are defined and categorised as follows:

Spot transaction	Single outright transaction involving the exchange of two currencies at a rate agreed on the date of the contract for value or delivery (cash settlement) within two business days. The spot legs of swaps were not included among spot transactions but were treated as swap transactions even when they were for settlement within two days (i.e. including "tomorrow/next day" transactions).
Outright forward	Transaction involving the exchange of two currencies at a rate agreed on the date of the contract for value or delivery (cash settlement) at some time in the future (more than two business days later).
Foreign exchange swap.	Transaction which involves the actual exchange of two currencies (principal amount only) on a specific date at a rate agreed at the time of conclusion of the contract (the short leg), and a reverse exchange of the same two currencies at a date further in the future and at a rate (generally different from the rate applied to the short leg) agreed at the time of the contract (the long leg). Both spot/forward and forward/forward swaps are included. Short-term swaps carried out as "tomorrow/next day" transactions are also included in this category.
Currency swap	Contract which commits two counterparties to exchange streams of interest payments in different currencies for an agreed period of time and to exchange principal amounts in different currencies at a pre-agreed exchange rate at maturity.
Currency option/warrant.	Option contract that gives the right to buy or sell a currency with another currency at a specified exchange rate during a specified period. This category also includes exotic foreign exchange options such as average rate options and barrier options.
Currency swaption	Option to enter into a currency swap contract.

Source: "Triennial Central Bank Survey, 2004, BIS, p 32-33.

There are different ways to classify these transactions. Traditional foreign exchange markets include spot transactions, outright forwards and foreign exchange swaps. Derivatives include futures⁽⁴⁰⁾, currency swaps, currency options and swaptions. They are called "derivatives" because their value is derived from the value of another foreign exchange transaction, for instance, a spot transaction, which is called the "principal". Derivatives, like traditional transactions, are double-edged swords: they allow transferring risks from economic agents that do not want to assume those risks to other agents that do want to assume those risks because they think they will make a profit from these assets. Hedging needs speculation.

From our point of view, the most important is to determine how these transactions are done in order to assess how they could be taxed. There are two important points. There are transactions that are delivered, i.e. settled, and some that are not. Transactions that are settled include spot transactions, outright forwards and swaps. In 2004, they represented at least 87.8% (See table 2-1).

⁴⁰⁾ Some outright forwards are traded on an exchange. They are then called "Futures". The most important exchanges for futures are located in Chicago, New York, London, Paris, Frankfurt, Tokyo and Singapore. Traders don't trade directly between themselves, but buy or sell futures to the exchange that operates as a central counterparty. These exchanges are private firms that establish their own regulations in accordance with monetary authorities. Contracts are standardised in order to facilitate their trade. Forward contracts are not standardised but adapted to customers' needs and this is why they trade over-the-counter.

Table 2-1 : Global Forex Market by Type of Transaction

<i>Daily average, billions of US \$</i>	1995	1998	2001	2004
SPOT	494	568	387	621
OUTRIGHT FORWARDS	97	128	131	208
FOREX SWAPS	546	734	656	944
CURRENCY SWAPS	4	10	7	21
OPTIONS	41	87	60	117
OTHER	1	0	0	2
ESTIMATED GAP IN REPORTING	53	60	26	107
TOTAL OTC FOREX MARKET	1236	1587	1267	2020
EXCHANGE TRADED CURRENCY DERIVATIVES	17	11	10	23
TOTAL FOREX MARKET	1253	1598	1277	2043
<i>In %</i>	1995	1998	2001	2004
SPOT	39.4	35.5	30.3	30.4
OUTRIGHT FORWARDS	7.7	8.0	10.3	10.2
FOREX SWAPS	43.6	45.9	51.4	46.2
CURRENCY SWAPS	0.3	0.6	0.5	1.0
OPTIONS	3.3	5.4	4.7	5.7
OTHER	0.1	0.0	0.0	0.1
ESTIMATED GAP IN REPORTING	4.2	3.8	2.0	5.2
TOTAL OTC FOREX MARKET	98.6	99.3	99.2	98.9
EXCHANGE TRADED CURRENCY DERIVATIVES	1.4	0.7	0.8	1.1
TOTAL FOREX MARKET	100.0	100.0	100.0	100.0

Source: BIS Triennial Central Bank Survey of Foreign Exchange for data. Author's calculations.

Options and futures (around 6%) are usually not settled. They are sold before they come to term. This means that if the tax is levied at the point of settlement, these transactions will not be taxed. Between 2001 and 2004, options and futures have doubled. If they were the only transactions not to be taxed, they would certainly increase further.

For a very small part of options and futures, called "exchange traded derivatives", the solution is easy. These transactions are traded on an exchange in Chicago, New York, London or Paris. They could be easily taxed at the moment of the trade capture. Usually, private firms that own the exchange use software that integrates trade, netting and settlement. The problem is that the exchange traded derivatives represent a very small part of foreign exchange transactions: only 1.1% in 2004. The foreign exchange market is still a decentralised market where 98.9% of global transactions are traded in a decentralised way, over-the-counter.

Therefore taxation must combine several approaches. It cannot rely on a single venue and must embrace every type of transaction, traditional or derivatives, settled or unsettled, over-the-counter or exchange traded, national or cross-border, on the wholesale or retail market. It has to be flexible in order to accompany the evolution of the market. This requires examining in detail how transactions are made, the nature of firms and institutions implied, and the changing nature of the market due to technical progress and legal context.

2.2 The different steps of a foreign exchange transaction

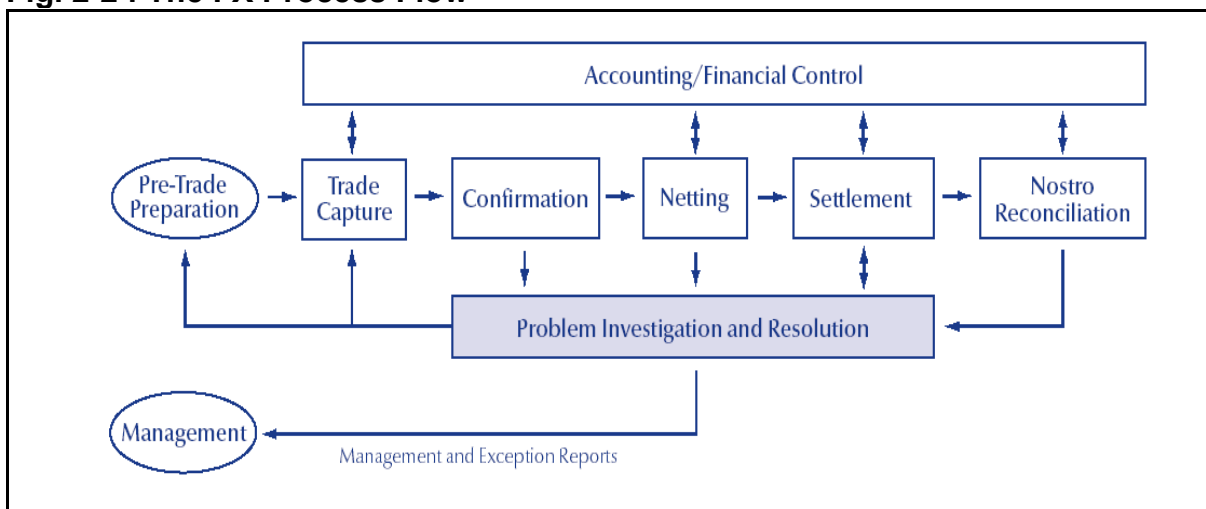
Foreign exchange transactions adhere to common rules and practices accepted by the banking community in order to reduce as much as possible the operational risk ⁽⁴¹⁾. These rules and practises are getting stricter and tend to homogenise at the international level since monetary authorities are getting more preoccupied by the risk that the failure of one bank will trigger a cascade of failures of other banks participating in the market. Money laundering and criminal activities are also another source of concern. This is the reason why monetary and financial authorities are recommending “best practices” for the foreign exchange community that are becoming professional standards ⁽⁴²⁾.

Following the Federal Reserve Bank of New York (2004), it is possible to distinguish seven steps of the foreign exchange trade process flow:

- 1) Pre-trade preparation, 2) trade capture, 3) confirmation, 4) netting, 5) settlement, 6) nostro reconciliation, and 7) accounting/ financial control processes.

How each of these seven phases integrates with the others in the FX process flow is outlined in figure 2-2 below that describes a trade between one bank and another bank, or with a non-bank customer. The definition of each step is given in Box 2-2.

Fig. 2-2 : The FX Process Flow



Source: “Management of Operational Risk in foreign Exchange”. The Foreign Exchange Committee, Federal Reserve Bank of New York, New York, 2004.

The process flow described above involve several private firms whose number is increasing due to outsourcing and technical innovations. The customer initiates the trade, and the bank is in charge of its execution. But to trade, the bank can directly contact another bank, or a voice broker, or increasingly, an electronic trading platform. The electronic trading platform can also in part take charge of confirmation, netting and even settlement. Or this can be done by different specialised private firms. For instance, netting can be done by one clearing institution, and settlement by another. Final settlement is executed by a central bank. Nostro reconciliation involves correspondent banks. Accounting and financial control is frequently outsourced, for instance to Bangalore (India), the new capital of outsourced back offices. When the customer that initiates the trade is not a productive firm that trades products and services internationally, but rather a financial institution that spec-

⁴¹⁾ Operational risks are the risk of direct or indirect loss resulting from inadequate or failed procedures, people, and systems, or from external events (Committee on Banking Supervision, 2002)

⁴²⁾ See the “best practises” list available on the Foreign Exchange Committees web sites of the USA, Canada, Japan, and the UK among others.

ulates, the currency used to buy another currency is not owned by the customer but borrowed from a “prime broker”. And to communicate, all these private firms and public institutions use a message carrier, the most important being SWIFT⁽⁴³⁾. SWIFT not only transfers messages between all agents involved in the process flow, but also executes some of the steps, like confirmation or netting, in competition with other specialised firms, like electronic trading platforms or clearing houses. SWIFT is the nervous system of foreign exchange and other financial markets.

Deregulation and technical innovations have profoundly transformed the foreign exchange market, especially since the beginning of the current decade. This new complexity has to be taken into account and our views about the way to collect the tax must change accordingly.

Up to now, there exists a consensus among the CTT supporters that the settlement is the most appropriate moment and place to collect the tax for reasons that will be justified below. But taxing at the settlement site has also some defaults and weaknesses. The first is that some transactions, like options, are not settled and hence cannot be taxed at the settlement site. The second is that when transactions reach the settlement phase their number has decreased due to the netting process, and this would reduce the tax base significantly.

Our approach is therefore to combine all the opportunities offered by the transaction flow to consider a more comprehensive way to collect the tax. The basic idea is that all foreign exchange transactions should be identified by a numerical tag that would follow the transaction through the process flow. The tag would include among other things the following information: if the tax has already been paid or has not yet been paid. This information would be automatically transferred to the ministry of finance of the relevant country via the central bank that would be the operating agent.

Banks and their customers would be free to pay spontaneously the tax when a transaction is captured or confirmed, when a transaction goes through the netting process, or when the transaction goes through the settlement process. Usually transactions are netted before being settled because it reduces costs. But some of them avoid the netting process and are directly settled when they are more urgent, even if it costs more. Hence the necessity to pay the tax at the netting site or at the settlement site providing that each individual transaction is clearly identified by its tag that informs the fiscal authorities about whether the tax has been already paid or not.

In summary, when banks trade with their customers or with other banks, they could spontaneously pay the tax when they trade. When banks use an electronic platform to trade, this can very easily collect the tax and transfer it to the central bank. Clearing houses, which are the legal institutions responsible for the netting, could be the third category of tax collecting agents. Once netted, transactions are irrevocably paid by the settlement system managed by the central bank which is the main crossroads of the financial system. Institutional relationships between clearing houses and central banks already exist and need not be created. Settlement would be the fourth and probably most important possibility to pay the tax.

We will now describe some features of each of these steps of the process flow to show that the necessary information and the technical and institutional infrastructure to collect the tax already exists and can be used without extra costs.

⁴³⁾ SWIFT stands for the “Society for Worldwide Interbank Financial Telecommunication”. It is an industry-owned supplier of (payment) message carrier services.

Box 2-2 : The Seven Steps of a Foreign Exchange Transaction. Definition and Explanations***Pre-Trade Preparation.***

"The pre-trade preparation and documentation process initiates the business relationship between two parties. It allows both parties to mutually agree on procedures and practices to ensure that business is conducted in a safe and sound manner. An understanding of each counterparty's trading characteristics and level of technical sophistication is developed. It involves coordination with sales and trading and operations as well as other support areas such as systems, credit, legal and compliance to establish trade capture parameters and requirements that should be in place prior to trading".

Trade Capture.

"It is the second phase of the foreign exchange process flow. Deals may be transacted directly over a recorded phone line, through a voice broker, via an electronic matching system (for example EBS and Reuters) or through Internet based systems or multidealer trading platforms." "After the deal is executed, the trader, or trader's assistant, inputs trade data into the front-office system or writes a ticket to be entered into a bank's operations system. Deals done over electronic dealing systems such as Reuters or EBS allow deal information to flow electronically to the front-office system. Trade information typically includes trade date, time of trade, settlement date, counterparty, financial instrument traded, amount transacted, price or rate, and may include settlement instructions" (we underline). "Trade information from front-office systems flows through the operations system (Accounting and Financial control on the figure), where it is posted to sub-ledger accounts, and the general ledger is updated as trades are processed. Operations staff should be responsible for ensuring that appropriate settlement instructions are captured so that the required confirmation message can be issued. For interbank, institutional, and corporate counterparties with Standard Settlement Instructions (SSIs) on file, the deal is immediately moved to the confirmation process.

3. Confirmation.

"The transaction confirmation is legal evidence of the terms of a FX or a currency derivative transaction. Therefore, the management of the confirmation process is an essential control". "Given the significance of the confirmation process, it is important that the process is handled independently of the trading room. In most institutions, the operations department performs this activity". "Confirmations should be transmitted in a secure manner whenever possible. In the most developed markets, confirmations are generally sent via electronic messages through secure networks. In some instances, proprietary systems have been developed to provide access to confirmations to clients. However, a significant number of transaction confirmations are also sent via mail, e-mail, and fax". "A transaction confirmation should include all relevant data that will allow the two counterparties to accurately agree to the terms of a transaction. All relevant settlement instructions for each transaction should be clearly identified in each confirmation".

4. Netting.

"Bilateral settlement netting is the practice of combining all trades between two counterparties due on a particular settlement date and calculating a single net payment in each currency. If, for example, a bank does twenty-five trades in dollar-yen with the same counterparty, all of which settle on the same day, bilateral settlement netting will enable the bank to make only one or two netted payments instead of twenty-five. "Multiple settlement netting is the practice of combining all trades between multiple counterparties and calculating a single payment in each currency". "Netted payments are calculated for transactions done in the same currencies with equal value dates. The bank and counterparty continue to confirm all deals on a daily basis either directly or through a system that helps support settlement netting. These systems allow a bank to view netted amounts of trades on a screen". "Operations generally confirm netted amounts again on the day before settlement date in addition to confirming the transaction itself on the trade date".

(box continues on next page...)

BOX 2 - 2, Continued.**Settlement.**

“Settlement is the exchange of payments between counterparties on the value date of the transaction. The settlement of FX transactions can involve the use of various secure international and domestic payment system networks”. “Settlement occurs and payments are exchanged on the value date of the transaction. For counterparties that are not settled on a net basis, payment instructions are sent to nostro banks for all the amounts owed—as well as for expected receipts”. A nostro bank, or correspondent bank, is usually a foreign bank that provides payment services to the bank that initiates the transaction. “Settlement instructions should include the counterparty’s nostro agent’s name and SWIFT address and account numbers if applicable”. “All payments are exchanged through the aforementioned nostro accounts. These accounts are denominated in the currency of the country where they are located. When a bank enters into a contract to buy dollars and sell yen, for example, it will credit its yen nostro account and debit its dollar nostro account. The counterparty credits its dollar nostro account and debits its yen nostro account in Japan. Both banks initiate a money transfer to pay their respective counterparties; this is done by a funds movement between the two banks using the local payment system. The money transfer is complete when both counterparties have been paid the appropriate amounts.”

6. Nostro reconciliation.

“Nostro reconciliation occurs at the end of the trade settlement process to ensure that a trade has settled properly and that all expected cash flows have occurred. A bank should begin reconciliation as soon as it receives notification from its nostro bank that payments are received. If possible, reconciliation should be performed before the payment system associated with each currency closes”. The main objective of the nostro reconciliation function is to ensure that expected cash movements agree with the actual cash movements of currency at the nostro bank.

7. Accounting/Financial Control.

“The accounting function ensures that FX transactions are properly recorded to the balance sheet and income statement”. “Accounting entries are first booked following the initiation of a trade. At this point, details of the deal are posted to contingent accounts (typically in a system used by operations). At the end of each trade day, all sub-ledger accounts flow through to the general ledger”.

Source: “Management of Operational Risk in Foreign Exchange”. The Foreign Exchange Committee, Federal Reserve Bank of New York, November 2004, New York.

2.2.1 Step 1: the pre-trade preparation

A first critical point is the “Know Your Customer” (KYC) procedure in force in the US but also in the E.U. for collecting information relating to the identity of a counter party and its activity (Federal Reserve Bank of New York, 2004). The second point is the presence of master agreements⁽⁴⁴⁾ that have developed as industry-standard forms that include “close-out netting” and standard settlement instructions.

1) KYC procedures have recently become “the cornerstone for combating criminal activity” (op cit p 11). And for this reason the Federal Reserve, together with the Singapore Foreign Exchange Market Committee, has not hesitated to recommend the elimination of a new practice on the foreign exchange market which is trading on an unnamed basis.

“Trading foreign exchange on an unnamed basis refers to the practice whereby an investment manager trades on behalf of a client without revealing its identity to the dealer in order to maintain client anonymity. Such practices constrain a dealer’s ability to assess the creditworthiness of their counterparties and comply with “know your customer” and anti-money laundering rules and regulations. These conditions expose dealers to clear and significant legal, compliance, credit, and reputational risks, as well as heighten the risk of

⁴⁴⁾ A master agreement sets forth the standard terms and conditions applicable to all or defined subset of transactions that the parties may enter into from time to time, including the terms and conditions for close-out netting. See below, step 3, confirmation.

fraud”.

The solution is “... to develop a process to disclose client names to a dealer’s credit, legal, and compliance functions prior to the execution of foreign exchange trades. In turn, dealers should establish procedures to ensure the strict confidentiality of the intermediary’s clients and restrict the disclosure of this information to the front office except in the event of default. This is a commonly achieved practice in other markets through the use of identification codes or similar identifier systems”⁽⁴⁵⁾.

2) Master agreements include closeout netting provisions to help protect a bank in the event of a counterparty default. They also include settlement netting that permits parties to settle multiple trades with the counterparty with only one payment instead of settling each trade individually with separate payments. There are master agreements covering spot transactions, forward currency transactions, and currency options.

Several lessons can be made for the tax collecting issue. The first is that even before the transaction is made, there exists the necessary information regarding the identity of the counterparties and the nature of their transaction. This information does not need to be created specifically for fiscal issues and therefore will not create extra costs for market participants.

The second lesson is that not disclosing customer identity to the dealer, while revealing it to other departments of the bank is common practice. It should be therefore technically possible to add the fiscal authority to the disclosure list.

The third lesson regards the settlement procedure. As we shall see, the settlement is the cornerstone of the collection of the tax. What we’ve learnt is that there is the technical possibility to “tag” a transaction in advance, even before it exists, indicating how it will be settled. It is therefore possible to trace this transaction from the cradle (the trade capture) to the grave (the settlement) with something similar to the bar code of an item that is registered a first time when it is brought into a supermarket, and a second time when it passes through a cash-register.

2.2.2 Step 2: Trade capture

Taxing at the trading site is considered to be the best way by J. Tobin (1996), following P. Kenen (1996), and it is worth looking at the advantages and disadvantages of their proposal. The tax could be collected at the dealing site by banks themselves when they trade with other banks and brokers on the wholesale market or with their customers on the retail market. The tax would be assessed at the dealing site using the paper trail generated at that site. Governments of the countries where the sites are located would keep part of the revenues for domestic use and transfer the rest to international institutions.

The first and main advantage of this proposal is that each single transaction could be traced and taxed before it is netted⁽⁴⁶⁾. The tax base is then bigger than after the transactions or positions are netted and the amount sent to the settlement system.

The second advantage is that there are trading rooms in each country where foreign exchange transactions are realised, and this would create an incentive for countries to ad-

⁴⁵⁾ Letter of the Foreign Exchange Committee of the Federal Reserve of New York and The Singapore Foreign Exchange Committee, February 2004, available on their respective web sites.

⁴⁶⁾ Netting is “an agreed offsetting of positions or obligations by trading partners or participants. The netting reduces a large number of individual positions or obligations to a smaller number of obligations or positions. Netting may take several forms which have varying degrees of legal enforceability in the event of the default of one of the parties” (BCE, 2001, p 742).

opt the tax and control banks as a part of the revenues would be kept at the national level. This would increase the geographical coverage of an international treaty.

What is the relevance of these two points? The first advantage is a real one. To reduce risks and costs, banks are making efforts to net, as much as possible, their transactions before settlement. Taxing at the settlement site would only encourage them further in this way. Furthermore, since 1996, when J. Tobin and P. Kenen were writing, there have been major improvements toward automation called "straight-through-processing" on financial markets that allows major changes in the architecture of the foreign exchange market.

"Straight-through-processing" (STP)⁽⁴⁷⁾ now allows tracing of all transactions comprehensively and at much lower cost than the paper trail that was used before, when trading was realised manually through telephone and confirmed by fax. Furthermore, this automation process is fostering a centralisation of the foreign exchange that could make things easier for tax issues.

As we have seen in the first part of the report, on the wholesale market (inter-dealer market) spot transactions are now automated at the level of 85% to 95% since 2001. The automation of other types of foreign exchange transactions are growing. In London, 46% of forward and swap transactions were conducted via electronic platforms, versus 76% for spot transactions (Bank of England, 2005). Only two electronic brokerage platforms, EBS and REUTER⁽⁴⁸⁾, dominate the wholesale market. With a slight modification of their software, it would be now technically possible to tax nearly all interbank transactions. There is a small share that is still traded by telephone but it is destined to decline further in the future. On the retail market (dealer-to-customer market), straight-through-processing is less advanced but growing quickly.

In Germany, electronic trading of foreign exchange is still small, around 10% of daily turnover, but growing due to deregulation of the financial system that especially hit the regional business between small and medium enterprises and Landesbanken⁽⁴⁹⁾. In the USA, a recent Greenwich Associates study reflects the fact that the value of on-line currency trading volumes doubled between 2002 and 2003, to \$8,000 trillion⁽⁵⁰⁾. In fact, according to Greenwich the proportion of corporates conducting their foreign exchange business electronically rose to a significant 43% in 2003, up from 32% in 2002, a growth which will undoubtedly continue as corporates, already using electronic trading services, shift more of their foreign exchange business onto electronic platforms. Another survey of 375 U.S. companies by U.K. technology consulting firm "Clientknowledge" found that 42% trades were conducted electronically. General Electric (GE), which belongs to the top ten multinational companies and whose financial arm is also one of the biggest financial companies in the world, does about 20,000 foreign exchange trades a year with a total value of about \$80 billion and has achieved a full straight-through-processing. GE's STP is integrated with GE's internal billing system and some of its general ledgers. It can upload trades into "FXpress", GE's data warehouse, which in turn uploads them into FXall, the electronic trading platform that GE has elected to execute its trades (S. Kelly, 2003).

⁴⁷⁾ Straight-through-processing is "the automated end-to-end processing of trades/payment transfers including the automated completion or confirmation, generation, clearing and settlement of instructions" (ECB, 2001, p 750). It enables one to do a trade and then convey the data back into the company's accounting system without re-keying any information.

⁴⁸⁾ EBS (Electronic Broking Services) covers essentially the trade in US dollars, euro, yen and Swiss franc. Reuters' Dealing 2000-2 dominates transactions in pounds sterling, Swedish Kronor, Australian dollars, Canadian dollars and New-Zealand dollars, together with some emerging countries currencies..

⁴⁹⁾ "Online foreign exchange trading in Germany, a market poised for growth". E-forex, July 2004.

⁵⁰⁾ Greenwich Associates Report, March 30, 2004.

Electronic trading platforms ⁽⁵¹⁾ between customers and dealers like FXall ⁽⁵²⁾, Currenex ⁽⁵³⁾ and FXconnect ⁽⁵⁴⁾ are registering big increases in their activity. In 2002, the global turnover of these platforms was around 14 billion dollars per day. Now, Currenex trades on average 12 to 15 billion dollars per day, and FXall and FXconnect 30 billion dollars a day apiece ⁽⁵⁵⁾. Most of these platforms have been created by banks that are also selling platforms to smaller banks and big customers for their internal foreign exchange risk management. According to Currenex, "40% of their revenues come from the selling of trading platforms". Lavatrading, Citigroup's subsidiary specialised in technology, has announced that it wants to turn the whole foreign exchange industry into a big electronic platform.

This is not mere propaganda. Since 2004, Reuters and EBS have been trying to extend their activities beyond the wholesale market to include the major traders of the retail market, the so-called buy side. In reaction, electronic trading platforms are willing to provide bank to bank trading, even if building a community to match EBS's and Reuters's would take a considerable amount of time.

Reuters announced in May 2004 a link with the Chicago Mercantile Exchange (CME) to provide CME pricing (in spot market terms) on Reuters Dealing 3000. These two institutions have not yet decided to pool neither their liquidity nor their order books. But this could change because of EBS's initiative. EBS announced in September 2004 that it has made its services (EBS Prime service) accessible to what it terms the "professional trading community" that includes hedge funds, asset managers, commodity trade advisers, and institutional investors that typically trade high frequency in the forex market and assume risk therein. This will increase speculation on the forex market. Hedge funds, which have targeted currencies as a speculative asset in their own right since the equity bear market of 2000, are now able to trade directly in the spot interbank foreign exchange market for the first time, gaining access to interbank market liquidity.

All these initiatives point toward the creation of exchanges for currency transactions as there are stock exchanges for equities. Hedge funds and other systematic traders are eagerly demanding the creation of such a currency exchange.

The idea of a currency exchange that would serve the foreign currency market as national bourses serve the stock market is not new. Ironically, it has been advocated by supporters of global taxes such as R.P. Mendez (1996, 2001, and 2002).

"Through an automated global computer network, matching buy and sell orders electronically, it would lower the cost to consumers of changing foreign currencies by giving them competitive rates and access to other buyers and sellers, which they now lack. FXE would also bring order, transparency, and efficiency to the present market. If properly designed, managed and sponsored, it could generate considerable revenues from licensing and transaction fees from its member traders and customers, as is done in the stock exchanges". The FXE would be created by the United Nations (UN) that would invest in the project in partnership with an existing electronic platform, and the revenues would be appropriated directly by the U.N.

⁵¹⁾ An electronic trading platform is a facility that provides some or all of the following services: electronic order routing (the delivery of orders from users to the execution system), automated trade execution (the transformation of orders into trades) and electronic dissemination of pre-trade (bid/offer quotes and depth) and post-trade information (transaction prices and volume data) (BIS, 2001, p 3).

⁵²⁾ FXall has been created in 2000 by Bank of America, Credit Suisse first Boston, Goldman Sachs, HSBC, JP Morgan, Morgan Stanley, and UBS Warburg. It has been joined since by more 50 banks.

⁵³⁾ Currenex has been founded by Shell and the capital risk fund Thomas H. Lee and has been rejoined by ABN ARMRO, Citigroup, Deutsche Bank, Lehman Brothers, Merrill Lynch, Calyon, Société Générale and again HSBC.

⁵⁴⁾ FXconnect is owned by State Street Bank.

⁵⁵⁾ Source: « Vers une bourse électronique des échanges ? » In "Les Echos, February 28th 2005".

R.P. Mendez's project has encountered criticisms and scepticism, in particular on the UN political will and capacity to engage in such a project due to the US ban on any fiscal issue (M.A. Brown, 2002, S. Corbridge and A. Hudson 1996, C. Chavagneux, 1996). Paradoxically, what has been deemed at the time as totally unrealistic may be realised naturally by market forces. Of course a future currency exchange will not be placed under the authority of the UN. There will be several private currency exchanges as there are a few stock exchanges in the US or in the EU. But at least there will probably be currency exchanges in the coming future.

On an economic theory point of view, there is no decisive argument in favour or against the efficiency of such a foreign currency exchange (see J. Frenkel, 1996, p 66). In these circumstances, empirical examples can help to figure out what could happen.

Government bond markets, which are also traditionally over-the-counter markets, have already experienced the same process. In Europe, the Italian government bond market (MTS), an inter-dealer quote-driven electronic market, provides an example of what could happen on the foreign exchange market. The introduction of the euro has highlighted the need to have facilities for cross-border trading in different government bonds of the Euro zone. New MTS were created forming a "galaxy" composed of several national markets (MTS Italy, MTS France, MTS Belgium, MTS Netherlands, and MTS Portugal) along a pan-European market, EuroMTS. Government bonds are traded both on national MTS markets and on the Euro-MTS. In the case of Italy, MTS Italy maintained its current trade volume and bid-ask spread while Euro-MTS increased its activity at the expense of transactions previously traded over-the-counter (CGFS, 2001, p 21). On the whole, the share of Italian government bonds traded centrally on an exchange increased clearly due to the electronic trading.

As far as foreign exchange markets are concerned, we are still not there, but the convergence towards currency exchanges could be similar. Probably, the centralisation process of the foreign exchange market due to the growing share of electronic platforms will slow down and the future exchange market will be divided in two segments: a traditional over-the-counter market driven by quotes for big corporations and a new centralised market maybe driven by orders for hedge funds and other speculators.

But even this partial evolution would be a major improvement for the CTT collection. Collecting the CTT would be as easy as paying the commercial fees for the use of these private electronic platforms.

A critical feature of these electronic platforms for taxing objectives is that they automatically capture all pre and post trade information, i.e. confirmation. Transparency and anonymity rules reflect the need of users of these systems and also the business interests of their owners. Non-disclosure of information can be an important element of the corporate strategy of an electronic platform. Information availability is decisive in the way a platform is designed and works. In principle, dealers have only access to the information related to their activity conducted on the platform. But system providers, however, have access to all information: The identity of dealers, the number and value of transactions they make. The CTT could be then collected automatically without changing anything to the way information is presently disclosed to participants. But legal provisions should establish that the audit trail would be at the disposal of fiscal authorities for regular checking. These legal provisions already exist for securities transactions on stock exchanges, where gains are submitted to taxation.

So, in principle, the natural evolution of foreign exchange markets toward more centralised and electronic markets could provide the basis for collecting the tax at the trading level. This is one of the inferences made by D. Rime (2003) about the policy implications of new electronic trading systems such as EBS and Reuter. "By regulating brokers

and requiring banks to use only regulated electronic brokers, the way could be opened for implementing trading halts, for example. Another possibility is to collect a transaction tax ("Tobin tax") through the electronic brokers". (op. cit., p 494, we underline).

Not only could we collect the tax, but there appears the technical possibility to implement automatically the surcharge conceived by P.B. Spahn, which works exactly as a trading halt. Another important feature is that "... several central banks have electronic brokers installed and use them for monitoring the market among other things" (op. cit., p 494).

Central banks that are destined to play a major role in collecting the tax could then have a direct link with the market and monitor banks activity. Electronic trading platforms establish operational performance reports that serve to control and monitor risk and performance. These reports contain quantifiable performance metrics at the level of details and summary. At FXall for instance, these reports contain a summary of a firm's volume done on FXall over any time period, a breakdown of request for quotes, sent, answered and dealt. Customers and banks have to maintain records of their past activity up to seven years in some countries. Electronic trading platforms can do it efficiently. The full audit trail of every action taken by individual users is logged instantly and stored. Reports of every trade are available in html, pdf, csv formats, and the frequency can be real time or via scheduler with notification upon completion. Fiscal authorities can check quite easily and cheaply trading volume, the tax to be paid and the tax effectively paid.

In summary, recent technical progress since 2000 and the evolution of the institutional architecture of the forex market has created the technical possibility to collect the tax at the trading step.

But there remain some questions to be answered. The geographical location of these electronic platforms has to be considered if the CTT is created in the E.U. only. On the wholesale market, EBS and Reuter are British companies located in the UK, and subject to British law. If the tax was adopted by the EU, it could be theoretically possible to ask EBS and Reuter to declare any currency transaction traded on their platform to the fiscal authority. But if the E.U. was the only area to adopt the CTT, the danger is that EBS and Reuter headquarters could leave London to migrate to the USA where they have subsidiaries.

On the retail market, many of the electronic platforms are American and situated in the USA. There is the potential danger that customers and banks trade whatever currencies on these American electronic platforms in order to avoid a tax adopted in the EU. It is technically possible to trade from Europe with a remote access with electronic platforms and even stock exchanges abroad. In fact, it could give them an important competitive advantage. The increased of the US share in the global turnover from 15.7% to 19.2% (see Table 2-2 below) is in great part due to funds and commodity trading accounts using electronic platforms ⁽⁵⁶⁾ in New York.

The answer to this potential problem is the following: Foreign exchange trading is considered as an "investment business". For instance, in the UK, the "Securities and Futures Authority" has ruled since 1996 that "advising, arranging, dealing or managing forex or other transactions" constitutes an "investment business" ⁽⁵⁷⁾. This is important because it means that EBS, Reuter, FXall, Currenex and others are legally considered as "investment firms" and have to be registered in the UK or in any of the EU countries to have the right to sell services to British or other European customers.

This decision is in line with European directives. Electronic trading platforms are

⁵⁶⁾ See "New York takes a bigger slice of the currency pie". Financial Times October 28, 2004.

⁵⁷⁾ See: "Board Notice 302, Guidance. Foreign Exchange and the Financial Services Act 1986". 1 February 1996, The Securities and Futures Authority, SFA, on its web site.

ruled by the “Directive on Financial Instruments Markets”, (also known as the “Investment Services Directive”), and the “Electronic Commerce Directive”. Spot transactions on foreign markets are not explicitly covered by the first directive but options, futures, swaps, forward rates agreements, and any other derivatives contracts relating to currencies are listed in the list of financial instruments concerned ⁽⁵⁸⁾. With such a list of complex transactions, spot transactions could be added with no difficulties.

To have the right to sell services in the EU, electronic trading platforms must be reviewed by the appropriate authority of one EU member which gives the authorisation to conduct business in the relevant country. This authorisation is then extended (thanks to the “passport regime”) to other EU countries under the EU’s investment Services Directive which was first adopted in 1993 and updated in 2004 ⁽⁵⁹⁾ to take full account of the impact of electronic trading platforms ⁽⁶⁰⁾ on the structure of financial markets and market competition between exchanges and electronic platforms. For instance, FXall has been reviewed by the UK Securities and Futures Authority and has been authorised to operate in the UK and the rest of the E.U and even in non EU European countries members of the European Economic Area. In France, for instance, FXall ⁽⁶¹⁾ and Currenex are considered as branches of investment firms of the European Economic Area, whose head office is located in London, and operating as services providers in France. They are monitored for the part of their activity in France by a French regulator, the “Financial Market Authority”. If FXall and Currenex did not have the legal statute of “branches” in France, they would be monitored by the Financial Services Authority in London. FXall and Currenex have also to comply with applicable legal and regulatory requirements in each jurisdiction in which they operate, especially business codes.

The “electronic commerce directive” adds some new principles. “The directive defines the place of establishment as the place where an operator actually pursues an economic activity through a fixed establishment irrespective of where web-sites or servers are situated or where the operator may have a mail-box”. “Such definition will remove current legal uncertainty and ensure that operators cannot evade supervision, as they will be subject to supervision in the member state where they are established”. Services Providers are obliged “to make available to customers and competent authorities in an easily and accessible and permanent form basic information concerning their activities (name, address, e-mail address, trade register number, professional authorisation and membership of professional bodies where applicable, Value Added Tax number)” (we underline) ⁽⁶²⁾. Concerning the payment of the VAT, the principle held is that when the services are delivered through Internet by a firm located in a non EU country to a customer located in the EU, VAT must be paid by the customer.

With such legal provisions in place, European customers cannot use electronic platforms services if these are not registered and authorised in the EU whatever the geographical location of these platforms’ headquarters or trading web sites. Non EU firms have the choice to establish a branch in the EU or not. If they open a branch, i.e. a fixed establishment, they can benefit from the European passport. If they don’t, they have to be

⁵⁸⁾ “Options, futures, swaps, forward rates agreements, and any other derivatives contracts relating to securities, currencies, interest rates or yields, or other derivatives instruments, financial indices, or financial measures which may be settled physically or in cash”. Annex 1, Section C of the Directive 2004/39/EC on Markets in Financial Instruments, Official Journal of the European Union, 30/04/2004.

⁵⁹⁾ See “Investment Services: final adoption of directive is boost for investment firms and their clients”, Brussels, 27th April 2004. <http://europa.eu.int/rapid/pressReleaseActions.do?reference=IP04> The full text of the directive is available on the EU web site.

⁶⁰⁾ The EU uses the term “Multilateral Trading Facilities” (MTF).

⁶¹⁾ It has also been approved by the Hong Kong Monetary for the same purpose in August 2001.

⁶²⁾ Quoted from “Electronic commerce: Commission welcomes final adoption of legal framework Directive” available on http://europa.eu.int/comm/internal_market/en/ecommerce/2k-442.htm.

registered in each EU country where they want to sell services. Locating their web site outside the EU will not change anything. The obligation to provide basic information to competent authorities even if they trade only online and in particular their VAT number gives an indication of what could be done if the CTT was part of the law.

The conclusion is that if EBS and Reuter headquarters migrated to the US to avoid the tax, which is not that simple and would cost them a lot of money, their customers would not avoid the tax. EBS and Reuter, or any other electronic trading platforms would have to be registered in one or every EU country.

Banks' trading rooms in the EU that use their services could also be subject to the fiscal law creating the CTT. The new "Investment Services Directive" adopted in 2004 already includes in its article 25, (paragraph 3 and 5) an obligation of reporting transactions and maintaining records (paragraph 2) for the purpose of monitoring the activities of investment firms, "to ensure that they act honestly, fairly and professionally and in a manner that promotes the integrity of the market" (article 1). The same obligation could be extended with no difficulty to fiscal issues.

Investment firms must report details of their transactions "... to the competent authority as quickly as possible as and no later than the close of the following day" (paragraph 3). "The report shall, in particular, include details of the names and numbers of the instruments bought or sold, the quantity, the dates and times of execution and the transaction prices and means of identifying the investment firms concerned" (paragraph 4). The report can be made and transmitted also by a regulated market, an MTF⁽⁶³⁾, or a trade matching or reporting system approved by the competent authority (paragraph 5). In a recent "draft commission document"⁽⁶⁴⁾, the Commission requires that "reports should be made in an electronic form"; to "ensure the safety and confidentiality of the data reported", and for that purpose "each competent authority shall publish a list of identification codes of the regulated markets, multilateral trading facilities, and entities which act as their central counterparties, ... and those codes shall be used to identify a counterparty to the transaction which is a regulated market, multilateral trading facility or other central counterparty" (op cit p 4).

We can conclude that critical technical, institutional and legal requirements for the implementation of the CTT are already in place in the EU. Foreign exchange transactions could be taxed when traded with no major changes to the present legal provisions. If banks are obliged by law to declare their transactions when they trade, they could do it directly or via the electronic platforms they already use. This will be no more costly as it is now because it will be done automatically.

But if the tax was introduced in the E.U. only, can we imagine that banks and their customers would stop trading currencies in the EU and use existing dealing sites in the USA or in Asia to trade without paying the tax? It is a real problem but one that must not be exaggerated. Buying or selling currencies in a cost-efficient way depends on a whole set of conditions that not every city and country is able to satisfy.

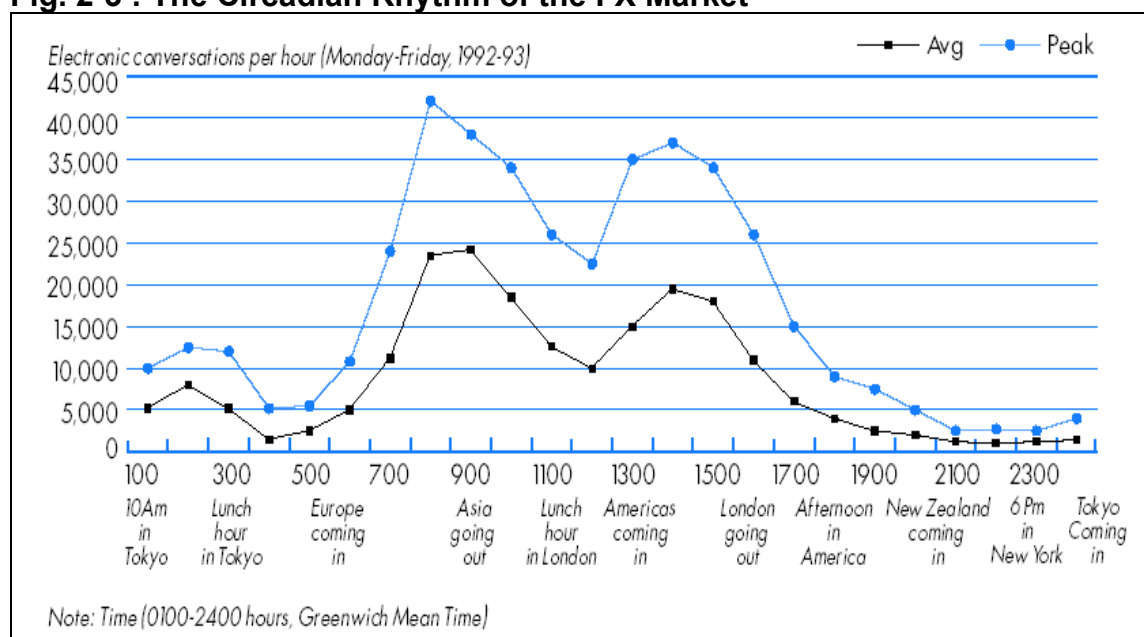
The first one is that the geographical location depends on its location in the universal time. One often meets the idea that there would be a unique integrated world financial market because it is possible to trade 24h a day. This representation of the market is partly misleading. Foreign exchange trading is rhythmized by the activity of the three major financial places, Tokyo, London and New York, each one located on the three continents where world wealth is produced and concentrated (See figure 2-3 below).

⁶³) A Multilateral Trade Facility: official term used by the EU commission to designate electronic platforms.

⁶⁴) "Draft commission Document on the methods and arrangements for reporting transactions in financial instruments, the contents of such reports, the exchange of information between competent authorities, and the determination of the most relevant market of a financial instrument in terms of liquidity". Option A, Cooperation and enforcement". Available on the European Commission's website.

These three cities realised 58.8% of world foreign exchange transactions in 2004, against 25.9% for the following seven places that play a minor and declining role (31.6% in 1989, see table 2-2 below). Each of these cities is located in a different time zone. The foreign exchange market awakens with Asia, reaches its full activity when Europe comes in, and again with North America that ends the 24 hours.

Fig. 2-3 : The Circadian Rhythm of the FX Market



Source: Reuters, cited in "The Foreign Exchange Market in the United States", Chapter 3, Federal Reserve Bank of New York, New York, 1999.

Table 2-2 : Market Share of the Main Countries, in % of the World Foreign Exchange Market

COUNTRIES	1989	1992	1995	1998	2001	2004
United Kingdom	25.6	27.0	29.5	32.5	31.1	31.3
United States	16.0	15.5	15.5	17.9	15.7	19.2
Japan	15.5	11.2	10.2	6.9	9.1	8.3
SUB TOTAL	57.1	53.7	55.2	57.3	55.9	58.8
Singapore	7.7	6.9	6.7	7.1	6.2	5.2
Germany	n.d.	5.1	4.8	4.8	5.4	4.9
Switzerland	7.8	6.1	5.5	4.2	4.4	3.3
Hong Kong	6.8	5.6	5.7	4.0	4.1	4.2
Australia	4.0	2.7	2.5	2.4	3.2	3.4
France	3.2	3.1	3.7	3.7	3.0	2.7
Canada	2.1	2.0	1.9	1.9	2.6	2.2
TOTAL	88.7	85.2	86.0	85.4	84.8	84.7

Source: own calculations from "Triennial Central Bank Survey", BIS 2001 and 2004.

Increasing investment in new technology is the second reason for the strong geographical concentration of the foreign exchange market. Foreign exchange transactions require sophisticated and secure computer and telecommunications infrastructures and highly qualified staff. These very costly elements need a high volume of transactions to be

profitable. Economies of scale are becoming, as in other industries, a strong incentive for mergers and acquisitions in the banking industry and also in electronic trading companies.

Intangible external economies are the third reason for the geographical concentration. In every professional community, one needs to know what is not explicitly written somewhere, but rather hears through the grapevine. Banks also need an adequate environment. A set of law and financial professions at hand, efficient transport commuting, and for their very well-paid staff, residential areas, shopping malls, leisure facilities, and good private schools for their children.

These advantages are only encountered in big cities where the world major financial centres are located (New York, London, Frankfurt, Paris, Zurich, Hong Kong, Singapore, etc.)⁽⁶⁵⁾. This is what economic theory calls a “natural monopoly”. In this respect, London enjoys a specific advantage. It has, most importantly, a number of overlapping hours with Asia and North America. Added to its historical heritage as an imperial metropolis, London, which is one of the most costly cities in the world, realised nearly a third of the world foreign exchange market. So, it would be more difficult than it looks, and probably not so profitable, to delocalise trading rooms in tax havens lost in the middle of the Pacific Ocean. If it was not the case, why are trading rooms not yet there?

For the same reasons, it would not be so simple to stop trading in London and in the E.U. in favour of New York, Tokyo or Singapore just because of a tax on currency transactions. It is theoretically possible to imagine that all transactions on European currencies could be made in New York or in Asia, but it would be difficult in practice. European customers, in particular productive and commercial firms, pension and mutual funds, want a close relationship with their bank to ask for advice and services. They don't only need quotes. Furthermore, they would have to work in Asian and American time if they had to trade with traders from American and Asian banks, and it is not realistic in the long term. In summary, technical progress has turned trading capture into a viable option for collecting the CTT.

2.2.3 Step 3: Confirmation

Transaction confirmation is important because it is the legal evidence that a transaction has been dealt. It includes all the relevant data that will allow the two counterparties to agree on the terms of the transaction. It also includes the settlement instructions. Confirmation is prepared by back office staff who are independent of the traders in the front office.

Confirmation is not difficult for traditional transactions such as spot, usual forward transactions and usual currency swaps, and even foreign currency options. These standard transactions can be easily automated. Their confirmation relies on electronic validation and confirmation messaging provided either by the electronic trading platform itself or by message carriers like SWIFT⁽⁶⁶⁾. These systems eliminate the operational expense of processing confirmations manually and eliminate trade errors, given that trade information is entered just once rather than re-keyed multiple times throughout the trade and settlement process. Reports are then available in html, pdf and csv formats and the frequency can be real time or via schedulers with notifications upon completion. The type of customer reports can include daily activity, audit trail and liquidity provider. In this case, fiscal authorities can be informed in real time about any transactions made by a bank, or can check at random any bank without significant costs.

⁶⁵⁾ Anecdotes sometimes reveal a lot. In an advertisement published in a reputed financial newspaper to attract more traders, Singapore announced that it had allowed clubs and discothèques to stay open later at night.

⁶⁶⁾ SWIFT provides an electronic confirmation matching services called SWIFT Accord.

The problem is that electronic confirmation matching services cannot handle the non standard OTC derivatives ⁽⁶⁷⁾ such as “non-deliverable forwards” (NDF) and some “exotic” currency option transactions, and that not every customer on the retail market has access to these services.

The combination of these two facts explains why OTC derivatives are privately negotiated transactions, usually traded and confirmed by telephone. In this case, conversations between traders are invariably recorded at the trading capture. Some firms also record back office conversations when confirmations are made by telephone.

The Foreign Exchange Committee of the FED (2004) recommends that “... following the telephone confirmation, both parties should record the date, time, telephone line, and the name of the individual with whom the trade was confirmed. In addition to the telephone confirmation, both parties should exchange and match a formal confirmation (mail, SWIFT, or other electronic) or a call back procedure should follow” (p 24). So, in any case, trading and confirming by telephone produces a paper or an electronic trail that could be used for taxation issues.

This trail contains all the necessary information because counterparties use master agreements issued by the Foreign Exchange Committee of the Federal Reserve Bank of New York, the Emerging Market Traders Association (EMTA), or the International Swaps and Derivatives Association (ISDA) among others. These master agreements list the economic terms of the transaction and many legal terms of the trade. “Data included in the confirmation should contain the following: the counterparty to the FX transaction; the office through which they are acting; the broker (if applicable); the transaction date; the value date; the amounts of the currencies being bought and sold; the buying and selling parties; and settlement instructions” (Foreign Exchange Committee, 2004, p 22).

According to the CPSS (1998), tapes of the recorded transactions are typically kept for six months, although some dealers keep them for a year, long enough to ensure that they are available on the first settlement for most transactions. The EU new legal legislation is increasing the record keeping requirements. The Directive on “Markets in financial Instruments” ⁽⁶⁸⁾ requires in its article 13(6) that “an investment firm shall arrange for records to be kept of all services and transactions undertaken by it which shall be sufficient to enable the competent authority to monitor compliance with the requirements under this directive...”. According to the Lamfalussy Process, the Commission may adopt the implementing measures, so-called “Level 2 measures” with respect to a large number of provisions of the Directive. For this prospect, it has sought the technical advice of the European Securities Regulators (CESR) on these measures.

On 3 March 2005, the Committee of European Securities Regulators (CESR) issued a consultation paper on Level 2 implementing measures with respect to the Markets in Financial Instruments Directive (MiFiD), which concerns foreign exchange transactions and in particular foreign exchange derivatives.

It proposes that investment firms maintain records “in a manner conducive to demonstrating compliance with the requirements under the directive” (CESR, 2005). Records of telephone orders must be kept on a voice recording system for a period of at least one year. Detailed records must be sufficient to enable supervisors to reconstruct the processing of each transaction during their five-year-retention period (we underline). They need to be retained in a durable medium”, so they can be reproduced at any time on pa-

⁶⁷⁾ Remember that a derivative transaction is a financial contract whose value depends on the values of one or more underlying reference assets, rates or indices. Derivatives are also called “structured” or “non standard transactions”.

⁶⁸⁾ the directive on Markets in Financial Instruments (Directive 2004/39/EC – “MiFiD”) was adopted by the European Parliament and Council on 21 April 2004 (OJ L145/1 of 30 April 2004). The Directive will replace the Investment Services Directive 93/22/EEC.

per. Records of the telephone conversations for the giving and/or receiving of orders have to be retained for at least one year. "Tapes, however, are not defined as a "durable medium", so any tape recordings could need to be transcribed into a "durable medium" at some points, with adequate measure to ensure no tampering during transcription" (FSA, 2005). The "durable medium" can be paper, optical, magnetic media, or other computer-based format.

In summary, every standard and non standard transaction can be monitored at the confirmation level. Even when trade is operated by telephone, the necessary data is already available in an electronic form for any control that fiscal authorities would like to do. So, there are no foreign exchange transactions that could avoid the tax. If OTC foreign exchange derivatives are not taxed when they are traded on telephone, they can be taxed when they are confirmed.

2.2.4 Step 4. Netting

As we have seen, netting (or clearing) is an agreed offsetting of transactions between trading partners in order to reduce a large number of individual transactions into a smaller net amount to be settled. Netting is important because it reduces settlement risks and operational costs. Clearing applies to all financial transactions: on retail markets as well as on wholesale markets, on the money market and foreign exchange markets, on bond and stock markets, on decentralised markets or on stock exchanges. Retail transactions are very numerous but their average value is small. They are called mass transactions. Wholesale transactions present the opposite features. They are not as numerous, but their average value is very high.

On the foreign exchange market, netting is realised by a clearing institution that is in general a bank for spot, forward, swaps transactions and OTC options, or an exchange for the small part of exchange-traded derivatives. Clearing institutions can restrict their activities to pure netting, but some of them are also settlement agents. One important recommendation of central banks to private banks is that all transactions, even those that will be netted, should be confirmed individually. If not, trades may be mistakenly added or removed from the net agreement, which will be difficult to detect on settlement day. This is important because it means that even netted transactions can be traced individually in order to find the origin of a potential error. For taxing issues it means that all transactions can be taxed even if they are subsequently netted.

There are two important categories of netting: bilateral and multilateral netting. Bilateral netting concerns multinational firms, investors and interbank transactions. Multinational companies make lots of internal foreign exchange transactions between their subsidiaries. Bilateral netting reduces the number of internal transactions and thus reduces operational costs and risks attached to them. Multinational banks sell bilateral netting services to the multinational companies thanks to their implantation on all continents and their links to national payment services. For instance, Citibank® Netting Services enables subsidiaries to settle their financial obligations with each other on a "net" basis, rather than transaction-by-transaction. It reduces inter-company payment transaction volumes, and automates the settlement process resulting from netting. Unfortunately, there is no estimation of the reduction of internal transactions due to this kind of netting.

Interbank bilateral netting has been common practice for more than ten years. In a 1997 survey, the BIS (1998) had found that 77% of banks already engaged in bilateral netting. "Across all currencies, 29% of the gross settlement flows in the 1997 survey were subject to bilateral netting, up from 24% in the 1996 survey. Overall, bilateral netting reduced total settlement flows by 15% in 1997 up from 13% in 1996". That is not much but is already significant. When we only take into account the 29% of settlement flows to which

bilateral netting is applied, the power of reduction of bilateral netting is impressive. In 1997, settlement flows are reduced by half.

We can reasonably hypothesise that since 1997, the percentage of settlement flows subject to bilateral netting must have increased thanks to technical progress. It has also increased because of mergers and acquisition in the banking industry. In Switzerland for instance, two large banks, prior to their merger, had similar types of businesses and nearly the same daily turnover in the national settlement system. After the merger and the consolidation of their two accounts in the national settlement system, the turnover of the new institution was roughly the same size as that of one of the pre-merger banks. The total volume and value of payment processed in the settlement system decreased by around 25% (BIS 2000). This reflects the potential for clearing offered by banking concentration, where interbank transactions become intrabank transactions which do not involve external exchanges of payment messages and tend to be cheaper to process. This evolution means that collecting the tax at the settlement step only captures a decreasing part of transactions.

Multilateral netting is more recent. In 1997, only 23% of the banks surveyed by the BIS engaged in multilateral netting, reducing transactions by less than 1%. More importantly, settlement flows were reduced by 71%. But the two multi-currency netting banks that existed at that time, Echo and Multinet, never succeeded in attracting a significant market share. The banking industry did not wish to invest in several different initiatives to reduce settlement risk and preferred to concentrate their effort on one project, the CLS bank, which was launched five years later. But the demonstration had been made that there was a dramatic potential to reduce the volume of transactions.

Norway gives an illustrative example of the reduction of flows due to netting in modern payment systems. The daily value of transactions on the retail and wholesale market for every transaction operated by banks is reduced from an average of NOK 66 billions before clearing, to NOK 8.6 billions to be settled, i.e. a reduction of 87%. "This netting effect means that banks on average, only require liquidity equivalent to 13% of the value of total payments in the clearing in order to cover their payments". (Norges Bank, 2004, p40).

Today, electronic trading platforms have developed multilateral netting facilities, or offer a direct electronic access to private and public clearing institutions that on their side have improved their performance. For instance FXall, Currenex and their competitors provide direct access to clearing and settlement banks. FXall allows the customer to choose between gross settlement, bilateral netting and CLS. Netting between counterparties is calculated automatically by a module integrated into the trading software. Only confirmed trades can be netted before settlement.

Forex transactions that have not been cleared internally or bilaterally (around 80%) are sent to clearing houses or other interbank clearing institutions specialised in cash transactions. Traditionally, there used to be a clear division of labour between clearing and settlement. LVTS in Canada, CHIPS⁽⁶⁹⁾ in the USA, and Paris Net Settlement in France are examples of multilateral domestic clearing institutions that combine all trade between their customers to calculate a single net payment, several times a day or once at the end of the day. In the European Economic Area (EEA)⁽⁷⁰⁾, Euro1 provides multilateral netting for cross-border transactions in euros. But now, clearing is even more integrated to settlement. On the forex market, the Continuous Link Settlement Bank (hereafter CLS), provides multilateral netting in each pair of currencies and then proceeds to the settlement⁽⁷¹⁾.

⁶⁹⁾ Clearing House Interbank Payments System.

⁷⁰⁾ The European Economic Area is constituted by the EU member states plus Iceland, Liechtenstein and Norway.

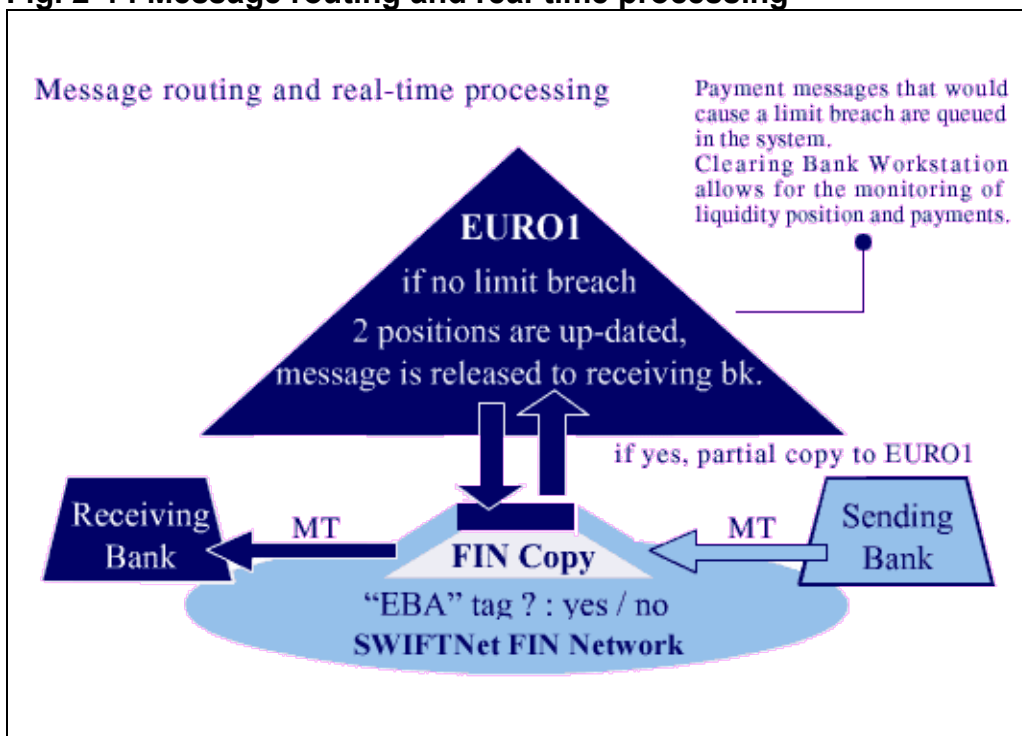
⁷¹⁾ CLS will be analysed in details below in the settlement section.

2.2.4.1 The role of Euro 1

In Europe, "Euro 1" is the most important private cross-border clearing institution specialised in large value euro transactions. It was founded in 1998 by the "Euro Banking Association", a cooperative association between EU-based commercial banks and EU branches of non-EU banks, created in 1985 by 18 commercial banks and the European Investment Bank with the support of the European Commission. The "Euro Banking Association" is an umbrella organisation intended to be a forum for exploring and debating issues related to euro payments. It has set up the EBA Clearing Company which operates the "Euro 1" system. They are located in Paris and operate under French law. Euro 1 is an equivalent to CHIPS in the USA in the sense that it supports the creation of a "single payment area" allowing euros to circulate between member states at low cost, in a similar way as the dollar between the states of the USA. With around 180 000 transactions per day in March 2005 with a daily value of €172 billion, Euro 1 has become the most important private clearing institution in the euro area. In 2002, it accounted for around 32% of the total value of foreign exchange trade in euros (ECB, 2003).

To achieve its mission, Euro 1 must rely on detailed information about the transactions it must process, which is provided by a message carrier, in this case, SWIFT. Payment messages sent by participants for the purpose of being processed by Euro 1 must carry the tag "EBA" in field 103 of the message header. Messages with this tag are partially copied to the clearing computer via SWIFT's "FIN-Copy" service, a dedicated software program (see Figure 2-4).

Fig. 2-4 : Message routing and real-time processing



Source: EBA website, <http://www.abe.org/>

Payment messages are processed on an individual basis. Processing consists of checking the sending and receiving participants' positions and, if possible, adjusting their position. Should the adjustment lead to a breach of the sending participant's debit cap or

the receiving participant's credit cap, the payment message will not be processed, but instead put into an on-hold queue.

Upon processing of a payment message, the clearing computer generates a release message to the FIN-Copy service, and the original payment message is forwarded to the receiving participant. The system revisits a participant's on-hold queue each time a payment message in relation to that bank is processed to check whether the adjusted position allows for further processing of payment messages that are held in the participant's on-hold queue.

Euro 1 settles at the end of the day in central bank money at the European Central Bank. After the cut-off time (4 p.m. Central Eastern Time, CET), banks with debit positions will pay their single obligation into the EBA settlement account at the European Central Bank (ECB) through TARGET. After all amounts due have been received, and upon instruction from the EBA Clearing Company, the ECB will pay the banks with credit positions, also through TARGET.

This procedure means that only net debit positions are settled through TARGET on the accounts of the ECB. In other terms, it is not the individual transactions that are settled one by one through TARGET during the day, but only their net amount at the end of the day.

This is not without consequence for tax issues. If the tax is levied only at the point of settlement on the accounts of the ECB, only the net amount will be taxed, which can be much less than the gross amount due to the power of reduction of the clearing process.

One solution is to levy the tax when the transactions are routed individually to Euro 1 by SWIFT. It is indeed possible, because each transaction is tagged to signal SWIFT that the transaction is destined for Euro 1. In fact SWIFT messages include various information: the identity of the sending and receiving banks, the nature of the transaction (for instance a forex transaction), the currency, the exchange rate and of course the amount of the transaction. It could then include easily another field to be filled about the fiscal status of transaction, i.e. whether the CTT has been paid or not.

Suppose that a US bank sends a SWIFT message to its correspondent bank in the euro area, for instance Crédit Lyonnais, to order a credit transfer in euros to Deutsche Bank. If Crédit Lyonnais uses Euro 1 to process the order, it is therefore possible that SWIFT Fin Copy sends a copy of the message to Euro 1 for clearing issues and one to the Banque de France for taxing issues.

2.2.4.2 The launch of CLS

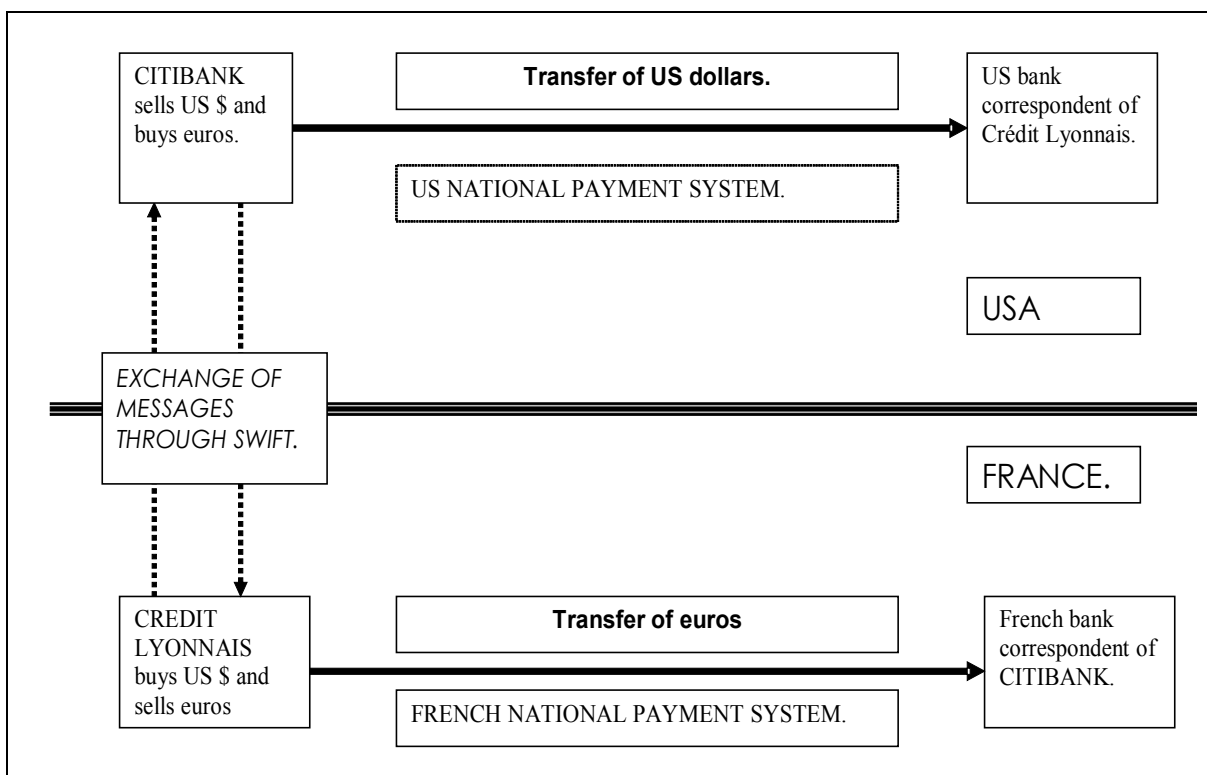
Today, multilateral netting facilities on the foreign exchange market like Echo and Multinet have been replaced by a major innovation launched on 9 September 2002: the Continuous Link Settlement Bank (CLS Bank). The CLS Bank is a global clearing and settlement system for settling both sides of forex deals simultaneously in order to eliminate the forex settlement risk.

The settlement risk is precisely defined as the risk that one party to a forex transaction will pay the currency it sold but not receive the currency it bought. This is due to the fact that the two legs of the transactions are settled in two different countries that are often located in two different time zones. For this reason they cannot usually be synchronised because one of the two national payment systems is closed.

Suppose that Crédit Lyonnais in France buys dollars and sells euros to Citibank in the US. The two traders will trade through EBS trading platform for instance that relies on SWIFT for the routing of message orders (see Figure 2-5 on the following page). Although the media makes a lot of fuss about the globalisation of finance and hot money that travels all around the world, the interesting point is that SWIFT messages are the only elements

that will travel across the ocean. Euros will stay in France and the US dollars will stay in the USA. Crédit Lyonnais will transfer euros via the French payment system on the account of a bank which acts as the correspondent in France of Citibank. This correspondent bank, also located in France for simplification's sake, will receive the funds in lieu of Citibank and will then credit a loro account. A loro account is the term used by a correspondent to describe an account held on behalf of a foreign bank (in the example Citibank). Citibank will regard this account as its nostro account. Crédit Lyonnais has a nostro account in its US correspondent which will be credited by the amount of dollars transferred by Citibank.

Fig. 2-5 : Settlement of a Forex Transaction Via Correspondent Banks



This very old system is cost efficient because banks don't have to open branches or subsidiaries in every country where they would be submitted to the national legislation. It is also very safe because transfers of funds are totally dematerialised. But it has also some shortcomings such as the exposure to settlement risk.

Although the operating hours of the euro and the US dollar payment systems now overlap, the payment of the two currencies are normally not made simultaneously. US dollar large-value payments are often made towards the end of the business day in the United States, 10 to 15 hours after the payment from Crédit Lyonnais has been finally settled in France. The unsynchronised settlement of the two payments exposed Crédit Lyonnais to the risk that Citibank will not make the US dollar payment as agreed.

The exposure to settlement risk was in fact much longer than the mere difference of time zone and extended to several days because of the processing time at all level of both settlement circuits, including the internal processing procedures of Crédit Lyonnais and

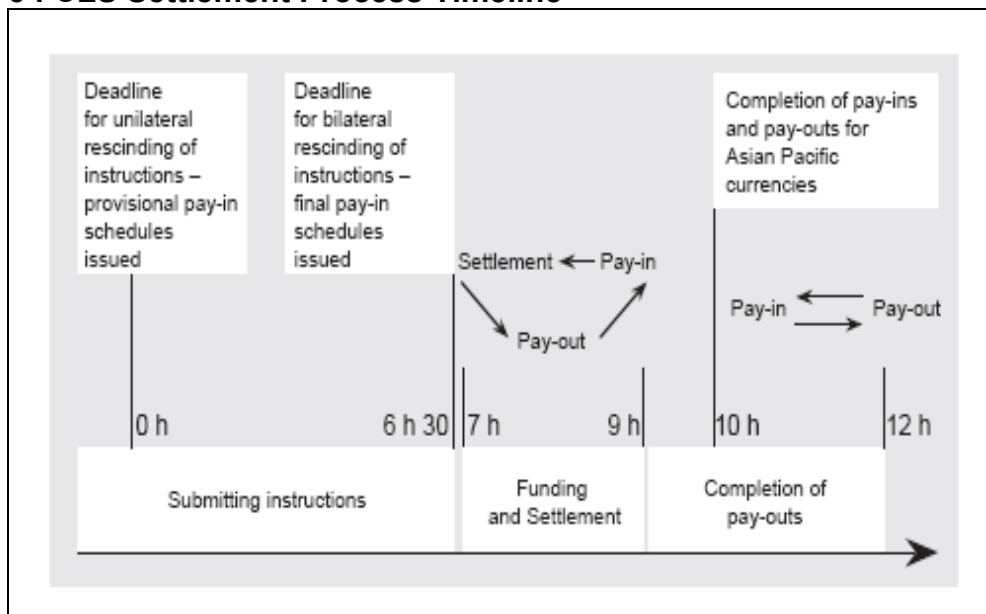
Citibank, those of their respective correspondent banks for the two currencies and the operating rules of the interbank systems used to transmit the payment instructions.

The CLS project was initiated by a group of major foreign exchange participants, known as the G20 banks, to address this problem of forex settlement risks. Central banks have supported the development of CLS and by November 2002, 67 major financial institutions located in 17 countries had joined the system and had become CLS shareholders⁽⁷²⁾. Some 22 banks, i.e. one third of the shareholders, are located in the euro area. CLS was granted a specific banking licence in 1999 in New York, limiting its field of activity. CLS is a single-purpose private bank whose sole activity is to engage in forex settlement activities. CLS is a settlement agent that does not at any point become a counterparty of the participants.

To reduce settlement risk, the CLS system combines two major advantages. First, trades are settled on a Payment versus Payment basis (PVP system). The settlement of one side of the transaction occurs if – and only if – the other side of the transaction is also settled. The debiting of one currency and the crediting of the other currency occurs simultaneously. The second advantage is that CLS members pay their final position on a net basis, which reduces dramatically the amounts they have to pay, and the risks attached to them.

To combine these two advantages, the CLS system establishes a clear distinction between trade settlements, realised on a gross basis on the books of CLS bank according to the PVP principle, and the funding of the resulting positions of each member, that is the final transfer (payment) of currencies between members and CLS Bank, realised on a net basis on the accounts of open by CLS Bank on the books of the relevant central banks. This distinction can be better understood with a full description of the CLS daily timeline (See figure 2-6 below and comments extracted from M. Bronner, 2002).

Fig. 2-6 : CLS Settlement Process Timeline



Source: CLS Group

CLS members can submit settlement instructions to CLS Bank or cancel them by mutual agreement before 6:30 Central Eastern Time (CET) on the settlement day. “At

⁷²⁾ To be entitled to open an account at CLS, commercial banks must become CLS shareholders. Shareholders are settlement members, and as such can submit instructions for the settlement of forex trades directly to CLS.

6:30, the system calculates the theoretical multilateral net positions in each currency that would result on the participants' account with CLS bank after execution of all of the foreign exchange transactions submitted for settlement on that day. Participants have to make pay-ins⁽⁷³⁾ for currencies in which their theoretical multilateral position is negative. For that purpose, CLS Bank sends each participant its pay-in schedule for the day. The pay-in deadlines are 8:00, 9:00 and 10:00 for Asian Pacific currencies and 8:00, 9:00 and 10:00, 11:00 and 12:00 for the other eligible currencies”.

The start of the settlement process occurs at 7:00 and, under normal circumstances, transactions are settled and pay-outs are completed by 12:00. All transactions must be settled across the participants' multi-currency accounts by 9:00 and the rest of the time is used to complete pay-ins and pay-outs.”

Pay-ins and pay-outs are made in central bank money in each currency via a Real-Time Gross Settlement (RTGS) payment system. “The operating hours of the CLS system correspond to the overlapping operating hours of the RTGS systems used to make pay-ins and pay-outs. The earlier cut-off time for Asian Pacific currencies handled by the CLS system corresponds to the close of markets in that area.” In the EU, for the funding of euro positions, CLS Bank has opened an account with the ECB Payment Mechanism, the ECB component of TARGET, the RTGS managed by the ECB for EU payments.

The importance of CLS for the settlement of large-value euro transactions should not be underestimated nor overestimated. The ECB has analysed the probable medium-term impact of CLS on the number and value of payments settled in individual large-value payment system operating in euro (ECB, 2003). Before the start of CLS, TARGET was estimated to account for 62% of the total value of forex trades in euro, compared with 32% for EURO 1. The remaining 6% were settled via smaller euro large-value payment systems.

The settlement members of CLS have indicated that the value of forex trades involving the euro that they intend to settle through CLS would amount to 55% of the total value of the forex market in euro. If one assumes that the settlement of forex trades would be transferred in equal measure from TARGET and EURO 1 to CLS, the value of payments settled in TARGET would shrink by a maximum of 12% and in EURO 1 by 37%. This significant impact could increase in the future because the number of CLS members and third party users is bound to grow, bringing in more trades.

But there are also limits to the expansion of CLS and the question remains about its possibility to become a business standard. This in turn has implication for the CTT case. The first limit of CLS is that it does not cover an exhaustive number of currencies, but only the most important ones. If it is not a problem for the introduction of the CTT inside the EU per se, it means that for the present moment, CLS cannot be used to collect the tax for the majority of developing countries.

The second point is that even for the major currencies, CLS market share is still limited. In 2005, less than half of total forex settlement took place in CLS (D. Sawyer, 2004). This means that some important banks and non bank financial corporations have chosen to settle outside CLS, particularly in the UK.

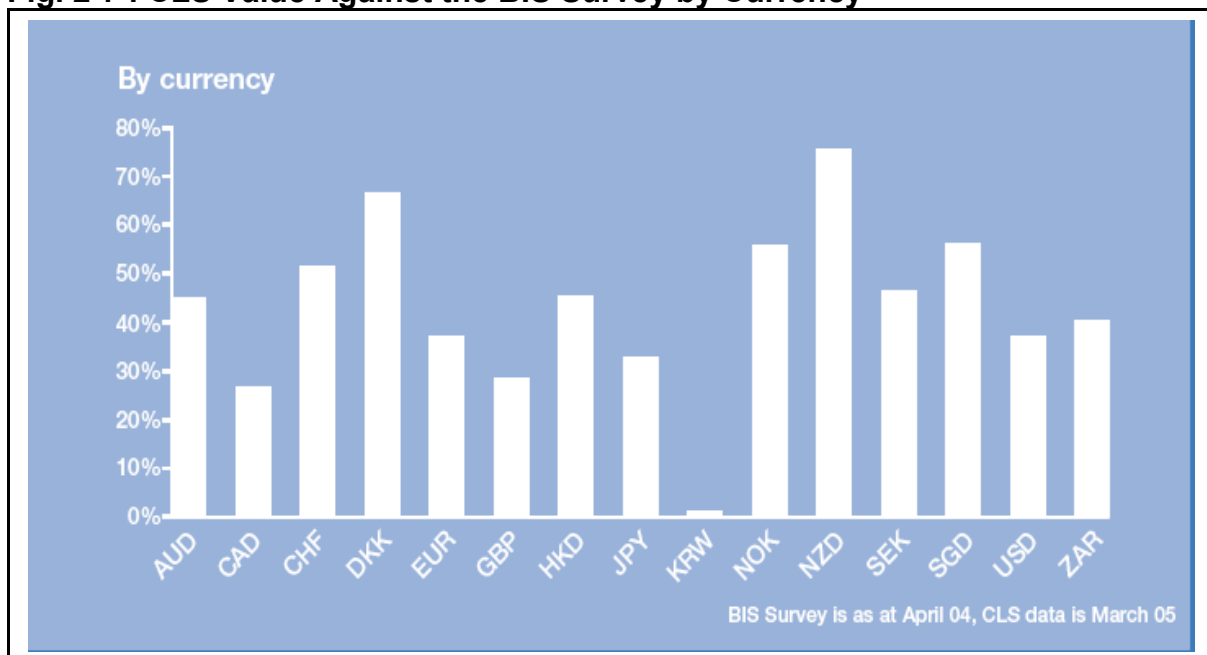
At the start, 7 major currencies were eligible to be settled in CLS, namely the US dollar, the euro, the Japanese yen, the pound sterling, the Swiss franc, the Australian dollar and the Canadian dollar that accounted for around 80% of the total interbank foreign exchange market. In September 2003, the number of eligible currencies was increased to eleven with the Danish and Norwegian krone, Swedish krona, as well as the Singapore dollar. At the end of 2004, the South African rand, the Hong Kong dollar, the Korean won

⁷³⁾ The transaction to pay off a negative position is called a pay-in. The transaction to pay off a positive position is called a pay-out.

and the New Zealand dollar have been added increasing the number of eligible currencies to 15. The inclusion of additional currencies such as the Mexican peso, Chilean peso, Israeli shekel and Turkish lira is being reviewed. But there are fixed costs to CLS and to its settlement members attached to the introduction of new currencies that may weaken the business case for adding them, not to say strict legal and technical criteria. Extending the currency coverage may not be an endlessly on-going process.

The present 15 currencies account for around 95% of total turnover in the global forex market according to the BIS Triennial survey. Despite this progress, in April 2004, CLS market share for all kind of transactions related to the 15 eligible currencies is approximately 40%, and over 60% for the sole inter-bank transactions. The importance of CLS market share for each currency varies greatly (See figure 2-7).

Fig. 2-7 : CLS Value Against the BIS Survey by Currency



Source: CLS Brief Issue June 9 2005.

CLS settles between 50% and 70% of the transactions in Swiss franc, Danish and Norwegian krone, and New Zealand and Singaporean dollars. But CLS settles only a minor share of major currencies: around 40% of the transactions in US dollars and euros, and 30% of the transactions in pounds sterling or Japanese Yen. It is not possible to rely on CLS as the major place to collect the tax.

Furthermore, some important banks and non banks still do not settle inside CLS. Participation in the CLS system can take two main forms, as a member or as a third-party user. A settlement member's foreign exchange transactions are settled directly across its accounts at CLS bank, while those of a third-party user (which has no direct relationship with CLS Bank) are settled by a settlement member on its behalf.

In December 2004, 296 institutions were settling through CLS Bank. Of these, 58 commercial or investment banks are CLS Bank Members, and an additional 238 banks, brokers, funds and corporates are using CLS Bank services as Member customers ("third parties"). Around 80% of the third-parties are also banks. This means that the most important gap in CLS coverage is in the area of non-bank financial and non-financial corporations. Only about 30 non-bank financial institutions were participating in CLS at the end of 2004, meaning that very few hedge funds and other investment funds were using CLS user members.

If we compare this information with the BIS Triennial Survey results, this means that the great part of transactions settled through CLS are interbank transactions, but that the growing share of foreign exchange trading between banks and their financial customers is not captured by CLS. The cost of using CLS may offset the elimination of settlement risk for many of these funds that have a risk appetite. For non-financial corporations, joining CLS as a third-party user is beneficial only if these corporations have a high volume of foreign exchange transactions. The conclusion is that the CTT cannot ignore CLS but must not focalise on it as the only channel to levy the CTT.

2.2.4.3 How to collect the tax at CLS?

From a tax point of view, it is very important to make a clear distinction between the settlement process realised on a gross basis and the funding process realised on a net basis. As explained above, the settlement process identifies each transaction individually to apply the PVP principle. But the actual payment is done in real time, through the national payment system of the relevant currency, after a multilateral netting process, in order to reduce as much as possible banks' liquidity needs.

The multilateral netting process, which reduces actual payments to a fraction of their gross amounts, is very powerful and increases with the number of participants and the transactions they make. "For example, if bank A sells USD 100 to bank B against euro and buys USD 100 from bank C against Japanese yen, its US dollar position is squared and it does not have to make any US dollar payments. For this reason the value of payments that banks need to make to settle their FX transactions is substantially lower in CLS than in traditional settlement mechanisms" (ECB Monthly Bulletin, January 2003).

According to Risk Magazine, (2003) CLS netting reduces gross payments amounts by around 85%, and the use of in-out-swaps ⁽⁷⁴⁾ by a further 10%. "At a recent peak after the US Thanksgiving holiday, the system handled around 74,000 trades with a gross payment value of around \$800 billion. The final net payment amount was under 3% of the gross payment total" (Risk Magazine, 2003) ⁽⁷⁵⁾.

The lesson is clear: the tax cannot be collected when transactions are paid through the national payment system of the relevant central bank, because more than 90% of the gross amount would not be taxed. The tax must be collected at the settlement stage through the inner CLS system, when each leg of a transaction is matched on a PVP basis. This means that each transaction settled through CLS has to be identified individually at the early stage. This is of course technically possible, because the identification of each transaction is at the root of the CLS system.

In this perspective there are in fact several possibilities to collect the tax. The first is the most obvious. CLS must identify each transaction on a gross basis, for each currency and for each settlement member, in order to match them and to calculate how much each settlement member owes to the other ones. For this purpose, each settlement member holds a multi-currency account at CLS Bank, with a sub-account for each currency approved to be settled through the system. So there cannot be any technical difficulty to tax

⁷⁴⁾ Banks balance their CLS liquidity in a certain currency to meet payment commitments by the use of a same-day zero-price currency swap, where one leg of the swap takes place inside CLS bank, and the other outside. For further details on in-out-swaps and the problem they pose see ECB Monthly Bulletin, January 2003, p 60-61, in particular Box 2.

⁷⁵⁾ CLS ran simulations in 2001 on the forecasts provided by 51 future participants. These showed that the average amount of pay-ins in each currency was between 8% and 18% of the gross amount of transactions in the same currency. According to F. Diehl, from central treasury department of BNP Paribas, in November 2003, the daily net amount to be paid (total pay-ins) was around USD 40 billion for a gross amount of USD 400 billion. In and out swaps reduced further the net amount by 70%. Only USD 12 billion had finally to be paid. The overall reduction from the gross to the net amount was thus 97%.

transactions each time the euro is involved, or to tax all transactions if the CTT is adopted by all countries whose currency is settled through CLS.

The same is true for CLS user members and third party services. User members have to be CLS shareholders and can submit instructions directly to CLS. However, they do not maintain accounts with CLS and therefore have to settle their transactions via a settlement member. Both settlement members and user members can provide CLS settlement third party services to other banks or corporate customers that are not participants in the CLS system. Again, their transactions must be settled via a CLS settlement member. So in the end, all kind of transactions can be perfectly identified and controlled through the accounts of the settlement members and the CTT can be collected without difficulties and extra costs.

Concerning the legal aspects they are solutions to the potential difficulties. Officially, CLS service is provided by CLS Bank International, a US-incorporated special-purpose bank, with a sister operations company (CLS Services Ltd) in the United Kingdom. Its parent company (CLS Group Holdings AG, incorporated in Switzerland) is currently owned by 69 of the world's largest financial institutions, mainly commercial banks. The Federal Reserve of New York is the lead overseer that coordinates oversight of the CLS system. But it works in conjunction with the other G10 central banks and other central banks whose currencies are or soon will be eligible for CLS. For instance, the Governing Council of the European Central Bank approved the inclusion of the euro in the CLS system on 10 July 2002. The ECB is the overseer in respect to the settlement of the euro, and each central bank of the EU has the right to monitor the transactions that involve the euro and are settled by banks which act as settlement members of CLS on its territory (CPPS, 2003, p 80).

Central banks play an operational role in CLS. They provide accounts and in most cases, settlement services for CLS. CLS can only work if central bank settlement systems can be used for the payment of pay-ins and pay-outs of each settlement member. The ECB has strengthened its contingency arrangements for TARGET to care of possible operational failure scenarios. Any disruptions in the executing of pay-ins and pay-outs can lead to the rejection of transactions in the currency involved and in other currencies.

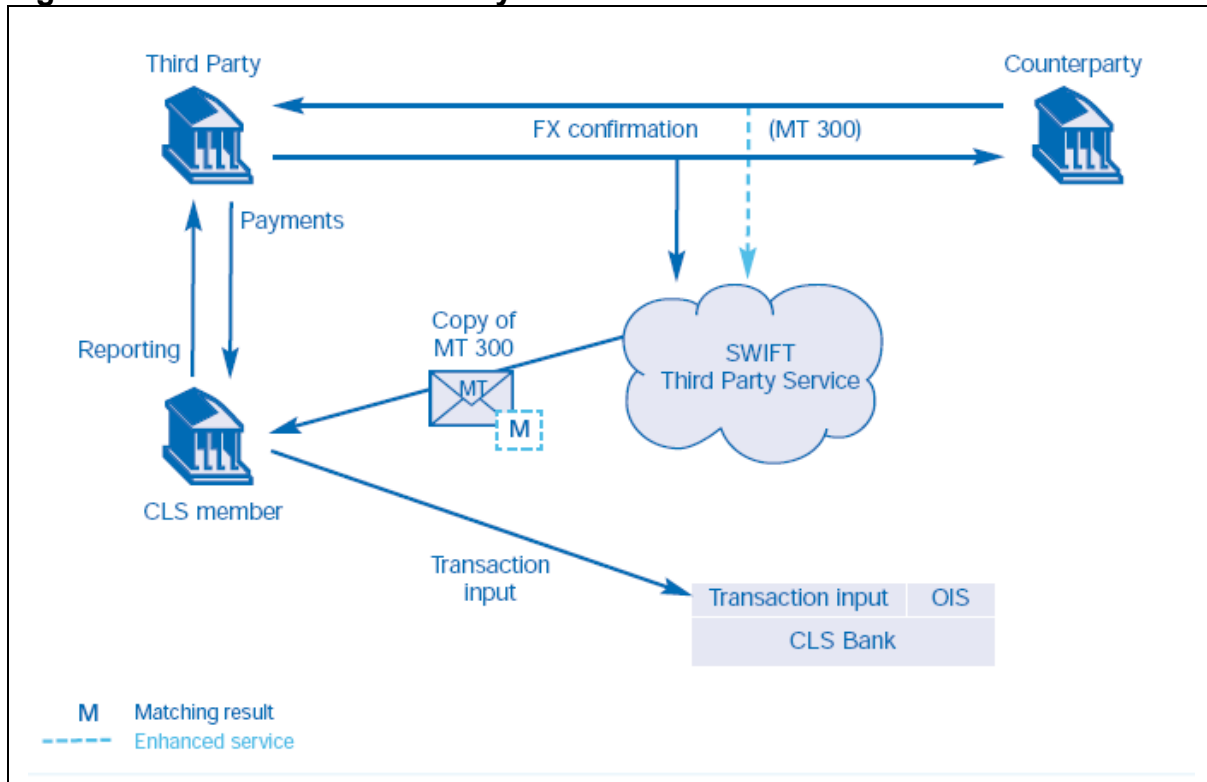
In the EU, decisions and recommendations were taken in coordination with the European banking industry to facilitate the euro pay-ins and euro pay-outs via the TARGET system. In France, for instance, a special high-priority transfer for executing pay-ins was created in TBF, the French component of TARGET.

All this means that without the active collaboration of the relevant central banks, CLS cannot work at all. If the CTT was part of the EU law, the ECB would have to verify that the tax has been paid on all transactions involving the euro, and it could do so as part of its oversight duty. In the event of a conflict, it could deny the use of TARGET for the funding of pay-ins and pay-outs in central bank money. This would have a major impact on CLS because the euro is the second most settled currency in CLS, with a settlement value of 25% of all forex trades in November 2002. The share of the British pound is 11%, and the Swiss franc, 3%. The US dollar has a leading role with a share of 47% (ECB, 2003). Because of large investments made, CLS needs volume to be profitable and could not survive if the euro, and all EU currencies, which must total around 40% of CLS activity, left CLS.

The second possibility is to use SWIFT. The involvement of SWIFT in CLS is related to the provision of the network infrastructure. SWIFT provides a communication service called SWIFTNet InterAct, which supports the exchange of request and response messages between two CLS members and allows them to browse remote data sources and to communicate with CLS. SWIFT has also a "CLS Third Party Service". After a third

party and a counterparty have struck a deal, the third party will choose to settle through a CLS member. The standard SWIFT service consists in delivering copies ⁽⁷⁶⁾ of foreign exchange confirmation (Message Type 300) sent by third parties to their chosen CLS member (See figure 2-8).

Fig. 2-8 : SWIFT "CLS Third Party Service"



Source: "SWIFT CLS Third Party Service", available on SWIFT website, www.swift.com

The enhanced service provides the matching status to CLS members of their third parties' MT 300. If third parties subscribe also to SWIFT Accord™, they will be able to view the matching status of their confirmations that are to be settled by the CLS Bank. Again, if SWIFTCopy is able to send a copy to a CLS member, it should also be able to send a copy to the relevant central bank for taxing issues.

The third possibility is to rely again on electronic trading platforms such as Reuters, EBS for interbank transactions and FXAll or Currenex for bank-to-customer transactions. These electronic platforms have developed full integration of their software with CLS's in order to achieve full straight-through-processing from trade to settlement. It is thus possible to assess the flow of transactions traded on these platforms that are settled through CLS.

For interbank transactions, there is the example of Reuters' "DealingMatching" a software module integrated to Reuters trading platform "Dealing 3000". It allows matching and settling trades electronically directly through CLS or any other settlement institutions like the Hong Kong Monetary Authority (HKMA). The basic principle is to define a "settlement group". A "settlement group" includes all counterparties that have pre-agreed on Standard Settlement Instructions (SSI) before trading. The "settlement group" is thus a central data store that each bank regularly actualises. Figure 2-9, taken from REUTERS, illustrates the example of a bank A that has struck a deal in euro with a counterparty

⁷⁶⁾ The copies are sent by FIN Copy™, a mechanism specifically designed to transmit messages for the clearing, netting and settlement of payments.

“KSAGBANK”.

Bank A has displayed the “Payment/Standing Instructions” dialogue box, then has chosen the “Settlement Groups” tab, and selected “CLS” from the “Settlement Group” drop-down list. “KSAGBANK” is selected from the subscriber list, and then the appropriate payment instruction which is automatically translated in a SWIFT’ format message type. KSAGBANK will follow the same procedure vis-à-vis Bank A.

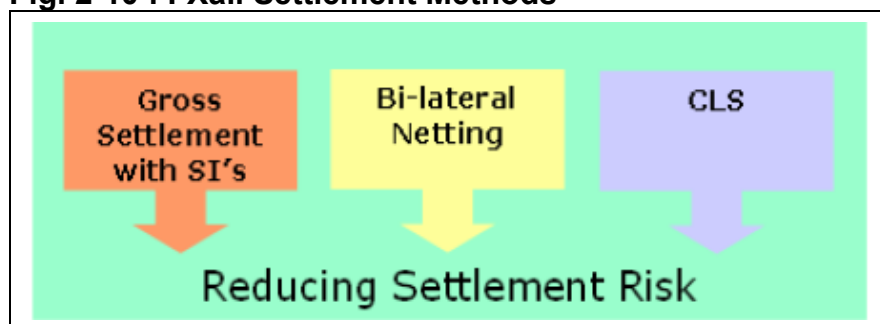
Fig. 2-9 : Bank a Has Struck a Deal With a Counterparty „KSAGBANK“

Payment/Standing Instructions		
Payment	Standing	Settlement Groups
Settlement Group	Currencies	Subscribers
CLS	EUR	AAAB*AAABBANK AAAE*AAAE BANK AA AF*AAAF BANK AAAG*AAAG BANK KSAG*KSAG BANK
Payment Instructions		Swift Code
D	pay ksab for eur	swiftd
2	pay ksab for eur2	swift2
3	pay ksab for eur3	swift3
4	pay ksab for eur4	swift4
5		
Standing Instruction		
Current:	4	New:

Source: REUTERS Dealing 3000 Matching.

This functionality applies to spot and also forward transactions for all CLS currencies. This shows that due to the importance of Reuters and EBS (who offers the same kind of service) it is possible to have a reasonable idea of the gross volume of transactions settled in CLS. If it was not possible for EU fiscal authorities to have direct access to CLS data, this alternative source of information could be used. This example illustrates again the importance of SWIFT as a conveyor of critical data throughout the different steps of the forex process flow.

In the case of bank-to-customer transactions, we observe the same characteristics. FXAll allows its customer to choose between gross settlement, bilateral netting and CLS (See Figure 2-10). For CLS participants, FXAll provides seamless messaging by sending third-party notifications for all customers. FXAll supports the CLS Custody Mapping (the “C”- trigger) and adds settlement instructions to the confirmation and notification messages. Matching is available on the settlement instructions as well as the economic details.

Fig. 2-10 : FXall Settlement Methods

Source: "A guide to achieving best practice in foreign exchange through automation". FXAll, 2004. www.fxall.com

All these case studies show that there are several possibilities that can be mobilised alternatively or in combination to tax transactions settled through CLS. However, as we have seen, CLS is only one important but not unique way to settle forex transactions. For the present moment, the majority of market activity is still outside CLS, and this may be the case for a long time yet. Traditional settlement procedures, i.e. correspondent banking, must still be taken into account for collecting the tax.

2.2.5 Step 5. Settlement

As we have seen previously, all transactions must be settled, either directly after transactions have been confirmed and matched, or indirectly after transactions have been netted bilaterally or multilaterally through CLS. This settlement is realised at the settlement system usually but not exclusively managed by the central bank of the relevant currency. The settlement is realised on a gross basis without netting, i.e. transaction by transaction each one being clearly identified, and in real time, i.e. continuously and without any delay. For these reasons it is called Real Time Gross Settlement System (RTGS).

Not only forex transactions, but all kinds of financial transactions, on the money market, equity market, corporate and bond markets, are in the end settled through the RTGS. Not only large-value transactions linked to these markets, but also retail transactions, such as cheques, credit cards and other kind of payments are settled through the RTGS. On Figure 2-11, one can see a hypothetical example of linkages between individual banks, clearing and settlement systems and the RTGS, which is the heart of the payment system.

Figure 2-11 shows that each clearing and settlement systems settles at pre-definite closing-times, for instance 09:00h for ACH, 10:00h for clearing of exchange-traded derivatives, etc..., while individual banks can settle at any time during the day. Individual private banks can have direct access with the RTGS to conclude interbank transfers. In this last case, the advantage for the bank is that settlement is realised immediately, but it costs more. Differed net systems are slower but cost less. There is an exchange between immediacy and cost that depends on the nature of the transaction.

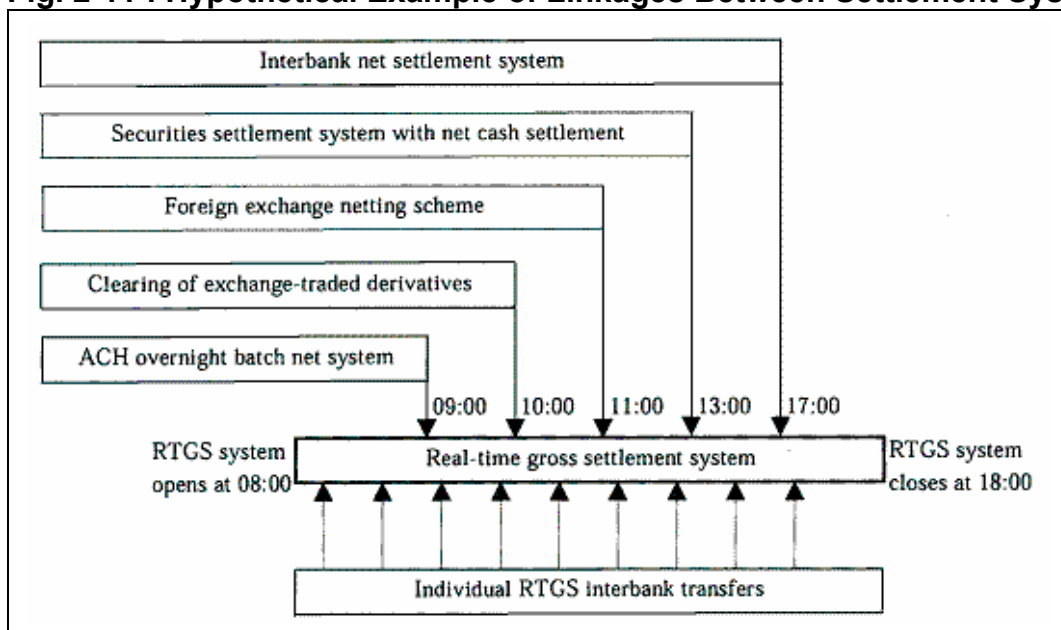
Private banks and clearing and settlement systems are the only economic agents who have direct access to the relevant RTGS, but they have to be resident in the country and duly licensed. Non-bank financial institutions and non-financial firms cannot settle their transactions through RTGS directly, but rather indirectly through the intermediation of banks and clearing systems. Non resident banks and systems are usually not allowed to access the national RTGS. This is due to the fact that national central banks want to protect the integrity and safety of their national payment system ⁽⁷⁷⁾.

⁷⁷⁾ To allow a foreign bank with no branch or subsidiary in the country to open an account at the central bank and to use the central bank money could endanger the central bank and the whole financial system. This foreign bank would not be liable to national banking laws and regulations, especially prudential ones, and its

Settlement is the actual transfer of funds between the payer's bank and the payee's bank. In general, the settlement of interbank funds transfers uses central bank money materialised by the transfer of balances on the books of the central bank. Settlement is declared final and irrevocable when the transfer of value has been recorded on the books of the central bank.

The central bank plays a key role in the payment system. "The widespread use of central bank money as a settlement asset reflects its overall qualities of safety, availability, efficiency, neutrality and finality" (CPPS, 2003b, p 2). The central bank is usually a solid institution that cannot fail, to the contrary of a commercial bank, and this minimises the systemic risk, i.e. the profound banking and financial crisis that could disrupt the whole economy if the settlement institution failed. In case of crisis, central banks are lenders of last resort because they have the power to create money.

Fig. 2-11 : Hypothetical Example of Linkages Between Settlement Systems



Source: "Real Time Gross Settlement Systems, CPSS, BIS, Basle 1997"

In normal periods, central banks provide intra-day liquidity to commercial banks to facilitate daily settlements. To decide if it can lend money, the central bank needs to know precisely the net position of each commercial bank that has opened an account on its books, minute by minute. To achieve this task, the central bank needs to be informed in real time about the daily activity of each commercial bank. Again, SWIFT plays this crucial role of providing the necessary information in real time to the central bank.

Let's now turn to the analysis of the types of transactions settled by the RTGS. At the domestic level, there is an interrelationship between differed net systems for interbank funds transfer like CHIPS in the US, CHAPS in the UK, or PNS in France, in which participants' net settlement positions are settled over an RTGS system at one or more designated times.

The second type of interrelationship concerns Securities Settlement Systems (SSS) in which securities (equities and bonds traded on exchanges) are exchanged simultaneously with cash by applying a Delivery Versus Payment (DVP) principle. In this case, the RTGS settles the cash leg of the transactions of securities. The settlement can be continuous or differed according to the nature of the SSS. The same principles apply to the clear-

failure could lead to a systemic crisis.

ing of exchange-traded derivatives. The Automated Clearing House (ACH) system covers the clearing of retail means of payments, such as cheques and credit cards. All domestic transactions have in common that the two legs are located, matched and settled in the national territory.

At the international level, one finds forex transactions clearing and settlement systems such as Euro 1 or CLS in the EU, or even international SSS such as Euroclear or Clearstream. As we have seen previously, all international transactions have in common that only one leg is settled in the national territory, the other being settled abroad. This is exactly the case for forex transactions that involve two currencies, with each one being settled in the relevant country. This is particularly clear when correspondent banking is used, because correspondent banks are necessarily situated in one of the two countries whose currencies are traded. But the existence of CLS does not change this particularity. As explained above, the novelty introduced by CLS is the simultaneity of payment, (PVP) like in a domestic transaction, but the two legs are still settled in two different countries.

It means that in each country, it will be impossible to match one leg of the transaction with the other leg which is located in another country. For Rodney Schmidt (2001) and P.B. Spahn (2002), this peculiarity establishes the principle to levy the tax at the settlement site when the national RTGS processes the transfer of funds: the absence of one leg is the mark of a forex transaction that will be detected as such by the RTGS. The law in favour of the CTT that has been adopted in Belgium relies on this principle.

This proposition is very powerful. The main advantage is the following. Customers and banks can buy or sell euros everywhere in the world, and these euros will be finally settled inside the euro zone. Taxing forex transactions in euros when they are settled via the RTGS of EU country member seems to circumvent all the difficulties linked to the globalisation of finance. As we will see now, this proposition is true, provided that we analyse in detail how the European RTGS work practically, and provided that complementary ways of taxing forex transactions are involved in conjunction.

2.2.5.1 The role of TARGET, the European RTGS

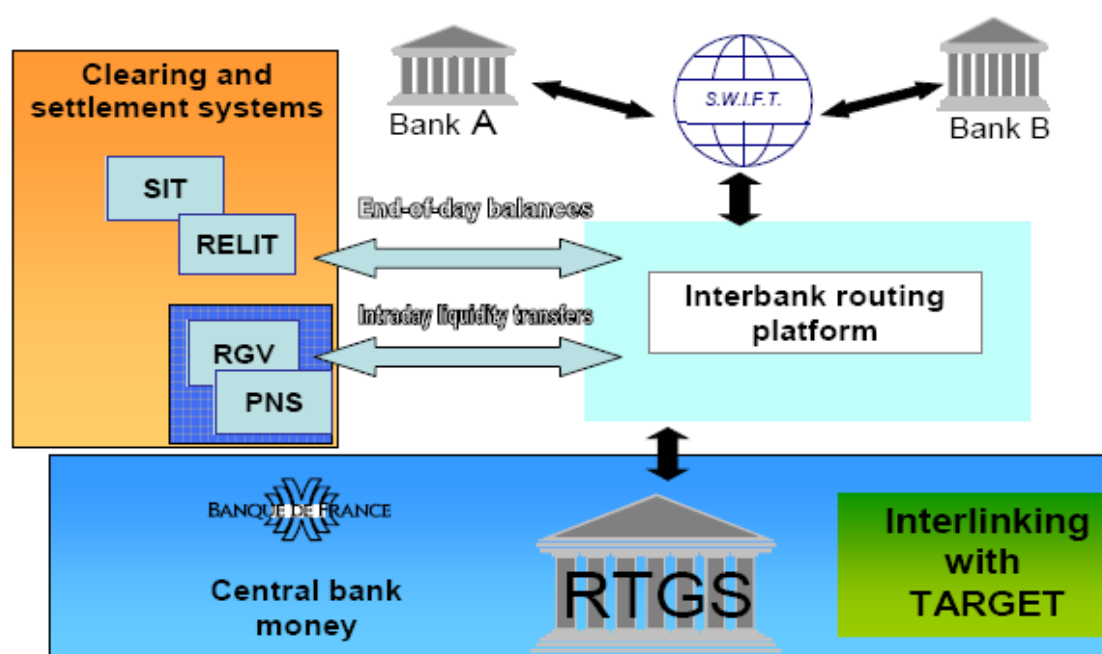
In the EU, the launch of the euro, the single monetary policy and the subsequent integration of financial markets have introduced a novelty: the creation in 1999 of a pan-European RTGS, called TARGET ⁽⁷⁸⁾. The existence of this pan-European RTGS introduces some more complexity because it changes the geography of European finance and the way national payment systems settle transactions. Some euro denominated transactions traded in an EU member state can settle domestically while some others can settle in another EU member state via TARGET (See figure 2-12 for the French case).

⁷⁸⁾ TARGET stands for Trans-European Automated Real-time Gross Settlement Express Transfer.

Fig. 2-12 : Country Example: Integration of Infrastructure in France**Infrastructure integration**

The French payment system architecture is currently comprised of four interbank settlement systems, all of them SIPS, each specialised according to the type and value of payment orders exchanged.

- Large-value payment transactions are settled either via the TBF (Transfert Banque de France) real-time gross settlement system, which is the French component of the European system TARGET, or via PNS (Paris Net Settlement), the real-time net settlement system. Both systems are accessed through a single platform operated by the CRI (Centrale des Règlements Interbancaires), the Centre for Interbank Funds Transfers.
- One single retail payment system exists for all retail payments (cheques, credit transfers under EUR 800,000, direct debits).
- There is a securities settlement system with two channels: one revocable (RELIT) for retail transactions and one irrevocable for monetary policy operations and large-value transactions, mainly on fixed income securities (RGV).

**Integrated liquidity and collateral management**

Operating days and operating hours are coordinated by means of a time schedule with clearing deadlines and ancillary systems settlement windows.

In addition, a real-time bridge exists between the main payment and securities systems (RGV, TBF and PNS) that involves common use of central bank money allowing the irrevocable transfer of liquidity between these systems without constraint, at any time of the day;

Coordinated contingency procedures

A Financial Crisis Steering Committee, comprised of representatives from the payment and securities settlement systems, ensures that:

- all systems have adequate, and overall consistent, contingency procedures; and
- industry-wide simultaneous migration to back-up sites is regularly tested.

Source: CPSS (2005). "General Guidance Consultative Report". CPSS BIS, Basle.

Three types of transactions can be handled by TARGET.

1. Payments directly connected with central bank operations in which the Eurosystem is involved on either the recipient or the sender side.
2. The settlement operations of large-value netting operating in euros (Euro1 for instance).
3. Interbank and commercial payments in euros.

It is mandatory for the first two types of transactions to be settled through TARGET (CPSS, 2003).

2.2.5.2 The geographical coverage of TARGET

One particularity is that the three EU members (Denmark, Sweden and the United Kingdom) which have not adopted the euro are connected to TARGET and can settle euros transactions in their own countries. Switzerland, which is not member of the EU, also has a formal euro settlement arrangement (euroSIC). EuroSIC members have direct access to the German RTGS system and subsequently a direct access to TARGET. The new EU members also have access to TARGET although they have not yet adopted the euro⁽⁷⁹⁾. And the scope is even broader because Hong Kong private banks can settle euro transactions in Hong Kong (EURCHATS).

This is an important point because if the project is to tax euro transactions at the settlement site, then it is obligatory that all European countries that settle transactions in euro together apply the tax. If it was not the case, it would be possible for banks and firms to settle their euro transactions in the UK, for instance.

How is possible that TARGET may process euro payments to countries that have not adopted the euro as their currency? This is because all EU central banks had to start making preparations for TARGET since 1995 before knowing if their country would adopt the euro. The Governing Council of the ECB adopted a special agreement for the three countries that finally did not join the euro area (see box 2-3 below). Under the terms of the agreement, these three Member States have a deposit in euros with the Eurosystem that allows their central banks to settle euro transactions in central bank money on the accounts opened by private banks on their books. This deposit allows the three central banks to provide the necessary but limited amount of intraday liquidity to their credit institutions. For instance, intraday liquidity provided by the Bank of England (as a non-euro area national central bank) to members of CHAPS Euro is limited to € 3 billion. But if this amount is not sufficient, banks established in the UK can get access to euro loans on the continent and send the liquidity directly via TARGET, in their capacity as direct members of TARGET⁽⁸⁰⁾.

⁷⁹⁾ In 2004, the Polish central bank decided to connect to TARGET before Poland joined the euro area. Narodowy Bank Polski chose to connect its own national euro system to TARGET via a bilateral link established with the Italian central bank, Banca d'Italia. The connection took place on 7 March 2005. This option differs technically from other central banks connected via the Interlinking.

⁸⁰⁾ "However, members are able to raise additional liquidity within the euro area and transfer this through TARGET to CHAPS Euro." (Bank of England, 2004, p 57).

Box 2-3 : Connection of Euro RTGS Systems of Non-Euro Central Banks to Target

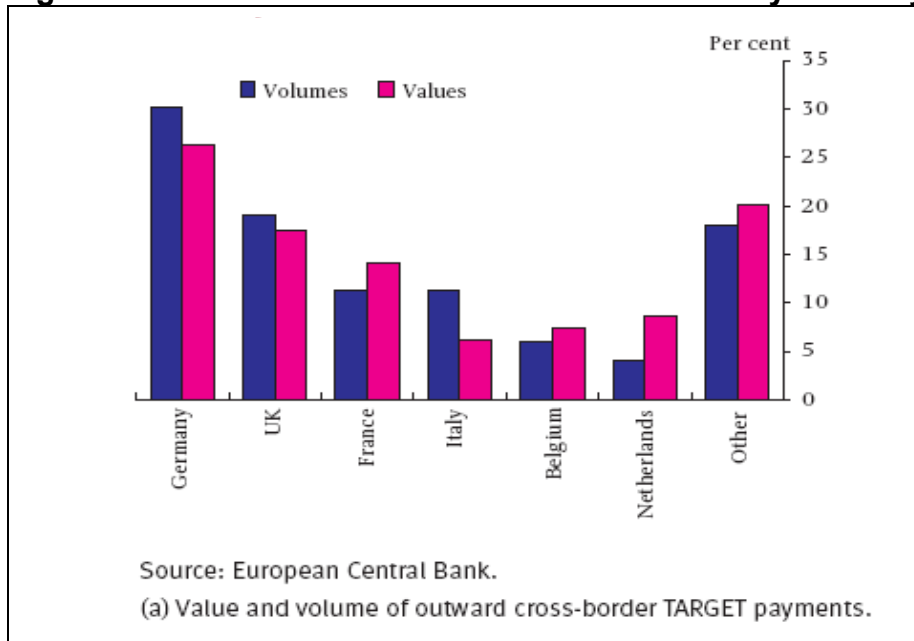
The TARGET Agreement (and its transposition into national RTGS rules) provides a mechanism whereby non-euro area NCBs can connect to TARGET, but must adhere to the rules and procedures stipulated in the TARGET legal documentation and implement the modifications and specifications appropriate for the non-euro area NCBs. Via the TARGET Agreement any changes made to the TARGET Guideline are also directly applicable to the non-euro area NCBs (see the section entitled “Legal framework” in Annex 3).

As for the provision of intraday liquidity, the non-euro area NCBs are allowed to offer only limited amounts of intraday liquidity in euro to their credit institutions on the basis of a deposit in euro held with the Eurosystem. Safeguards have been established in order to ensure that non-euro area credit institutions will always be in a position to reimburse intraday credit in good time, thus avoiding any need for overnight central bank credit in euro. This arrangement is a unique one, as it is the first time a central bank has allowed central banks belonging to other currency areas to provide settlement facilities in its currency. A policy statement issued by the ECB in November 1998 made it clear that central bank money in euro can only be provided by central banks belonging to the Eurosystem and indicated that the facility offered to non-euro area central banks was an exception.

Source: TARGET Annual Report, 2003, p 47, ECB, Frankfurt.

This shows how much the EU national payment systems are integrated and the necessity of including all EU members, even if the euro was the only currency subjected to the tax.

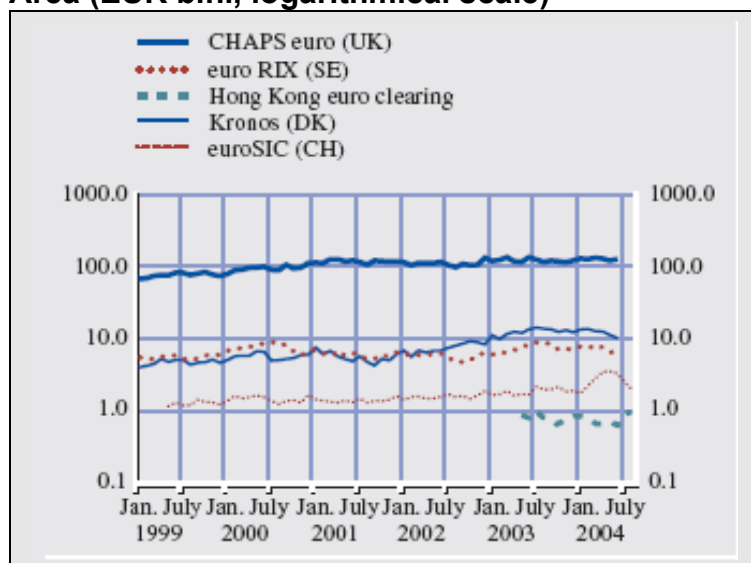
Fig. 2-13 : Share of 2003 Cross-Border TARGET Payments by TARGET Component ^(a)



Source: Payment Systems Oversight Report, Bank of England, 2004.

If the UK was not part of the CTT agreement, banks from the rest of the EU could quite easily transfer euros in the UK to avoid the tax. The same is true for Denmark and Sweden, even if their market is much smaller (See figure 2-13 above). In addition, an aggravating factor is the importance of the British market for euro transactions. It is the second-largest market in terms of value and volume, after Germany and before France (See figure 2-14 below). One cannot simply ignore it.

Fig. 2-14 : Daily Values Settled by Euro Payment Systems Located Outside the Euro Area (EUR bln., logarithmical scale)



Source: ECB, Swiss Interbank Clearing and Hong Kong Internet Clearing Ltd.

The conclusion is that applying the CTT to the euro implies that at least the 15 EU Member States that settle in euro levy the tax. But it would be better if the pound sterling, the Swedish krona and Danish krona were also submitted to the tax. Because, if not, it would boost these currencies, particularly the pound sterling, as international currencies to the detriment of the euro. The same argument applies to a lesser extent to the new member-states though they cannot settle in euros. They are not part of the euro area for the moment, but will join it in the near future and can be connected to TARGET in the meantime, like Poland.

In political terms, if the message is that the EU wants to make a special contribution in financing for development and the global common good, then no one will understand why these countries stayed outside the system.

Hong Kong (EuroCHATS) and Germany/Switzerland (EuroSIC) are typical of the emergence of new arrangements for the settlement of local payments in foreign currency, in this case the euro (see box 2-4). They create new problems because they neither fit perfectly in the traditional category of "correspondent banking" nor in the category of "payment system" (CPPSS, 2005b, p 24). "The main common characteristic of these arrangements is that they do not settle in central bank money but across accounts held with a commercial bank and that they are based on clearly defined and transparent rules for payment activities" (CPPSS, 2005b, p 24).

Box 2-4 : New Dimension in Correspondent Banking

In Hong Kong, the US dollar and euro clearing systems USD CHATS (Clearing House Automated Transfer System) and Euro CHATS were introduced in 2000 and 2003 respectively, in order to enhance the safety and efficiency of settling these foreign currencies in the local time zone. These systems are almost exact replicas of the Hong Kong dollar RTGS system (HKD CHATS). The key functions of both systems are to enable PVP settlement of foreign exchange transactions between HKD, USD and euros and DVP securities settlement in the respective currencies through a linkage with the Central Moneymarkets Unit (CMU). Both systems settle in commercial bank money. The Hong Kong Monetary Authority (HKMA) has appointed the Hongkong and Shanghai Banking Corporation (HSBC) as the settlement institution for USD CHATS and Standard Chartered Bank (Hong Kong) Limited as the settlement institution for Euro CHATS. Both institutions provide intraday liquidity to the direct participating banks by means of repos as well as overdraft facilities. The operator of both systems is HKICL,²⁷ the same as that of HKD CHATS.

In 1999, Swiss financial institutions established a cross-border solution in order to facilitate their cash management in euros. This solution involves a fully licensed bank in Germany, Swiss Euro Clearing Bank (SECB). To process euro transactions SECB uses the euroSIC platform in Switzerland, which is often referred to as the euro payment system of Switzerland. Some consider SECB/euroSIC to be a payment system and others see it as a "quasi-system" or as correspondent banking. In terms of design, euroSIC is a replication of the Swiss franc RTGS system Swiss Interbank Clearing (SIC), so that it provides to a great extent the same functionalities. SIC and euroSIC are technically operated by Swiss Interbank Clearing AG.²⁸ SECB is the settlement institution and shares the role of settlement agent with the operator SIC AG. SECB is also the liquidity provider in euroSIC. It extends intraday and overnight credit to the participants of euroSIC against collateral. SECB provides a link to the euro area as it is a direct participant in RTGS^{plus}, through which access to TARGET is established.

Source: "New Development in Large-Value Payment Systems". CPSS (2005b), BIS, Basle.

Switzerland is a special case. It is the only European country with a developed and sophisticated financial infrastructure that settles in euro without being member of the EU. Furthermore, it practises secretive banking and because of this is often considered a tax haven.

The strong financial links between Switzerland and Germany have lead to the creation of EUREX through the merger between the Swiss derivatives stock exchange (SWX) and the German derivatives stock exchange (Deutsche Terminbörse) in December 1996. Both parties agreed to develop and implement a single platform for their derivatives markets and trade a harmonised product range. To settle the cash leg of these transactions, it was necessary to develop a link to TARGET to settle payments in euros. To this purpose, the Swiss Euro Clearing Bank (SECB) was established in Frankfurt am Main. SECB operates euroSIC, a payment system linked to RTGS^{plus}, the German RTGS system connected to TARGET. "Thus, for Swiss financial market participants, euroSIC constitutes a link to the other payment systems and provides efficient cross-border gateway for payments to and from other European payment systems" (CPSS, 2003).

Although euroSIC was originally created to satisfy the securities transactions needs, it has enlarged the scope of its activities. It now processes primarily transactions of private companies and individuals, but also interbank payments, which largely consist of the euro leg of foreign exchange transactions, money market transactions, and securities transactions. It has consistently increased the volume and value it processes and, in the first eight months of 2004, handled a daily average of 9,500 transactions with a value of €2.9 billion per day. This places euroSIC in fourth position in the ranking of off-shore euro settlement systems, far behind the British CHAPS Euro (daily average of €128 billion), the Danish Kronos (€12.4 billion), and the Swedish Euro RIX (€7.4 billion) (see also Table 2-5 at the end of this chapter for more comparisons).

But even if the present activity is modest, euroSIC would create a leak in the system if it was not submitted to the CTT. It is possible to tax the euro leg of the forex transactions because, as explained above in Box 2-4, the liquidity in euros is provided by the Swiss

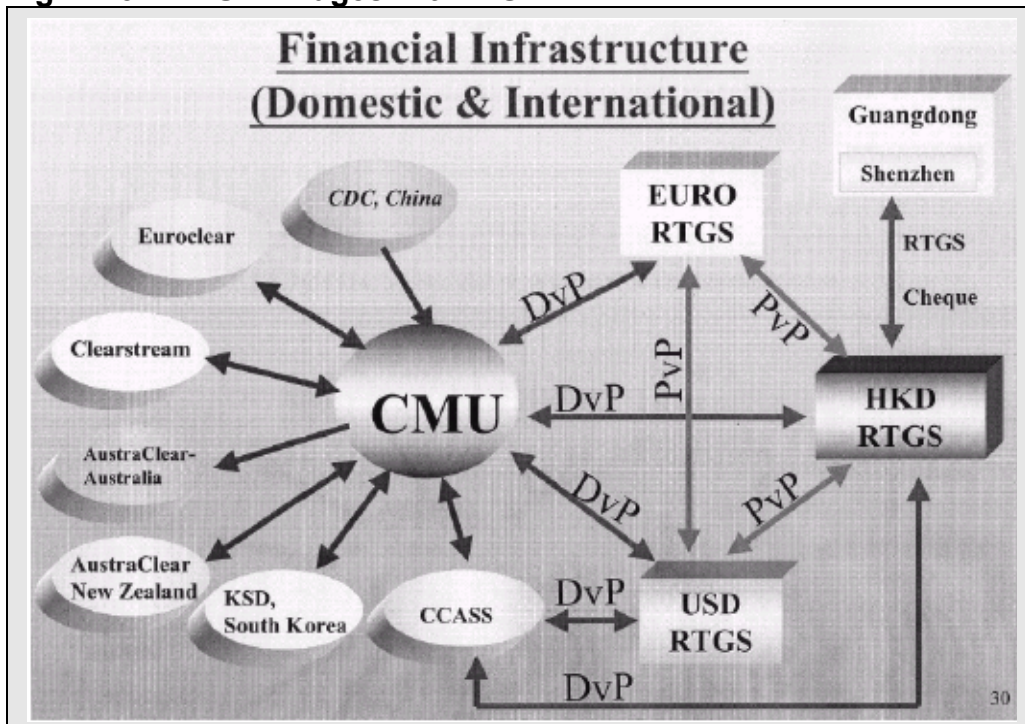
Euro Clearing Bank, (SECB), which to the contrary of what its name may suppose, is a fully licensed bank in Germany. EuroSIC operates on the basis of the software developed for SIC, the Swiss RTGS, and runs on the same platform. But SECB, who owns euroSIC, is a German bank and a direct participant in RTGS^{plus}, the German RTGS and as such comes under the supervision of the Deutsche Bundesbank.

If the CTT was adopted by Germany, SECB would have to collaborate on the levying of the tax, otherwise the Bundesbank or any other EU central bank could deny it access to TARGET and its advantages, such as the intraday liquidity in euro that the Bundesbank provides. This is a different case from the offshore euro systems of the three EU members because there is no special agreement by which the Swiss central bank has an important deposit in euros.

The case of EuroCHATS in Hong Kong is different. At the end of 2004, there were 23 direct and 21 indirect participants in EuroCHATS, including 11 indirect participants from outside Hong Kong, most of them from neighbouring countries. In 2004, the system handled an average of 37 transactions a day with a total value of over €923 million, which puts it at the bottom of the ranking of offshore euro payment systems ⁽⁸¹⁾. But it may grow, because Hong Kong is a small territory that has specialised in finance and plans to become an Asian financial hub for neighbouring countries, and in particular mainland China. If commercial trade and financial trade between China and East Asian countries with the EU grow in the near future, then the use of euros in those transactions will grow. It has become necessary to settle in real time, i.e. in Asian time, the euro leg of those transactions and to synchronise them with US\$ transactions in Hong Kong. This is why the Central Monetary Unit has created cross-border linkages between the CMU (Central Money-markets Unit, the main Central Custodian Deposit (CSD) in Hong Kong) and International Central Custodian Deposits (ICSD) such as Euroclear and Cleastream and national CDS of the region (See figure 2-15). The establishment of those outbound two-way links allows investors in Asia to hold and settle international securities directly through CMU members, most of which are banks in Hong Kong. The interlinking of those private securities settlement systems and private euro and dollar payment systems is unique for the moment but shows there is a potential for the development of offshore private payment systems. Settlement in euros is bound to increase.

⁸¹⁾ The value of euro transactions is also very small in comparison with the value settled in US\$ via the US dollar RTGS system, dollar CHATS, with \$5.51 billion in 2004.

Fig. 2-15 : CMU Linkages with ICSD



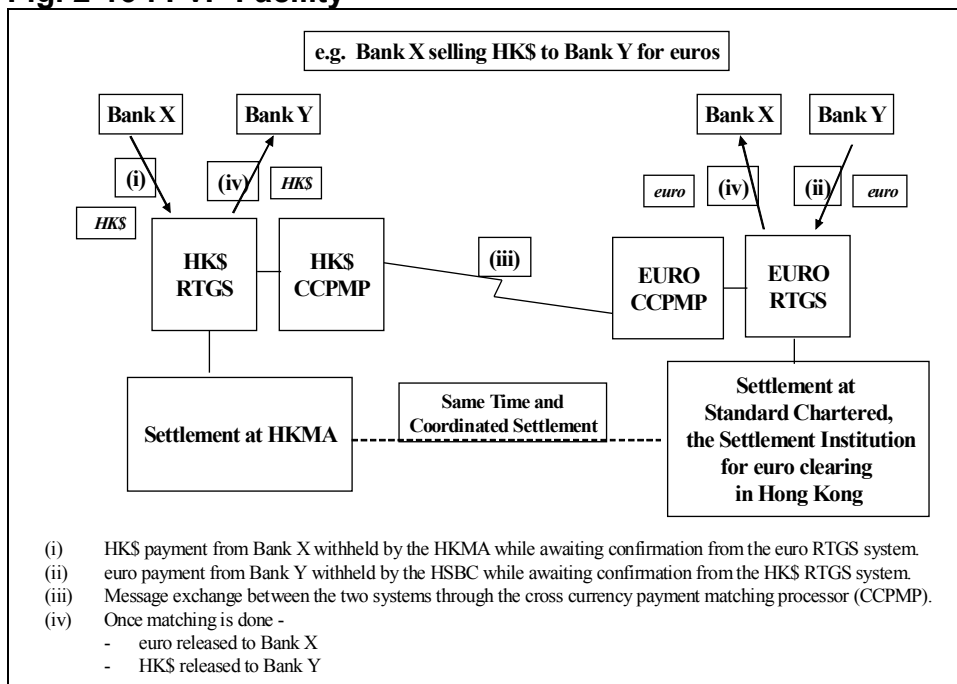
Source: HKMA

Direct participants to Euro CHATS have to open accounts at Standard Chartered Bank in Hong Kong, the settlement institution. Standard Chartered Bank is one of the world's most international Banks. It employs 38,000 people in 950 locations in more than 50 countries in the Asia Pacific region, South Asia, the Middle East, Africa, the UK and the Americas. It is also one of the biggest banks in the world, and is in the top 25 FSTE-100 companies, by market capitalisation. It is headquartered in London and listed on the London Stock Exchange, but it is also listed on the Stock Exchange of Hong Kong where it has been established for more than 150 years. It was authorised to issue bank notes in Hong Kong up until the end of 19th century and is still one of three banks to print Hong Kong bank notes.

With these characteristics one understands easily why Standard Chartered Bank was appointed by the Hong Kong Monetary Authority as the settlement institution for euro transactions. Standard Chartered Bank has enough liquidity in euros not only to allow the settlement of transactions on the accounts opened by direct members but also to provide interest-free intraday credit. How does it work?

Suppose that two banks (Bank X and Bank Y) have agreed to settle a euro/Hong Kong dollar forex deal by Payment-versus-Payment (PvP) in Hong Kong (See figure 2-16). Bank X and Bank Y have opened accounts at the Hong Kong Monetary Authority (HKMA) and Standard Chartered Bank. On settlement day, the seller of Hong Kong dollars (Bank X) sends a PvP payment transaction to Bank Y via HKMA, the RTGS for the Hong Kong dollar. The seller of the euros (Bank Y) also initiates a mirror PvP via EuroChat. The Cross Currency Payment Matching Processor (CCMP)⁽⁸²⁾ will then communicate with the two RTGS to match and confirm the transaction. After successful matching, and if Bank A and B have sufficient funding, HKMA and Euro CHATS will transfer the funds to their respective counterparty simultaneously.

⁸²⁾ the CCMP plays the same role as SWIFTAccord.

Fig. 2-16 : Pvp Facility

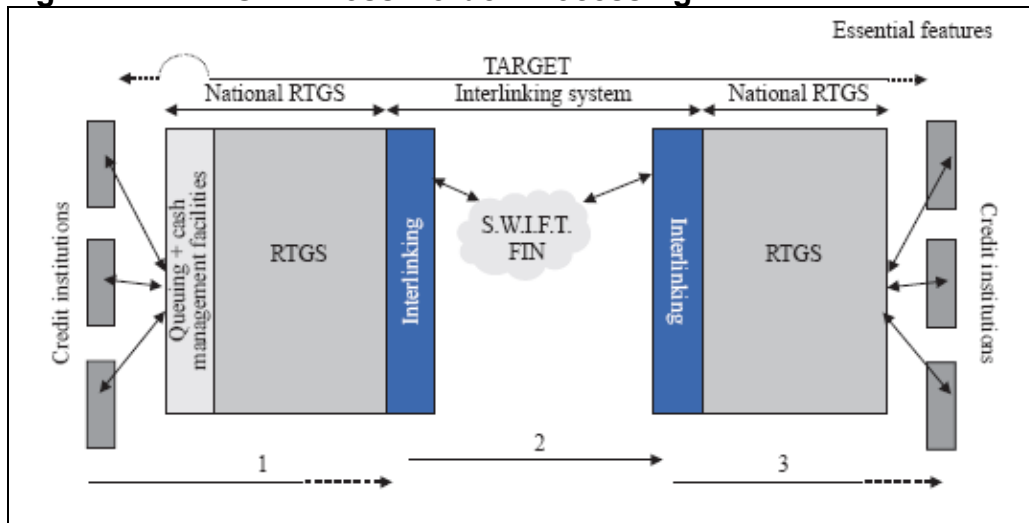
Source: adapted from HKMA, 2002.

Standard Chartered Bank in Hong Kong in one way or another needs to have a direct link with the EU payment system and finally TARGET in order to fund the settlement of euro transactions in Hong Kong. It is the same problem as euroSic in the Swiss/German case which needs Swiss Euro Clearing Bank, a German bank, to get access to TARGET. This is realised by Standard Chartered Bank's headquarters in London, which provide the necessary amount of euros through internal transactions. As a British bank, Standard Chartered UK is a direct member of TARGET and subject to the supervision of the Bank of England.

This means that if the UK was part of the CTT agreement, Standard Chartered Bank would have to pay the tax on the amount of euros that were used as the euro leg of transactions settled in Hong Kong. Standard Chartered Bank in London could decide to provide voluntarily the data concerning the volume and value of transactions via SWIFT-Copy to the Bank of England. But if it refused to cooperate, the EU could decide to impose a lump sum tax based on statistics concerning the volume and value realised by Euro CHATS published by the Hong Kong Monetary Authority.

2.2.5.3 How does TARGET work?

TARGET is a decentralised system that has created a link between the 15 domestic RTGS of the EU member countries (pre-expansion), the ECB payment mechanism (EPM) and the interlinking system. The interlinking system connects the national RTGS and the EPM by means of common procedures that allow cross-border payment orders to move from one system to another. The role of the interlinking component is to convert the presentation of payment data from the national standard into the interlinking standard and vice versa (See figure 2-17).

Fig. 2-17 : TARGET Cross Border Processing...

Source: "Information Guide for Institutions using TARGET", ECB 2003.

Payment transactions are settled one by one on a continuous basis, with intraday finality and in central bank money. A transaction between France and Germany will be first presented by a bank to the French RTGS managed by the Banque de France and then routed to the Bundesbank through the intermediary of TARGET. The Bundesbank will be informed that a payment is coming from France, check that the beneficiary is located in Germany, debit the interlinking account of the Banque de France and deliver a positive acknowledgement to the Banque de France. The Bundesbank will credit the funds on the account that the beneficiary's bank has opened at the Bundesbank. The Bundesbank will also send the payment message through the German RTGS to the commercial bank of the final beneficiary. This commercial bank will then credit the funds to the account of its customer. If the receiving bank is not a participant in the German RTGS system, the Bundesbank will reject the payment message. We can observe that SWIFT, which already plays a critical role for the settlement of transactions internal to the French RTGS system (See figure 2-12), plays also a critical role for the interlinking of the French RTGS with the German RTGS (See figure 2-17).

TARGET is the preferred system for the processing of large-value payments in euros but its share in low-value payments is also increasing. On an international standpoint, in 2003 TARGET processed a slightly higher amount of transactions in value terms than FEDWIRE, the state-owned US RTGS (see Table 2-5 at the end of the chapter). Creating the CTT in the EU has solid grounds.

In 2004, TARGET's share of the global traffic (domestic and cross-border) of all large-value payment systems operating in euro rose to 88% in terms of value, and remained unchanged at 58% in terms of volume. TARGET is the dominant system in Europe. The difference between terms of value and volume shows the impact of large-value transactions such as interbank transactions although TARGET accepts any kind of payment with no value limit. Customers' orders of any kind are handled by TARGET. They have a lower value but are more numerous.

In 2004, the daily average of payments processed by TARGET as a whole (i.e. both domestic and cross-border) represented a daily value of €1,714 billion of which 33.0% was cross-border⁽⁸³⁾. In terms of volume, inter-member state traffic represented 23%. This shows that despite European integration, domestic financial transactions are still pre-emin-

⁸³⁾ In 2004, TARGET processed a daily average of 65,040 inter-Member State payments with a total value of €564 billion. All these data come from ECB, 2004.

ent. The use of TARGET for intra-member state payments varies considerably among the different EU country members. In some countries (such as France and Spain), TARGET is used mostly to process especially high value payments; in others (such as Germany and Italy), it is also heavily used for low-value payments ⁽⁸⁴⁾.

Of the cross-border TARGET payments, 95% in terms of value were interbank transactions with the remaining 5% being customer payments. In terms of value, TARGET traffic is overwhelmingly interbank, although the value share from customers is growing slowly. Interbank transactions have a high unit value because they are “related to money market transactions, securities settlement transactions, foreign exchange transactions and liquidity transfers resulting from the centralisation of liquidity management by multi-country banks” (ECB, 2004, p 11). But in volume terms, the share of customer transactions (51%) superseded interbank transactions (49%) for the first time ⁽⁸⁵⁾. This shift reflects the further migration of commercial payments from correspondent banking to systems such as TARGET (ECB, 2004). This is confirmed by the fact that 65% of TARGET payments were for values less than €50,000 ⁽⁸⁶⁾.

TARGET is therefore a heterogeneous system reflecting the ongoing diversity of European countries. This situation will change with the launch of TARGET 2 which is due to begin in January 2007. “In TARGET 2, it will no longer be necessary for each national central bank to maintain a national RTGS system of its own. All central banks will be able to share one technical platform, the Single Shared Platform (SSP), thus supporting the RTGS services that they offer to their banks. However, the settlement account relationship and the intraday credit provision will continue to belong to the business relationship between each central bank and its national banking community” (CPSS, 2005, p 41). So, there will be a greater centralisation, standardisation and harmonisation of settlement in central money in Europe.

What will be the probable changes for the CTT perspective? Not many. The positive aspects are the following. The settlement of individual euro payments in central bank money will be maintained. There will be a greater transparency as users will be offered consolidated account information and liquidity management services with a broad range of optional tools. One important innovation and a potential negative aspect for the CTT, is that TARGET will include mechanisms that incorporate mutually offsetting payment flows. This netting mechanism will operate when transactions are in the queue. It creates the same kind of problems raised by EURO1 and CLS. The CTT must be collected before transactions are offset, when they are first presented to TARGET, because if not the volume base of the CTT will be reduced by the offsetting mechanism.

2.2.5.4 What conclusions can we draw from the present TARGET characteristics?

In principle, TARGET is the appropriate institution that can observe one-legged financial transactions and conclude that it is a forex transaction subject to the tax. But in reality, there are some limits and difficulties to be taken into account. The limit is that an important part of forex transactions (and perhaps the major part) are netted before being routed to the RTGS. Only forex transactions that are addressed individually by banks directly to the RTGS on a gross basis can be identified and taxed individually when settled.

The difficulties are that not only forex transactions give birth to unmatched transactions. International financial transactions on bonds and securities, money market transactions and cash management and other types of cross-border transactions are character-

⁸⁴⁾ The German and Italian TARGET components combined processed more than two thirds of intra-member state payments (ECB, 2004).

⁸⁵⁾ In 2003, interbank transactions (51%) were still higher than customer transactions (49%).

⁸⁶⁾ Payments over € 1 million only accounted for 12% of the traffic, and payments above € 1 billion for less than 0.1%.

ised by the fact that only leg of the transaction is settled via TARGET. If for instance a German firm has a plant in France and makes frequent payments in euro from Germany to France for ordinary operational motives, it will be registered as a one-legged transaction and could be taxed in the same way as a forex transaction. If the firm had all its plants in Germany, it would not bear any risk of paying the tax.

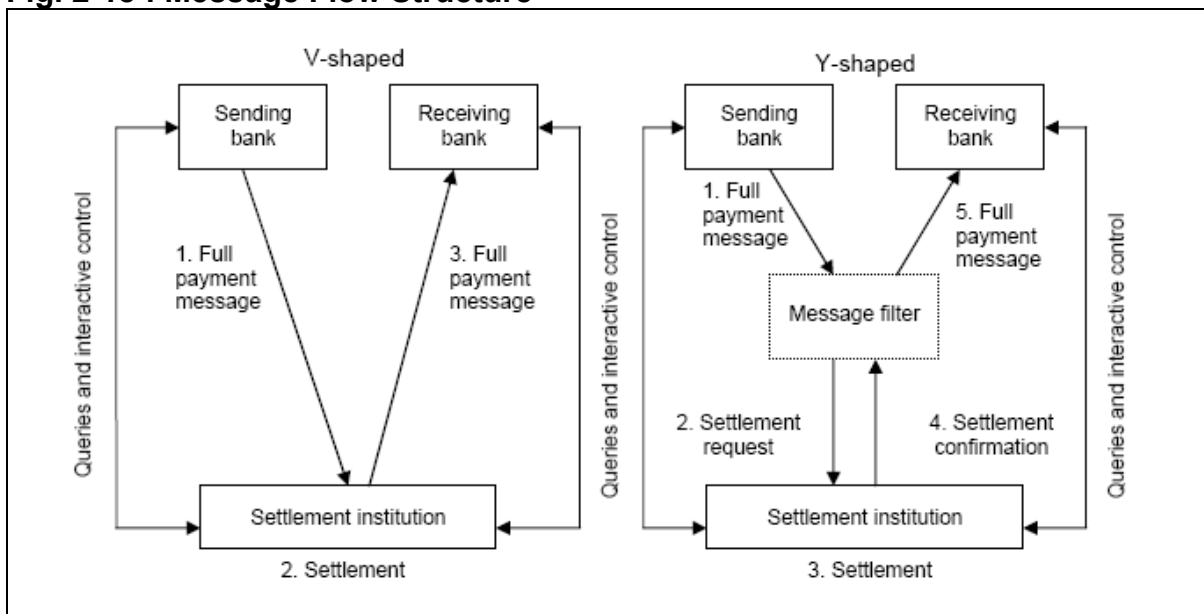
Taxing all international financial transactions is not a problem in itself and is a normal extension of the CTT to all financial transactions. But taxing the ordinary internal transactions of productive firm is clearly not the objective of the CTT. These limits and practical difficulties justify our initial proposal to use extensively all the existing opportunities to levy the tax at each step of the forex transaction flow, with the idea in mind of an electronic tag that would inform the settlement institution about the fiscal status of the transaction: Has the CTT been already paid or not? If the settlement order is routed by Euro1 or CLS then the CTT must have been already paid. If the settlement order is routed individually by a private bank, then the CTT has to be collected by the RTGS during the settlement process.

To overcome the problem of confusion between forex and non forex transactions, the RTGS must be able to clearly identify the nature of the transaction. Is this presently possible, or not? To answer these questions, one must analyse carefully how RTGSs work in the EU context. The starting point is again SWIFT. SWIFT is really the nervous system of the national payment system.

Through the communication network, banks and clearing institutions forward their payment instructions to the payment system in order to achieve the exchange of funds. As we have seen, the same channels can also be used for the provision of information on the clearing and settlement process to the participants.

To initiate a funds transfer the sending bank dispatches a payment message which is subsequently routed to the central bank and to the receiving bank as the system processes and settles the transfer. In fact, the payment message is routed only after SWIFT has requested and received from both parties a confirmation message of the transaction (message-type 300). The majority of RTGS have adopted the so-called V-shaped message flow structure, but some have adopted the so-called Y-shaped structure⁽⁸⁷⁾ (See figure 2-18).

⁸⁷⁾ There exist also L-shaped and T-shaped message flow structures. For more details, see CPSS, 1997.

Fig. 2-18 : Message Flow Structure

Source: CPPS, 2005b.

The V-shaped structure is the simplest way to process a payment message. The full message containing all the relevant information (including the details of the beneficiary) is passed to the settlement institution (in general the central bank although it can be SWIFT or a private settlement bank), and is sent to the receiving bank only after the transfer has been settled by the central bank. The settlement occurs if the sending bank has sufficient covering funds in its central bank account. If not, the central bank can lend money to the sending bank for a few minutes or hours, providing that the sending bank has not yet reached the credit limits that the central bank has allowed to it. If the limits set against the sending bank are about to be breached, the fund transfer order is queued.

In this case, the settlement institution sends a message to the sending bank about the status of the payment order, the sending bank's account balance and the details of the incoming queued payment. The information provided makes it easier for the sending bank to control the payment process interactively in real time⁽⁸⁸⁾. The sending bank can provide liquidity, change the position of payments in the queue, or their priority, or revoke the payment. The central bank can change the sender limits.

In the Y-shaped structure, the payment message is transmitted directly by the sending bank to the receiving bank. The central processor (usually SWIFT) filters the message in order to take a subset of information that is necessary for settlement from the original message and copy this core subset⁽⁸⁹⁾ to the settlement institution (the original message being kept in the central processor). Upon receipt of the core subset, the settlement institution checks that the sending bank has sufficient covering funds on its account and informs SWIFT of the status of the transfer, for instance queued or settled. Once settled, the full message containing the confirmation of settlement is rebuilt by the SWIFT and sent to the receiving bank. The business information exchanged between the sending and receiving bank (such as the identity of the beneficiary) is therefore not known by the settlement agent. Like in the V-shaped structure, SWIFT provides a number of query and reporting

⁸⁸⁾ SWIFT Net InterAct is the software that provides this interactive exchange of instructions between the settlement institution and the counterparties. This was already the case in CLS.

⁸⁹⁾ This copy is done by SWIFT FIN Copy which plays a critical role in private settlement systems such as Euro 1 or CLS.

features which enables participants to obtain information to facilitate their liquidity management.

The main difference between the V-shaped and the Y-shaped relies in the difference of information that is delivered to the central bank. On its website, SWIFT clearly explains that “commercial information does not need to be copied to the central institution” (SWIFT, 2004). The objective is clearly to hide some information from the central bank. This raises the possibility that some useful information to collect the CTT could escape to the knowledge of the central bank. It cannot be the identity of the sending bank and the amount of the transaction because the central bank must know if the sending bank is not breaching its limits. But all the rest of the information such as the identity of the ordering institution, the nature of the transaction (forex transaction, or payment of salaries) may be hidden to the central bank and this can create difficulties to collect the tax. Some of them can be resolved. If the identity of the ordering institution (whether customer or bank) is unknown to the central bank as well as the final beneficiary, one solution is that the CTT would be paid in full by the sending bank that would then arrange to be partially or fully reimbursed by the ordering institution and/or the receiving bank and final beneficiary.

But other problems remain such as the nature of the transaction. TARGET is not destined and equipped to apply the PVP or DVP principles. It is designed to enable a single payment message to be passed from one RTGS to another (CPSS, 1997, p 35-36). TARGET does not match and confirm transactions. It is the duty of SWIFT and other netting institutions. It is therefore critical that the content of the message that the central bank receives allows identifying a forex transaction.

In fact, we can observe that the majority of national European RTGS have adopted a Y-shaped structure while international settlement institutions like CLS, Euro CHAPS or TARGET have adopted a V-shaped structure (see table 2-5 at the end of the chapter).

This means that if a French bank A buys yen against euro from a French bank B (the two banks being located in Paris), Bank A will send euros to bank through the French national payment system whether directly (via TBF the French RTGS) or indirectly (via PNS) to settle the euro leg of the transaction. In this classical case of correspondent banking, all that TBF knows is that it has debited Bank A's account by a certain amount of euros to credit the account of the receiving bank (bank B), but TBF does not necessarily know who is the final beneficiary, and if the transfer of euros is the leg of a forex transaction or the cash leg of a security transaction, or one leg of a money market transaction. This is because TBF has adopted a Y-shaped structure. Only SWIFT possesses the complete information set included in the message.

The danger is that all domestically traded forex transactions risk passing unnoticed by the central bank, i.e. around 34% of euro transactions ⁽⁹⁰⁾. To implement the CTT, it is therefore necessary to demand that in case of a domestic forex transaction, the full message (or at least the necessary data) be transferred to the relevant central bank. It is technically possible. In one of its last report, the BIS (2005) notices that in a Y-shaped structure, “SWIFT intercepts the message (sent by the sending bank) copies the entire content (or a subset) of the message and sends this copy to the settlement institution” (we underline). There is clearly room to manoeuvre in the definition of the content of the subset of information sent to the central bank, and it must be technically possible to include the necessary data allowing the identification of a forex transaction. A regulation by national central banks of the Member States or by the ECB could decide that the necessary data should be included in the subset.

⁹⁰⁾ According to the BIS (2005, p 6, table B.2.), in 2004, 38% of global turnover at the world level was local transactions, versus 62% for cross-border transactions. For the euro, the share of local transactions is around 34% (calculated from table E.1., statistical annex, BIS, 2005).

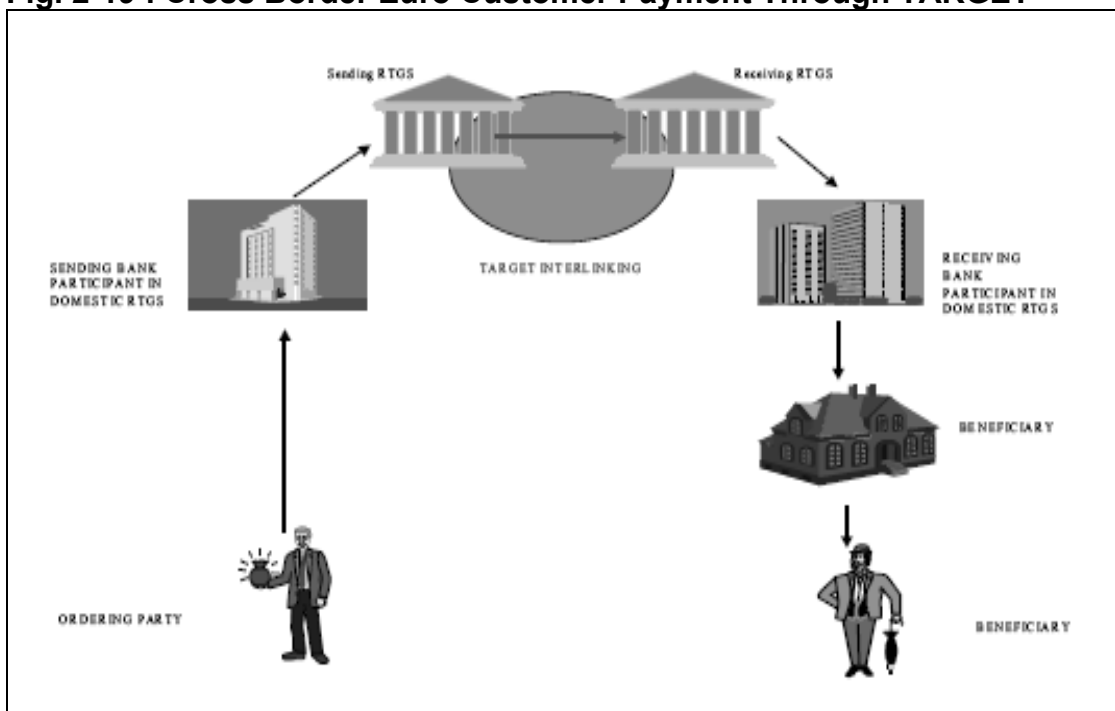
Suppose now that the French bank A has dealt with the Luxemburg branch of the French Bank B. The euros will be sent through TARGET or EURO1. If it is settled by TARGET, the two central banks involved, French and Luxemburgian, will process the settlement. As TARGET uses a V-shaped message structure, the full message will be sent by SWIFT to both central banks. The critical question is then the following: what is the content of the messages sent via TARGET (or via private clearing and settlement institutions). Do we have the guarantee to find the data necessary to collect the tax?

2.2.5.5 The critical importance of SWIFT Message-Types used in TARGET

There are two main SWIFT message-types relevant for a forex transaction. One (MT103) is initiated by the customer (a non-financial firm) and is sent to a bank which processes the order. The other is for interbank transactions (MT 202). The format specifications establish the status of the specification (or field), which is mandatory (M) or optional (O) ⁽⁹¹⁾. The field tag allows identifying the specification, and the field name describes the content of the specification ⁽⁹²⁾.

When two customers do not belong to the same corporate firm, and do not have a direct account relationship in the currency of the transfer, then the ordering customer has no other choice than to ask a bank to process the payment. It means that a bank will receive the MT 103 and will “cover” the customer transfer by sending its own message, an MT 202 (General Financial Institution Message) to the bank of the receiving customer that includes the details of the MT 103 ⁽⁹³⁾. The two message-types, MT 103 and MT 202, are linked between them (See figure 2-19).

Fig. 2-19 : Cross Border Euro Customer Payment Through TARGET



Source “TARGET Information Guide”, ECB, 2003.

⁹¹⁾ Optional does not usually mean that banks have the freedom to choose to provide the information or not. It means that if information is not already provided in the mandatory field, then it has to be provided in the optional field.

⁹²⁾ The two last columns concern the possible options and their technical transcription.

⁹³⁾ This payment method is called « cover » in the technical vocabulary. When more than two financial institutions are involved in the payment chain, and if the MT 103 is sent from one financial institution to the next financial institution in this chain, then the payment method is called “serial”. See SWIFT, 2005.

2.2.5.6 Data included in a message when a customer makes a forex transaction



The Message-Type (MT 103 core) is used in case of a “single customer credit transfer”. It includes various situations such as the payment of salaries, pensions, securities and foreign exchange transactions initiated by an “ordering customer”, i.e. a non-financial firm, and sent by a bank (the sender). It is sent directly or through a correspondent to the receiving bank of the beneficiary customer. The format specifications of MT 103 are worth studying because one finds all the data necessary for the collection of the CTT (see Table 2-3, MT 103 format specifications).

There exists two other versions: a MT103 +, which is subset of MT 103 that limits the number of fields and options to enable full STP, and a MT103 REMIT which to allow financial institutions to offer their customers the possibility to send more information to the beneficiary customer. The MT 103 + includes all the fields and options critical for the CTT. This shows once again that the CTT can benefit from technical progress and creates no additional cost. The MT103 REMIT presence proves that if necessary, it is possible to increase the information content of the message. If all participants agree on the presence of this extended information, by subscribing to a Message user Group (MUG), it can then be transformed into STP data.

Let’s turn to the analysis of the content of MT103. First, the transaction and the parties involved are clearly identified with the “Sender’s Reference” (tag M20), the “Ordering Customer” (tag 50a), the “Sending Institution” (tag 51A), the “Ordering Institution” (tag 52a), the “Sender’s Correspondent” (tag 53a), the “Receiver’s Correspondent” (tag 54a) and the “Beneficiary Customer” (tag 59a).

The sender’s reference clearly identifies the message with a reference given by the bank that sends the message of its ordering customer. This reference must be quoted in any related confirmation or statement. It is then possible to track the message.

Table 2-3 : MT 103 Format Specifications

MT 103 Single Customer Credit Transfer				
Status	Tag	Field Name	Content/Options	No.
M	20	Sender’s Reference	16x	 1
----->				
O	13C	Time Indication	/8c/4!n1!x4!n	 2



M	23B	Bank Operation Code	4!c	 3
----->				
O	23E	Instruction Code	4!c[30x]	 4

Table Continues on the next page...

Status	Tag	Field Name	Content/Options	No.
O	26T	Transaction Type Code	3!c	i 5
M	32A	Value Date/Currency/Interbank Settled Amount	6!n3!a15d	i 6
O	33B	Currency/Instructed Amount	3!a15d	i 7
O	36	Exchange Rate	12d	i 8
M	50a	Ordering Customer	A or K	i 9
O	51A	Sending Institution	[/1!a]/[34x] 4!a2!a2!c[3!c]	i 10
O	52a	Ordering Institution	A or D	i 11
O	53a	Sender's Correspondent	A, B or D	i 12
O	54a	Receiver's Correspondent	A, B or D	i 13
O	55a	Third Reimbursement Institution	A, B or D	i 14
O	56a	Intermediary Institution	A, C or D	i 15
O	57a	Account With Institution	A, B, C or D	i 16
M	59a	Beneficiary Customer	A or no letter option	i 17
O	70	Remittance Information	4*35x	i 18
M	71A	Details of Charges	3!a	i 19
----->				
O	71F	Sender's Charges	3!a15d	i 20

O	71G	Receiver's Charges	3!a15d	i 21
O	72	Sender to Receiver Information	6*35x	i 22
O	77B	Regulatory Reporting	3*35x	i 23
O	77T	Envelope Contents	9000z	i 24
M = Mandatory O = Optional				

Source SWIFT 2005.

The EU has adopted several regulations to promote equal treatment between national and cross-border transactions in euro inside the EU ⁽⁹⁴⁾ and for anti-money laundering purposes ⁽⁹⁵⁾. The 2001 Regulation obliges banks to charge equal fees for national and cross-border payments. One mean to achieve these goals is to promote full STP as a mean to achieve equal treatment, competitiveness and transparency.

As a consequence, it is mandatory since 2003 in the EU, that ordering and receiving customers, sending and receiving banks, and any intermediary bank in between are

⁹⁴⁾ See Directive 97/5/EC of the European Parliament and of the Council of 27 January 1997, Regulation (EC) n° 2560/2001 of the European Parliament and of the Council of 19 December 2001 for cross-border transactions.

⁹⁵⁾ See Directive 91/308/EC of the Council of 10 June 2001, and Directive 2001/97/EC of 4 December 2001.

clearly identified by a correct IBAN code ⁽⁹⁶⁾ for customers and a BIC code ⁽⁹⁷⁾ for banks. This information are also mandatory in the STP version MT103+. This distinguishes European and non-European transactions because these data are not always present in other parts of the world.

Our point is that it also serves the cause of tax issues in the EU, because it will facilitate the identification of the counterparties who will have to pay the CTT without new legal dispositions and extra-costs.

The new EU Member States and EEA countries have also accepted this European validation rule among other countries. By May 2005, all of them had completed the implementation of the presence of a correct IBAN in MT 103 STP message.

Time indication (O 13C) can also help identifying the transaction. The time indication is necessary if for instance the payment is destined to CLS (code CLSTIME) for which time scheduling is very strict. There may also be the code "RNCTIME", the time at which a TARGET payment has been credited at the receiving central bank, and "SENDTIME" the time at which a TARGET payment has been debited at the sending central bank (expressed in CET). This shows that SWIFT message-types are adapted to European features or to CLS and that TARGET can trace credit transfers.

Instructions (O 23E) can be joined, among them one (code CORT) which specifies that the "payment is made in settlement of a trade, e.g., foreign exchange deal, securities transaction" (SWIFT 2005, p 134). The presence of this instruction proves that it is perfectly possible to include a tag that clearly identifies the transaction as a foreign exchange transaction and even a securities transaction if one wants to extend the transaction tax to securities. These instructions are optional for the present moment but could become mandatory by an amendment to the EU directive on cross border credit transfer. The amendment could specify three options: one to identify the euro leg of a forex transaction, one to identify the euro leg of a security transaction, and one to identify the euro leg of a money transaction.

The same is true for field 26T (Transaction Type Code). "This field identifies the nature of, purpose of, and/or reason for the individual transaction, e.g., salaries, pensions, dividends" (SWIFT, 2005, p 136). This field is also very important because it proves that it is perfectly possible to resolve the potential problem mentioned above, i.e. the confusion between forex transactions and ordinary transactions of corporate customers that have nothing to do with forex transactions.

If this field was mandatory, then TARGET would be able to distinguish between unilateral transactions (transactions with only one leg) in order to tax forex transactions only. It is clearly possible because SWIFT notes that the codes from the Eurostat list "Code list for Balance of Payment Collection Systems" may be used in this field because "the information given is intended both for regulatory and statutory requirements and/or to provide information to the beneficiary customer on the nature of the transaction" (SWIFT 2005, p 136). Once again, this shows that SWIFT standards are flexible and already fitted to EU requirements.

This is for transactions in euros. But what happens when the credit transfer is

⁹⁶⁾ The IBAN, the International Bank Account Number, is defined in the official ISO (International Standardization Organisation) 13616 Standard. It provides a unique and automatically processable identification of the bank, branch and account number at an international level. The European IBAN nom was developed by the ECBS (the European Council for Banking Standards) to convert any non-harmonized national account number into a European account number. The customer can thus be identified by the IBAN of the account that it has opened in any bank.

⁹⁷⁾ The Bank Identifier Code (BIC) is the ISO bank code as defined by SWIFT. It is mandatory for TARGET system participants to use the BIC attributed to them. The list is published by SWIFT on its website. For further details on IBAN and BIC, see ECBS's website, <http://www.ecbs.org>

destined for a country that does not use the euro as the national currency? In this case, there is a more direct and simple possibility to identify a foreign exchange transaction. When a customer instructs a payment for a beneficiary located in a country outside the euro area, then the instructed amount (field 33B) and the settled amount (field 32A)⁽⁹⁸⁾ will be denominated in two different currencies. In this case, field 36 (exchange rate) is mandatory and not optional. This happens when the ordering customer is located in the euro zone, and the beneficiary customer receives its funds in pounds sterling, Swedish krona, or Norwegian krona, for instance; or in a currency of a new Member State; or in a currency of some other small countries or territories (See box 2-5).

What is interesting in box 2-5, is that field 33B and 36 are new and were incorporated in MT103 design to satisfy the EU demands for more transparency and are called the “EU validation”. It seems as if, involuntarily, the EU had created beforehand the necessary fields to implement the CTT⁽⁹⁹⁾. In another document (MT103, “Frequently Asked Questions”), SWIFT explains that:

“Transparency is increasingly becoming a regulatory requirement. Especially in the European Union (EU), the European Commission and European Parliament are mandating more transparency in cross-border customer transfers. The MT 103 provides the framework to achieve this with a number of new, dedicated fields (e.g. instructed currency and amount, regulatory reporting fields, charging fields, exchange rate, etc.)”.

Another useful characteristic is that the same MT103 has been adopted by institutions like EURO1, allowing full compatibility with TARGET. One can also infer that the same data can be found in the messages sent by private clearing and settlement institutions in the EU because they are subjected to the same regulations. In short what is true for TARGET is in great part true for other large-value institutions in the EU, and probably for CLS transactions, as long as EU currencies are concerned.

⁹⁸⁾ The mandatory field 32A (Value Date/Currency/Interbank Settled Amount) specifies the value date, the currency and the settlement amount to be booked/reconciled at interbank level. This information must be of course present in the MT 202 exchanged by the sending bank and the receiving bank on behalf of their respective customers.

⁹⁹⁾ Field 23E (Instruction code) and 26T (Transaction Type Code) that are also critical for the CTT (see above) are also new fields introduced at the request of the EU and were discussed as others in the “Heathrow Group”, that gathered private bank, SWIFT and EU representatives to conceive the new MT103.

Box 2-5 : MT 103: Specific Validation Within EU Countries**32 countries are concerned.**

EU validation will be applied on all versions of the MT 103, and is a guarantee that the message contains the instructed currency and amount field 33B.

This validation will apply whatever form of communication (e.g. clearing system, correspondent banking) is used and whenever a MT 103 message is sent between BIC destinations whose country codes belong to the following list:

AD	Andorra	IS	Iceland
AT	Austria	IT	Italy
BE	Belgium	LI	Liechtenstein
BV	Bouvet Island	LU	Luxemburg
CH	Switzerland	MC	Monaco
DE	Germany	MQ	Martinique
DK	Denmark	NL	The Netherlands
ES	Spain	NO	Norway
FI	Finland	PM	Saint Pierre et Miquelon
FR	France	PT	Portugal
GB	United Kingdom	RE	Réunion
GF	French Guyana	SE	Sweden
GI	Gibraltar	SJ	Svalbard and Jan Mayen Islands
GP	Guadeloupe	SM	San Marino
GR	Greece	TF	French Southern Territories
IE	Ireland	VA	Vatican City State

Note: Some countries requested SWIFT to apply the technical validation due to reciprocity agreements and do not consider that they are bound by all requirements of the EC directive on cross-border credit transfers”.

Source: “Why do we move from MT100 to MT103?” on SWIFT website.

Finally, we can observe that EU regulations are accepted by Switzerland and by some tax haven territories such as Liechtenstein and Monaco, but not others such as Guernsey and Jersey, Isle of Man, and Mayotte that are also linked to EC members (the UK and France). Of course these countries would reconsider their acceptance of EU directives if the CTT was adopted by the EU, but it shows that the EU has a sufficient power of persuasion to get some transparency measures adopted by some of these small tax havens. If there was a sufficient political commitment on the part of the EU, these tax havens are so dependent on Europe that they would have to accept the CTT.

The presence of field 33B in the SWIFT message is also particularly interesting in the perspective of an enlargement of the CTT to other countries and continents. It proves that the technical basis already exists for the whole EU and not only for the sole euro area, and also for a universal treaty and not only for the EU.

Another very important point is the presence of field 36 (exchange rate): We have precisely here the technical instrument necessary to implement the two-tier CTT when a customer orders a foreign exchange transaction. If the exchange rate included in the message is outside the band on the date and time of the transaction, then the surcharge is applied to the ordering or beneficiary institution according to pre-agreed rules. This validates technically the Spahn proposal in a very simple way.

Another interesting feature is that SWIFT messages establish very clearly and simply the link between bank-to-customer transactions (the retail market) and interbank transactions (the gross market), because SWIFT needs to calculate the transactions

charges that it will receive. And this gives the solution about how to integrate the tax in the inner payment process of the transaction. Let me present an example given by SWIFT itself about the possible usage rules regarding transaction charges. Suppose that a bank A in the euro zone wants to send €1000 to a bank B in the UK.

Examples: Transaction A

- Pay the equivalent of EUR 1000,00 in GBP to a beneficiary in the United Kingdom
- Exchange rate is 1 EUR for 0,61999 GBP
- Transaction charges on the Sender's side are EUR 5,00 (=GBP 3,1)
- Transaction charges on the Receiver's side are GBP 4 (=EUR 6,45)

Source: SWIFT 2005, p 126.

There are three charging options: the first is that the ordering customer pays all the charges (charging option "OUR"), the second is that the ordering customer and the beneficiary shares the charges (charging option "SHA"), the third is when the beneficiary pays the charges (charging option BEN). By default, the EU has decided that the option "OUR" prevails. We present this first charging option to show how the MT 103 is affected (See figure 2-20 next page).

The instructed amount (field 33B) is €1000 equivalent to £619.99 credited to the beneficiary but €1011.45 will be debited from the ordering customer equivalent to £623.99 (field 32A) which is the settled interbank amount. The exchange rate, 0.61999 appears in field 36 of the message. If one applies the same rules to collect the tax, one possibility is to increase the sender's charges by the amount of the tax. If the tax is 0.1%, it would cost €1 for an instructed amount of €1000 (to compare with SWIFT charges of €5). The sender's charges would be €6 instead of €5, i.e. an increase of 20%. But it is also technically possible to share the tax between the sender and the receiver. In this case it would cost €0.50 each. Sender's charges would amount to €5.50, a 10% increase, and receiver's charges would amount to €4.5, a 7.8% increase. The third possibility is that the receiver pays the full amount of the tax. Charges would amount to €7.45, a 15.5% increase.

This hypothetical exercise shows again that everything is already in place for the collecting of the tax with a full array of options. All is needed is the inclusion of the tax inside the transaction charges.

Fig. 2-20 : Example: Charging Option is OUR

a) Amount debited from the ordering customer's account:

Instructed Amount	EUR	1000,00
+ Sender's charges	EUR	5,00
+ Receiver's charges	EUR	6,45
= Debit Amount	EUR	1011,45

b) MT 103 extract:

Field Tag	Content	
33B	EUR	1000,00
71A		OUR
71G	GBP	4,00
36		0,61999
32A	GBP	623,99

c) The subsequent MT 950 shows one debit entry for GBP 623,99, ie, field 32A.

d) Amount credited to the beneficiary:

Interbank settlement amount	GBP	623,99
- Receiver's charges	GBP	4,00
= Credit amount	GBP	619,99

Source: SWIFT 2005, p 127.

We can now turn to interbank transactions, using MT 202 to check that we also find the necessary data.

2.2.5.7 Data included in a message in case of interbank transaction (MT202)

Interbank transactions use “MT 202 General Financial Institution Transfer” messages. These messages are used by sending banks to receiving banks to order the movement of funds to the beneficiary institution. Their format specifications are the following (see Table 2-4, source SWIFT 2005).

Table 2-4 : MT 202 Format Specifications

MT 202 General Financial Institution Transfer				
Status	Tag	Field Name	Content/Options	No
M	20	Transaction Reference Number	16x	1
M	21	Related Reference	16x	2
----->				
O	13C	Time Indication	/8c/4!n1!x4!n	3

M	32A	Value Date, Currency Code, Amount	6!n3!a15d	4
O	52a	Ordering Institution	A or D	5
O	53a	Sender's Correspondent	A, B or D	6
O	54a	Receiver's Correspondent	A, B or D	7
O	56a	Intermediary	A or D	8
O	57a	Account With Institution	A, B or D	9
M	58a	Beneficiary Institution	A or D	10
O	72	Sender to Receiver Information	6*35x	11
M = Mandatory O = Optional				

Source SWIFT 2005.

This information is critical to levy the tax. Field 20 specifies the reference assigned by the sender to unambiguously identify the message. Field 21 (related reference) is especially important. This field contains a reference to the related transaction initiated by the customer. In this case, the field will contain the field 20 sender's reference of that MT 103. This means that it is perfectly possible to identify a forex transaction ordered by a customer (but not necessarily the identity of this customer).

“In all other cases, field 21 will contain a reference to the related transaction which is meaningful to the beneficiary institution, e.g., the common reference in an MT 300 Foreign Exchange Confirmation, field 21 of an MT 202 General Financial Institution Transfer, an MT 205 Financial Institution Transfer Execution or an MT 400 Advice of Payment” (SWIFT, 2005, p 26, we underline).

Again, we can verify that thanks to field 21, it is technically possible to make a clear distinction between forex transactions and financial transactions that are not related to forex transactions. If the reference to MT300 forex confirmation is present, then we can be sure that it is a forex transaction; otherwise it will be another type of transaction.

Field 13C, (time indication) is optional but can be useful because it specifies one or

several time indication(s) related to the processing of the payment instruction as in MT103. It can then give information about the settlement institutions involved. For instance the "CLSTIME" code can be used to specify the time (expressed in CET) by which the funding payment must be credited, with confirmation to the CLS Bank's account at the central bank. Its simple presence indicates a forex transaction is settled through CLS. "RNCTIME" is the time at which a TARGET payment has been credited at the receiving central bank and "SNDTIME" the time at which a TARGET payment has been debited at the sending central bank. It is therefore possible to say precisely when a forex transaction has been settled through TARGET and collect the tax at this precise moment.

Field 32A (Value date, Currency Code, Amount) concerns the currency and amount to be transferred between banks. It is mandatory and important for the CTT and was already present in MT103. Its presence shows that it is perfectly possible to calculate the CTT for forex transactions involving the euro at the interbank level and not only at the customer to bank level.

Field 52A (ordering institution) is optional. It specifies the identity of the ordering institution when different to the sender of the message. The identity is given by the BIC code. It can be used to indicate a national clearing system code such as the Canadian Payments Association Payment Routing Number, the Bank Code of Hong Kong, Fedwire (the US RTGS), or CHIPS (the US private-owned settlement institution), etc. It would be better to have this information, and the EU could decide to make its presence mandatory. But the CTT can be levied even in its absence. By default, the sending bank will have to pay the tax and then will arrange with its customer (the ordering institution) for reimbursement or incorporate the tax directly into its fees.

Fields 53a and 54a are used in case of correspondent banking, but are absent if the sending bank and the receiving bank are two branches of the same global bank for instance. In this case, the two banks have a direct account relationship. But if they are independent, they must specify the counterparty identity with a BIC identifier. Field 53a specifies the account or branch of the sending bank or its correspondent through which the sender will pay the receiving bank. Field 54a specifies the branch of the receiving bank or the correspondent bank at which the funds will be made available to the receiving bank. These fields are useful because correspondent banking is the traditional way to settle a forex transaction and is still important even after the launch of CLS. The presence of these fields allows the central bank to monitor the activity of correspondent banking of European banks and complete its information about forex transactions.

Field 56a (intermediary) is used when a bank, or more usually, a national clearing institution is used as an intermediary between the sending and the receiving bank. For instance the code "//RT" means that an incoming SWIFT payment is being made via real-time gross settlement and the code "//SW" means that the incoming payment comes through the intermediary of the Swiss clearing institution SIC. The code is binding for the receiver if an RTGS is used as an intermediary. This information will be useful to help identify forex transactions coming through foreign clearing or settlement systems and not directly from a sending bank.

Field 57a (account with institution) is almost the same. It identifies the financial institution, which can be a national clearing or settlement institution, which will pay or credit the receiving bank when it is necessary that the payment be made via these institutions or when the receiving bank cannot be identified by a BIC code.

Field 56a and Field 57a guarantees that in any case an intermediate payer or receiver of the transaction is identified. This information helps to establish the payment chain from the ordering institution through to the final receiver. It will be useful to identify transactions that are traded outside the EU but settled inside the EU through intermediaries.

Field 58a (beneficiary institution) specifies the bank that has been designated by the ordering institution as the ultimate recipient of the funds being transferred. It is mandatory information. It means that all banks in the EU receiving funds as the result of a forex transaction can be identified as such and subject to the tax if the share or beneficiary option charges are chosen.

Field 72 (sender to receiver information) specifies additional information for the receiver. An interesting feature is the following: "In order to comply with the EC-Directive on cross border credit transfers, the optional code word "EXCH" may be used to transport an exchange rate." (SWIFT 2005, p 40)

This indication proves two important things:

1. When the EU decides to impose a rule, financial institutions have no choice but to follow and find a technical solution.
2. If it is possible to integrate the exchange rate at which the transaction is made inside the message ordering the settlement, then it proves again that the technical instrument to implement the two-tier CTT is already in place and need not be created as we have seen previously in the MT103 case.

There are nevertheless some difficulties due to the reluctance of the European banking industry to implement the "cross-border credit transfer" regulation adopted in 2001, which stipulates that the IBAN and BIC are mandatory in SWIFT messages in order to improve STP and reduces money laundering practices. The various ECB reports (2001, 2003c) on the creation of a "Single Euro Payments Area" (SEPA) testify how difficult it is to convince private banks to realise the necessary investments to upgrade their internal process to achieve the requirements of EU legislation and a full STP.

The provision of IBAN and BIC to the customer has become mandatory with the regulation, but the regulation does not make the *use* of BIC and IBAN mandatory in payments systems (see ECB, 2003c, p 14). It is an absurdity that can be only be explained by undue concessions to the banking industry. The use of IBAN and BIC should be made mandatory in the use of all payment systems not only for tax issues, but also for anti-money laundering issues.

As far as TARGET is concerned, MT103 and MT103+ are the only message-types accepted for customer cross border transfers. But MT103 can be filled out manually, thereby allowing the absence of the IBAN and BIC of the beneficiary. This drawback seems to be on the way to resolution. According to the ECB (2005, p 18), the use of MT103 and especially its STP version MT103+ is growing strongly recently and these forms require the presence of the IBAN and BIC of the beneficiary's institution.

"In 2004, the share of MT103+ in TARGET inter-Member State customer payments increased from 27% in the first quarter to 40% in the fourth quarter. In the first quarter of 2003, however, the share was only 5%" (ECB, 2004, p 18). Pan-European STP is progressing to the benefit of the CTT project.

We hope that this detailed analysis of SWIFT messages have convincingly proved that it is possible to collect the two-tier CTT in the EU without any supplementary investment by simply using what already exists.

Two final arguments will presented to demonstrate, we hope definitively, that the CTT is enforceable: The first concerns the creation of a European single market for securities transactions. The EU has dedicated a lot of effort to promote this objective together with the SEPA. What is of interest for the CTT is first that securities are still subject to transaction taxes in a few European countries, and second that the objective is to create a pan-European settlement system for securities. Securities transaction taxes (STT) are in this context, collected at the point of settlement. For sure, it is of interest for the CTT, the STT cousin.

The second concerns SWIFT itself. We have seen repetitively how crucial the role of SWIFT is. It is important to know more about SWIFT in order to perfect the laws and regulations defining its activity.

2.3 Collecting securities transaction taxes (STT) through settlement systems already exists

The creation of an integrated European capital market is one of the most important projects currently under way in the EU (European Commission 2004). A crucial element of this project is the safety and efficiency of Pan-European clearing and settlement systems. Presently the clearing and settlement systems work at the domestic level and are numerous and fragmented, affecting the liquidity of financial markets and the cost of capital. There is no such European integration of securities clearing and settlement systems as there is for forex and money markets thanks to EURO1 and TARGET. The European Parliament's Resolution of January 2003 ⁽¹⁰⁰⁾ underlined that "the existing clearing and settlement arrangements do not enable cross-border transactions to be processed efficiently and, in consequence, it is impossible to exploit to the full the internal market in financial services". The Parliament called upon the Commission to study thoroughly the US example of a unified clearing, settlement and custody framework with the objective to create a unified European framework ⁽¹⁰¹⁾.

Several reports were dedicated to the subject. Among them, the two reports of the *Giovannini Group* identified 15 barriers, divided into technical or market practice barriers, barriers related to tax procedures and legal barriers ("the Giovannini Barriers") ⁽¹⁰²⁾, as the main causes of fragmentation. The reports concluded that until these barriers are eliminated, the EU clearing and settlement environment will remain a juxtaposition of domestic, non-integrated markets. Among the barriers, tax procedures issues are of particular interest. The two reports are not demanding the suppression of taxation on securities that exists in a few countries, such as the UK, Ireland and Belgium. Taxation remains an attribute of national sovereignty.

The EU concern is to realise free access to any securities settlement systems without any discrimination between national and foreign systems in order to promote pan-European integration through competition between systems. In the words of the commission: "Another category of barriers constitute an effective impediment to the use of Securities Settlement Systems as intermediaries in cross-border settlement. An example of this type of barriers would be the collection of transaction taxes only via a functionality integrated into the local Securities Settlement System; using a different system could mean

¹⁰⁰⁾ European Parliament resolution on the communication from the Commission to the Council and the European Parliament entitled "Clearing and settlement in the European Union: main policy issues and future challenges", 15 January 2003.

¹⁰¹⁾ Another important aspect of the EU legislation work concerns the cooperation between EU member states. Information exchange on as wide a basis as possible underpins Council Directive 2003/48/EC dealing with taxation of income in the form of interest received across national frontiers. Moreover, there is now a Directive for Mutual Assistance on Recovery, under which the competent authorities of one Member State can assist those of another with the collection of both direct and indirect taxes due in the first-mentioned state from a debtor located in the second. In addition, the original Directive on Mutual Assistance (Council Directive 77/799/EEC of 19 December 1977 concerning mutual assistance by the competent authorities of the Member States in the field of direct taxation, OJ 1977 L336/15) is currently undergoing modernisation with a view to strengthening it. Therefore, Member States will have better possibilities for controlling taxpayers who are located outside their territorial jurisdiction. This could be useful for the CTT.

¹⁰²⁾ The full texts of the two Giovannini reports are available on the Commission's website and are therefore not discussed in detail in this Communication.

paying higher transaction taxes ⁽¹⁰³⁾. As a consequence, market participants may, because of cost concerns, not use their preferred settlement location” (EU Commission, 2004, we underline).

This citation shows two important points: The first is that it is recognised that Securities Transactions Taxes are presently collected via a functionality integrated to the settlement systems. This means that there is already in the EU a legal basis for collecting transaction taxes automatically as proposed by CTT supporters through settlement systems despite all the legislation in favour of free capital movement and the neo-liberal dogma of free competition. If it is true for securities, why would it be different for forex transactions?

The second point relates to paying higher taxes when using a foreign settlement system rather than the national one. This is labelled by the first Giovannini Report as “Barrier 12”. The paradox is that the elimination of this barrier which prevents equal treatment would lead to a situation where all settlement systems could compete to collect transaction taxes during the settlement process.

The second Giovannini Report, which establishes a strategy to remove the barriers, states ⁽¹⁰⁴⁾ (See box 2-6):

Box 2-6 : Excerpt from the Second Giovanni Report

Removing Barrier 12

Any provisions requiring that taxes on securities transactions be collected via local systems should be removed to ensure a level playing field between domestic and foreign investors. This is clearly a responsibility of national governments and their actions should be co-ordinated via the relevant EU Council. This barrier is to be removed within a period of three months of removing Barriers 7 and 1.

Source: Second Giovannini Report, p 11.

The Commission then proposes the creation of a group of experts to examine, in more detail, the taxation issues identified by the Giovannini group and by respondents to the first Commission Communication on Clearing and Settlement as constituting barriers to efficient cross-border settlement. This group of experts was created under the name of FISCO group (FISCal COmpliance experts group) and held its first meeting on 15th April 2005.

The close link between STT and the CTT is so obvious that during the discussion of the Villiers/Kauppi Report on Clearing and Settlement at the ECON session of 30th March 2005 in the European Parliament, Ieke van den Burg (MEP, Socialist Group) proposed that the FISCO group should also consider the “Tobin Tax” issue. During the first meeting of the FISCO group, David Wright, Director of Directorate G in DG Internal Market, and head of the group, thanked “the EP for the attentions they gave to the FISCO” but carefully ruled out the proposal, because the “Tobin Tax” issue was “clearly outside the scope of the mandate of the expert group and therefore could not be considered” (see FISCO, 2005).

Nonetheless, the presentations included elements about the capabilities of a settlement system to help the fiscal authorities to collect a transaction tax.

¹⁰³⁾ The reason is that foreign intermediaries are obliged to use a local agent or local representative in the discharge of their withholding charges which entails extra cost.

¹⁰⁴⁾ Barriers 1 and 7 are respectively :the removing of national differences in information technology and interfaces used by clearing and settlement providers (barrier 1) and the harmonisation of the operating hours of the numerous European settlement systems (barrier 7). SWIFT is charged with supervising the removing of barrier 1.

The UK Stamp Duty Reserve Tax is a tax on agreements to transfer chargeable securities for money or money's worth. In principle a 0.5% charge applies. Chargeable securities are mainly equities, rights, warrants and certain debt securities that are issued by a UK issuer or registered in the UK. In Ireland, the Irish Stamp Duty is a 1% charge on certain "instruments" such as instruments which affect transfers on sales of registered shares in Irish companies or equitable interests in Irish shares and contract for the sale of equitable interest in Irish shares. There is no equivalent to the UK SDRT3 (FISCO, 2005).

But in either case, the role of CREST, the main securities settlement system in the UK and in Ireland is central. CREST is required to ensure that chargeable transactions are reported to the Inland Revenue, to collect the Stamp Duty Reserve Tax, and to account for it to the Inland Revenue (See box 2-7). Brokers and dealers are required to file the data related to relevant transactions directly into CREST which will automatically inform the Inland Revenue authority. This proves that Straight-Through-Processing (STP) can be used for fiscal issues. Penalties are applied when the duty is not paid on time which could also inspire the CTT legislation.

Box 2-7 : CREST - Electronic Transfer of Shares System (Capital Taxes)

"The purpose of this manual is to explain how stamp duty and the CREST system interact. For the sake of simplicity the term shares is used but all types of security (e.g. shares, stock, debentures, debenture stock) can be transferred through the system and the charge to stamp duty covers transfers of all such types.

CREST is the name of an electronic system, which settles transfers of shares that are dealt with on the Irish and UK Stock Exchanges. Prior to the introduction of CREST stamp duty was calculated and collected by a computer system called Talisman and a stampable instrument (TBT) was produced in respect of each share transfer on which stamp duty was charged; payment of this duty was made under composition agreement.

Under the CREST system, an instrument is not produced - the shares are transferred electronically, i.e. CREST is a paperless system of transferring shares. Legislation was introduced under the 1996 Finance Act, which provided for the payment of stamp duty on electronic messages, which effect the transfer of shares. The transfer of Irish shares through the CREST system commenced in October 1996.

The Stamp Duties Consolidation Act, 1999 supersedes the legislation enacted in the 1996 Finance Act. Sections 67 to 78 deal with electronic transfer of shares".

Source: Summary of Rules, Procedures and Reference Manuals used by the Revenue Commissioners. The complete manuals have been published on the Revenue website (<http://www.revenue.ie>)

In 2001-2001, the annual revenues of the stamp duty in the UK reached £4.5 billion to be compared with £32.4 billion for corporation tax and a total of public sector receipts of £383.0 billion (M. Hawkins, J. McCrae, 2002). This shows the relevance of the fiscal revenues from transaction taxes.

In Belgium, a "pro rata temporis withholding tax regime for debt securities held in the book entry form in a recognised settlement system" exists (FISCO, 2005, p 5). Currently, only the settlement system operated by the Belgian National Bank has been recognised. The securities are held by account-holders with the operator of the system in tax exempt accounts (X accounts) and taxable accounts (N accounts). Taxation pro rata temporis means that taxation is a function of time. "Any entry of securities into a taxable account results in a credit of withholding tax on interest accrued since the last income payment until date of entry. Any delivery out of a taxable account results in a debit of withholding tax on interest accrued since the last income payment until the date of delivery" (FISCO, 2005, p 5). Taxes are collected by the operator of the system, i.e. the Belgian National Bank.

This example shows again that a settlement system can automatically collect a transaction tax, and that a central bank can assume fiscal responsibility.

2.4 SWIFT's strategic role in combating money laundering

SWIFT (Society of Worldwide Interbank Financial Telecommunications) is an industry-owned limited liability cooperative that supplies secure messaging services and interface software for financial transactions to more than 7,400 banks, clearing and settlement payment systems (Euro1, CLS, TARGET), stock exchanges (Euronext), securities brokers, and investment managers in 198 countries.

It was founded in 1973 by the major multinational banks. Its headquarters are located at La Hulpe, in Brussels' periphery. It is ruled by Belgian law, and supervised by the Belgian Central Bank, which acts on behalf of the European Central Bank.

SWIFT is the primary facilitator of cross-border payment information in the world and transmits approximately seven million messages per day. 1.8 billion messages were processed in 2002. Communications and messaging standards introduced by SWIFT have the potential to drive the payments industry towards a payment messaging standard because of the SWIFT network's broad span. The other proprietary messaging systems that remain have to be careful to maintain compatibility between their standards and SWIFT standards if they want to keep connected with the rest of global financial markets. SWIFT's ability to create standards has been officially recognised by the Giovannini Group and the EU commission that asked SWIFT to remove "Barrier 1", which is the lack of harmonisation and interoperability of European securities settlement systems.

SWIFT payment messages are processed by the Financial Information Network (FIN) which operates on a secure Internet Protocol (IP) network called SWIFTNet. SWIFTNet services were introduced in 1999 with the objective of offering the financial industry an interactive standard platform for financial communication and messaging. All new payment systems like CLS, and now TARGET, use SWIFTNet interactive services to allow real time management of queued messages, for instance.

We have seen how critical SWIFT is for the CTT and STT issues. It may be seen as illusory, the possibility to use SWIFT for this purpose due to the fierce opposition of its users who worship the holy confidentiality of their transactions. However, there is at least another reason to be interested in SWIFT: the fight against money laundering and financing terrorism. On these topics, we will see how far-reaching the legislation is at national and international levels.

Eric Heillener (2001) has convincingly demonstrated that most of the measures conceived and sometimes implemented against money laundering can be used to create a new international order based on new capital controls. We think that his argument can be extended to global taxes.

In 1989 at the Paris G7 summit, an international body called "Financial Action Task Force" (FATF) was established ⁽¹⁰⁵⁾. Although its action may be criticised as insufficient, it is at least considered as the minimum world standard in the fight against money laundering. The FATF had quickly acknowledged that one important measure against money laundering would be to increase the information content included in SWIFT messages. Eric Heillener (op cit, p 8) explains that under the FATF requirement, SWIFT had already decided on 30 July 1992, to send a worldwide message to its customers to invite them to include in their messages the name and address of each of their ordering and receiving non-bank customers ⁽¹⁰⁶⁾. But this invitation was not binding because at that time there was no legis-

¹⁰⁵⁾ In 2003, the FATF had 33 members: 31 countries and governments and two international organisations; more than 20 observers, five FATF-style regional bodies and more than 15 other international standards for combating money laundering and the financing of terrorism.

¹⁰⁶⁾ "Initiatives of this kind may signal the first step along a potential route of transforming CHIPS, Fedwire and SWIFT into "closed-circuit systems" that can be used only by those willing to adopt certain responsibilities vis-à-vis the regulation of money laundering" (Eric Heillener op cit, p 8). This concept of "closed-circuit

lation on that matter.

This situation has changed now because, soon after its creation, the FATF submitted in 1990 an important report detailing 40 recommendations to strengthen the fight against the recycling of capital derived from criminal activities. These 40 recommendations were revised in 1996 and then extended in 2003 to integrate eight new recommendations to more specifically counteract the financing of terrorism. In the last revision, some important aspects have been softened, but some recommendations remain that are useful for global tax issues. Among them, we have selected some that are the most relevant. The basic idea is to read the 40 recommendations with “global taxes lenses” and in some cases to substitute the term “money laundering” with “fiscal fraud”.

For instance, **recommendation 1** establishes that “*countries should criminalise money laundering*” and should “*apply the crime of money laundering to all serious offences, with a view to including the widest range of predicate offences*” “*Predicate offences for money laundering should extend to conduct that occurred in another country, which constitutes an offence in that country, and which would have constituted a predicate offence had it occurred domestically*”. If “money laundering” was replaced by “fiscal fraud” lots of judges who cannot prosecute big firms, banks and rich people who defraud the tax in the EU would be happy, and citizens too.

Recommendation 2, in its paragraph b states: “*Criminal liability, and, where that is not possible, civil or administrative liability, should apply to legal persons. This should not preclude parallel criminal, civil or administrative proceedings with respect to legal persons in countries in which such forms of liability are available. Legal persons should be subject to effective, proportionate and dissuasive sanctions. Such measures should be without prejudice to the criminal liability of individuals*”. Imagine for a moment that the same applied for legal persons who would dare to defraud the CTT.

Recommendation 3 details the provisional measures to confiscate “*property laundered, proceeds from money laundering or predicate offences*”. Again, this would apply perfectly to fiscal fraud.

Recommendation 4 is particularly interesting for the CTT. It states: “*Countries should ensure that financial institution secrecy laws do not inhibit implementation of the FATF Recommendations*”. We can perfectly imagine an article in the European Directive saying: EU State Members should ensure that financial institution secrecy laws do not inhibit implementation of the CTT in the EU.

Recommendation 5 seems to have been written especially for the CTT and is perfectly in accordance with the “know your customer” best practice that we have seen before. It could apply for instance when a bank or a clearing and settlement institution processes a forex transaction which is not directly routed to the RTGS. We cannot resist to the pleasure to quote this recommendation (box 2-8). Just substitute again “money laundering” and “terrorist financing” by “fiscal defrauding”.

systems” could also be used for tax issues. Payment systems would not be “porous”. There would gateways opened only to those respecting laws and regulations including of course fiscal ones.

Box 2-8 : FATF Recommendation No. 5

“Financial institutions should not keep anonymous accounts or accounts in obviously fictitious names.

Financial institutions should undertake customer due diligence measures, including identifying and verifying the identity of their customers, when:

(i) establishing business relations; carrying out occasional transactions above the applicable designated threshold; or

(ii) that are wire transfers in the circumstances covered by the Interpretative Note to Special Recommendation VII; there is a suspicion of money laundering or terrorist financing; or the financial institution has doubts about the veracity or adequacy of previously obtained customer identification data.

The customer due diligence (CDD) measures to be taken are as follows:

a) Identifying the customer and verifying that customer’s identity using reliable, independent source documents, data or information [4].

b) Identifying the beneficial owner, and taking reasonable measures to verify the identity of the beneficial owner such that the financial institution is satisfied that it knows who the beneficial owner is. For legal persons and arrangements this should include financial institutions taking reasonable measures to understand the ownership and control structure of the customer.

c) Obtaining information on the purpose and intended nature of the business relationship.

d) Conducting ongoing due diligence on the business relationship and scrutiny of transactions undertaken throughout the course of that relationship to ensure that the transactions being conducted are consistent with the institution’s knowledge of the customer, their business and risk profile, including, where necessary, the source of funds”.

Customer due diligence would be useful for global taxes, too. Thus **recommendation 7** is of importance for forex transactions because it relates to cross-border correspondent banking which is still important for their settlement. Financial institutions should, in addition to performing normal due diligence measures:

“a) Gather sufficient information about a respondent institution to understand fully the nature of the respondent’s business and to determine from publicly available information the reputation of the institution and the quality of supervision, including whether it has been subject to a money laundering or terrorist financing investigation or regulatory action.

b) Assess the respondent institution’s anti-money laundering and terrorist financing controls.

c) Obtain approval from senior management before establishing new correspondent relationships.

d) Document the respective responsibilities of each institution.

e) With respect to “payable-through accounts”, be satisfied that the respondent bank has verified the identity of and performed on-going due diligence on the customers having direct access to accounts of the correspondent and that it is able to provide relevant customer identification data upon request to the correspondent bank”.

This shows that it is possible to be very strict when establishing correspondent banking business relations. If a bank has a reputation of defrauding the CTT, in the circumstances described, then it should not be possible to establish correspondent banking relations with it. And correspondent banking is “the vital blood” of money laundering according to the US Senator Carl Levin ⁽¹⁰⁷⁾. Without their link with the payment systems of big financial centres, shell banks established in tax havens would be unable to do anything. Reputation risk is another reason for banks to respect the law.

Recommendation 10 could be important for controlling the payment of the tax: “Financial institutions should maintain, for at least five years, all necessary records on transactions, both domestic and international, to enable them to comply swiftly with inform-

¹⁰⁷⁾ “Minority Staff of the Permanent Subcommittee on Investigations”, Carl Levin, United State Senate, 2001. The title of the report is particularly illustrative : “Correspondant banking: a gateway for money laundering”. See in particular pages 13 and 14.

http://www.senate.gov/~gov_affairs/020501_psi_minority_report.htm

ation requests from the competent authorities. Such records must be sufficient to permit reconstruction of individual transactions (including the amounts and types of currency involved if any) so as to provide, if necessary, evidence for prosecution of criminal activity”.

This proves again that even without the CTT, banks are obliged to store a huge amount of data for five years. This data includes domestic and international transactions, the amount and types of currency involved if any. This proves again that the data exist. It is included in the message types that SWIFT processes. The CTT would simply rely on this already existing material to check if the tax has been duly paid.

Recommendation 14 protects financial institutions, their directors and officers and employees from judicial action for breach of any restriction on disclosure of information, if they report their suspicions. It can be important if employees inform authorities that a customer refuses to pay the CTT.

Recommendation 17 asks countries to ensure that “effective, proportionate and dissuasive sanctions” are available to deal with those that would fail to comply with the law.

Recommendation 21 establishes that countries that do not apply or insufficiently apply the FATF recommendations could be subject to countermeasures. This could establish a base to protect the CTT area, i.e. the EU against countries opposed to the CTT.

The last recommendations deal with the necessity that supervisors have the necessary legal power to investigate and that countries cooperate extensively at the international level. This applies also to the CTT.

There are also interpretative notes that are valuable. The **interpretative note to recommendation 13** explains “that suspicious transactions should be reported by financial institutions regardless of whether they are thought to involve tax matters”. Although it shows the disrespect towards the payment of taxes, which can be evaded and is not usually considered as a crime, this note shows that in practice it is difficult to separate money laundering and tax evasion because they use the same mechanisms.

The **interpretative note to recommendation 19** is also worthwhile. In its first paragraph, it states that: “To facilitate the detection and monitoring of cash transactions, without impeding in any way the freedom of capital movements, countries should consider the feasibility of subjecting all cross-border transfers, above a given threshold, to verification, administrative monitoring declaration and record keeping”. One can imagine that if it is feasible to check any cross-border transaction in cash, then it must be much easier to check, monitor and record dematerialised transactions that only require access to file records.

Finally, the **interpretative note to recommendation 38** is especially appealing because it is very close with the principle of a special fund for the financing of development. “Countries should consider establishing an asset forfeiture fund in its respective country into which all or portion of confiscated property will be deposited for law enforcement, health, education, or other appropriate purposes”.

2.4.1 The EU reaction to FATF recommendations

The EU reacted quickly to the FATF recommendations and was probably the first region of the world to implement the FATF recommendations.

Since 1991, the European Commission Directive requires Member States to prohibit the laundering of illicit drug proceeds, to oblige their financial sector to identify their customers, keep records, establish internal control procedures and to report any indications of

money laundering to the competent authorities.

This had consequences on the legislation concerning cross-border financial transactions. A new step was made when the EU decided in 1997 to adopt the first directive on retail cross-border transfers. This directive makes mandatory the presence of the identity of the ordering and receiving customers in the SWIFT message and the nature of the transaction. This was confirmed by all subsequent EU directives on cross-border transfers.

The limitation to drug proceeds was soon found to be too restrictive, and that money launderers had found alternative ways to launder money. In 1999, the commission proposed widening the range of criminal offences covered and the range of vulnerable non-financial activities and professions. These propositions laid ground for the amending Directive 2001/97/EC adopted on 4 December 2001.

In June 2003, the FATF considerably extended the level of detail in its recommendations, notably with regard to customer identification and verification, the situations where a higher risk of money laundering may justify enhanced measures and also eight new measures against the financing of terrorism.

In 2004, the EU Member States and the Commission believed that these revised recommendations justify a new directive in order to implement them in a coordinated way⁽¹⁰⁸⁾. A proposal presented by the Commission in 2005 followed “on information on the payer accompanying transfers of funds”⁽¹⁰⁹⁾. This proposal establishes in conformity with FATF Special Recommendation n° 7 that simplified information (the account number of the payer or a unique identifier) has to be applied to transferred funds within the EU whereas complete information (name, address, account number) on the payer or of the payee has to be applied to transfers of funds between the EU and other jurisdictions.

All this activity shows that when there exists a political will to do something at the international or even at the European level, it is possible to act, even if it does not mean that money laundering has disappeared. Money launderers have evolved their institutions, too. This is a second lesson for global tax issues. Their supporters have argued that there is no reason why Member States should passively assist the innovation of financial engineers to create new products especially to evade the tax. The combat of money laundering shows that it is perfectly possible to react to money launderers innovations by new directives and new regulations. The same is true for global taxes, and there is no reason why financial engineers would be smarter than civil servants. If the same energy that has been exerted in the fight against money laundering was spent on combating tax havens, fiscal competition, capital flight and in favour of global taxes, the realization of a CTT would be easy.

There have been some timid attempts in this direction. The potential of anti-money laundering regulatory regime for constructing new international regulatory arrangements was recognized by the G7 finance ministers in 1998, who announced new initiatives to counter international tax evasion (E. Heillener, *op cit*, p 12). “(T)hey stated that domestic agencies involved in the fight against money laundering should now be permitted to share financial information with both domestic and foreign tax authorities” (*op cit* p12). E. Heillener gives examples of the use of very complex artificial intelligence computer programmes by the “Financial Crimes Enforcement Network” an agency of the US Treasury, and its equivalent in Australia, to track money laundering activities but also tax evasion activities. “Indeed, in the Australian case, the majority of suspicious transactions that have been identified in recent years have in fact related to tax evasion” (*op cit* p 13, note 42).

This is another proof that technical progress increases the regulatory power of

¹⁰⁸⁾ See the Proposal for a « Directive of the European Parliament and of the Council on the prevention of the use of the financial system for the purpose of money laundering, including terrorist financing”. Brussels, COM (2004) 448 final, 2004/0137 (COD).

¹⁰⁹⁾ “Proposal for a Regulation of the European Parliament and of the Council “on Information on the Payer Accompanying Transfers of Funds”. Brussels 26/07/2005, COM(2005) 343 final.

states in the age of global finance. This power could be used to deny access to those who would not respect the law. The US is doing it explicitly, in order to combat financing of terrorism, with the "Patriot Act". Although the "Patriot Act" is dangerous and must be criticised because it restrains a lot individual liberties, it has increased the number of legal requirements for non-US banks and correspondent banking, and has put in practice the concept of "closed circuit-systems" (see J.B. Tompkins, 2002). The US national payment system is now scrutinized with a full outfit of legal and technical devices.

The same can be made in areas such as global taxes and capital flight.

Table 2-5 : Some Characteristic of Selected Large-Value Payment Systems

Country	Name, ownership and year.	Settlement institution	Message carrier	Message flow shape	Annual number of transactions (2003, thousands)	Annual value of transactions (2003, in billions of USD)
EUROPEAN COUNTRIES						
BELGIUM	ELLIPS, CB+ B, 1996.	CB	SWIFT	V	15,306	22,517
FRANCE	TBF and PNS, CB and B 1999.	CB	SWIFT for both systems	Y for both systems	3,864 and 7,332	108,746 and 20,294
GERMANY	RTGS ^{PLUS} , CB, 2001.	CB	SWIFT	Y	32,792	145,115
ITALY	BI-REL, CB, 1997	CB	SWIFT	Y	9,423	27,953
NETHERLAND	TOP, CB, 1997.	CB	SWIFT	Y	4,717	24,119
SWEDEN	K-RIX and E-RIX 1990 and 1999	CB	SWIFT	Y	1,302 and 93	13,900 and 2,141
U.K.	CHAPS Sterling, CB + B, 1984	CB + B	SWIFT	Y	27,215	84,267
	CHAPS Euro, CB + B, 1999	CB + B	SWIFT	V	4,292	35,207
SWITZERLAND	SIC, B and Postfinance, 1987	CB	Proprietary network	Y	192,700	33,202
PAN EUROPEAN AND INTERNATIONAL SYSTEMS						
European Union	TARGET, CB, 1999	CB	SWIFT for TARGET Interlinking	V for cross-border TARGET payments	66,608	474,706
EURO 1	B, 1999	CB	SWIFT	Y	38,852	50,501
EPM	CB, 1999	CB	SWIFT	V	41	5
GERMANY/SWITZERLAND	SEC-EuroSic, B and Postfinance 1999	B	Proprietary network	V	2,023	630
CLS	B, 2002.	SPI	SWIFT	V	20,583	221,299
OTHER COUNTRIES						
USA	Fedwire, CB, 1918.	CB	Proprietary network	V	123,300	436,706
	CHIPS, B, 1970	B	Proprietary network	V	64,500	326,561
CANADA	LVTS, 1999, CB	PA	SWIFT	Y	4,139	22,517
JAPAN	BOJ-NET, CB, 1998	CB	Commercial telephone companies	V	4925	161,914
SINGAPORE	MEPS+, CMA, 2005	CMA	SWIFT	Y	2132	5,638
HONG KONG	HKD CHATS, CMA, 1996	CMA + PA	Proprietary network	Y	3,508	11,207
	USD CHATS, B, 2000	CMA + PA	Proprietary network	Y	999	1,236
	Euro CHATS, B, 2003	CMA + PA	Proprietary network	Y	5	135

Notes: CB = Central Bank. B = Banks. CMA = Central Monetary Authority. PA = Payment Association.

Source: CPSS, BIS 2005b.

3 FISCAL REVENUES, THEIR MANAGEMENT AND USE.

Like any tax, the CTT generates fiscal revenues that are potentially considerable. It is therefore legitimate to try to estimate them and to think about their possible uses. James Tobin's own view was that revenues were a "by-product" that had no major importance and could not justify per se the creation of the tax.

He considers initially giving the revenues to the IMF or to the World Bank to increase their budget. In a 1996 collective book, he proposes that the revenues should be divided between these two international institutions and the governments that would have levied the tax, according to a progressive formula allowing the poorest countries to keep the full amount of the receipts to guarantee their participation to the scheme.

For the CTT supporters, the revenues are on the contrary of paramount importance due to the magnitude of world social inequalities and ecological needs waiting for money to be addressed. CTT revenues are also crucial in the sense that they offer an opportunity to recreate an international solidarity between people that has been weakened by the caricature experience of so-called "socialist countries" which have perverted its signification, and since free-market ayatollahs have put in practice their motto « trade not aid » as if aid was the first culprit of poverty and free trade the miraculous way out hunger.

Aid must be rehabilitated. This is why it is important to estimate the CTT revenues as exactly as possible, to analyse how they could be usefully spent on social, ecological and economical grounds. But before, it is necessary to answer some objections that are frequently made about the CTT fiscal revenues.

Is not there a contradiction between the objective of reducing speculation as much as possible and at the same time turning the CTT into a financing fund for development? In effect, if the tax is efficient against speculation, there should not be speculation anymore, and so no more revenues.

On a moral ground, is it right to finance development and global common goods with an activity, i.e. speculation, that by the way we condemn?

On a political ground, is not there a risk to turn the neo-liberal globalisation tolerable by reducing the more out crying social and ecological inequalities, while at the same time allowing speculators to keep on speculating?

After all, G. Soros himself has declared himself in favour of the "Tobin tax" and argued that "too much speculation kills speculation".

How can we answer to these objections?

1) In our view, the first objective is to reduce speculation as much as possible. If the CTT was able to eradicate speculation totally, this primary objective would be achieved and the CTT supporters could congratulate themselves. But nobody imagine seriously that currency speculation could totally disappear with a unique measure such as a small tax. In fact speculation would be strongly reduced but not totally.

As H. Desir (2000) member of the European Parliament explains, the North American CTT supporters compare the CTT to the "sin taxes" in force in the USA, i.e. in non religious terms, taxes on alcohols and tobaccos.

These last years, these taxes have strongly increased in countries such as France and the UK, with the result of a significant decrease of consumption. Nonetheless, no one imagine that alcohol and tobacco addictions could disappear thanks to mere taxes.

Public health problems can only be resolved with appropriate public health policies. There goes the same with the CTT. It can contribute to dampen speculation, but the only true solution must be found in the reconstruction of a new international monetary and fin-

ancial system in which markets would be placed under the surveillance of public authorities and not the contrary as it is today.

Therefore, the tax can indeed achieve two objectives. Dampening speculation and producing new financial resources.

Let's add that the purpose is not to turn the CTT as the only financing for development fund that would substitute the already existing sources. Fiscal revenues coming from the CTT must increase the existing resources and not replace them.

CTT revenues should not also create a situation where governments should feel free of their responsibilities in terms of Official Development Aid (ODA). ODA must be maintained as the essential source of stable and permanent financing for development. 30 years ago, United Nations adopted a resolution asking the 22 richest countries members of the OECD to dedicate 0.7% of their GDP to ODA. Not only this objective has never been reached, but most of rich countries governments have never ceased to reduce their contribution that has fallen to 0.2% in 2000 (among which 0.10% for the USA and 0.32% for France at that time)⁽¹¹⁰⁾. Meanwhile, they kept on asking developing countries to open their economies and welcome foreign direct investments and foreign portfolio investments that are supposed to boost their development but are generally responsible of economic crises.

If rich countries fulfil their promise to dedicate 0.7% of their GDP to ODA, these would increase from the US\$ 56 billion registered in 2000 to 156 US\$ billion. This increase of 100 billion would make it possible to finance global common goods, emergency aid, and go beyond the Millennium Development Goals. Added to the CTT revenues, it would be possible to be far more ambitious than these social basic needs for all developing countries, while private capital is only interested in countries that have a sufficient number of potential consumers.

2) This leads us to the second objection. According to the UNCTAD in its 1999 annual report, the 48 less advanced countries where nearly 600 millions of people live have received only 0.5% of Foreign Direct Investments (FDI) directed to developing countries. Four developing countries have received since 1998 more than 50% of these FDI. This private capital have scarcely contributed to development mostly buying already existing firms, have benefited from profit opportunities, and have strongly increased social and economical instability. Portfolio investments that are short-term financial investments of purely speculative nature add to this instability. J. Stiglitz, former economist in chief at the World Bank, and Nobel Prize of economics, once said that relying on portfolio investment for financing development is the equivalent as being sited in a plane ready in permanence to take off for another country. As a consequence, demanding speculation to pay the amount necessary to repair the social disasters that it provokes is as moral as asking petroleum companies to pay for the pollution of oceans each time a tanker sinks.

The demand « polluters must pay » must be completed by the demand that « speculators must pay ».

3) This is why we think that the danger that the CTT could be enlisted to comfort neo-liberal globalization is not a serious one. Banks and speculators don't want to pay for the crisis they are guilty for no more than petroleum companies do spontaneously agree to pay to compensate for the ecological and human catastrophes they are responsible for. Banks and financial investors are fiercely opposed to the CTT for two reasons. The first is that they have much to lose in terms of profit. The second is for political reasons. Banks,

¹¹⁰⁾ Only 4 countries from northern Europe have achieved and regularly over passed this objective in 2000: Denmark (1.06%), Netherlands (0.84%), Sweden and Norway (0.80%). See : OCDE : www.oecd.org

financial investors and their corporate customers have gotten addicted to the near full liberty that governments have given them these last two decades. Their objective is to guarantee that there won't be any come back to the situation that prevailed in the sixties, where capital controls limited their decisions. That is what the ex general director of the GATT, Renato Ruggiero expressed at the launch of the World Trade Organisation when he declared: "We are in the process of writing the world economy constitution" ⁽¹¹¹⁾.

In this context, the adoption of the CTT would be necessarily interpreted as a major symbolic victory by those who oppose the neo-liberal globalisation able to change the present relation of social forces and create a new political momentum that banks and investors don't want at any price.

This is why we think that the CTT will achieve its double objective of reducing speculation and financing development.

3.1 ESTIMATION OF THE REVENUES

Estimating the CTT revenues is necessarily a difficult task due to the unavoidable arbitrary hypotheses that must compensate the absence of past experience. Three recent official reports ⁽¹¹²⁾ and at least nine reports of more or less critical supporters of the CTT ⁽¹¹³⁾ have realised this exercise. These previous estimations will not be presented here in details but we will discuss their main hypotheses and methodology in order to justify our own choices (See below table 3-1).

There are several features that differentiate these previous studies. One can start by discriminating between simple and sophisticated methodology. The simple one consists in taking the annual volume of the world forex market and to multiply it by the tax rate (for instance, D. Cassimon). This gives very high and optimistic estimations.

¹¹¹⁾ Quoted by Stephen. GILL, in a very instructive article judiciously intiteld: « The new liberal constitution», « L'Economie Politique », n° 2-2^{ème} trimestre 1999, France.

¹¹²⁾ Ministry of Finance of Finland (2001), Ministère des Finances de Belgique (2001). Ministère de l'Economie des Finances et de l'Industrie of France (2000).

¹¹³⁾ S. Kapoor (2004), Clunies-Ross A. (2003), M. Nissanke (2003), B. Jetin 2002, P.B. Spahn (2002), R. Schmidt (2001), D. Cassimon (2001), H. Patomäki (2001), D. Felix and R. Sau (1996).

Table 3-1 : SURVEY OF PREVIOUS REVENUES ESTIMATES

AUTHOR	Year of daily turnover	Geographical coverage	Daily turnover (in US dollar billion)	Exempted official trading	Fiscal evasion	Pre-tax transaction costs.	Elasticity	Reduction of volume	Tax rates	Revenues (in US dollar billion)
S. Kapoor (2004)	2004	World Level				0.01%-0.03%		None	0.005%	10-15
M. Nissanke (2004)	2001	World Level	1,210.0	8%	2%	0.01%	none	5%	0.01%	30-35
						0.02%	none	15%	0.02%	17-19
P.B Spahn (2002)	2001	EU level	440.0	none	none	0.01% for banks and 0.02% for customers	none	-15%	0.01% with 0.01% for banks	16.6 20.8
A. Clunies-Ross	2001	World level	1,210						0.02%	53
D. Cassimon (2001)	1998	World level	2,100 (with derivatives)	10%	None	None	None	None	0.01% and 0.02%	47.25 and 94,5
D. Felix & R. Sau (1996)	1995	World level	1,120	10%	25%	0.1% 0.5% 1%	0.3 to 1.75.	-13% for a 0.05% tax rate, -49% for a 0.1% tax rate.	0.05% 0.1% 0.25%	90 to 97 148 180
P. Kenen (1996)	1995	World level	1,120						0.05% and 0.025% for banks.	90 to 97
J. Tobin (1996)	1995	World level	1,120					-70%	0.1%	50 to 94
J. Frankel (1996)	1995	World level	1,120		-20%			-45%	0.1%	176
Belgium Ministry of Finance (2001)	1998	World level and EU level	1500 at the world level, 772,5 at the EU level.	Increasing rate in accordance with the tax rate: from 15% to 25% at the world level. 20.2% to 35% at the EU level.		0.02% for banks, 0.05% for financial institutions, 0.1% for others	-0.5, to -1.5 (world). -0.55, to -1.75 (EU)	From 5% to 100% according to tax rate and elasticity	From 0.01% to 1%	From 19 to 128 (world level) and from 9 to 39 (EU level).
Finnish Ministry of Finance (2001)	1998	World level	1500		20%	0.02% for banks, 0.05% for financial institutions, 0.1% for others	-0.5 non financial customers, -1 financial customers, -1.5 banks	From 5% to 100% according to tax rate and elasticity	0.01%, 0.25% and 1%	71, 102, 177
French Ministry of Finance (2000)	1998	World level	1500	None	20%	0.02% and 0.05%	-0.5, -1, -1.5	-67 % in central estimate	0.01% to 0.20%	50
		EU level	682	None	30%	0.02% and 0.05%	-0.5, -1, -1.5	-67 % in central estimate	0.01% to 0.20%	22
		France	54	None	50%	0.02% and 0.05%	-0.5, -1, -1.5	-67 % in central estimate	0.01% to 0.20%	2

Source: Various Studies compiled by the author

The sophisticated methodology assumes that the introduction of the tax will lead to a reduction of the volume of transactions in relation to the prevailing situation according to the nature of the trader (bank, financial customer or non-financial customer, see P.B. Spahn 2002, Ministry of Finance of Belgium and Finland, 2001, for instance) and sometimes according to the nature of the transaction (spot, outright forward and swaps, see M. Nissanke for instance). In our view, it is a perfectly normal and desired consequence since one objective of the tax is to reduce the excessive volume of transactions.

Starting from these premises, we diverge with the opponents of the tax, which tend to exaggerate the volume reduction, and also with those supporters that advocate a very tiny ordinary tax in order to minimise as far as possible the reduction of volume, because they wrongly identify volume of transactions and liquidity (S. Kapoor, 2004; M. Nissanke, 2003; P.B. Spahn, 2002).

The difficulty is double. First it is necessary to make hypotheses concerning fiscal evasion and fraud, with the idea that they will increase with the tax level. Second, it is necessary to estimate the sensibility of the volume of transactions to the tax rate ⁽¹¹⁴⁾, with the same idea that the higher the tax rate, the stronger the reduction of volume. In other terms, the volume elasticity increases with the tax rate.

1. Fiscal fraud is a deliberate act against the law. Fiscal evasion tries to stay on the borderline by creating new financial products that by-pass the law, or by off-shoring trading to countries that do not apply the tax, in particular tax havens. We have seen that our conception of the tax collecting procedure minimises strongly the possibilities of fraud and off-shoring. But with a concern of prudence, we have retained pessimistic hypotheses: The higher the tax rate and the smaller the geographical coverage, the higher fiscal fraud and evasion is.

The French official report (hereafter French report) conjectures that at the world level, fiscal fraud and evasion leads to a reduction of 20% of volume. 20% can be considered a high level and we can suppose like J. Frankel (1996) that it also includes the exemption of official transactions realised by governments, central banks and other public institutions ⁽¹¹⁵⁾. At the EU level, the French report assumes that the reduction of volume is 30%. At the national level it would be 50%. The Belgium official report (hereafter Belgium report) is a bit more refined. It supposes that the fiscal leakage grows with the level of tax. At the world level, it supposes that some countries (mostly tax havens) refuse to adopt the tax and allow some traders to by-pass the tax. Even if we think that tax havens cannot stay out of reach and can be efficiently retaliated, we will accept in one of our estimates the Belgium report's hypothesis that a minimum of 15% evade the tax, plus $(t \times 100 \times 10\%)$, t being the tax rate ⁽¹¹⁶⁾.

2. The estimate of the volume elasticity poses more difficulty. Those who trade will react to the increase of their transaction cost. This raises questions about the relevant initial transaction cost and their degree of sensibility to the increase of this transaction cost. As far as the initial transaction cost is concerned there are two possible options.

On one hand, if one thinks that the tax will be paid by banks only and that the tax must not disturb markets (for instance, S. Kapoor 2004, M. Nissanke, 2003, P.B. Spahn 2002) then the interbank pre-tax transaction cost is relevant. It is presently 0.011% for the euro-US dollar market, 0.023 for the US dollar/yen market, and 0.021% for the US

¹¹⁴⁾ Economists call this sensibility an « elasticity ». In the present case a “volume” elasticity.

¹¹⁵⁾ M. Nissanke (2003, p 23) “assumes that the share of official transactions carried out by monetary authorities in global turnover is about 8%”. Because she retains a very low tax rate of 0.01% to 0.02% the incentive for tax evasion through migration and asset substitution is also low. On the whole, the possible leakages amount to 10% of total turnover and are deducted from the tax base as non-taxed instruments. In this regard our assumption that for higher tax rates a leakage of 20% may include exempted official transactions is not abusive.

¹¹⁶⁾ t is expressed in decimals. For instance, for a 1% tax rate, $t = 0.01$, and $15\% + (0.01 \times 100 \times 10\%) = 25\%$ of the initial volume would escape from the tax (see the Belgium report on page 50).

dollar/GB pound (see P.B. Spahn, 2002). In this conception the tax rate is necessarily very close to zero, in the 0.01% to 0.02% range, because a 0.01% tax rate already reaps off half of banks' profit margin.

On the other hand, if one thinks, (like we do but also D. Felix et R. Sau, op cit 1996), that banks and their professional customers (financial institutions of all kinds and non-financial firms) must pay the tax, having in mind that in the end the transaction cost has to increase significantly to put sands in the wheels, then the non-financial firm pre-tax transaction cost is a maximum and the relevant reference to judge the impact of the tax.

The main argument against our view is that banks will transfer the burden of the tax to their customers, and in particular to non-financial firms and it will hurt cross-border trade and investment more than speculators, contradicting the main objective of the tax (see M. Nissanke 2003 and P. Davidson 1997). Our answer is twofold.

Banks already pass to their customers the charges that they don't want to pay. And it is true that they will also try to pass the CTT cost to their customers. But because of increased competition between banks and the changing relations of forces between banks and their customers due to electronic trading, banks will have to pay their share of the CTT. Thanks to the increasing transparency on electronic platforms, customers are able to compare the quotes offered by banks which include the transaction cost and would include the tax. Customers will be able to choose the most advantageous quotes, and rivalry between banks will force them to accept to pay part of the CTT in order to offer more competitive quotes.

This effect will happen at the trading site. But there is another possibility at the settlement site.

As we have seen in part 2, SWIFT messages offer the possibility of fine-tuning the messaging and settlement charges. An ordering customer can decide to pay these charges, to share them with the beneficiary, or ask the beneficiary to pay them. In case of an interbank transaction, SWIFT offers the same options. The EU has decided that by default the ordering customer should pay these charges (option "OUR" in a SWIFT message). It is thus perfectly possible to use these fine-tuning possibilities to decide that the CTT should be paid entirely by the ordering counterparty (be it a customer or a bank) or that half should be paid by the ordering counterparty and half by the beneficiary counterparty, or whatever other proportion. There is no need for the EU commission to scrutinise every transaction. But if a legal basis exists, the counterparty that feels it pays an over duly share of the tax could engage in legal action.

To summarise we are faced with two options. At the trading site, competitive forces can decide which share of the CTT is paid by banks and their customers. At the settlement site, there is another possibility for the two counterparties and all the intermediaries to reach an agreement. If there is no agreement, the EU rule applies by default, say equal share for each counterparty, for instance.

As a consequence, we will study a unified tax rate applied independently to the wholesale (interbank) and retail markets (other financial and non-financial customers). This tax rate will be compared with the non-financial pre-tax transaction cost on the retail market. This transaction cost is presently 0.1 % in developed countries according to the Belgium and Finish and French reports. According to D. Felix and R. Sau, (1996) the final transaction cost charged to customers includes the whole chain of transactions of the "potato principle", searching costs and risk premiums. For these reasons the pre-tax transaction cost can reach 0.5% to 1%. But again, with a concern of prudence, we will retain a tax rate of 0.1%, i.e. five to tenfold the rate privileged by M. Nissanke and P.B. Spahn as the most plausible and desirable rate. For exploratory reasons, we also study higher rates up to 1%.

Regarding the volume elasticity, the only solution is to make hypotheses, as there is no empirical evidence for the foreign exchange markets. Banks and their customers (other financial customers and non-financial customers) can be more or less sensible to the same transaction cost increase. We may suppose that banks have a higher elasticity than the other financial institutions, which in turn have a higher elasticity than non-financial customers due to their respective pre-tax transaction costs. The higher the sensibility of traders is, the higher the reduction of volume.

For these reasons, we have decided to study two estimations based on the official reports of the ministry of Finance of France, Belgium and Finland. This choice is justified by the following rationale. These reports are not in favour of the CTT. Much to the contrary, they are critical and their conclusion is that the CTT should not be adopted. By using the methodology employed in these reports, we cannot be suspected of producing over optimistic revenue estimates.

The first estimation is the simplest and follows the methodology of the French Ministry of Finance. It is based on a unique tax rate and the same volume elasticity whatever the trader (banks or their customers) and the nature of transaction (spot, outright forward, swaps and other derivatives). This methodology is the more adapted to the idea that banks and their customers will find a way to share the tax between them which allows to consider the market as a whole and study the impact on the market of three different elasticities -0.5, -1 and -1.5⁽¹¹⁷⁾. In its simplest acceptation, an elasticity of -1 means that the volume of the forex market decreases by 1% when the transaction cost increases by 1%. In other terms the reduction of volume is proportionate to the increase of the transaction cost. It is a neutral assumption. When the elasticity is -1.5, one supposes that traders are very sensible and overreact to the increase of the transaction cost. They reduce by -1.5% the volume of their trade when the transaction cost increase by 1%. To the contrary, an elasticity of 0.5% means that traders are not very sensible to the increase of the transaction cost. When this one increases by 1%, they reduce their transactions by only 0.5%.

The second estimation is based on the idea that banks and customers will not share the tax burden between them but that each will pay it in full. In this case it is necessary to take into account differences in elasticity of banks and their customers in accordance with their respective pre-tax transaction costs. On this point we follow the methodology of the two official reports made by the Ministry of Finance of Finland and Belgium which are more or less the same. At the world level, it is supposed an elasticity of -1.5 for banks, -1 for other financial customers and -0.5 for non-financial customers respectively.

To estimate revenues at the EU level, the Belgium report makes the additional assumption that elasticities are higher because traders are faced with more possibilities to trade in other currencies (especially the US dollar) than the taxed currencies, that are the euro, and the other EU currencies such as the British pound, the Swedish krona and the Danish krone and the new Member States' currencies from eastern Europe. At the EU level, the elasticities are -0.55, -1.1, and 1.75.

In this second alternative, we will estimate four different geographical coverages. The first is the CTT revenue at the world level. The second estimates the revenue in the hypothesis that the CTT is adopted by the euro area only. The third estimates the revenue of the 15 EU member-states (the euro area plus the United Kingdom, Denmark and Sweden) before the last wave of integration of new member-states. The new member-states must join the euro area in the near future and due to the lack of comprehensive data

¹¹⁷⁾ In the 1996 collective book dedicated to the analysis of Tobin tax, J. Frankel, a reckoned specialist of exchange rates and not a declared supporter of the CTT, recalls that any hypothesis concerning the volume elasticity is arbitrary. But he deems an elasticity of -0.32 linked to pre-tax transaction of 0.1% as reasonable. So, the hypotheses of the French, Belgium and Finnish official reports may considered as more restrictive and not over friendly to the CTT.

we have not included them in the estimations. Another difficulty is that when they will join the euro area, the volume of their forex transactions will decrease due to the elimination of their transactions with the member-states of the euro area. But it is difficult to anticipate how much the reduction of the volume of their transactions will be. But if taken into account, they would increase the revenue slightly because their joint weight on the foreign exchange market is not very important. Much more significant is the inclusion of the United Kingdom in the estimation because London, with one third of global turnover is the most important market of the world. Finally, we will estimate revenues in the case of Switzerland and Norway joining the CTT area, even though they are not members of the EU. Again, the impact is significant due to the importance of the Swiss forex market.

3.1.1 Estimates based on unique tax rates and the same elasticity for the whole foreign exchange market ⁽¹¹⁸⁾

In order to minimise the possibilities to by-pass the CTT, the tax rate is the same for any kind of transaction (spot, outright forward, swaps and derivatives) and for any economic agent (banks and their customers).

The initial tax base is the global turnover indicated in the triennial foreign exchange survey published by the BIS. The latest survey available at the time of this report was published in March 2005 for the activity of April 2004. The average daily world turnover in traditional foreign exchange markets at current exchange rates rose to US \$ 1.9 trillion in April 2004, a 57% increase compared to 2001 and 26% more than the level reached in 1998. In other terms, the peak level reached in 2004 more than reversed the fall observed between 1998 and 2001. The revenues are very sensible to these evolutions of the global turnover, which until 1998 had never ceased to increase at a quick pace.

For the euro area, the turnover is lower than the combined market turnover of the previous currencies of the countries that decided to create the euro. This is partly due to the elimination of internal transactions between those countries. In April 2004, it reached US \$ 659 billion per day to be compared with 442 billion in 2001 and 750 in 1998. Contrary to the world turnover, the euro turnover was, in 2004, 49% higher than in 2001, but -12% lower in 1998.

We suppose that the tax rate varies between 0.01 and 0.20% and that pre-tax transaction cost vary between 0.02% and 0.1% ⁽¹¹⁹⁾. Of course, the combination of a tax rate of 0.20% combined with pre-tax transaction cost of 0.02% and a -1.5 elasticity makes no sense since the market turnover would have disappeared. The French report disregards such extreme combinations and also its contrary such as a tax rate of 0.01%, pre-tax transaction cost of 0.05%, and a low elasticity of -0.5 leading to a small reduction of -15%. This is why we will only consider plausible combinations with a maximum for the reduction of market volume no superior to two-third of the market which already leaves ample room for theoretical estimations and a minimum of volume reduction of 15% when the tax rate is 0.01% ⁽¹²⁰⁾.

The amount of the annual revenue is given by the application of the tax rate to the tax base. The tax base is calculated by subtracting to the market turnover the reduction of

¹¹⁸⁾ We follow the methodology used by the Ministry of Finance of France (2000) for the period 1989-2004 at the world level and 1998-2000, at the euro area level.

¹¹⁹⁾ The French report considers pre-tax transaction costs between 0.01% and 0.05%. We have included the 0.1% level for reasons explained before.

¹²⁰⁾ The matrix of market turnover reduction is obtained by the combination of the tax rate, pre-tax transaction costs and volume elasticity according to the formulae used in each report. These matrixes are presented in annex in table 3-11 in the annex for the French report and in table 3-12 for the Belgium and Finnish reports.

volume due to fiscal evasion and to the volume elasticity according to the following formulae used in the French report:

$$R = 250 \times \tau \times V \times (1 - ev) \times \left(1 + \frac{2\tau}{k}\right)^\varepsilon$$

Where **R** is the revenue, 250 the number of business days per year, τ the tax rate, **V** is the market turnover before tax, **ev** is fiscal evasion, **k** is the pre-tax transaction cost, and ε is the volume elasticity.

What is interesting in this formulae is that the reduction of the market turnover due to the sensibility of traders to the increase of transaction cost is strengthened by the fact that the elasticity, ε , is not a multiplier but an exponential, which is more powerful. This means that the reduction of volume is rather overestimated than underestimated, which tends to minimise the revenues rather than increase them.

The tax, " τ " is multiplied by 2 because it leads to a simultaneous reduction of the bid price and an increase of the ask price⁽¹²¹⁾. The French report supposes implicitly that the trader makes a round trip, for instance sells the euro and then buys it a few minutes later. This is precisely what J. Tobin had in mind when he conceived his tax. The arbitrageur, "jobbers" and other speculators are those who make frequently round trips on currencies. They would pay the tax twice. Hence, the reduction of volume due to the sensibility of traders to the increase of transaction cost is stronger than if we focus on traders that don't make round trips but single transaction: buy or sell but not buy and sell in a short interval. In this case, traders pay only once the tax. The reduction of volume due to the sensibility is much weaker for the precise reason that transaction costs increase less. This is the situation studied in the Finnish and Belgium reports (see below the second set of estimations). The French report is thus more severe in this senses and leads to weaker revenues.

Having this in mind we can comment the synthetic results presented in tables 3-1 and 3-2⁽¹²²⁾. We have distinguished three scenarios, the "privileged", the "intermediate" scenario, and the "minimal" ones. The privileged scenario is based on CTT rate of 0.1%, a pre-tax transaction cost of 0.1% and a neutral elasticity of -1. It is associated with a reduction of market volume of 67% (see table 3-11 in annex of chapter 3). It is our favourite scenario because it is close to the conception of the CTT that we have defended in the first two parts of this report. The intermediate scenario is base on a CTT rate of 0.02%, a pre-tax transaction cost of 0.02% and a neutral elasticity of -1. It is also associated with a reduction of volume of 67%. These are stricter hypotheses than the ones found in the central scenario of the French report (2000, annex 3, p 62) for which a tax rate of 0.05%, a pre-tax transaction cost of 0.05% and an elasticity of -1 is considered a "plausible" scenario⁽¹²³⁾.

What we call the "minimal" scenario is the market-friendly one: a very small CTT rate of 0.01%-0.02%, a pre-tax transaction cost of 0.02% and weak volume elasticity of -0.5. The assumption of a weak elasticity is coherent with the choice of a very small tax rate. The forex market should not be disturbed by such a tiny tax rate, and the market turnover should remain more or less stable. In effect, the reduction of market volume is

¹²¹⁾ The buying price (bid price) is the price at which the market is ready to buy the currency. The selling price (ask price) is the price at which the market is ready to sell the currency. By definition, the selling price is always superior to the buying price. Transaction costs are defined as the difference (the spread) between the ask and the bid prices.

¹²²⁾ The detailed results are presented in table 3-9 in the statistical annex at the end of part 3.

¹²³⁾ The French report central scenario leads also to a reduction of 67% of market turnover.

29% when the tax rate is 0.01% and 42% when the tax rate is 0.02%. This “minimal” scenario reflects the choices made by authors like P.B. Spahn, M. Nissanke and S. Kapoor but with a much stronger reduction of volume.

The two scenarios are not necessarily contradictory and can be reconciled if the 0.01%-0.02% is conceived as an “introductory” rate due to increase to the 0.1% rate across a phase-in period, like envisaged by D. Felix and R. Sau (1996) for whom the tax rate could reach 0.25% at the end of the process.

At the world level, the revenues in 2004 in the privileged scenario can be estimated at US \$ 125 billion in 2004, against US \$ 80 billion in 2001, and US \$ 100 in 1998 (See table 3-2 and figure 3-1). These amounts of revenues are sufficient to go beyond the financing of the Millennium Development Goals as we will detail later.

Table 3-2 : REVENUE ESTIMATES AT THE WORLD LEVEL

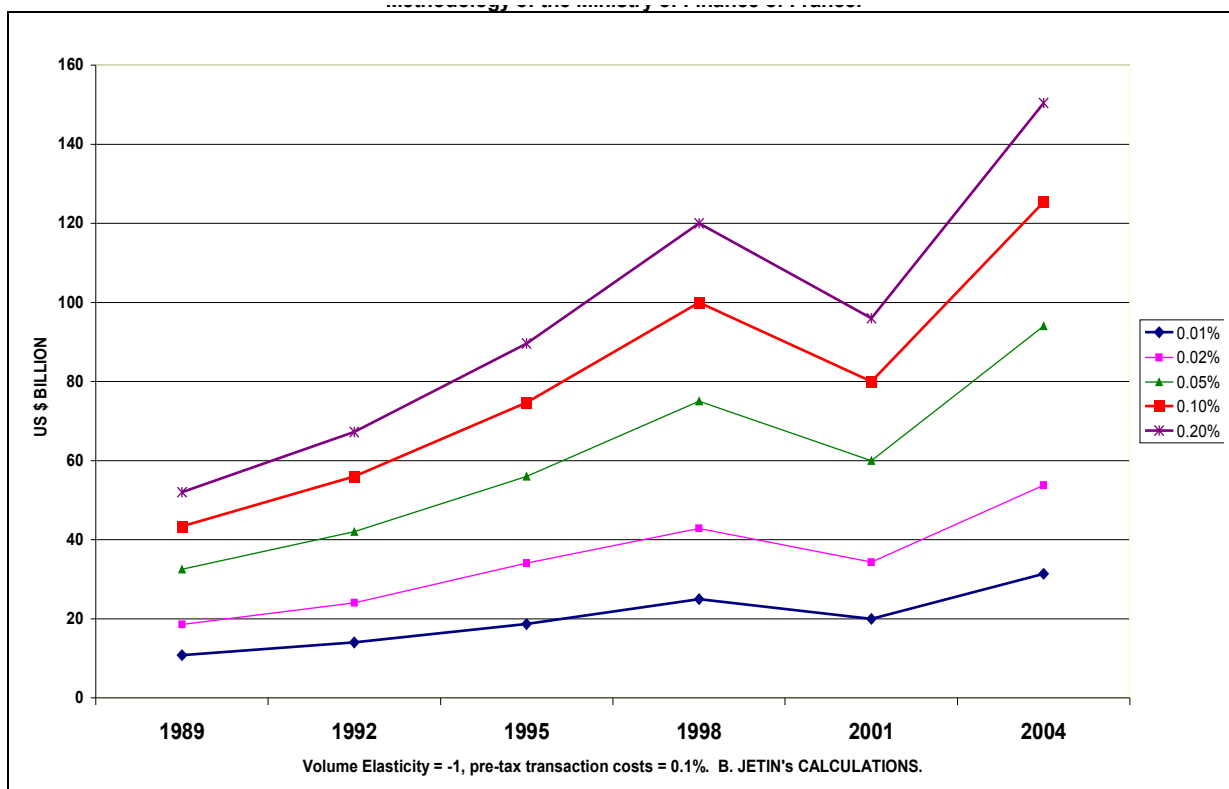
PRIVILEGED SCENARIO						
ELASTICITY OF -1 AND TRANSACTION COST BEFORE CTT = 0.1%						
TAX LEVEL	1989	1992	1995	1998	2001	2004
0.01%	11	14	19	25	20	31
0.02%	19	24	34	43	34	54
0.05%	33	42	56	75	60	94
0.10%	43	56	75	100	80	125
0.20%	52	67	90	120	96	150
INTERMEDIATE SCENARIO						
ELASTICITY OF -1 AND TRANSACTION COST BEFORE CTT = 0.02%						
TAX LEVEL	1989	1992	1995	1998	2001	2004
0.01%	7	8	11	15	12	19
0.02%	9	11	16	20	16	25
0.05%	11	14	19	25	20	31
0.10%	12	15	20	27	22	34
"MINIMAL" SCENARIO						
ELASTICITY OF -0.5 AND TRANSACTION COST BEFORE CTT = 0.02%						
TAX LEVEL	1989	1992	1995	1998	2001	2004
0.01%	9	12	16	21	17	27
0.02%	15	19	27	35	28	43
0.05%	27	34	46	61	49	77
0.10%	39	51	68	90	72	113
NOTE: METHODOLOGY OF THE FRENCH MINISTRY OF FINANCE (2000). AUTHOR'S CALCULATIONS						

It shows that a universal treaty creating the CTT, together with other global taxes ⁽¹²⁴⁾ have a real potential to financing development and global common goods.

It is not exactly the case with the “minimal” scenario. Revenues would amount to US \$ 27 to US \$ 43 billion in 2004, US \$ 17 billion to US \$ 28 billion in 2001 and US \$ 21 billion to US \$ 35 billion in 1998 ⁽¹²⁵⁾.

¹²⁴⁾ The CTT is not the only global tax that could be mobilised to finance development and global commons. Detailed analysis on global taxes can be found in B. Jetin (2003) and the “Landau and alii” report (2004).

¹²⁵⁾ On the whole period, average revenues are respectively US\$ 17 and US\$ 28 billion. On the last ten years (1995-2004), they remain stable at respectively 20 and 33 billion.

Fig. 3-1 : CTT Revenues Estimates According to the Tax Rate at the World Level

Note: Methodology of the Ministry of France

These estimates are rather conservative but closed to M. Nissanke's (2003) estimates of 17-19 billion for 0.01% CTT and 30-35 billion for a 0.02% CTT for the year 2001, despite a notable difference in methodology⁽¹²⁶⁾. US \$ 27 to US \$ 43 billion represents 54% to 86% of the US \$ 50 billion deemed necessary by the World Bank to finance the Millennium Development Goals (hereafter MDG). This is quite significant even though the World Bank's estimate is very conservative (see below) but has turned the official financing target due to the weigh of this institution. But, it is important to remember that this minimal scenario enjoys a favourable assumption of a volume elasticity of -0.5. In the intermediate scenario, revenues fall to the range of US \$ 19 to US \$ 25 billion⁽¹²⁷⁾ in 2004, i.e. between 38% and 50% of the MDG financial needs.

A cautious conclusion of this first series of estimates at the world level is that in terms of financing efficiency, the minimal scenario is insufficient to cover basic needs, unless one gets satisfied with raising half the financing needed. If we want to be sure that sufficient money is raised, a tax rate of 0.1% should be the objective.

At the Euro area level (see table 3.2), in our privileged scenario⁽¹²⁸⁾, the revenue could amount to US \$ 38.4 billion in 2004, up from 25.8 in 2001 but below the 1998 level of

¹²⁶⁾ M. Nissanke (2003) applies different tax rates according to the nature of the transaction and the nature of the market - wholesale and retail. The French official report uses a unique tax rate. She assumes that the reduction of volume is 5% when the tax rate is 0.01%, and 15% when the tax rate is 0.02%, while we assume a reduction of volume of 29% and 42% respectively.

¹²⁷⁾ Remember that the intermediate mixes the same elasticity as in the privileged scenario, i.e. -1, and pre-tax transaction cost of 0.02% considered by P.B. Spahn and M. Nissanke.

¹²⁸⁾ The privileged scenario is: tax rate = 0.1%, pre-tax transaction costs = 0.1% and elasticity = -1.

43.8 before the launch of the euro. This is a very important amount of money at the disposal of the EU to finance global commons goods and development. The euro area on its own has the possibility to alleviate substantially the sufferings of developing countries by financing 77% of the MDG.

In the minimal scenario ⁽¹²⁹⁾, revenues are between the US \$ 8.2 and US \$ 13.3 billion, that is one third of the privileged scenario ⁽¹³⁰⁾ and only 16.4% and 26.6% of the financing of the MDG. And this holds only under the favourable condition that the volume elasticity is -0.5, because if traders are more sensible and the elasticity is neutral, i.e. -1, the revenues are only respectively, US \$ 5.8 and 7.7 billion (intermediate scenario). This means a contribution to the MDG financing of respectively of only 12% and 15%. This does not mean that we underestimate the importance of these reduced revenues.

What do represent these US\$ 7.7 billions? According to UNESCO “the world should spend US\$ 7 billions more during the 10 years to come to give basic education to all children. This is less than what is spent every year in the USA in cosmetics or in ice cream in Europe”. And the same document adds that “according to a World Bank study, in 1990, a one year extension of the average duration of education in a country could lead to a 3% increase of its GDP” ⁽¹³¹⁾. Other figures deserve to be mentioned. A preparatory document to the United Nations conference on « financing for development » shows that it would be necessary to dispose of a budget of US\$ 8 to 9 billion per year to finance properly humanitarian emergency aid to be compared with a present UN budget of US\$ 5 billions. Extra 3 to 4 US\$ billions need to be found ⁽¹³²⁾. These examples are sufficient to justify the creation of the CTT and it will not be possible to oppose to them the traditional catastrophist argument. One can hardly imagine how a tiny tax rate of 0.01% could provoke the disappearance of the present foreign exchange market.

In summary, even the “minimum” scenario would be a gigantic step forward. But our point is that it is indeed possible to do much better.

¹²⁹⁾ The minimal scenario is: tax rate = 0.01% - 0.02%, pre-tax transaction costs = 01% and elasticity = - 0.5.

¹³⁰⁾ For 2001, our estimates of the « minimal » scenario is US \$ 4 billion for tax rate of 0.01% and US \$ 9 billion for a tax rate of 0.02%. This is much lower than P.B. Sphan's estimates for the same year: US \$ 16.573 billion for a tax rate of 0.01% and US \$ 20.8 billion when the tax rate is 0.02% with 0.01% for banks. The difference of methodology and in particular the more severe hypotheses of the French report concerning the tax base and the elasticity explains this important difference.

¹³¹⁾ UNESCO, Facts and figures, 2000, Institut de la statistique. www.unesco.org

¹³²⁾ « High Level Panel on Financing for Development-Recommendations and Technical Report », United Nations, A/55/1000, 26 June 2001. www.un.org/esa/ffd/ODA-Sub-index-.htm

Table 3-3 : Revenue Estimates at the Euro Area Level

PRIVILEGED SCENARIO			
ELASTICITY OF -1 AND TRANSACTION			
COST BEFORE TAX = 0.1%			
TAX LEVEL	1998	2001	2004
0.01%	11	6	10
0.02%	19	11	16
0.05%	33	19	29
0.10%	44	26	38
0.20%	53	31	46
INTERMEDIATE SCENARIO			
ELASTICITY OF -1 AND TRANSACTION			
COST BEFORE TAX = 0.1%			
TAX LEVEL	1998	2001	2004
0.01%	7	4	6
0.02%	9	5	8
0.05%	11	6	10
0.10%	12	7	10
"MINIMAL" SCENARIO			
ELASTICITY OF -0.5 AND TRANSACTION			
COST BEFORE TAX = 0.02%			
TAX LEVEL	1998	2001	2004
0.01%	9	5	8
0.02%	15	9	13
0.05%	27	16	24
0.10%	40	23	35
NOTE: METHODOLOGY OF THE FRENCH MINISTRY OF FINANCE (2000). AUTHOR'S CALCULATIONS			

3.1.2 Estimates based on a specific tax rate for banks, financial customers and non-financial customers ⁽¹³³⁾

The major difference in this new estimation is that now we take into account the differences in pre-tax transaction costs on the wholesale and retail markets with the implicit idea that the tax burden will not be shifted between banks and their customers. It is a complete change from the previous methodology because the hypotheses concerning the reduction of market volume are much more restrictive. The disappearance of the market is reached much more quickly than in the previous methodology in particular for banks.

The pre-tax transaction cost of banks, financial customers and non-financial customers is supposed to be respectively 0.02%, 0.05% and 0.1%. Because banks have very low initial transaction costs, it is assumed that they are very sensible to the increase of these transaction costs and therefore their volume-elasticity is high: -1.5. For the same reasons, the elasticity for financial customers (insurance companies, hedge funds, mutual funds and others) is supposed to be -1, and the volume elasticity for non-financial customers (productive firms) is supposed to be -0.5. At the world level, fiscal evasion varies from 15% to 25% according to the tax rate. But fiscal evasion is assumed to increase up to the range of 25.2% to 40% at the euro area level (see table 3-14 in annex). The relative market share of banks, financial and non-financial customers is taken from the BIS survey ⁽¹³⁴⁾.

The formula used is of the same kind as the one found in the French report with the following significant differences: It is supposed that those who trade don't make round trip

¹³³⁾ These estimates follow the methodology used by the Ministry of Finance of Belgium (2001) and Finland (2001) for the period 1989-2004.

¹³⁴⁾ These relative sector shares vary according to the geographical coverage and we have calculated them accordingly using BIS data. We have used table E.1 in BIS survey because it gives "net-net" data while the Belgium and Finnish reports have relied on table E.8 in BIS survey that presents "net-gross" data. It is not a detail because it introduces major differences in the market share of banks and customers. For a detail presentation of data used, see the annex at the end of part 3.

on currencies but single transactions. And the elasticity effect is taken as the difference to one ⁽¹³⁵⁾.

$$R = 250 \times \tau \times V \times (1 - ev) \times \left[1 - \left(1 + \frac{\tau}{k} \right)^\varepsilon \right]$$

τ the tax rate, is thus not multiplied by 2. As a consequence, the reduction of volume due to the elasticity is inferior to the one observed in the French report ⁽¹³⁶⁾. In this sense, the Belgium and Finnish methodology is more favourable to the revenue estimate, but in compensation it is based on lower pre-tax transaction costs for banks which account for the majority of transactions, and lower tax rates.

The results are presented for the world level in table 3-4 for 2004. We can see that the tax base of the banking sector decreases stiffly and that the limit of two thirds of volume reduction is reached at the 0.02% (the value beyond the two-thirds limit is marked in red on the table). At this level, the revenue paid by banks is US\$ 14.9 billion. Beyond that level, there is still some possibility to increase the revenue (see the tax rate marked in blue), but at a decreasing rate due to the bell-form of the revenue curve (see chart 3.2). The maximum of revenue (US\$ 16.2 billion) is reached for a tax rate of 0.04%. Increasing the tax rate beyond 0.04% is counterproductive because revenues begin to decrease due to the elasticity effect. At the 0.04% level, the reduction of the volume of transactions realised by banks is 80.8%. In other terms, the volume of transactions of the banking sector would be at 19.2% of its previous level. There is therefore a trade-off between the volume of transactions of the banking sector and the maximisation of revenues generated by banks comprised in the range of 0.02% to 0.04%. The difference of revenue is of US\$ 1.3 billion which is not negligible. A good compromise between efficiency and feasibility is to fix the tax rate at 0.02% for the banking sector and get revenues of US\$ 14.9 billion.

But table 3-4 and figure 3-2 show that it is not necessary to make such a compromise for their financial and non-financial customers. At a 0.1% tax rate, the reduction of volume is exactly two-third for financial customers and only 29.1% for non-financial customers that would not be hurt too much. At this level of taxation, the two kinds of customers generate respectively US\$ 43.4 billion and US\$ 39.1 billion. The total revenue generated by banks and their customers would therefore reach US\$ 97.4 billion at world level in 2004 ⁽¹³⁷⁾.

¹³⁵⁾ The formula used in the Belgium and Finnish reports is never given explicitly anywhere to the contrary of the French report. One can only find in annex the matrix of decreases of market volume due to the elasticity effect. So we had to reconstitute the formula by approximation. But in the end we get the same results so we are sure that the formula found is the good one. The matrix of decreases of market volume is presented in table 3-12 in the annex, so that the reader can check that the formula and the revenue estimates are exact.

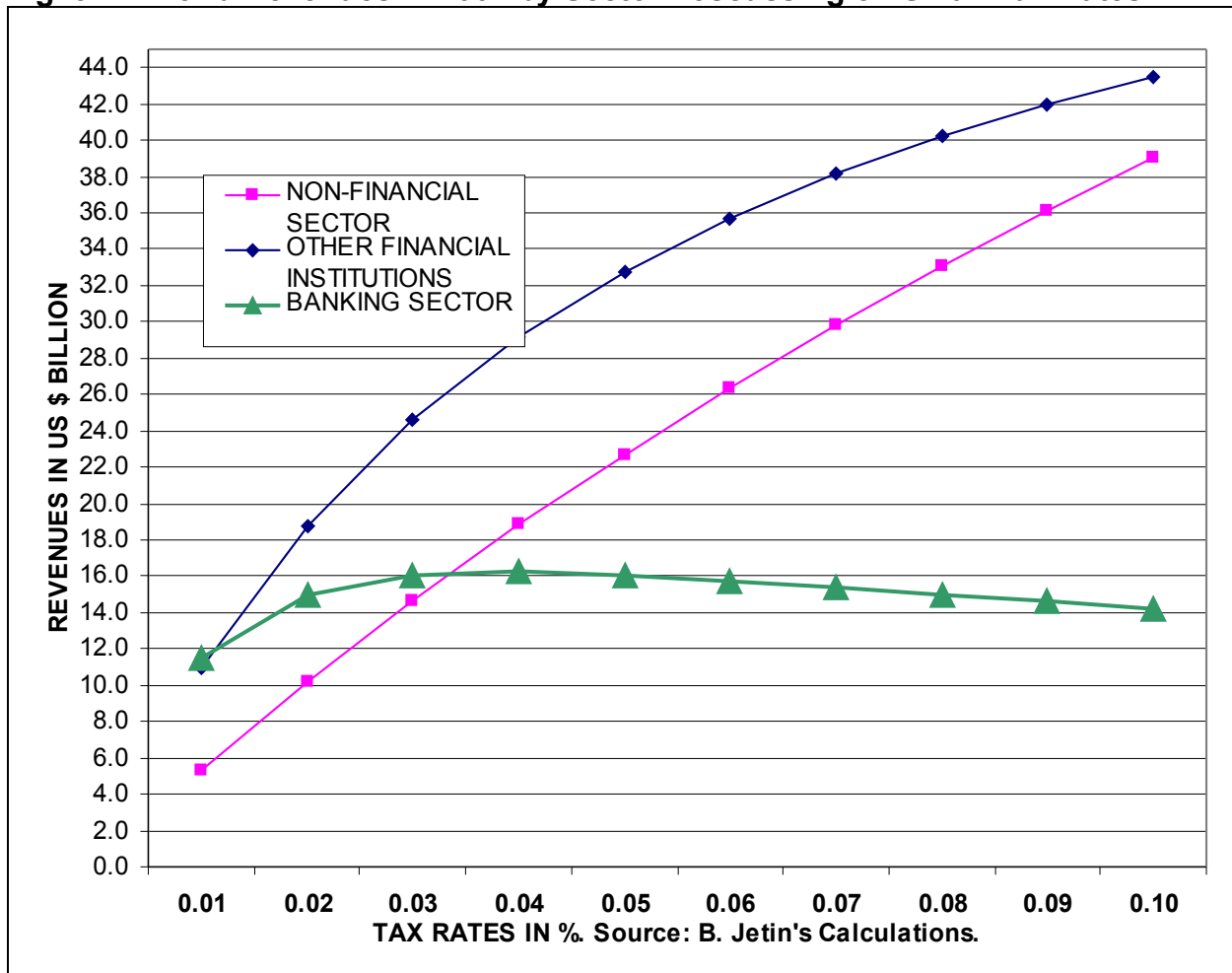
¹³⁶⁾ See in annex tables 3-11 and 3-12 in the annex for a comparison of matrix of volume reduction for the two methodologies.

¹³⁷⁾ If a unified tax rate of 0.1% had been applied, revenues would have been around US\$ 700 million lower at 96.7 billion (see table 3-4).

Table 3-4 : Revenues Estimates According the Methodology of the Ministry of Finance of Belgium and Finland for the World Level in 2004

WORLD LEVEL IN 2004	TOTAL	NON-FINANCIAL SECTOR	OTHER FINANCIAL INSTITUTIONS	BANKING SECTOR
<i>ELASTICITY</i>		-0.5	-1	-1.5
<i>Transaction cost before tax in %</i>		0.1	0.05	0.02
<i>Share of volume before tax in %</i>	100	14	33	53
<i>CTT Rate in %</i>	<i>Fiscal evasion in %</i>	<i>Endogeneous reduction of volume in %</i>	<i>Endogeneous reduction of volume in %</i>	<i>Endogeneous reduction of volume in %</i>
0.01	15.1	4.7	16.7	45.6
0.02	15.2	8.7	28.6	64.6
0.03	15.3	12.3	37.5	74.7
0.04	15.4	15.5	44.4	80.8
0.05	15.5	18.4	50.0	84.7
0.06	15.6	20.9	54.5	87.5
0.07	15.7	23.3	58.3	89.5
0.08	15.8	25.5	61.5	91.1
0.09	15.9	27.5	64.3	92.2
0.10	16.0	29.3	66.7	93.2
0.15	16.5	36.8	75.0	96.0
0.20	17.0	42.3	80.0	97.3
0.25	17.5	46.5	83.3	98.0
0.50	20.0	59.2	90.9	99.2
0.75	22.5	65.7	93.8	99.6
1	25.0	69.8	95.2	99.7
<i>CTT Rate in %</i>	<i>Annual Revenue in US \$ billion</i>	<i>Annual Revenue in US \$ billion</i>	<i>Annual Revenue in US \$ billion</i>	<i>Annual Revenue in US \$ billion</i>
0.01	27.8	5.3	11.0	11.5
0.02	43.9	10.2	18.8	14.9
0.03	55.3	14.7	24.6	16.0
0.04	64.2	18.8	29.2	16.2
0.05	71.5	22.7	32.8	16.1
0.06	77.8	26.3	35.7	15.8
0.07	83.3	29.8	38.1	15.4
0.08	88.2	33.0	40.2	15.0
0.09	92.7	36.1	41.9	14.6
0.10	96.7	39.1	43.4	14.2
0.15	113.1	52.1	48.57	12.5
0.20	125.7	63.0	51.49	11.2
0.25	136.3	72.6	53.42	10.3
0.50	171.8	107.4	56.46	8.0
0.75	192.9	131.2	55.89	5.8
1	210.5	149.0	55.84	5.6

Source: BIS Triennial Forex Survey for data, Belgium and Finnish reports (2001) for methodology. B. Jetin's calculations.

Fig. 3-2 : World Revenues in 2004 by Sector Focussing on Small Tax Rates

Of the 97.4 billion generated by a 0.02% to 0.1% CTT rate, banks would pay 15.3% of the total, financial customers 44.6% and non-financial customers 40.1%. In other terms customers bears nearly 85% of the tax burden for a share of market turnover of 47%. This result may be considered a paradox for those of think that banks must pay the major share of the tax burden because they are supposedly more speculative than their customers that are surprisingly exonerated for any speculative activity. But as we have shown in part 1, insurance companies, hedge funds, mutual funds and even pension funds and multinational firms are also engaged in speculative activities and must be taxed as such.

More generally, figure 3-3 shows that banks pay a major share (41%) for a tax rate of 0.01% only. Beyond that level, their share shrinks rapidly to one fifth at the 0.6% rate and 15% at the 0.1% rate. Financial customers pay the bigger share (45% to 46%) from the 0.02% rate until the 0.1% rate. Finally, non-financial customers pay an increasing share from less than one fifth for a 0.01% up to 40% at the 0.1% and then turn the major contributor to the CTT. At the theoretical but unrealisable 1% level, banks would pay nearly nothing because they would nearly have ceased their activity and non-financial customers would pay 70%, which makes no sense.

As a consequence, the fact that customers pay a tax share that is nearly the double their market share while banks pay a tax share that is about a quarter of their market share is unavoidable⁽¹³⁸⁾. For the critics of the CTT (R. Dodd, 2003) who argue that banks don't

¹³⁸⁾ This results is also due to the hypothesis that the elasticity of banks is high: -1,5. If we suppose that the elasticity of banks is neutral, i.e. = -1, i.e. the same as financial customers whose transaction costs are close

speculate, this result must be reassuring. Whatever the point of view, we are not concerned by an objective of equal tax share in order to guarantee fiscal justice for multinational banks, speculative funds and corporations, but with an objective of efficiency. In this perspective, a differentiated tax rate, i.e. a 0.02% tax rate for banks and a 0.1% for their customers is a good compromise.

Another interesting result to observe is that despite the difference in methodology, the revenue is again in the magnitude of US\$ 100 billion in 2004. If we apply the same compromise across time, we can see in figure 3-4, world revenues fluctuate according to the fluctuations of market turnover. This reminds us that global taxes are not as stable as ODA financed by national budgets and cannot be considered as the main source of financing for development but as supplementary sources of financing. Nonetheless, if the CTT had been created since 1992, it would have provided on average US \$ 64.2 billion each year on the period 1992-2004 (for 0.02% and 0.1% tax rate). Since 1995, the world revenues are on average US\$ 70.9 billion and 75.7 billion since 1998. Again we can observe the leverage of a CTT as a source of financing. In this regard, smaller rates are deceptive (See figure 3-4). A 0.01% rate would have generated no more than US \$ 19 billion on average on the 1992-2004 period, and a 0.02% US\$ 29.4 billion. It is clearly not enough and it is possible to make better.

(0.05%), the relative share of each actor is much more equilibrated. Banks would pay 29.8%, the financial customers 37% and non-financial customers 33.3% of the tax burden. What is the true elasticity remains an open question.

Fig. 3-3 : Share of the Tax by Sector According to the Tax Rate

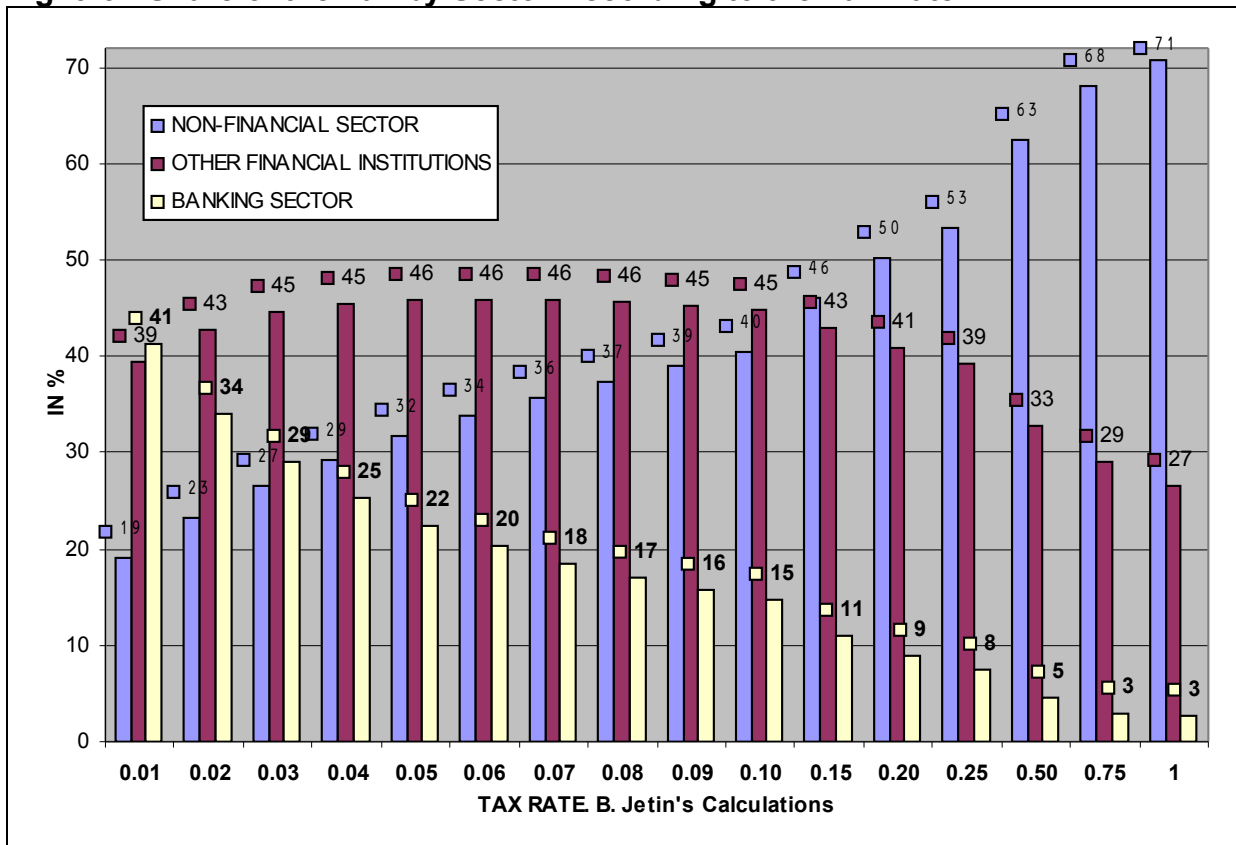
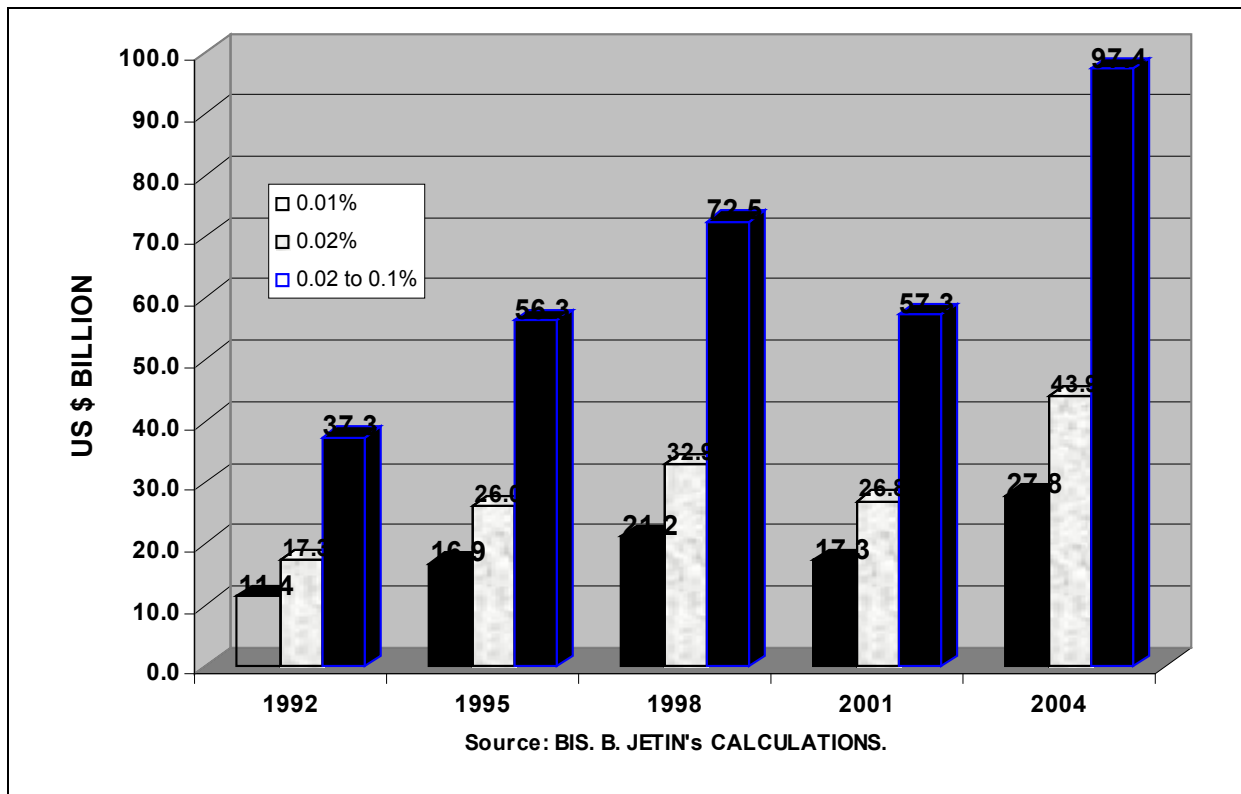


Fig. 3-4 : Revenues Estimates of the CTT According to the Tax Rate at the World Level



At the European level, the picture is a bit different for several reasons. First, the relative turnover market share of banks is even lower than at the world level. This is especially true for the euro area. In 2004, banks accounted for 49.5% (against 53% at the world level), other financial institutions for 34.8% (33%) and non-financial customers for 15.8 % (14%). This plays in favour of the revenues because customers by hypothesis have a lower elasticity than banks. Second, the set of hypothesis is not exactly the same. Volume elasticities and fiscal evasion are higher because the geographical coverage is smaller. We have considered three alternatives. A CTT adopted at the euro area level only, then at the EU 15 and finally an enlargement to Switzerland and Norway.

We begin by presenting the results at the euro area level for 2004 and 2001 (see table 3-5 for detailed results and figure 3-5 below for intra-European comparisons).

As we can see, the annual revenue for a unique 0.1% CTT rate at the euro area level in 2004 would be theoretically US\$ 28.3 billion that is about 10 billion less than the US\$ 38 billion estimate obtained with the methodology of the French report. But again, we note that at such rate the banking activity has shrunk to almost nothing, 4.3% of its initial volume. If we apply the same compromise, a 0.02% tax rate for banks and a 0.1% for customers, the revenue would be US\$ 29.3 billion, one billion more ⁽¹³⁹⁾. We can thus consider that revenues in the range of 29 and 38 billion can be deemed as plausible for the euro area for the year 2004. This shows that the euro zone has a great potential to generate massive revenues. In comparison, the 0.01% and 0.02% render a meagre US\$ 8.4 and US\$ 13.1 billion.

This estimate can be considered as robust due to the severity of the hypotheses retained. The market turnover for 2004, US\$ 659 billion is the total forex turnover of the euro area net of local and cross-border interdealer double counting ⁽¹⁴⁰⁾ to the contrary of the data used by the Ministry of finance of Belgium and Finland, which did not eliminate cross-border interdealer double counting ⁽¹⁴¹⁾. The volume elasticity is higher for the euro area than at the world level for each sector. In particular, the volume elasticity for banks amounts to 1.75 leading to a stronger reduction of volume, -50.8% for the very tiny tax rate of 0.01%, that is one basis point, or in other term one cent of euro for each banknote of 100 euros. And finally, we have assumed a higher fiscal evasion, from 25.1% up to 40% than the one found in the Belgium and Finnish report to estimate the revenues at the EU level (20.2% to 35.0%, see op cit, page 56), because the euro area is smaller.

In 2001, the revenues would have been US\$ 17.8 billion with a market turnover of 442 billion against 659 billion in 2004, (See figure 3-5 below). This result is close to P.B. Spahn's estimation (20.8 billion), although our methodology differs on several points. Our elasticity volume is much higher because the tax rate applied to customers is 5 times higher. This may explain our smaller revenue estimate.

¹³⁹⁾ Customers would still pay 0.1%. Financial customers would generate 12.6 billion of revenues and non-financial customers, 13.1. Added to the 3.6 paid by banks whose trade volume is 30% of its previous level, it sums to US\$ 29.3 billion. To respect fully our self-imposed rule regarding the upper limit of volume reduction of two thirds, we should have retained a 0.8% tax rate for financial customers generating US\$ 11.8 billion (in blue in the table 3-5). But to keep things simple, we have opted for a 0.1% rate for financial customers even if it corresponds to a 70.1% reduction of market volume (in red in table 3-5).

¹⁴⁰⁾ See table E.1 of the BIS 2004 triennial forex survey, on page 48 of the statistical annex. We have chosen "net-net" data, which is in accordance with the aggregated data presented in tables B.1 and B.2, page 5 and 6 of the BIS Survey. This is important to calculate the share of each counterparty at the European and euro area level.

¹⁴¹⁾ These reports used the E.8 tables in the BIS triennial survey, which presents what the BIS calls "net-gross" data. Net-gross data overestimates the market share of the banking sector, especially in Europe.

Table 3-5 : Revenues Estimates According the Methodology of the Ministry of Finance of Belgium and Finland for the Euro Zone in 2004

EURO ZONE LEVEL IN 2004	TOTAL	NON-FINANCIAL SECTOR	OTHER FINANCIAL INSTITUTIONS	BANKING SECTOR
<i>ELASTICITY</i>		-0.55	-1.1	-1.75
<i>Transaction cost before tax in %</i>		0.1	0.05	0.02
<i>Share of volume before tax in %</i>	100	15.8%	34.8%	49.5%
<i>CTT Rate in %</i>	<i>Fiscal evasion in %</i>	<i>Endogeneous reduction of volume in %</i>	<i>Endogeneous reduction of volume in %</i>	<i>Endogeneous reduction of volume in %</i>
0.01	25.2	5.1	18.2	50.8
0.02	25.3	9.5	30.9	70.3
0.03	25.5	13.4	40.4	79.9
0.04	25.6	16.9	47.6	85.4
0.05	25.8	20.0	53.3	88.8
0.06	25.9	22.8	58.0	91.2
0.07	26.1	25.3	61.8	92.8
0.08	26.2	27.6	65.0	94.0
0.09	26.4	29.7	67.8	94.9
0.10	26.5	31.7	70.1	95.7
0.15	27.3	39.6	78.2	98.5
0.20	28.0	45.4	83.0	98.9
0.25	28.8	49.8	86.1	99.7
0.50	32.5	62.7	92.8	99.8
0.75	36.3	69.2	95.3	99.9
1	40.0	73.3	96.5	99.7
<i>CTT Rate in %</i>	<i>Annual Revenue in US \$ billion</i>	<i>Annual Revenue in US \$ billion</i>	<i>Annual Revenue in US \$ billion</i>	<i>Annual Revenue in US \$ billion</i>
0.01	8.4	1.8	3.5	3.0
0.02	13.1	3.5	5.9	3.6
0.03	16.4	5.0	7.6	3.7
0.04	18.9	6.4	8.9	3.5
0.05	23.0	7.7	10.6	4.6
0.06	22.8	8.9	10.7	3.2
0.07	24.4	10.1	11.3	3.0
0.08	25.8	11.1	11.8	2.9
0.09	27.1	12.1	12.2	2.7
0.10	28.3	13.1	12.6	2.6
0.15	32.1	17.2	13.6	1.3
0.20	35.8	20.5	14.1	1.2
0.25	38.0	23.3	14.2	0.5
0.50	47.1	32.8	13.8	0.5
0.75	51.7	38.4	13.0	0.4
1	55.3	41.8	12.1	1.5

Source: BIS Triennial Forex Survey for data, Belgium and Finnish reports (2001) form methodology. B. Jetin's calculations.

We now turn to the revenue estimate at the EU15 level. We have to add the UK, Sweden and Denmark foreign exchange activity. This means that transactions in UK sterling pound, Swedish krona and Danish krone are also taxed along with the euro. Transactions now amount to US\$ 1016 billion per day in 2004, a 54% increase in comparison with the euro area market turnover due essentially to the incorporation of the British market. The volume elasticity for each counterparty remains the same, but fiscal evasion is lower. As in the Belgium and Finnish report, it starts at 20.1% when the tax rate is 0.01% and ends at the 35% level when the rate is 1%.

Revenues estimates are presented in table 3-6. A 0.02% tax rate on interdealer transactions would produce US\$ 6.1 billion while transactions of financial and non-financial customers would produce revenues of respectively US\$ 20.2 and US\$ 21.2 billion. The total at the EU 15 level would amount to US\$ 47.5 billion in 2004, nearly half of world CTT revenues. This result shows once again that the EU has an important role to play in the fight against poverty and in favour of global common goods. If the EU decided it, it could nearly finance on its own the Millennium Development Goals. In 2001, revenues would have been US\$ 28.65 billion due to a smaller market turnover of US\$ 657 billions per day.

Adopting the CTT at the EU level would be an important political signal addressed to developing countries. It would be an act of solidarity proving that the European construction can be based on fundamental values and not only on business. Of course, the CTT can be created by the Euro area only. But the political symbol and the efficiency of the CTT would have much more momentum and coherence if the decision was taken at the EU level. It would be a stronger incentive for non-European countries to join in.

If we now think of the potential of a European decision beyond the EU, incorporating also Switzerland and Norway, revenues would not only be larger, but the possibility to avoid the tax would also be reduced further. Switzerland is not only an important European financial centre, but it is also closely linked to EU financial market and to the euro, via its partnership with German banks. The market turnover would now be US\$ 1149 billion in 2004 (746 billion in 2001). We assume the same volume elasticities than before but we suppose that fiscal evasion is now slightly lower. It starts at 17.7% for a 0.01% CTT rate up to 32.5% for a 1% rate.

On this basis, table 3-7 shows that a 0.02% rate applied to banks would produce revenue US\$ of 7.1 billion in 2004 and a 0.1% applied to customers would produce respectively revenue of US\$ 24.6 billion and US\$ 23.6 billion. The total would amount to US\$ 55.3 billion, i.e. the official MDG financing target (US\$ 33.4 billion in 2001).

These results are synthesized in figure 3-5, which presents the revenues that could be generated by a CTT based on low tax rate of 0.02% for banks and higher tax rate of 0.1% for their customers. It shows that Europe has very important role to play.

To which purposes should these revenues used for? How could the world and Europe manage these revenues to be sure that they are used for in a proper way?

Table 3-6 : Revenues Estimates According the Methodology of the Ministry of Finance of Belgium and Finland for the EU-15 Level in 2004

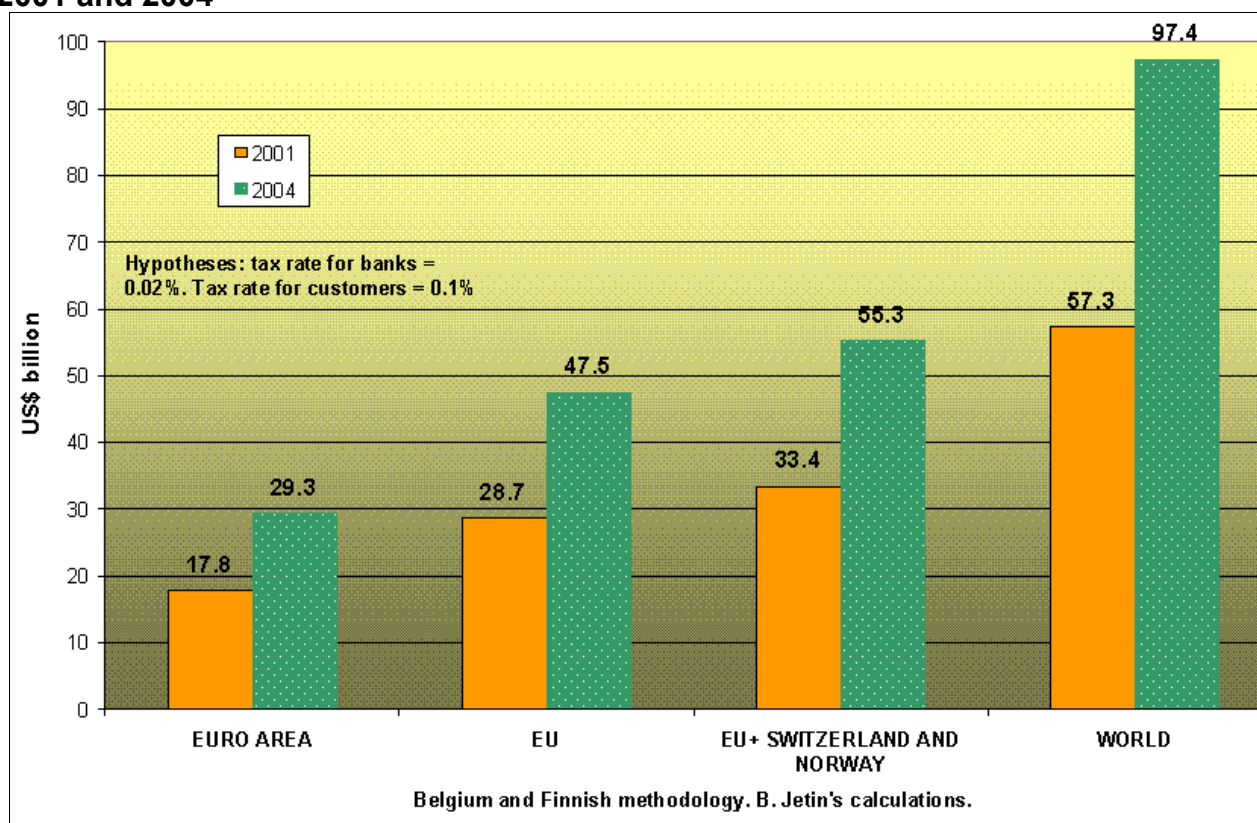
EU 15 LEVEL IN 2004	TOTAL	NON-FINANCIAL SECTOR	OTHER FINANCIAL INSTITUTIONS	BANKING SECTOR
<i>ELASTICITY</i>		-0.55	-1.1	-1.75
<i>Transaction cost before tax in %</i>		0.1	0.05	0.02
<i>Share of volume before tax in %</i>	100	15.5%	34.0%	50.5%
<i>CTT Rate in %</i>	<i>Fiscal evasion in %</i>	<i>Endogeneous reduction of volume in %</i>	<i>Endogeneous reduction of volume in %</i>	<i>Endogeneous reduction of volume in %</i>
0.01	20.2	5.1	18.2	50.8
0.02	20.3	9.5	30.9	70.3
0.03	20.5	13.4	40.4	79.9
0.04	20.6	16.9	47.6	85.4
0.05	20.8	20.0	53.3	88.8
0.06	20.9	22.8	58.0	91.2
0.07	21.1	25.3	61.8	92.8
0.08	21.2	27.6	65.0	94.0
0.09	21.4	29.7	67.8	94.9
0.10	21.5	31.7	70.1	95.7
0.15	22.3	39.6	78.2	97.6
0.20	23.0	45.4	83.0	98.5
0.25	23.8	49.8	86.1	98.9
0.50	27.5	62.7	92.8	99.7
0.75	31.3	69.2	95.3	99.8
1	35.0	73.3	96.5	99.9
<i>CTT Rate in %</i>	<i>Annual Revenue in US \$ billion</i>	<i>Annual Revenue in US \$ billion</i>	<i>Annual Revenue in US \$ billion</i>	<i>Annual Revenue in US \$ billion</i>
0.01	13.7	3.0	5.6	5.0
0.02	21.3	5.7	9.5	6.1
0.03	26.6	8.1	12.3	6.2
0.04	30.7	10.4	14.4	6.0
0.05	34.1	12.5	16.0	5.7
0.06	37.0	14.4	17.2	5.4
0.07	39.6	16.3	18.2	5.1
0.08	41.8	18.0	19.0	4.8
0.09	43.9	19.6	19.7	4.6
0.10	45.7	21.1	20.2	4.3
0.15	53.2	27.7	21.9	3.6
0.20	58.7	33.1	22.6	3.0
0.25	63.3	37.7	22.9	2.7
0.50	77.1	53.3	22.4	1.4
0.75	85.0	62.6	21.1	1.3
1	89.0	68.4	19.7	0.8

Source: BIS Triennial Forex Survey for data, Belgium and Finnish reports (2001) for methodology. B. Jetin's calculations.

Table 3-7 : Revenues Estimates According the Methodology of the Ministry of Finance of Belgium and Finland for the EU15 Level +Norway and Switzerland

EU 15 + SWITZERLAND AND NORWAY	TOTAL	NON-FINANCIAL SECTOR	OTHER FINANCIAL INSTITUTIONS	BANKING SECTOR
<i>ELASTICITY</i>		-0.55	-1.1	-1.75
<i>Transaction cost before tax in %</i>		0.1	0.05	0.02
<i>Share of volume before tax in %</i>	100	15.5%	34.0%	50.5%
<i>CTT Rate in %</i>	<i>Fiscal evasion in %</i>	<i>Endogeneous reduction of volume in %</i>	<i>Endogeneous reduction of volume in %</i>	<i>Endogeneous reduction of volume in %</i>
0.01	17.7	5.1	18.2	50.8
0.02	17.8	9.5	30.9	70.3
0.03	18.0	13.4	40.4	79.9
0.04	18.1	16.9	47.6	85.4
0.05	18.3	20.0	53.3	88.8
0.06	18.4	22.8	58.0	91.2
0.07	18.6	25.3	61.8	92.8
0.08	18.7	27.6	65.0	94.0
0.09	18.9	29.7	67.8	94.9
0.10	19.0	31.7	70.1	95.7
0.15	19.8	39.6	78.2	97.6
0.20	20.5	45.4	83.0	98.5
0.25	21.3	49.8	86.1	98.9
0.50	25.0	62.7	92.8	99.7
0.75	28.8	69.2	95.3	99.8
1	32.5	73.3	96.5	99.9
<i>CTT Rate in %</i>	<i>Annual Revenue in US \$ billion</i>	<i>Annual Revenue in US \$ billion</i>	<i>Annual Revenue in US \$ billion</i>	<i>Annual Revenue in US \$ billion</i>
0.01	15.9	3.5	6.6	5.9
0.02	24.8	6.6	11.1	7.1
0.03	31.0	9.5	14.3	7.2
0.04	35.8	12.1	16.8	7.0
0.05	39.8	14.6	18.6	6.6
0.06	43.2	16.8	20.1	6.3
0.07	46.2	19.0	21.3	6.0
0.08	48.8	21.0	22.2	5.6
0.09	51.2	22.9	23.0	5.4
0.10	53.3	24.6	23.6	5.1
0.15	62.2	32.4	25.6	4.2
0.20	68.6	38.7	26.4	3.5
0.25	74.0	44.0	26.8	3.1
0.50	90.2	62.3	26.2	1.6
0.75	99.6	73.3	24.7	1.6
1	104.5	80.4	23.2	1.0

Source: B I S Triennial Forex Survey for data, Belgium and Finnish reports (2001) form methodology. B. Jetin's calculations.

Fig. 3-5 : Summary of Revue Estimates According to the Geographical Coverage in 2001 and 2004

3.2 HOW SHOULD THE REVENUE BE SPENT?

J. TOBIN's proposal to use the revenue to supplement the budget of the IMF and the World Bank was received by the NGOs "like a stone falling into water" to repeat an expression Tobin used himself. Equally, the suggestion of using the revenue to pay all or a part of the foreign debt of the countries of the South received no echo at all, since the large majority of NGOs, trade unions and political parties from the global South demand, pure and simple, the cancellation of a debt that has already been repaid several times ⁽¹⁴²⁾. It would be senseless to help the countries to finance their development, if one continues to demand from them that they impoverish themselves by repaying their foreign debt. To give one example: 40% of Zambia's budget is dedicated to servicing foreign debt, and this is more than the combined budgets for health and education. At the same time, infant mortality is on the rise, only a third of the children receive complete vaccination and the number of children not going to school is increasing.

Debt cancellation for the countries of the global South could save them more than \$300 billion per year and this would then be available to finance internal development and no longer the contribute to the growth of the rich countries.

The distribution of the revenue from the tax between rich and poor countries is another aspect of the debate. Some think that the rich countries should keep a part of the revenue. This would signify an additional incentive for their government to adopt the tax in times where reducing the budget deficit and lowering taxes has become the golden rule for the countries that want to enjoy glorification by the market. The tax revenue could be used to reduce poverty, improve the social protection of those in greatest need, construct welfare housing, etc. The list is long since social inequality and poverty in the rich countries have increased in the past few years. As far as we are concerned, we think that the countries from the global North are sufficiently rich to finance this indispensable social expenditure from their available resources and do not need the CCT or any other global taxes for this. The CCT is not necessary to raise the minimum income benefits in France, since France already possesses such resources as well as the necessary wealth. It only has to be redistributed differently.

Consequently, we think that all of the revenue of the CCT should be dedicated on the one hand to international programmes of common interest in fields like health and ecology, and on the other hand, to national development programmes in countries of the global south.

In some cases, it is possible to refer to studies made by the UN and its different agencies to find an estimate for the sums required. The revenues from a CTT should not be the only source of financing for these programmes. There are other forms of development financing, especially the Official Public Development Aid (ODA). As will be shown later, the CCT revenue should not be used to release the rich countries from their duty to finance development. However, the estimates of the cost of development made by the different UN agencies during the 1990s up to the concerted effort at the "Conference on Financing for Development" organised by the UN in Monterrey in March 2002, are useful to determine the magnitude of the sums to be collected at the international and national levels in order to reach minimal ecological and social objectives. Thus the United Nations Programme for Development (UNDP) seeks to define international programmes of common interest through the new notion of "global public good" prior to specific financing. As far as the specific national development programmes are concerned, it is the notion of

¹⁴²⁾ On this topic see "le bateau ivre de la mondialisation" (the inebriated boat of globalisation), a publication edited by Eric Toussaint and Arnaud Zacharie, Editions CADTM/Syllepse, 2000, Paris.

"universal access to basic social services" that is placed in the foreground. Through these two notions we will analyse step-by-step the role the CCT revenue could play.

3.2.1 Financing "global public good"

The concept of "public good" is traditionally defined as opposed to "private good". A good is private when the same quantity of this good cannot be consumed by two individuals at the same time. Its allocation is regulated by a market. In contrast, at the country level, a public good is the currency, health, education, culture, non-polluted air, heritage, justice, security, infrastructure, and the transmission of information and knowledge. It is essentially a non-tradable service that is often indivisible. Public goods have two common characteristics. The first is that their consumption by one individual does not reduce the possibility of consumption by other individuals (non-rivalry principle). The second is that nobody can be deprived of it since nobody can appropriate it (non-exclusion principle) ⁽¹⁴³⁾.

The consumption of public goods often has positive effects for the entire community. Thus, individuals that respect the rules of hygiene and public health improve their personal situation by having vaccinations and taking care of themselves and at the same time help to prevent illnesses and this profits the whole community without incurring any costs. This collective positive and free effect is qualified as "external economy" by the economists ⁽¹⁴⁴⁾. The so-called "pure" public goods like justice, police and national defence are traditional obligations and can only be financed by taxes. They are essentially provided by the national state or local communities. Correspondingly, other public goods are called "impure" since there is no obligation to use them and so are paid for by voluntary users (toll motorways for example). However, even in this case the price paid does not always represent the real cost, since this could be prohibitive, and so carries a state subsidy financed by the tax. In some cases, but not always, the public goods are indispensable to the community but are not profitable, and so are therefore not produced by private enterprise and sold on the market. The definition of public goods therefore varies and depends on the historical and political traditions of each country. The same applies to education. The existence of a public education service in France is a political decision inherited from the republican tradition that formally derives from the intention of wanting to guarantee the right to education for all citizens. However it co-exists with a private education system. In other countries, education is primarily considered a private good, even if in reality, the two systems, public and private, often co-exist.

This is the essence of the problem. Except for the pure collective goods that reduce the state to its regulatory functions (army, police, justice), for which there is no market, the neo-liberals think that in every possible case the public goods should be transformed into private goods and markets should be created to deal in them. This requires the calculation of property rights ⁽¹⁴⁵⁾. This neo-liberal programme is clearly at work in a number of coun-

¹⁴³⁾ For instance, the "consumption" of street lighting by one individual does not reduce the consumption by her/his neighbour and cannot exclude her/him from such consumption. However, there are numerous intermediary cases. Pay TV (with a cable or decoder) is an unrivalled good since its consumption does not diminish the consumption by others, yet it is exclusive since only those who pay for it have access to it. These goods are sometimes called "club goods". See H.R. VARIAN, "Analyse microéconomique" (Micro-economic Analysis), p. 419-420, éditions De Boeck Université, 1995, Bruxelles.

¹⁴⁴⁾ However, there are also "public bads" that generate collective negative effects (still called external diseconomies by the economists). These include pollution, traffic congestion or communication congestion. Therefore it is necessary to reduce pollution or congestion to generate a collective positive effect.

¹⁴⁵⁾ Concerning the elimination of "public bads", liberal economic theory promoted the famous Coase theorem (1960), which was nominated for the Nobel prize in Economics. According to this theorem, if the transaction costs are low, and if property rights and laws are clearly defined, then the state need not try to reduce "public

tries, with the privatisation of public services and the organisation of competition between public and private enterprises, with the private appropriation and commodification of a number of goods and services that used to be in the public domain and available free. We are witnessing the extension of intellectual property rights in the fields of culture, education, information and even with living species, the transferring of public assets to private spheres that then need to be paid for, etc.

The same tendency is reproduced at the global level, since with the increasing integration of the economies, more and more public goods or bads cross national borders. What are these global public goods?

The list is more or less long depending on whether we refer to rigorously exhaustive definitions (See table 3-8) or to a more limited but more operational definition (for the one defined in the preparatory work for the United Nations Conference on Financing for Development, see the following box 3-1).

Box 3-1 : GLOBAL PUBLIC GOODS DEFINED IN THE PREPARATORY PROCESS FOR THE MONTERREY CONFERENCE (March 2001).

- Maintaining peace
- Prevention of contagious diseases and the fight against HIV/AIDS.
- The creation of a fund to purchase vaccines and for research in tropical diseases.
- International agricultural research.
- The prevention of CF emissions and other greenhouse gases.
- The limitation of CO₂ emissions.
- Biodiversity protection.

Source: Panel of experts report to the United Nations General Secretariat.

Table 3-8 permits an easier comprehension of the differences between certain global public goods (or bads). It distinguishes public goods according to whether they only concern the present generation or also affect future generations at a global or regional level. Then it classifies public goods into four categories. The pure public goods are those that strictly respect the principles of non-rivalry and non-exclusion. The other categories only partially respect these two principles. Based on this classification it is for example useful to compare the need for clean water, air, and financial stability. If an enterprise pollutes river water, two possibilities are open to achieve clean water. In some countries the state could decide that the enterprises own the clean water and have the right to pollute it since they need to be competitive and cleaning up the pollution is expensive. In this case the citizens have put up with pollution and if they want clean water they have to pay for the pollution clean-up by buying rights to clean water from the enterprises that own them. Once the citizens own the right to clean water, these citizens could demand that the enterprises reduce their pollution, or take them to court. This solution is unjust since the sufferers from pollution have to pay. However this is the preferred solution for the neo-liberals since they proceed from the principle that sufferers from pollution have the "freedom" to buy (or not to buy) the right to have clean water on a market ⁽¹⁴⁶⁾. The other solution is that the state de-

bads". The market will spontaneously reduce them, and the victim of economic externality could threaten whoever is responsible with a law suit and then negotiate an amicable settlement for compensation.

¹⁴⁶⁾ This solution was proposed in 1960 by R. Coase, Nobel Laureate in Economics, and a fierce advocate for property rights. This solution leads to the creation of markets (with assistance from the state) to solve all the problems of humanity. This indeed is a false solution since the enterprises are interested in maximum pollution in order to make citizens pay a high price to buy the right to clean water. The principle of a market of

cides that the citizens have the right to clean water and that the polluters have to stop polluting and reduce the costs of pollution. As in the case of education, the choice between subjection to market mechanisms or state intervention is a political decision. It is notable that in the example of water pollution, it is possible to identify the polluter. In the case of global public bads, like air pollution, it is much more difficult to exactly identify which are the enterprises that pollute and by what quantities in order to make them pay the real cost of cleaning up the pollution. This is already difficult within a single country, it is a priori even more difficult at the international level, since the pollution clouds travel through various layers of the atmosphere. Therefore, market mechanisms cannot work in this case, and it is only public intervention that can lead to a reduction in pollution of the atmosphere, by setting emission standard for pollution and fixing financial penalties.

Table 3-8 : Taxonomy of Global Public Goods According to Their Characteristics

		PURE PUBLIC GOODS	IMPURE PUBLIC GOODS	CLUB	JOINT PRODUCTS
INTRA - GENERATIONAL	REGIONAL	Extinguishing forest fires	Navigation routes	Common markets	Peace-keeping
		Decontamination of ground water	Depolluting rivers	Crises cells	Medical aid
		Control of veterinary diseases	Motorways	Electric networks	Technical assistance
		Flood control	Local parks	Information networks	
		Cleaning up maritime pollution	Allocation of electromagnetic wave bands	Canals	Foreign aid
	GLOBAL	Meteorological forecasts	Satellite communications	Air corridors	Humanitarian aid in case of natural disasters
		Meteorological surveillance stations	Postal services	Internet	Combating drug traffic
		International tribunals	Epidemic control	Fishing zones	
		Preservation of humid zones	Reducing acid rain	National parks	Peace-keeping
		Cleaning up lakes	Protection of fish reserves	Irrigation systems	Flood control
INTER - GENERATIONAL	REGIONAL	Cleaning up toxic waste	Protection of wildlife reserves	Lakes	Cultural diversity
	GLOBAL	Reducing the main pollutants	Reduction in volatile organic compounds	Cities	
		Protecting the ozone layer	Overuse of antibiotics	Transnational Parks	Preservation of tropical forests
		Reducing the greenhouse effect	Maritime fishing	Geostationary orbits	Space exploration
		Eradication of epidemics	Protecting the Antarctica	Polar orbits	United Nations
		Creation of new encounters	Financial stability	Coral Reefs	Reducing poverty

Source : Adapted from Todd Sandler, "Intergenerational Public Goods, Strategy, Efficiency and Institutions". In "Global Public Goods", p. 24-25.

rights to pollute is still gaining momentum since it constitutes the "major innovation" of the Kyoto protocol (1997) to reduce the greenhouse gases. It has been accepted by the European Union and France.

Financial instability is a public bad that is located between these two examples. Financial instability manifests itself through excessive fluctuations at the stock exchange and in currency exchange rates, and through the massive influx or outflow of capital. These phenomena, naturally provoked by financial markets, lead to financial crises that affect the life of countless victims⁽¹⁴⁷⁾. As in the case of polluted air, it is not always easy to identify which financial enterprises are responsible for a financial crisis, since the responsibility is often collective. Action by the state is therefore justified but, unlike the case of air pollution, the standards, in the case of standards of financial transparency and prudence, are not sufficient and have never managed to prevent new financial crises. The failure of the Enron enterprise in the United States which had satisfied all the financial regulations and procedures is a good example. This justifies the CCT. The excessive volatility of the exchange rates is a negative externality. As we have seen previously, the CCT enables a "filter" to be placed on currency transactions, and leads to the identification after the event of those responsible for the financial instability through those who pay the tax most often. The CCT works in the same way as a tax imposed on polluting enterprises. The tax leads to a reduction in the number of currency transactions responsible for the instability in the same way as a reduction in the volume of production of the polluting enterprises reduces pollution emissions⁽¹⁴⁸⁾. More precisely, if we refer to the proposal of a fluctuation corridor for currencies as in chapter 1, the excessive fluctuation of currency exchange rates are those that exceed the capacity of the corridor and thus deserve to be taxed by a dissuading rate.

To strengthen this system of a fluctuation corridor, we could arrange that a part of the revenue could be used to create a "reserve currency fund" to strengthen the currency defence capacities of public authorities when faced with speculative attacks or massive outflows of capital. From this point of view, the CCT is certainly a global tax that enables financing a global public good, since it would contribute to the stability of currencies in a two-fold way, by dissuading speculation and by financing the reserve fund. If the exchange rate stability achieved were not obligatory but resulted from the free choice of the countries who sign an international treaty, this stability could be considered an impure public regional or global good.

This stability of currency taxes, which is only one aspect of financial stability, would either be profitable to group of countries (possibly on a regional basis) or to the whole world, after the application of the tax has been geographically expanded.

It would benefit the entire population and present and future economic actors. These characteristics are essential and need to serve as a basis for the definition of global public goods that can be suitably financed by the global taxes.

For a good to be global and really public, a good has to satisfy three essential criteria: it has to apply to all countries, it has to benefit all social categories of the population, and it has to satisfy the needs of current generations without endangering future generations⁽¹⁴⁹⁾.

This definition has the merit of being clear and it is doubtlessly for this reason that it cannot be accepted by the G8 countries, the international institutions and especially the WTO, since it is too restrictive for the interests of TNCs.

¹⁴⁷⁾ Financial instability is a public bad since it fulfils the criteria of non-rivalry and non-exclusion.

¹⁴⁸⁾ From this point of view, the CCT is similar to a Pigou tax, named after the English economist who made this proposal in 1920.

¹⁴⁹⁾ See I. KAUL, I. GRUNBERG, M.A. STERN (editors), "Global Public Goods. International Cooperation in the 21st Century", Oxford University Press, Oxford, 1999. Especially Chapter 1, "Defining global Public Goods", p. 10-16.

The stakes are high and are particularly important since it is not only the case of defining whether a good is public or private but also who produces it: public authority or private initiative?

The multinational corporations, supported by their governments and the WTO want a restrictive definition of global public goods to guarantee the largest possible sphere for private interest. The privatised global public goods are to be regulated by the "General Agreement on Trade in Services" (GATS) that the WTO wants to define in the round of trade negotiations adopted at the Doha conference in 2001.

We find a first recent example of the pursuit of these interests in health. The fight against HIV/Aids and other infectious illnesses is often cited as an exemplary global public good because of its planetary expansion. During the G8 summit in Genoa, a decision was even made to start an international fund. However, besides the fact that the G8 countries are not rushing to contribute to the fund, the fight against HIV/Aids interferes with the private interest of pharmaceutical TNCs that have done everything to prevent South Africa from producing present medicines at a more accessible cost for the infected population. The case of *Stavudine*, a medicine against Aids, is a showcase: "Developed by university research, the molecule has been exclusively acquired by the Bristol-Myers Squibb corporation, which has obstructed its commercialisation in the countries most affected by the pandemic"⁽¹⁵⁰⁾. A compromise was finally found, not due to a natural process but because of a struggle carried out by South Africa and other countries of the South, leading to an agreement at the WTO Doha summit in 2001.

The second example concerns access to information on the internet. The Universal Declaration of Human Rights defines freedom of expression in article 19, and in article 27 the freedom of access to information and protection of security and the private nature of the users of the means of communication. Based on this, UNESCO considers that governments and civil society have a responsibility to make information a global public good, universally available for educational, cultural and social needs ⁽¹⁵¹⁾. Now, there are several problems if we follow this approach. The first is obviously the higher cost of access (computer, telephone line, internet provider costs). The second problem lies in the definition of information being considered as a national or global public good when copyright or other intellectual rights are being extended and are transforming the internet into an increasingly private sphere restricted to those that pay for right of access.

The third example is the preservation of biological diversity. As Michael Flitner reminds us ⁽¹⁵²⁾, the transformation of plants and animals into commodities has been accelerated with the adoption of agreements that regulate intellectual property rights at an international level. The TNCs of the countries of the North that produce seeds had their property rights protected since the creation of the "International Union for the Protection of New Varieties of Plants" (UPOV) in 1961. These signed conventions have stimulated acquisitions and mergers between corporations, have led to a rapid reduction in genetic diversity and confirmed an economic inequality between the countries of the global South, providers of original plant varieties and the countries from the North, sellers of "modernised varieties" in hard currencies. Since 1983, when the United Nations Food and Agriculture Organisation (FAO) adopted a resolution that defined all the genetic plant resources, including the vari-

¹⁵⁰⁾ Cf. Philippe Demenet: "Le scandale stavudine. Ces profiteurs du Sida". Le Monde Diplomatique, February 2002.

¹⁵¹⁾ See "Panel on Universal Access to Information and Informatics for Human Development", organised under the auspices of UNESCO at the Economic and Social Council of the United Nations, 10 May 2000, New York. UNESCO/CII/INF Draft 20 1 2000.

¹⁵²⁾ Michael Flitner: "Biodiversity: of Local Commons and Global Commodities". In: "Privatizing Nature. Political Struggles for the Global Commons", publication co-ordinated by Michael Goldman, Pluto Press in association with Transnational Institute, 1998.

eties developed by the TNCs, as a "heritage of humanity", the Northern member countries of the UPOV denounced this as a "blow to the heart of free enterprise". The resolution will remain purely on paper just like the resolutions defining the "rights of peasants" on the access to seeds and their reuse, "... deriving from their past, present and future contribution to conservation, preservation, and future improvement in the disposal of genetic plant resources..." (FAO 1989). Since the GATT and then the WTO will commandeer the issue of intellectual property rights to establish international legislation that legalises the exorbitant power acquired by the chemical and agro-industrial TNCs we will see seeds that cannot yield germinating seed (i.e. must be bought for each planting) produced by Monsanto. The fruits and vegetables produced in this way will then compete with the produce of Latin American peasants where market access has been blown wide open with dynamite, a favourite expression of Mickey Kantor, former international trade negotiator of the United States.

These three examples show that we cannot rely on the private sector or the markets to offer global public goods satisfying the three criteria we defined previously since the private corporations try above all to restrict beneficiaries only to solvent customers. Instead of eradicating epidemics, it is more profitable to sell to those who can buy the means to cure themselves. This is why it is safer to count on the intervention of the state to produce universal public goods, benefiting all countries and all people of all the generations. As P. Hugon and Jean-Jacques Gabas ⁽¹⁵³⁾ affirm, we have to abandon purely economic concepts, and even a utilitarian concept of liberal economy, and adopt a political concept (or political economy). "Politics define public goods and the specific space occupied by the market" (p. 25-26).

3.2.2 What would be the Probable Cost of Financing Global Public Goods?

It is impossible to estimate the costs of financing the "reserve currency fund" in advance. Firstly, this reserve could be either regional or international depending on the geographic expansion of the CCT. It would also depend on the currencies concerned and their volatility. It would be a task for the future institution that is assigned to managing the tax to decide the amount of resources necessary according to these parameters and based on experience.

As far as the other global public goods are concerned, where the scientific basis is absent for a rigorous evaluation of certain public goods such as, for instance, the reduction of the greenhouse effect there are only rough estimates and no exact figures (see Box 3-2).

¹⁵³⁾ P. Hugon and Jean-Jacques Gabas: "Global Public Goods and International Co-operation", "L'Economie Politique" no. 12, 4th trimester 2001.

Box 3-2 : ESTIMATE OF ANNUAL COSTS OF GLOBAL PUBLIC GOODS.

- Maintaining peace (1 billion \$)
- The fight against tuberculosis and malaria (2 billion). The fight against HIV/AIDS. (7 to 10 billion \$)
- The creation of a fund to purchase vaccines and for research in tropical diseases. (1 to 6 billion \$).
- Agricultural Research for the Third World (currently, the budget of the CGIAR amounts to 330 million, decreasing during the past years).
- The prevention of CFC emissions and other greenhouse gases. The financing from countries of the North to the countries of the South to help them reduce emissions is currently at 1.2 billion \$.
- The limitation of CO2 emissions. No estimate available, certainly very high costs.
- Protection of biological diversity. No estimate available, probably several billion \$.

Source: Panel of experts Report to the General Secretariat of the United Nations, p. 70-71.

Therefore, "satisfying the needs in global public goods in a slightly more extensive way would probably require a minimum of \$20 billion a year that would be about four times the current sum", assuming that most of the measures against the greenhouse effect would be financed through national budgets (UNO p. 51 and 70).

We should add emergency humanitarian aid. It is not only justified an obligation of solidarity. Assisting the victims of a natural disaster or of an armed conflict is the starting point for reconstructing local and national communities so that the fight against poverty, inequalities, epidemics, and reestablishment of peace can be undertaken. It would make little sense to fight epidemics that are already affecting several countries while ignoring those that suddenly increases because of local conflicts. On the other hand, even if this is disputed, the number of victims of natural disasters (floods, storms) has risen by 300% during the last ten years, and this could be the consequence of the greenhouse effect.

For all these reasons, humanitarian aid is intrinsically linked to the supply of global public goods. The higher the supply in global public goods, the less likely natural disasters and conflicts are to occur, and this would reduce the need in humanitarian aid. In the meantime, it is necessary to assist the victims. During the 1990s, about 100 million people were victims of a natural disaster or an armed conflict each year. The budget of humanitarian aid increased to about \$4.5 billion during this period, i.e. 8% of the official development aid budget. This budget is clearly insufficient to satisfy all needs: during the conflict in Eritrea in 1998, the victims received less than \$2 per person in aid. To provide real aid to all victims, a budget of \$8 to \$9 billion a year would be necessary, i.e. an increase from \$3 to \$4 billion ⁽¹⁵⁴⁾. The creation of a reserve fund of \$1 to \$2 billion could be added in order to be able to react without delay. Finally, this would amount to an extra \$10 billion to be added to the cost of international programmes.

In total, the international programmes of common interest would cost at least \$30 billion.

Which kind of public financing should be chosen?

The financing of these resources would need to be specified and not become a burden on the current development aid budget. At the moment, the UNO (op cit) estimates that "15% of aid is dedicated to the supply of global public goods in a strict sense", i.e. in health and environment. The report notes that "... the financed activities very often benefit

¹⁵⁴⁾ All figures cited are from the previously mentioned High-Level Panel of experts to the General Secretary of the United Nations. It provides all the complementary bibliographic references we cannot reproduce here.

the donor countries more than the destination countries", and that there is a danger of "cannibalisation" of public development aid given to national programmes, notably those designated to fight poverty. For instance, Gabon, which is not one of the poorest countries, is designated to receive more development aid from France, not to supplement the financing of additional social expenditure but to "preserve" forests. This decision on co-operation by the French is justified by the concept of global public good. However, this lies within the period of decline in French government aid from 0.57% of GDP in 1994 to 0.32% in 2000. This means that an increase in financing for development can only mean less financing for social expenditure, in Gabon and in other countries. Finally, the preservation of forests in Gabon is presented as the supply of a global public good, to hide purely economic interests that have nothing to do with the concern for preserving forests and for the people living there. The forests are principally considered as resources that need to be "managed" in the best of interests of the timber and furniture industry ⁽¹⁵⁵⁾.

If we really want to provide global public goods to all of the citizens in the countries of the South and the North, then these need to be disconnected from private interests, and should be provided by the co-operation between states, and/or international institutions, since there is no international state. At the federal level, public goods can be provided and supplied by the state, perhaps without cost as a result of the tax. Following the same logic, at the international level, the global public goods need to be financed by new taxes to be called "global taxes", requiring an international treaty. This was one of the aspects of the initial mandate of the United Nations Social Summit in June 2000 in Geneva to the commission charged with studying the financing of development. The tax on currency transactions is obviously one of the main global taxes to be considered but it is not the only one: a unitary tax on the profit of TNCs, a tax on air transport, a tax on CO₂ emissions (two global eco-taxes), a tax on internet use (bit tax) could also complete the tax in a useful way. According to the preparatory documents for the UN conferences, the carbon tax could collect \$125 billion a year, (an amount similar to the CCT), the tax on air transport \$2.2 billion, and the internet tax \$70 billion in the year 1996 (see technical note no. 3 by the UN General Secretariat), i.e. a total of about \$200 billion, that could be added to the \$100 billion from the CCT. Altogether global taxes could collect about \$300 billion.

Which direction should these global taxes take? It is above all not a question of ratifying the decrease in federal taxation carried out and legitimised by the liberal reforms. It is also not a question of justifying the absence of political good will on the part of several governments from the global South in imposing a progressive income tax on the revenue of wealthy households and on corporations. According to the OECD, the national tax revenue does not amount to more than 26% of GNP for the rich countries, 19% of GNP for intermediary countries and only 9% of GNP for poor countries. For instance, the inability and absence of political will on the part of the Argentinean government to impose taxes on the large national and transnational corporations as well as on the Argentinean bourgeoisie who transfers their fortunes to Miami, is one of the main causes of the tax bankruptcy of the Argentinean state. With or without global taxes, it would be necessary to reverse by all means the current tendency and reaffirm the necessity for a just contribution from citizens and corporations to the state budget without which the federal solidarity assuring equality between citizens would be impossible.

We do not want to question the prerogatives of the state in fiscal matters, one of the attributes of sovereignty that is most strenuously defended. The global taxes, like the CCT, would be imposed by each state at the federal level (see chapter 3), they would however be subjected to specific accountancy rules to make clear that they are intended to finance

¹⁵⁵) This concept is justified by the French development aid representative, Jean-Michel Sevério, in "Critique Internationale", no. 10, January 2001, Paris.

the common good at the international level. The CCT, like the other global taxes, are indeed a necessary instrument for solidarity between all countries.

In the present case, we note that if only the CCT would be implemented and would collect a minimum of \$100 billion a year, it would enable the financing of \$20 billion of expenditure on global public goods as estimated by the UNO. \$80 billion would then remain to finance federal development programmes, especially to finance the basic conditions for development of social and environmental issues. We will see at the end of this chapter that if we take into account the entirety of potential resources generated by global taxes, completed by other possible measures of financing, it would be possible to clearly surpass the minimum development goals set by international organisations.

3.2.3 Universal Access to Basic Social Services

In 1990, the first "World Children's Summit" took place under the auspices of UNICEF. There was an agreement on the objective to halve the mortality rates of pregnant women and malnutrition of infants under 5 years of age by the year 2000. In 1995, Copenhagen hosted the first "Summit for Social Development" organised by the UN. The objective was then extended to universal access to "basic social services". This means that "every individual can have access to basic preventive and curative health care, to family planning and to minimum care for pregnant women, to education and AIDS prevention, to drinking water and waste water treatment, to school from kindergarten to college, and to literacy programmes for adults" ⁽¹⁵⁶⁾. In 1995, UNICEF estimated that the expenditure necessary to fulfil these objectives would be an additional \$40 billion. In 1998, UNICEF (op cit) and UNDP ⁽¹⁵⁷⁾ estimate together "... that 80 billion Dollars (at 1995 prices) are lacking to ensure the basic needs for all are satisfied, the approximate total sum necessary being between \$206 and \$216 billion, instead of the actual expenditure of only \$136 billion". The difference between the required and the actual expenditure has since doubled since the "World Social Summit" in 1995, because of the increase in that population which is has no access to basic social services, improved cost estimation and the increase in prices. The break-down in the missing \$80 billion is shown in Box 3-3.

Let us remember that the countries from the South are also called upon to contribute to finance basic social services by accepting the requirement of dedicating 20% of their budget to satisfying the basic needs of all, to which the rich countries also dedicate 20% of public development aid (world programme 20-20 adopted in 1995). "A recent study of thirty countries showed that the basic social services consist of 12% to 14% of the federal budget in most of these cases. However, in a small number of countries the net amount is lower, for instance in Cameroon (4.0%), the Philippines, or Brazil (8.5%) ... Furthermore, the distribution of public expenditure on health and education is severely discriminatory. The richest people benefit most, and the needs of the poorest suffer most neglect. An accentuated bias can also be observed in the distribution of subsidies" (UNDP, op cit, Box 4.5, p. 79). UNICEF (op cit p. 15) adds that gender inequalities amplify these inequalities between rich and poor. In Niger, the literacy rate for men is 21% and only 7% for women. In Nepal, these figures are 41% for men and 14% for women. The proportion of girls and women that have never been to school comes to 85% for the poorest 20% of the population and 54% for the richest 20%.

¹⁵⁶) "Basic services for all?", UNICEF report, Centre de Recherche Innocenti, <http://www.unicef.org/>

¹⁵⁷) UN Development Programme. "World Human Development Report 2000". See especially: p. 9, and chapter 4, rights provide the means to fight against poverty, p. 79. Available at the ATTAC France site: <http://www.attac.org>

As far as the rich countries are concerned, they only dedicated \$5.5 billion to basic social services in 1995-96, and in 1997-98 they reduced this amount by 20% to \$4.35 billion, i.e. half of the 11% in Official Development Aid, far removed from the goal of 20% officially adopted by the OECD in 1996.

Box 3-3: Where the Money is Missing...

According to UNICEF the additional \$70 to \$80 billion per year would have to be distributed in the following way:

- \$7 to \$8 billion on basic education.
- \$8 to \$10 billion on gynaecologic health, obstetrics, and family planning.
- \$15 to \$17 billion on access to drinking water and waste water treatment.
- \$14 billion on basic health services.
- \$26 to \$31 billion on essential clinical care.

Source: "Basic services for all?", 1998, p. 19. UNICEF report, Research Centre Innocenti, <http://www.unicef.org/>

.... And Where There is Too Much Money:

"\$80 billion, that is nearly four times less than the Third World has to pay on foreign debt; it is about a quarter of the United States military budget; 9% of world-wide military expenditure; 8% of annual world-wide advertisement costs; half of the wealth of the four richest people of the planet. Misery of the present, richness of the possible".

Source: "Satisfaction des besoins fondamentaux" (Satisfaction of Basic Needs) by Eric Toussaint and Arnaud Zacharie, Comité pour l'Annulation de la Dette du Tiers-Monde. <http://attac.org/genes2001/documents/docdet5.htm>

The second "World Social Development Summit" organised by the UN took place in this context in 2000 in Geneva. Despite some progress, the goals will not be achieved because the developed countries did not comply with their commitments in development aid and because the Third World countries which want to increase their social expenditure were strangled by the foreign debt service payments. Notwithstanding, more ambitious goals were adopted, ratified by the heads of state and the governments at the UN in New York during the "Millennium Summit" from 6 to 8 September 2000.

As well as universal access to basic social services, the "Millennium Development Goals" were extended to the reduction of extreme poverty (concerning the billion of individuals living on less than one dollar per day), gender equality, the protection and regeneration of the environment (see Box no. 3-4). According to a recent study by the World Bank published for the Summit on Financing for Development (¹⁵⁸), a minimum of an additional \$50 billion is necessary for these goals to have any chance of being met by 2015. This amount that would mean the doubling amount of public development aid currently budgeted, and is calculated in the following way. The World Bank estimates that halving extreme poverty by 2015, one of the goals of the Millennium Declaration, needs an extra \$39 billion. Poverty reduction would mean that more people would have enough money to pay for basic social services. The amount required to finance providing these services cost

¹⁵⁸) The summary of this study can be found in the UN journal "International Press Service" (IPS), vol. 10, no. 4, page 4 and 5 in the article "\$76 billion needed to achieve Millennium Goals" available at: <http://www.ipsdailyjournal.org>. These estimations are also used in the following preparatory document for the Conference on Financing for Development: "High-Level Panel on Financing for Development - Recommendations & Technical Report", UNO, A/55/1000, 26 June 2001. <http://www.org/esa/ffd/ODA-Sub-index-.htm>.

free to those that remain poor would also automatically be reduced. According to the study, reducing extreme poverty by half and simply providing universal access to basic social services would cost an additional \$54 billion a year.

A second approach presented in the World Bank study follows the UNDP and UNICEF method mentioned above to calculate the individual cost of each goal. The result is an additional amount of between \$35 and \$76 billion a year. The lowest estimate, \$35 billion, corresponds to the amount necessary to reduce poverty with positive effects on the other development goals. The \$76 billion, very close to the UNDP and UNICEF estimate, corresponds to the amount that access to each basic social service for all would cost. If we assume that poverty reduction would not ensure that the population concerned could pay for access to these services, then the median between these two hypotheses would amount to \$55.5 billion.

3.2.4 What do these figures tell us?

1) Even if the cost is increased, elimination of extreme poverty and universal access to basic social services would not come to astronomic sums that are beyond the financing capacities of the global North. If the countries of the North would dedicate 0.7% of their GNP to Official Development Aid, an additional \$100 billion would be available and the financing of this social minimum could be fully achieved.

2) A simple accounting exercise reveals that if we combine the public aid resources of 0.7% of GDP, the revenue from the CCT (\$100 billion \$) and the other global taxes previously collected (about \$200 billion), this would amount to an additional revenue of \$400 billion a year becoming available, compared to the cost of international social and ecological programmes (\$30 billion) and the costs of the Millennium Development Goals (\$80 billion), i.e. \$110 billion. The obvious conclusion would be that it would be possible to certainly surpass the minimum given in the "Millennium Declaration" (See Box 3-4), and to eliminate poverty entirely and not just extreme poverty (we are still poor even if we earn 5 \$ a day), and to really assist the people beyond just providing basic care, and to realise more ambitious education goals than just learning to read, write and count, to clean up contamination and protect the environment and not just treat waste water, to preserve natural and cultural assets, etc.

Box 3-4 : Excerpt from the "Millennium Declaration" adopted by the heads of state and government at the "Millennium Summit", 6 - 8 September 2001 at the UNO.

"We resolve:

To halve, by the year 2015, the proportion of the world's people whose income is less than one dollar a day and the proportion of people who suffer from hunger and, by the same date, to halve the proportion of people who are unable to reach or to afford safe drinking water.

To ensure that, by the same date, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling and that girls and boys will have equal access to all levels of education.

By the same date, to have reduced maternal mortality by three quarters, and under-five child mortality by two thirds, of their current rates.

To have, by then, halted, and begun to reverse, the spread of HIV/AIDS, the scourge of malaria and other major diseases that afflict humanity.

To provide special assistance to children orphaned by HIV/AIDS.

By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers as proposed in the 'Cities Without Slums' initiative."

We could start dreaming that this declaration, not the first of this kind, could finally take some effect. However, less than one year later, the UNO estimates that at least \$50 billion a year would be necessary for the goals announced to have any chance of being achieved.

3) To be convinced that the elimination of poverty and the financing for development is possible, we need to remember that we have not considered other sources of financing that consist of precise proposals like the unitary tax on TNC profits, an exceptional tax on the assets of the largest fortunes in the world, as UNCTAD suggested in its 1995 report. Naivety need not lead to thinking that with the current state of affairs, the well-being of humanity could be achieved within a few days by the grace of the leaders of the rich countries who are suddenly convinced by rational arguments. However, a completely limited redistribution of resources by an act of international solidarity can lead to a real improvement of the fate of the poorest. The leaders of the rich countries will not do this unless they are forced to do so by public opinion.

4) In this perspective, the entirety of possible financial resources could fill a "Solidarity Fund for Sustainable Development", (SFSD) that would secure a redistribution of social wealth from the countries of the North to the South, correcting some of the inequalities aggravated by free trade and international investment. Of course, development cannot be reduced to a question of finance. It is primarily a question of respect for human and social rights that only local social mobilisations can put into effect. However, money does count. If we want to end child labour, we need to provide a minimum income to the families that would otherwise depend on child labour to survive, especially if the parents' health and their ability to work is rapidly declining⁽¹⁵⁹⁾. Additionally, it is necessary to build schools or equip existing school buildings, or pay teachers' salaries.

Financing and implementation of fundamental rights go together. This is a prerequisite for development aid to be efficient, otherwise the development projects miss their targets, and development will not occur or is carried out against the population. This is

¹⁵⁹⁾ See Ashul's story told by M. Bonnet. A 12 year old Indian child, Ashul works as a slater to support his family since his father became ill from breathing in slate dust for years. "It is the same for everybody here. We work seven or eight years, we get ill, and it's over: we cannot be cured". The slates are used by millions of Indian school kids. "Regards sur les enfants travailleurs" by M. BONNET, "Cahiers Libres", Editions Page Deux, Geneva, 1998.

evident from the past experience of development aid as conceived by big institutions such as the World Bank. The programme for the protection of biological diversity managed by the "Global Environment Facility" (GEF, created in 1991), an institution dominated by the World Bank, is one of the most recent of such examples. "False priorities or their absence, a top-down approach, with little local participation and a lot of external expertise, large-scale intervention over a short period of time..." (Michael Fitner, 1998, op cit p. 159) are others. In the case of the Amazon forest, "lungs of the planet", this concept leads to a distance between observer and observed comparable to the distance that separates a satellite observing the forest from space and the seringueiro down below. "Under these circumstances it is inevitable that the demand for global management of the Amazon forest is in conflict with the aspirations with respect to cultural rights, democracy and self-determination" (Wolfgang Sachs, 1993, cited by Michael Fitner).

Therefore, if the CCT is born and the revenue is significant, it should not be used to repeat the mistakes of the past. The CCT and the other new sources for financing for development must provide the opportunity and time to break with the past experience and renew the strategies for development. The only possible guarantee for achieving this is to take care of the redistribution of revenue from the CCT, and making it a practical exercise of democracy, whereby the beneficiary people have rights to define, manage and control the projects. This is the idea we will develop in the following section by focussing on the management and distribution of revenue from the CCT. The same principles could also apply to all new taxes contributing to the "Solidarity Fund for Sustainable Development", (SFSD), if it were to be created one day.

3.3 WHICH GLOBAL INSTITUTION SHOULD MANAGE THE REVENUES?

The general idea is that the tax would be collected at the national level, mainly in the rich countries where the majority of change transactions are carried out. This income would be dedicated to financing international and national developing programmes. A possibility with the advantage of being simple would be that the CTT revenues would just flow into the budget of the Development Ministries of each country, and this would solve the management problem. The difficulty with this proposal would be that the rich countries have the annoying tendency of using development aid for political and economic aims.

At the EU level, we could also imagine that the revenues would go directly to the European Commission to increase the budget of the commissioner in charge of development aid. But in this case there is no guarantee that the revenues would be better used and better controlled than they are today. It is not a matter of goodwill or efficiency of the people working at the European Commission but the lack of democracy and accountability of the present European institutions and the absence of people receiving the aid in the definition of the purpose and priorities of the European aid.

If one wants to resolve these traditional problems, the only solution is to create a new institution at the international level if the CTT is adopted worldwide or at the European level if the CTT is created by the EU in a first stage. This new institution would have the responsibility to centralise revenues at the international level first, and second to redistribute them to the developing South.

This supposes that rich countries, and among them the European countries, engage in a process of international solidarity and do agree to transfer to this new institution the revenues collected on their national territory. This is already the case with ODA.

To determine the characteristics of this new institution, the best is to define the tasks it would have to achieve and the working principles that it should respect. This will enable us to determine if one or several already existing international institutions are capable to achieve these tasks and put these principles in practise ⁽¹⁶⁰⁾.

3.3.1 Objectives and principles of the institution

The institution should be responsible for the following tasks:

1. Defining general tax regulations

These regulations would define the rules of imposition (tax basis, tax rate) to be applied in each state for the tax levy as well as the general regulations dealing with its redistribution to the countries of the South. These general regulations (that are discussed further below) could be redefined according to the evolution of financing requirements.

2. Supporting the countries in the application of the regulations and controlling compliance

Even though the tax is imposed at a national level, the international institution would have to support the countries complying with the general regulations and in applying the terms of the agreement. This would require an international institution capable of supervising the agreement. Traditionally, supervising compliance with international agreements

¹⁶⁰⁾ In this process, we will follow the "War on Want" report, in collaboration with the « New Economics Foundation" entitled « The Robin Hood Tax », <http://www.waronwant.org> , even if we don't necessarily agree on all points.

is either based on voluntary activity reports compiled by the states or based on the complaints of some states concerning other states. Surely the most efficient way would be to equip the international institution with direct investigational power that would permit the verification of compliance with agreements.

3. Penalising violation of rules

Ensuring the rules are respected supposes a penalising power which could range from simply publishing cases of fraud, obliging the countries concerned to explain their behaviour publicly, to issuing a warning and even going as far as imposing financial penalties. The member states would have to accept the principle of such sanctions and the details would be negotiated collectively.

4. Interpretation and amendments to the general rules.

The initial general rules would probably not foresee the modalities of implementation in all its details. Financial innovations would immediately attempt to avoid the new legislation. Therefore it would be necessary to envisage frequent amendments that would cover the legislation loopholes and counter new attempts of evasion.

As far as its functioning is concerned, three principal key features would have to be maintained to ascertain the credibility of the new institution: transparency, accountability and democracy.

1. Transparency

The information concerning fiscal revenue and its expenditure needs to be subject to immediate communication and be easily accessible. The penalties for non-compliance with the regulations by member states need to be clear and known in advance.

2. Accountability

The institution needs to be accountable to all member states, and also to all citizens. Accountability has to be considered as a duty inscribed in the founding treaty of the institution so that it cannot be abolished.

3. Democracy

The functioning has to be based on the participation and equal treatment of all member states in the South and in the North. Representatives of governments, of national parliaments, of the trade union movement and other NGOs need to take the lead to make the institution more democratic than the existing institutions,

3.3.2 Does an adequate institution already exist?

Are there one or more international institutions capable of ensuring these objectives and to respect these basic principles? This question is first of all directed towards the United Nations itself and its various bodies but also to other international institutions that are not part of the UN or are not under the influence of the so-called "Bretton Woods" institutions.

The United Nations are often cited as the ideal framework for negotiating, creating and managing the CTT. All the countries of the planet are members of the UN and are said to have equal influence, since each country has one vote. This is in contrast to the IMF, where the number of votes is proportional to the financial contribution of each country. The United Nations therefore is believed to enjoy a more democratic image and has not been

discredited as much as the IMF and the World Bank. But this goes too far in ignoring the reality. The existence of the Security Council of the United Nations which deals with questions of peace and security, strongly contradicts the idea that each country has an equal vote since the permanent members have a de facto veto right. Additionally, most of the decisions are made previously behind the scenes. The fact that each country has a single vote does not provide sufficiently guarantee equality. The same principle is in place at the WTO, and it is known that the inequalities are great among a number of countries of the South that do not have access to financial resources or possess sufficient expertise to participate in the negotiations on an equal basis. Also, the countries of the North meet secretly behind closed doors as soon as things get serious and it is time to make decisions. At the United Nations, the G7 countries also exert a determining influence on all decisive questions and are capable of exerting pressure on other countries in order to influence their votes. The United States did not hesitate to paralyse the United Nations during the 1980s by not paying their financial contributions, and would not hesitate to exert new financial blackmailing to avoid the adoption of the tax ⁽¹⁶¹⁾. Despite these difficulties, could one imagine that the UNO or one of its bodies could offer an institutional framework for the CTT?

- The General Assembly of the United Nations is sometimes cited as an institution that is a priori suitable to create and then administer the tax under its authority, since every country has a vote. The problem is that its decisions are not binding. It does not dispose of sufficient authority to create a tax on a universal basis nor can it ensure compliance. In addition, it does not possess sufficient management capabilities. However, it could possibly be a forum for negotiation and conclusion of an international treaty to impose the tax on a global level.
- The Economic and Social Council (ECOSOC) was established by the founding charter of the United Nations as the principal decision-making body in economic and social matters. Theoretically its task is to co-ordinate all economic policies carried out by the United Nations agencies, including the specialised agencies. From the perspective of democratic participation, it is one of the UN bodies that include the largest number of countries from the South, and which provides trade unions, NGOs and other international and national organisations with a right of consultation. In practice, however, the Economic and Social Council has never managed to play an important role in the definition and implementation of either economic or social policies, nor has it even been able to co-ordinate the actions carried out by all the UN agencies. Its involvement in international financial and monetary questions is even more marginal.
- The UN Conference on Trade and Development (UNCTAD), created in 1964 at the request of the countries of the South, is the principal body subordinate to the General Assembly, and includes representatives from all countries. In the past it has acquired the reputation of being the principal forum for discussion and analysis of economic questions primarily concerning the countries of the South. It has developed an integral approach to international trade, finance, investment and development. Several international agreements have been negotiated and adopted under its auspices. However, the majority of them, like the agreements on primary resources have remained on paper only, since the Northern countries have refused

¹⁶¹⁾ A more modest example but still significant is the publication of the joint work in 1996 concerning the "Tobin Tax", "The Tobin Tax: Coping with Financial Volatility" that was initially supposed to be published by the UN. The United States tried to censor it by threatening to withdraw their financial contribution to the UN if it were published. The book was finally published by Oxford University Press.

to sign them, and this has given the UNCTAD the reputation of being only a forum for discussion. It could be a relevant forum for the negotiation of an international agreement to establish the CCT at the global level. However, the UNCTAD does not have the required technical competence and administrative capacity to transform itself into an institution that could be assigned the collection and redistribution of the revenues from the CTT.

- The United Nations Development Programme (UNDP), created in 1964, recombines different funds and specific programmes and has an executive office of 36 members, elected on a geographical basis. It carries out the most important work of the United Nations in the sphere of conceptualisation and implementation of sustainable development policies and the eradication of poverty in co-operation with the governments of the 130 countries of the South where it has been implemented. The UNDP has a long tradition of co-operation with NGOs. Every year it publishes the "Human Development Report" that measures the development for each country according to an indicator that is based on a broad statistical basis, and is much more representative than the per capita income alone. For these reasons, the UNDP could make a useful contribution in the redistribution of resources among the countries and for the identification of social priorities. On the other hand, it has no experience in the field of negotiations and the adoption of new international treaties, particularly in the financial and fiscal areas. Therefore, it could not serve as an institutional framework to collect the CTT and to solve the technical problems that might arise.

In summary, the United Nations, despite appearances, neither offer sufficient democratic conditions nor all of the necessary competences to manage and redistribute the resources coming from the CTT. They could be a forum for negotiation of an international treaty designed to apply the CCT to the whole world, and could provide cooperation in the field of redistribution of resources between countries.

3.3.3 Are the Bretton Woods institutions more adequate?

The International Monetary Fund and the World Bank are two institutions created by the so-called "Bretton Woods" agreements in 1944. They are formally specialised agencies of the UN and present an annual activity report to the UN. However, they have acquired a de facto independence from the UN, and make their major decisions accordingly. It is therefore a very telling fact that the UN considers it a major victory that the IMF and World Bank attended the Monterrey conference on Financing Development in March 2001. This reveals to what extent these two institutions are more used to being accountable to their true masters, the G7 countries, and especially to the United States, since the European Union has never tried to exert a joint influence on the IMF to reinforce a different policy. These two institutions suffer great discredit. This is due to the economic, social and ecological catastrophes caused by the structural adjustment policies imposed by the IMF, the inefficiencies and negative effects of which have unfortunately been proven countless times, and to the programmes of the World Bank which have too often been unrelated to the real needs of the countries they have been applied to, and have even been imposed against the will of the population.

The debate among NGOs (that do not depend financially on these two institutions) are on whether or not it is possible to radically reform these two institutions that used to be Keynesian and are today enshrined in neo-liberalism. Is it still possible or relevant to re-

form these institutions so that they could contribute positively to development or would it not be more useful and productive to declare their "decommissioning as in the case of obsolete nuclear power stations" and their replacement by new institutions established on new and better foundations ⁽¹⁶²⁾ ?

Even if we tend towards the third solution, developing this point would go beyond the aspirations of this text. We will restrict ourselves to underlining reasons why these two institutions, together with their open hostility towards the CCT, would not be suitable to manage the CCT.

The IMF is primarily specialised in the field of international finance (international mobility of capital, currency exchange rates and interest rates) and has a global reach. However, it is not really specialised in the field of national and international taxation since this exceeds its mandate. The World Bank also analyses international finance from the perspective of financing countries in the South but it also does not have technical expertise in fiscal matters, nor legitimacy in this area. During the preparation process for the UN conference in Monterrey (op cit, p. 65-66) this point was also emphasized, when the creation of an international fiscal organisation to be assigned to ensuring a minimum of co-operation and regulation of international taxation was proposed.

The IMF and the World Bank are also characterised by anti-democratic procedures that disqualify them as guarantors of the equality between countries of the North and the South. The richer countries are individually represented in the executive bodies whereas all the other countries are grouped together according to region and may only select one representative, often chosen by the most powerful country in the region. The voting rights are in proportion according to the financial contribution of each country. To give just one example, 21 African countries plus the Seychelles are represented by one executive director and have 4.07% of the votes at the World Bank and 2% at the IMF. In both institutions, the presidents are not elected but chosen by the rich countries.

Both institutions have recently made progress in the matter of transparency and have established independent evaluation bodies. However, the participation of NGOs and trade unions does not go beyond a consultation status, and some representatives, such as those from business, have a stronger status than others. A participation in decision making is not foreseen.

For all these reasons, the IMF and the World Bank cannot be the appropriate institutions to manage the tax.

The Bank of International Settlements (BIS) is the last important international institution. Created in 1930 to facilitate the war reparation payments of Germany, it is the oldest international finance institution. It is the co-ordination centre for central banks, mainly of the rich countries. It supplies important statistical information on the international capital markets. The shares of the bank are held by the 49 central banks of the member states that have the right to vote at the General Assembly. As a bank, it intervenes during financial crises to participate in the financial rescue of countries in difficulties. This occurred with Mexico in 1982 and with Brazil in 1998. However, the BIS also intervenes as a banking agent in some international currency exchange agreements. Accordingly, the BIS was also in charge of carrying out some transactions between European central banks at the time of the European Monetary System (EMS, 1974-1994) that preceded the creation of the Euro. The BIS is an important forum for the elaboration of financial and banking standards (such as the Cooke ratio) that the countries then incorporate into their national legis-

¹⁶²⁾ See the contribution by Walden Bello, director of the NGO "Focus on a Global South": "The Structural Adjustment Plans. A Success for Whom?" in the joint book on the Globalisation Process compiled by Edward Goldsmith and Jerry Mander.

lation. Finally, the BIS fulfills an important role in the harmonisation of financial transaction regulations that are particularly important for the practical introduction of the CCT, as we will see in the next chapter. The BIS members meet each other monthly on a confidential basis to discuss economic policies and banking and fiscal regulation.

The BIS is the international institution that has the most extensive expertise concerning the functioning of international finance, especially with regard to currency markets, and could provide very valuable technical co-operation in collecting the tax. Unfortunately, it does not encompass all the countries of the world, and especially not those of the South, which also have important financial centres such as Singapore and Hong Kong. On the other hand, it includes institutions, such as central banks, which, unlike the Treasuries, are formally independent of governments. This intensifies democracy problems, since the Treasuries are political institutions representing their governments. Finally, BIS is unlikely to be found working together with the representatives of civil society on questions of development, for which it has no competence whatsoever. On the other hand, the BIS could provide their expertise in the field of mechanisms of international finance to an institution assigned to collecting the CTT.

Finally, we have to conclude that no existing institution has all the competences that would be needed to fulfil the three necessary basic functions, i.e. negotiation of an international treaty, the definition of the necessary technical norms to introduce the tax, and the distribution of revenues among the countries. Thus, it would seem more appropriate to create a new institution based on an international treaty that could be negotiated at the General Assembly of the United Nations, if the CTT were to be immediately introduced at a global level, or to be negotiated directly between countries if the CTT were first created by a group of initiating countries. If the tax were created by the European Union, its institutions could be used to negotiate the treaty. The new institution which could be called the "Solidarity Fund for Sustainable Development" (SFSD) which could then work in co-operation with the BIS on all matters dealing with technical aspects of levying the tax, and together with UNCTAD and UNDP for the redistribution of resources. However, in any case, the new institution would have to remain independent from all existing international institutions. The independence should extend to the United Nations, if the tax is not extended across the entire planet, and as long as the United Nations does not reform itself in terms of real independence from the countries of the North, and towards a real equality between North and South. Even if the CTT were created as an initiative of the European Union but without the participation of the United States, it probably would leave the management of the tax to a UN agency where the United States could still exert a decisive influence.

3.3.4 The structure of the new international institution (SFSD)

The conception of the outlines of an institution assigned to manage a global tax on the international level that does not as yet exist is an exercise in the "science of political fiction". Furthermore, among the criticisms formulated about the CCT, the nature of the institution assigned to its management is often criticised. This is why it appears useful to carry out this exercise. This is partially inspired by some studies written by the supporters of the tax, especially concerning the internal organisation of the new institution, which fully defend the original project with respect to its concrete activities and its field of competence. The point we have in common with several of these studies is that the future institution would be composed of two essential bodies: an executive in the form of a States

Council and a legislative in the form of a Democratic Assembly ⁽¹⁶³⁾. According to Heikki Patomäki and Lieven A. Denys, these two bodies would have the following characteristics:

- The States Council would be composed of representatives of states that signed the international treaty to create the CTT. The Council would have the objective to put the treaty into practice, i.e. supervise the implementation of the tax and the revenue levy by signing up the member states, clarify its interpretation in case of litigation or difficulties, and prepare the budget based on the tax levy. Each country would have voting rights proportional to their population. Countries with the largest populations (for instance India or Brazil) would have three votes, countries with a medium-sized population two, countries with a small population one vote. More important decisions would be taken by a majority of two-thirds, ordinary decisions by a simple majority. Furthermore, the council would be assisted in its task by a permanent secretariat that would have also the objective of following innovations on the financial markets in the following fields: creation of new financial products affecting currency transactions; evolution of communication means between the financial and banking institutions; evolution of the means for regulating currency transactions. This would be carried out with the objective of developing the treaty according to market innovations. The secretariat would have to report to the council. It would publish a biannual report to be approved by the Democratic Assembly.
- The Democratic Assembly would be equipped with the necessary powers to control the States Council that reports on its activities. Notably, the assembly has the power to amend the treaty and to vote on the budget the council submits. The council is obliged to implement the budget as it has been amended and voted on by the Assembly. The Assembly is composed of representatives of states, democratically elected federal parliaments, of NGOs and trade unions. Each government has the right to one representative. The federal parliaments have the right to one to five representatives according to the size of their population. The NGOs and trade unions have the right to a number of representatives equalling three-quarters of the number of representatives of states and parliaments. The NGOs and trade unions would be drawn by lottery from a previously established list, since this would be the least arbitrary way of choosing representatives from "civil society" that are not elected and are not legitimised by a democratic vote. The lottery would have to be set up in a way that guarantees a majority of representatives from the trade unions and NGOs from the South. A procedure of accreditation (based on written documents and auditions) would have to be organised to verify that the candidates from trade unions and NGOs are independent from their federal state and international institutions, especially financially, and can prove a real activity in the fields that are likely to be financed before they can be included in this list. The accredited NGOs and trade unions that have not been drawn by lottery, as well as the local communities (regional communities, municipalities) would have the right to directly submit projects to the SFSD.

¹⁶³⁾ Apart from the report by the NGO War on Want already mentioned, the most successful projet being the one by Heikki Patomäki, Professor of Economics and International Politics at the University of Nottingham Trent (Great Britain), heikki_at_nigd.u-net.com and Lieven A. Denys, Professor of European and International Fiscal Law at the Free University of Bruxelles (Belgium) ldenyys_at_vub.ac.be. They are the authors of a plan of a "Treaty for the Tax on Currency Transactions" finalised on 24 January 2002.

3.3.5 What should the budget debate be based on?

As we see it, the new institution should mainly deal with international programmes (currency reserve funds, ecological and social programmes), discuss their objectives, their relative priorities as well as the cost of financing them. As far as the federal development programmes are concerned, the role of the institution would be to determine the share of resources to be returned to each country. The contents of each federal programme would be elaborated by the countries themselves, the SFSD limiting itself to verifying that the development projects that have been submitted are in line with the general founding treaty and the basis international conventions (UN universal charter of Human Rights, reduction of gender inequalities, basic labour standards of the ILO, international environment law, etc.).

According to which principles should the resources be redistributed?

Democracy has to play a decisive role, not only in the functioning of the SFSD but also as a criterion to allocate resources. Each country would receive a share of the revenue in relation to population size and its classification in terms of human development according to the indicators calculated each year by the United Nations Programme for Development (UNDP) (See box 3-5) that could show visible reduction in inequalities between men and women. The general idea would be that countries would receive a larger amount of resources at the beginning when their classification by the Human Development Indicator (HDI) is lower. This proportion could be increased according to the average improvements measured by the Gender-related Development Index (GDI) that incorporates gender inequalities that are made. If no improvement were accomplished, the amount would be reduced after a warning from the SFSD and negotiation with the countries concerned. Therefore it would be unjust if a very poor country with very great social and gender inequalities would continue to receive a lot of resources even if it makes no effort to change the situation and wastes the allotted resources. After several years, in the worst case, the country would receive no further resources and these would either be held in reserve or redistributed to other countries that need them and are making progress in the gender discrimination field. This procedure would aim at avoiding financing countries to no avail, where the money would not be spent in a useful way, and this would never be applied by a blind mechanism but through a permanent political dialogue between the SFSD and the country in question. Ecological indicators would also have to be designed, allowing a similar measure of the ecological status of a country and the improvements made in this area. The UNDP publishes statistics in its annual report on the "level of ecological degradation" for 174 countries, and they could develop these indicators. As in the social and human sphere, a country classified at a low level in ecological status would receive a high amount that would be adjusted according to the measured improvements or deterioration.

Box 3-5 : THE UNDP HUMAN DEVELOPMENT INDICATORS

- The Human Development Indicator (HDI) is calculated each year since 1990 to determine the general improvements of basic aspects of human development with a composite indicator enabling a classification of the countries. The HDI measures average improvements in elementary dimensions of human development: life expectancy, education level and standard of living.
- The Human Poverty Indicator (HPI) concentrates on deficits and failures in the 3 dimensions above.
- The Gender-related Development Index (GDI), evaluates the average progress of the same aspects as the HDI but corrects the results by including inequality between men and women. The stronger this inequality is, the lower the classification according to the HDI of a country that may be well-classed according to the HDI.
- The Indicator of Women's Participation translates inequalities between men and women in the most important fields of participation and economic and political decision-making. It concentrates more on the opportunities open to women rather than their capacities that are already measured by the GDI. Three dimensions are considered: (1) Percentage of women in executive and managing positions. (2) Percentage of women in technical and superior teaching professions. (3) Percentage occupying parliamentary functions.

Source: Based on Human Development Report, UNDP, 1999.

The role of the SFSD would therefore be crucial in the elaboration of international programmes and their financing, and also in determining the quota each country would have to pay to finance federal programmes for sustainable development. On the other hand, the SFSD would not have the right to define the contents of these federal programmes.

How should the federal programmes of development be elaborated?

In fact, if we want to break with the World Bank procedure and start development programmes that really respond to the needs of the people, the best is that they themselves elaborate programmes and determine the priorities themselves. Therefore, in the project proposed here, respecting human rights and exercising political democracy play a decisive role. Exercising democracy is the only means to guarantee that the gains are used for social and ecological aims and not diverted to other aims (e.g. arms trade, buying votes, nepotism) or foster corruption.

As soon as it is possible, the ideal would be that in each country the precise use of resources would be decided by referendum, as in the case of the participatory budget experiment in the city of Porto Alegre in Brazil. In this system, the population, either directly or through trade unions and NGOs, would enter into dialogue with the political representatives elected in the various local assemblies. The objective would be to establish a budget transparency and to define the expenditure priorities. The political parties and the deputies would both take part in defining priorities⁽¹⁶⁴⁾. The same would apply in the case of the revenue from the CTT following a procedure adapted to the preferences and traditions of the countries, since the expenditure concerns social and ecological spheres. The revenue distributed to each country could be the results of a referendum at the national level or it could be decentralised to the regional level or even to the municipal level. All combinations between the federal and local levels are conceivable. This scheme inspired by the process

¹⁶⁴⁾ During the second "World Social Forum" in Porto Alegre, for example, a symbolical vote was organised. The outcome from 6 possible choices was to use resources resulting from the interdiction of arms trade.

of the participatory budget experiment in Porto Alegre and the state of Rio Grande do Sul, would have a decisive place in the democracy.

If human rights and practising democracy are not sufficiently respected, to the extent that the local people cannot express their choices, then, whenever possible, it is up to the SFSD to estimate the possibilities of redistribution of revenue case by case together with the representatives of the local populations. Although this topic is delicate, considering the numerous possible pit falls with respect to ethno-centrism, there are still means to deliver an assessment based on the reports of national and international human rights organisations when auditioning representatives of governments, auditioning trade union representatives, associations and local NGOs, and by sending evaluation missions there. The objective should not be try to distribute the resources allocated to a country at all costs but to verify whether in actual fact there is a way of ensuring that all or some of these resources can benefit the people concerned. There is a huge number of concrete situations. In a country ruled by an authoritarian government, i.e. dictatorial, for example, it can sometimes be possible to allocate financing to communities and local municipalities or to NGOs active in the region. If there are no useful means of allocating the resources to the people concerned, the resources have to be put into a special reserve fund that could be immediately used as soon as a minimum of democratic conditions have been established. Again, the revenue of the tax should not be diverted to foster corruption. If there is no minimal guarantee for spending the revenues properly, it would be better to refrain from distributing them. During a seminar on the CTT and the financing of development, organised by AT-TAC France during the second "World Social Forum" in Porto Alegre in February 2002, a Brazilian speaker underlined to what extent development aid could be destructive if it fosters the nepotistic practices of certain politicians, or even buying votes during elections.

This concept of redistribution of finances in placing democracy at its centre is probably the most utopian. However, it is the only concept that ensures that lessons are learnt from the past failures of traditional development aid. The content of social policies financed by international financial institutions is often defined without the consultation of the people concerned and is then imposed "from above". During the same seminar in Porto Alegre, a teacher coming from Northern Argentina explained how the World Bank imposed educational programmes designed for young Africans in that Argentinean region. Ecological priorities and concepts are also not the same in the countries of the North and South. The new sources of financing resulting from the global taxes must be taken as a chance to completely renew development politics and to break with these practices that lead to failure.

This necessity for democratic control in the elaboration of projects, as well as their finalisation and application, should also be applied to the institution itself, the SFSD that distributes the resources.

This actually implies that the SFSD should only accept representatives from governments that respect the UN Universal Charter of Human Rights, and the fundamental labour norms defined by the International Labour Organisation. The concrete respect for this rights can additionally be monitored with reports from international human rights organisations. Otherwise it is hard to imagine how dictatorships could respect the indispensable rules that ensure that the CTT finances are applied according to the democratic criteria we have described. As a last resort, the participation or non-participation of a country in the international institution would depend on the acceptance by the trade union representatives and NGOs who are independent of the country in question.

Despite the necessary rules we have proposed above, we do not pretend to present an institutional project that guarantees that there will be no deviation of funds from their intended use or that the danger of corruption is definitively avoided and that all financial pro-

jects will be useful and efficient. It is impossible to foresee a solution to all possible problems, especially those we cannot as yet anticipate. However, is this not usually the case when we try to change things? Can we demand of the CCT that all the preconditions that guarantee success are put in place, such as we would demand of any other proposal? The experience with past mistakes in development aid will at least be useful for telling us what not to do. On the other hand, the CCT will not come into existence unless we achieve a political victory over neo-liberalism that enables an extension of democracy. This is why the definition of local priorities, the contents of ecological, education, health and other policies can be rethought and resolved in more favourable conditions than the ones we have today.

STATISTICAL ANNEX OF CHAPTER 3

Table 3-9: CTT Annual Revenues at the World Level for Different Years and Tax Levels

CTT ANNUAL REVENUES AT THE WORLD LEVEL IN 1998 (BILLIONS OF DOLLARS)									
ELASTICITY→	-0.5			-1			-1.5		
	PRE-TAX TRANSACTION COST↓			PRE-TAX TRANSACTION COST↓			PRE-TAX TRANSACTION COST↓		
TAX LEVEL↓	0.02%	0.05%	0.1%	0.02%	0.05%	0.1%	0.02%	0.05%	0.1%
0.01%	21	25	27	15	21	25	11	18	23
0.02%	35	45	51	20	33	43	12	25	36
0.05%	61	87	106	25	50	75	10	29	53
0.10%	90	134	173	27	60	100	8	27	58
0.20%	131	200	268	29	67	120	6	22	54
CTT ANNUAL REVENUES AT THE WORLD LEVEL IN 2001 (BILLIONS OF DOLLARS)									
ELASTICITY→	-0.5			-1			-1.5		
	PRE-TAX TRANSACTION COST↓			PRE-TAX TRANSACTION COST↓			PRE-TAX TRANSACTION COST↓		
TAX LEVEL↓	0.02%	0.05%	0.1%	0.02%	0.05%	0.1%	0.02%	0.05%	0.1%
0.01%	17	20	22	12	17	20	8	14	18
0.02%	28	36	41	16	27	34	9	20	29
0.05%	49	69	85	20	40	60	8	23	42
0.10%	72	107	139	22	48	80	7	21	46
0.20%	105	160	215	23	53	96	5	18	43
CTT ANNUAL REVENUES AT THE WORLD LEVEL IN 2004 (BILLIONS OF DOLLARS)									
ELASTICITY→	-0.5			-1			-1.5		
	PRE-TAX TRANSACTION COST↓			PRE-TAX TRANSACTION COST↓			PRE-TAX TRANSACTION COST↓		
TAX LEVEL↓	0.02%	0.05%	0.1%	0.02%	0.05%	0.1%	0.02%	0.05%	0.1%
0.01%	27	32	34	19	27	31	13	23	29
0.02%	43	56	64	25	42	54	14	31	45
0.05%	77	109	133	31	63	94	13	36	66
0.10%	113	168	217	34	75	125	10	34	72
0.20%	164	251	336	36	84	150	8	28	67
SOURCE: BIS FOREIGN EXCHANGE TRIENNAL SURVEY, VARIOUS ISSUES. AUTHOR'S OWN CALCULATIONS									

Table 3-10: Estimates of the CTT Annual Revenues at Euro Area Level According to the Methodology of the French Ministry of Finance

CTT ANNUAL REVENUES AT THE EURO AREA LEVEL IN 1998 (BILLIONS OF DOLLARS)									
ELASTICITY→	-0.5			-1			-1.5		
	PRE-TAX TRANSACTION COST↓			PRE-TAX TRANSACTION COST↓			PRE-TAX TRANSACTION COST↓		
TAX LEVEL↓	0.02%	0.05%	0.1%	0.02%	0.05%	0.1%	0.02%	0.05%	0.1%
0.01%	9	11	12	7	9	11	5	8	10
0.02%	15	20	22	9	15	19	5	11	16
0.05%	27	38	46	11	22	33	4	13	23
0.10%	40	59	76	12	26	44	4	12	25
0.20%	57	88	117	13	29	53	3	10	23
CTT ANNUAL REVENUES AT THE EURO AREA LEVEL IN 2001 (BILLIONS OF DOLLARS)									
ELASTICITY→	-0.5			-1			-1.5		
	PRE-TAX TRANSACTION COST↓			PRE-TAX TRANSACTION COST↓			PRE-TAX TRANSACTION COST↓		
TAX LEVEL↓	0.02%	0.05%	0.1%	0.02%	0.05%	0.1%	0.02%	0.05%	0.1%
0.01%	5	7	7	4	6	6	3	5	6
0.02%	9	12	13	5	9	11	3	6	9
0.05%	16	22	27	6	13	19	3	7	14
0.10%	23	35	45	7	15	26	2	7	15
0.20%	34	52	69	7	17	31	2	6	14
CTT ANNUAL REVENUES AT THE EURO AREA LEVEL IN 2004 (BILLIONS OF DOLLARS)									
ELASTICITY→	-0.5			-1			-1.5		
	PRE-TAX TRANSACTION COST↓			PRE-TAX TRANSACTION COST↓			PRE-TAX TRANSACTION COST↓		
TAX LEVEL↓	0.02%	0.05%	0.1%	0.02%	0.05%	0.1%	0.02%	0.05%	0.1%
0.01%	8	10	11	6	8	10	4	7	9
0.02%	13	17	19	8	13	16	4	10	14
0.05%	24	33	41	10	19	29	4	11	20
0.10%	35	52	67	10	23	38	3	10	22
0.20%	50	77	103	11	26	46	2	9	21

SOURCE: BIS FOREIGN EXCHANGE TRIENNAL SURVEY, VARIOUS ISSUES. AUTHOR'S OWN CALCULATIONS

Table 3-11: Reduction of Market Volume According to the Tax Rate, the Elasticity and Pre-Tax Transaction Consts**TABLE A 3.3: REDUCTION OF MARKET VOLUMES ACCORDING TO THE TAX RATE,**

ELASTICITY	-0.5			-1			-1.5		
	PRE-TAX TRANSACTION COST								
TAX RATE	0.02	0.05	0.1	0.02	0.05	0.1	0.02	0.05	0.1
0.01%	29	15	9	50	29	17	65	40	24
0.02%	42	25	15	67	44	29	81	59	40
0.05%	59	42	29	83	67	50	93	81	65
0.1%	70	55	42	91	80	67	97	91	81
0.2%	78	67	55	95	89	80	99	96	91

Note: we have added the 0.02% tax rate and the 0.1% transaction cost. B. Jeth's calculations.

The French report (2000) considers that the most plausible scenario is based on a neutral elasticity, -1, pre-tax transaction cost of 0.05% and a tax rate of 0.05%. It corresponds to a reduction of market volume of -67%. It means that after the introduction of the tax, the volume of the market would be at one third of its previous level. It is marked in blue in the table.

We have considered a 0.1% tax rate combined with a pre-tax transaction cost of also 0.1%, and a neutral elasticity of -1. This also leads to a reduction of -67% of the volume of the market. It is marked in green in the table.

In red, are represented combinations where the reduction of the market volume is closed or superior to 90%. These situations are undesirable and can be neglected.

The combination of a high tax rate, 0.2%, with low pre-tax transaction costs 0.02-0.05% and a low elasticity of -0.5 can exist in theory but are highly improbable. It is hard to imagine that traders would not be much more sensible to such an increase in transaction costs. These situations are marked in purple.

Table 3-12: Revenues Estimates According to the Methodology of the Ministry of Finance of Belgium and Finland

TABLE A 3.4. REVENUE ESTIMATES ACCORDING TO THE METHODOLOGY

WORLD LEVEL IN 2004	TOTAL	NON- FINANCIAL SECTOR	OTHER FINANCIAL INSTITUTIONS	BANKING SECTOR
<i>ELASTICITY</i>		-0.5	-1	-1.5
<i>Transaction cost before tax in %</i>		0.1	0.05	0.02
<i>CTT Rate in %</i>	<i>Fiscal evasion in %</i>	<i>Endogeneous reduction of volume in %</i>	<i>Endogeneous reduction of volume in %</i>	<i>Endogeneous reduction of volume in %</i>
0.01	15.1	4.7	16.7	45.6
0.02	15.2	8.7	28.6	64.6
0.03	15.3	12.3	37.5	74.7
0.04	15.4	15.5	44.4	80.8
0.05	15.5	18.4	50.0	84.7
0.06	15.6	20.9	54.5	87.5
0.07	15.7	23.3	58.3	89.5
0.08	15.8	25.5	61.5	91.1
0.09	15.9	27.5	64.3	92.2
0.10	16.0	29.3	66.7	93.2
0.15	16.5	36.8	75.0	96.0
0.20	17.0	42.3	80.0	97.3
0.25	17.5	46.5	83.3	98.0
0.50	20.0	59.2	90.9	99.2
0.75	22.5	65.7	93.8	99.6
1	25.0	69.8	95.2	99.7

This table presents the reduction of volume of the foreign exchange market at the world level. The values in red represent the combination of volume elasticity, pre-tax transaction costs and tax rate that lead to a reduction of market volume equal or superior to two thirds of the previous volume of the market.

A 0.1% tax rate is far above this limit for the banking sector (93.2%), just at the limit for the financial customers and would lead to a reduction of 29.3% of transactions ordered by non-financial customers.

To avoid the nearly disappearance of the market turnover of the banking sector, the solution is to fix the tax rate at 0.02% for banks only. For the customers, the tax rate remains at 0.1%.

Table 3-13: Hypotheses Concerning the Revenue Estimates According to the Methodology of the Ministry of Finance of Belgium and Finland for the Euro Zone

EURO ZONE LEVEL IN 2004	TOTAL	NON- FINANCIAL SECTOR	OTHER FINANCIAL INSTITUTIONS	BANKING SECTOR
<i>ELASTICITY</i>		-0.55	-1.1	-1.75
<i>Transaction cost before tax in %</i>		0.1	0.05	0.02
<i>CTT Rate in %</i>	<i>Fiscal evasion in %</i>	<i>Endogeneous reduction of volume in %</i>	<i>Endogeneous reduction of volume in %</i>	<i>Endogeneous reduction of volume in %</i>
0.01	25.2	5.1	18.2	50.8
0.02	25.3	9.5	30.9	70.3
0.03	25.5	13.4	40.4	79.9
0.04	25.6	16.9	47.6	85.4
0.05	25.8	20.0	53.3	88.8
0.06	25.9	22.8	58.0	91.2
0.07	26.1	25.3	61.8	92.8
0.08	26.2	27.6	65.0	94.0
0.09	26.4	29.7	67.8	94.9
0.10	26.5	31.7	70.1	95.7
0.15	27.3	39.6	78.2	98.5
0.20	28.0	45.4	83.0	98.9
0.25	28.8	49.8	86.1	99.7
0.50	32.5	62.7	92.8	99.8
0.75	36.3	69.2	95.3	99.9
1	40.0	73.3	96.5	99.7

Source: Based on the methodology of the Ministry of Belgium and Finland (2001) with a higher fiscal evasion (25%) and different tax rates. B.Jetin's calculations.

Table 3-14: Hypotheses Concerning the Level of Fiscal Evasion According to the geographical Coverage and the CTT Rate

CTT Rate in %	EURO AREA	EU	EU+ SWITZERLAND+ NORWAY	WORLD LEVEL
0.01	25.2	20.2	17.7	15.1
0.02	25.3	20.3	17.8	15.2
0.03	25.5	20.5	18.0	15.3
0.04	25.6	20.6	18.1	15.4
0.05	25.8	20.8	18.3	15.5
0.06	25.9	20.9	18.4	15.6
0.07	26.1	21.1	18.6	15.7
0.08	26.2	21.2	18.7	15.8
0.09	26.4	21.4	18.9	15.9
0.10	26.5	21.5	19.0	16.0
0.15	27.3	22.3	19.8	16.5
0.20	28.0	23.0	20.5	17.0
0.25	28.8	23.8	21.3	17.5
0.50	32.5	27.5	25.0	20.0
0.75	36.3	31.3	28.8	22.5
1	40.0	35.0	32.5	25.0

Note: Methodology of the Ministry of Finance of Belgium for the EU and world level. Own hypothesis and calculations concerning the euro area and the EU+Switzerland and Norway

PART II

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LEGAL ISSUES IN THE EU CONTEXT

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4 IMPLEMENTATION OF THE CURRENCY TRANSACTION TAX IN THE EU LEGAL CONTEXT

This contribution discusses the compatibility of a Currency Transaction Tax (CTT)¹⁶⁵ with the legal framework of the European Union (EU) and elaborates on the opportunities at the EU level to ensure a correct application of the tax and the prevention of fraud.

The starting point of this contribution is the address on *Capital Tax Systems and Globalisation* that the author gave to the European Parliament Intergroup on 27 June 2001. The address was published as "*An Opinion on Tobin-Spahn Tax on Financial Transactions and Art. 56 EC*" and annexed hereto (European Taxation, 2001, p. 430-435). It concludes that the CTT is not in principle incompatible with the legal framework of the EU. In detail the conclusions slightly reframed are:

- (1) The Acceptability of a CTT must be examined at the level of European law, i.e. in view of the Treaty articles on taxation and the fundamental articles of the treaty that govern the Internal Market including the free movement of capital.
 - (2) The EC Treaty articles on taxation do not oppose a CTT and make it possible to prescribe the introduction of a harmonised CTT (at the national level) or to harmonise at the European level the CTTs introduced at a national level.
 - (3) The European secondary tax legislation must be observed by a national CTT (and, where necessary, can be adapted by unanimity).
 - (4) Upon the introduction of the CTT, the member states must respect other fundamental principles of (non-tax) European law.
 - (5) There is a concurrence of the objectives of the European Union/EMU and the CTT that aims at the financing of development policy and furtherance of monetary stability. The CTT is therefore not in principle incompatible with the objectives of the Treaty and the EMU.
 - (6) A crucial test for the Tobin Tax is its compatibility with the European non-discrimination principle that, inter alia, contains an almost complete prohibition of discrimination on grounds of nationality (Article 12 EC) and with the Internal Market's four fundamental principles of freedom of movement.
- It cannot be concluded that the CTT would in principle be contrary to the EU non-discrimination principle because the tax is based upon a justifiable differentiation.
- (7) Under the free movement of capital and related payments member states can introduce a CTT with a low tariff which thereby does not distort the movement of capital, or that is, under the Rule of Reason, justified in the light of its legitimate objectives that concur with the EC treaty objectives, and that does not unreasonably or disproportionately restrict the movement of capital.
 - (8) The CTT surcharge at a high tariff, however, the main aim of which is not budgetary but to combat harmful currency fluctuations, serves essentially a monetary policy, which within the scope of the EMU requires action at European level within the framework of the EMU (with a cooperation between EU and national authorities also at the international level). This high tariff surcharge is not contrary to the EC treaty if used as an instrument of monetary policy in the EU policy.
 - (9) Also, the free movement of goods, persons and services do not oppose under the Rule of Reason a CTT that, in the light of its objectives, does not unreasonably or disproportionately obstruct payments.

¹⁶⁵ CTT as formulated in Part II of the proposal for a treaty by H. Patomäki and L.A. Denys, *Draft Treaty on Global Currency Transaction Tax*, January 2002 and slightly revised in 2005. The draft is based on PATOMAKI, Heikki (2001), *Democratising Globalisation, The Leverage of the Tobin Tax*, London and New York: Zed Books. It accommodates to a large extent the basic ideas of Paul Bernd Spahn (2002), who published a well-elaborated report, *On the Feasibility of a Tax on Foreign Exchange Transactions*, Report to the Federal Ministry for Economic Co-operation and Development, Bonn, www.uni-frankfurt.de. This Draft Treaty (Part II) was the technical source of inspiration for the Belgian Law on CTT of November 19th 2004, published in the *Moniteur Belge* of December 24th 2004.

The EU Commission took a rather sceptical position on the compatibility of the CTT with the legal framework of the EU. At the request of the EU Council, the EU Commission published a report on *"Responses to the Challenges of Globalisation: a Study on the International Monetary and Financial System"* (14 February 2002).

The report does not really discuss the implementation of a "Tobin-Spahn Tax" from the legal or technical perspective. It only covers the CTT in a few pages. The report concludes that:

- The CTT may look appealing, but the feasibility is not demonstrated;
- A tax on transactions between the euro and currencies of other EU member states is likely to be found contrary to the Treaties;
- The compatibility with the EU's obligations within the World Trade Organisation (WTO) remains to be explored;
- The non-EU international cooperation has not reached a sufficient degree of integration, so that the feasibility of reaching an international agreement can be questioned;
- Extensive international coordination would need to be based on legally binding international agreements, including definitions of the tax base, the tax rate, the administration of the tax and an extensive coverage of countries;
- Collection of the tax at the national level requires an unprecedented degree of coordination among countries, such as a worldwide exchange of information.

The report of the EU Commission does not conclude that a CTT is not feasible in the legal context of the EU. It points to an intra-EU problem of taxation on exchange transactions between euro and other EU currencies, and the feasibility of a worldwide agreement and coordination for implementation. The report does not discuss the opinions already suggested in the literature, such as the options taken in the Draft CTT Treaty (see footnote 1), which to a large degree offers workable solutions for the geographical scope and coverage (taxable persons, taxable transactions, place of taxable transactions, chargeable events), the tax base, the tax rate, the tax liability and measures to ensure the application and to prevent fraud, drawing on the solutions found for the EU value-added tax (VAT), especially on international electronic trade and for the EU Saving Directive, especially with regard to the concept of paying-agents.

Moreover, on the occasion of their assessment of the Belgian Law on the CTT, the Commissioner for Taxation and the European Central Bank (cfr. hereafter sub 2.3.) have questioned, doubted and even to a certain extent negatively commented the CTT. In replies to EU parliamentary questions, the EU Commission has given further comments.

In its reports of 2005 in the framework of the debate on the EU Development Policy the EU Commission took a more neutral position but still repeated the differentiation / discrimination between the Euro and the other EU Member States currencies as the main legal obstacle. This is understandable as the financing of development with a low tariff CTT does not meet the same monetary criticism as the CTT in its dimension of a monetary surcharge.

The Commission Services prepared a Staff Working Paper in April and June 2005 as background for the debate on EU development policy in the framework of the assessment of the financing for the Millennium Development Goals (+5) in September 2005.

In this paper a more neutral position is taken vis à vis the CTT. In "New Sources of Financing for Development: A review of Options, SEC (2005) 467, Brussels, 5.4.2005", (building on the Commission Globalisation Report, the Landau Report and the Lula Report) the discrimination between EU Member States with different currencies for intra-EU

transactions compared to those within a country or within the Eurozone is listed as the main concern within the legal issue of the compatibility of the CTT with the free movement of capital. The paper however offers as a solution to have a tax on all financial transactions (p. 17).

In the legal assessment of the CTT the paper concludes (p. 30) that *"the compatibility with the EC Treaty is not established yet. A CTT could restrict the free movement of capital and payments (Art. 56 TEC). The tax could also discriminate transactions involving countries with different currencies - including intra- EU transactions - compared to those within one country and within the euro zone.*

The view of the European Central Bank, in an opinion relating to the Belgian tax model, was that the measure would not be compatible with the Treaty.

Furthermore, it needs to be checked whether such tax would be compatible with the GATS rules and other international obligations."

In the Communication from the Commission to the Council and the European Parliament "Accelerating progress towards attaining the Millennium Development Goals - Financing for Development and Aid Effectiveness" (Com (2005) 133 d.d. 12.04.2005) the Commission lists the range of proposals for international taxation contained in the Landau and Lula reports to be the most prominent proposals for new innovative finance mechanisms. The Commission quotes a.o. taxes on currency or financial transactions like the Tobin Tax (p. 12 - 13) inviting the Council "to agree to accelerate work on the most promising options for innovative additional sources of finance" and "to explore the scope for a European initiative".

From the annex to the Communication a summary of replies to a survey with Member States (January 2005) indicates that a Tobin Tax on currency transactions (among others) poses problems of political acceptability or economic efficiency (p. 28). The survey shows that with six Member States are involved in studies and analysis of a CTT (this tax scores the best compared to the IFF, the carbon tax, aviation tax, other international taxes and global lottery).

The EU comments do not take into account the growing number of instruments of cross border cooperation of tax, judicial and police authorities that may be applicable to the CTT.

It remained thus to be further examined - and that is the object of this contribution - whether the CTT is compatible with the changing legal framework of the EU and what instruments exist at the EU level to ensure a correct application of the tax.

The following chapter (4.1.1) deals with the change of the legal framework since 2001 up to the EU Convention (EUC 2004). It is the author's contention that the developments since 2001 do not basically affect the previous conclusions. In this section, the institutional framework relevant for an EU CTT will be clarified.

The second part of this chapter (4.1.2) intends to formulate further suggestions for implementation of a CTT in the EU on the basis of the development of the EU legal framework, taking into account the role of the European System of Central Banks.

In the third part of this chapter (4.1.3) comments are formulated on the Opinion of the European Central Bank and the European Commissioner for Taxation on the Belgian CTT Law approved by the end of 2004.

Chapter 4.2 focuses on the opportunities at the EU level to ensure a correct application of the tax and the prevention of fraud. This study concentrates on the EU instruments for cross-border cooperation and suggests how the existing instruments could be valued in the context of the CTT.

It becomes clear that the existing EU - Mutual Administrative Assistance in Tax Matters may, with a simple addition making reference to the CTT, be made applicable to organise the appropriate safe net for a coordinated tax administration of an EU-wide CTT.

The correct application of the CTT may be further guaranteed by the application of the existing EU money laundering legislation, the EU judicial cooperation in criminal matters and the EU administrative cooperation in criminal matters as well as the Prudential Supervision of Financial Institutions.

4.1 The implementation of a CTT in the EU Treaty Framework

Since 2000, the EU and EC Treaties have been amended¹⁶⁶ by the Treaty of Nice, which contains an important chapter on “Enhanced Cooperation”¹⁶⁷. The Accession Treaties of 2003 have substantially enlarged the EU to ten new Member States. But as far as relevant for this contribution, the basic mechanisms have not been changed on this occasion. This study discusses the issues concerning an implementation of the CTT in the EU on the basis of the Treaty establishing the European Community (TEC or EC Treaty) with European institutions and EC Law, based on the Treaty Directives and Regulations, the Treaty on the European Union (TEU or EU Treaty) with an intergovernmental dimension and European Union Law, based on Conventions on Criminal Law (the “Freedom and Security” pillar), the EU cooperation of police authorities (coordinated by Europol), and on the cooperation of judicial authorities (coordinated by Eurojust). The Conventions relevant in this context are the Europol Convention (1995), the Convention on the Protection of the European Community’s Financial Interests (1995), the Convention of Schengen (1985 and 1990), which is also relevant for police cooperation, the Judicial Assistance Convention (2000), and common positions, joint actions, framework decisions, and non-binding Decisions.

In the light of the objectives of the European Treaties, it is important to stress that the CTT’s main objectives are to support international development policies and enhance international monetary stability. These objectives concur with the general objectives of the EC Treaty (art. 2, 3, 4 and 177). The CTT is therefore an instrument that would support internal and external policies of the EU (TEC Part III, Titles VII Economic and Monetary Policy, XIX Environment, XX Development Cooperation and XXI Economic, Financial and Technical Cooperation with third countries).

4.1.1 General objectives and principles of the EU Treaties

4.1.1.1 Non-discrimination principle

The case law on the non-discrimination principle has further developed since 2001. In view of the CTT debate, to my knowledge no adversary developments are to be reported, so that I can refer to the earlier findings given in the annex. An excellent overview of the case law as it stands now is given by Advocate General Poiares Maduro in the opinion in the Marks and Spencer case (C-446/03) of April 7th 2005.

The CTT is not contrary to the non-discrimination principle. The CTT is based on justified distinctions or differentiations. CTTs not harmonised at the EU level may create disparity among Member States in the tax systems within the EU, where (and to the extent that) the fiscal sovereignty is not transferred to the EU level. Tax disparities are not prohib-

¹⁶⁶ This contribution will not focus on the further amendments that would result from the European Convention 2004 (EUC 2004) unless otherwise stated.

¹⁶⁷ Art. 11 and 11a TEC juncto 43 to 45 TEU.

ited by EU law. The Member States have indeed in principle the right to introduce new indirect taxation, until the EU enacts measures in that area.

Also, differences in currencies under the current Treaties are seen as acceptable disparities: they co-exist within the EU.

4.1.1.2 Internal market principles

Four Fundamental Freedoms

The CTT does not contradict the basic freedoms of the internal market, the free movement of people, services, goods and capital. The treaty articles on the four fundamental freedoms will not be changed in substance under in the EU Constitution 2004.

As to the principles of the internal market in general, the jurisprudence of the European Court of Justice (ECJ) has developed in the same direction as summarized in annex 1 (p. 434; see also above sub 2.1.1. the reference to the 2005 Opinion of the Advocate-General in the case of Marks and Spencer). Furthermore, it appears that the "rule of reason" allows a balanced approach in valuing measures of general public interest; also the concept of fiscal cohesion seems to be given a new development, at least in the opinions of Advocates-General (e.g. A.G. Kokot in the Case C-319/02 Manninen and A. G. Tizzano in Case C-315/02 Lenz).

We can add to the reasoning indicated in the summary in annex 1 that it is recognized that there will not be a prohibited restriction when Member States do not restrict the "access to the market", nor hinder the transactions that take place in that market; in our opinion this will also be the case if the Member States do not regulate the use nor the exchange of the currencies, but merely organise one of the conditions of functioning of the market at the national level (e.g. the taxation that conditions the functioning) in a neutral way (i.e. as the CTT envisages, all currency exchange transactions are taxed, including those where the domestic currency is used).

In the case law of the European Court, according to leading authors (M. Lehner, A. Cordewener, EALTP conference 2005, publication in print) the market access test is supplemented by a "rule of remoteness" which excludes minor hindrances from the realm of the market freedoms. The question is then whether the CTT specifically places a burden on transactions which fall within the scope of the market freedom and whether the CTT has the effect of splitting up the internal market into several domestic markets by constituting a barrier to entry or to exit.

The organisation of the national taxation of market transactions in a neutral way through a CTT falls outside the scope of the EU Internal Market rules: the CTT, as envisaged, does indeed not affect the position of a person as such, nor the access to the market.

The CTT as envisaged is neutral, since it is not dependent on the position or residence of the market player nor does it influence his behaviour on the market; it does not distort competition between persons nor between currency transactions, as they are all treated equally.

A double taxation however may be an unacceptable restriction to the internal market. Therefore, the CTT envisaged (and indeed the Belgian law) provides for a clause to avoid double taxation by giving preference to the taxing rights of the country of the transferor, rather than to the country of the transferee, or the country of which the currency is involved. The CTT is also not an exit or entry tax as it does not take account of the origin of the currencies nor its destination (e.g. domestic vs. foreign currency; foreign vs. another foreign currency; foreign vs. domestic currency); CTT as envisaged is to be levied on any currency exchange. The "exchange" of a currency within the same currency (e.g. coins for

notes or the reverse only within the same domestic currency or the same foreign currency) is not to be considered a taxable exchange of currency; also the mere use of a currency for payment of goods or services is not a (taxable) exchange in the envisaged CTTs.

Free movement of Capital

Although the treaty article on capital liberalisation is already “directly effective”, also with respect to third countries (art. 57.1 TEC), the restrictions existing on 31 December 1993¹⁶⁸ in four areas (direct investment, establishment, provision of financial services, and admission of securities to capital markets) may be continued. The ECJ ruled¹⁶⁹ that currency transactions are not within the listed areas, so that this article is not relevant for the CTT. However, the EU may legislate in those areas and shall endeavour to liberalise the capital movement with third countries to the greatest extent possible (art.57.2 TEC).

Moreover, the EU Council may, on a proposal from the Commission, unanimously decide to enact measures that constitute a step back in EU capital liberalisation with third countries (art.57.2 in fine TEC). Even if the CTT was considered to be a step back in EU capital liberalization towards third countries - quod non - this clause would allow the introduction of a CTT anyway.

The two general EC law exceptions to the freedoms of movement also applicable to the free movement of capital, i.e. the justified differentiations or the justified restrictions, may allow the possible restrictive dimension of the CTT.

Moreover, Art. 58.1a TEC allows for distinguishing between taxpayers who are in different situations with regard to the place of residence or the place where capital is invested. In some specific circumstances, this might apply to a CTT. It is however not clear whether the self-imposed restriction for such legislation on intra-EU capital movements not existing before 31 December 1992¹⁷⁰ reduces this possible differentiation c.q. justification. If so this clause may e.g. not allow CTT restrictions on transactions with taxpayers of non-euro Member States or on capital movements to and from these States.

Article 58.1b TEC allows measures to prevent infringement of Member States laws in the field of taxation and the prudential supervision of financial institutions. It also allows measures to gather administrative or statistical information and other measures justified on grounds of public policy or public securities. These exceptions may well be appropriate not only to introduce measures against CTT tax evasion and avoidance, but also to reinforce the application of prudential supervision mechanisms to condition the compliance with the CTT.

Art. 59 TEC allows exceptional monetary community measures with respect to third countries for up to six months. The Council decides on these matters, after consultation with the European Central Bank (ECB). Where it concerns a tax measure, a unanimous vote will be required. This clause might be very important for the high surcharge of the CTT to be permitted in times of excessive currency fluctuation. A European Directive or Regulation may enable a simplified urgent procedure, allowing a decision for six months. Non-Euro Member States can also take such measures on the basis of art. 119, 120 and 122(6) TEC.

The EU Commissioner for Taxation and the ECB are however of the opinion that this article is not appropriate for a CTT (cfr. infra sub 2.3).

¹⁶⁸ For Estonia and Hungary, December 31st 1999

¹⁶⁹ ECJ Case C-163/94 Sanz de Lera

¹⁷⁰ Declaration on art. 73 of the Maastricht version – art. 58 of the Amsterdam version.

4.1.2 The institutional framework

4.1.2.1 *EU competences in general in view of a CTT.*

Within the fundamental principles of the institutional framework the EU cannot introduce a fully fledged “European tax”, except with respect to the Common Custom Tariff Duties in the framework of the Customs Union (art. 23-27 TEC) and apart from agricultural levies and antidumping duties.

The competence or power of taxation is not conferred to the European Union. As the EU has no exclusive competence, the Member States are thus in principle free to introduce a CTT.

However, the EU has exclusive competence in the area of monetary policy for the Eurogroup, the group of Member States whose currency is the euro. This includes the competence to conclude international agreements. The monetary policy of the EU is conducted by the Eurosystem, constituted by the ECB and the national central banks of the Eurogroup. Together with all other national central banks in the EU they constitute the European System of Central Banks (ESCB), which is governed by the ECB (art. 107 TEC).

Non-euro Member States and their central banks however retain their powers in monetary matters (art.112 TEC). Nevertheless, the ECB must be consulted on all legal acts from the EU and all Member States in the monetary area (art. 105.4 TEC).

In areas of exclusive competence, only the EU may legislate. Member States can only act if so empowered, or for the implementation of EU acts. It is therefore necessary for Member States that introduce a CTT with a monetary surcharge to refer to the European level for that dimension of the CTT.

In areas where the EU has no exclusive competence conferred upon it, the subsidiary and proportionality principles apply (art. 5 TEC). In the light of the wording of art. 5 TEC, it is reasonable to assume that a CTT aimed at a regional or global coverage cannot be sufficiently achieved by the Member States at their level. For reasons of the scale and the effects of the proposed action, it could be better achieved at the European Union level. Thus, it would be appropriate for the EU to act in the matter of the CTT, but only to the extent necessary.

The internal market (art. 3.1c and 14.2 TEC), which includes the harmonisation of indirect taxes (Part III, Title VI, Chapter 2), is considered to be an area of shared competence. The Member States may exercise their competence, but only to the extent the EU has not exercised its competence or has ceased to exercise it.

Development cooperation and humanitarian aid are also considered to be an area of shared competence. Here the EU can take action and conduct a common policy, but that competence may not result in Member States being prevented from exercising their competence (art. 177-181 TEC). It can reasonably be concluded that the CTT enters into these competences of Member States. Therefore, the EU could harmonise legislation in this area, but it cannot prevent Member States from acting themselves.

Apart from the euro Member States, economic policies are “coordinated” by the Member States themselves, but within the broad guidelines adopted by the EU Council.

Even the most “European” tax that actually exists, the Common Customs Duties, which is an area of exclusive EU competence (art. 23 et. seq. TEC), is, though fully unified (there is a Common Customs Union), basically administered and collected at the level of the Member States on the basis of European Regulations. These are legislative acts, which are generally applicable, binding in their entirety and directly applicable in the Member States (art. 249 TEC).

As the EU has no tax administration, it is recommendable that a European CTT be administered by the national tax administrations of the Member States. The appropriate in-

strument to realise a coordination or harmonisation of the CTT in the EU is a Directive (art. 249 TEC). The VAT, which is the most elaborated, harmonised indirect tax in the EU, may be the appropriate model. It is organised at the EU level by the legal instruments of European Directives. These are legislative acts binding as to the result, but leaving the choice of forms and methods to national authorities (art. 249 TEC).

4.1.2.2 The EU Fiscal provisions

The EU has the competence to harmonise indirect taxation, provided that this is necessary for the internal market and to avoid distortion of competition. The EU can thus prescribe the introduction of a harmonised EU-CTT at the national level. The EU can also prescribe the harmonisation of the CTTs autonomously¹⁷¹ introduced by (some) Member States. For harmonising indirect taxation, unanimity at the Council is required (art. 93 TEC).

A limited group of Member States may however engage in an "enhanced cooperation", if it is established by the Council that the EU as a whole cannot attain the objectives of such cooperation within a reasonable time, and if at least eight Member States participate (art. 43-45 TEU). Unanimity in tax matters is then constituted just by the votes of all of the participating Member States. The acts bind only the participating Member States. The enhanced cooperation must not undermine the internal market or constitute a barrier to intra-community trade. It must not discriminate between Member States or distort competition between them.

As indicated above, the CTT does not principally violate these rules. Germany, France and other Member States are considering, together with the European Commission, to apply this new technique for the first time to harmonise corporate tax. This may serve as inspiration for the CTT.

The Member States can formulate a request to the EU Commission which may or may not submit a proposal to the Council that may act after obtaining the opinion c.q. the consent of the European Parliament. Each of these institutions can thus block such requests or proposals. As it relates to a fiscal matter, unanimity is required, while only participating members may vote. However, the Council of the Heads of State may unanimously decide to act by qualified majority. Hence, the CTT movement could encourage Member States to initiate the enhanced cooperation procedures for the establishment of an EU-CTT.

Apart from art. 93 TEC on the competence of the EU to harmonise indirect taxation, two other sets of fiscal provisions must be considered in the context of a CTT in the EU. These are art. 25-27 TEC on the customs union and art. 90 TEC on the fiscal non-discrimination of products.

It is established ECJ case law (e.g. Case C-358/93 *Bordessa*) that foreign currencies are not "goods" in the sense that they fall under the requirement of the free movement of goods. A CTT on "import and export" exchange of foreign currencies would therefore not fall under the prohibition of import and export duties or other measures with similar effects (art. 28-29 TEC). The CTT would also not be affected by the prohibition of internal taxation of "products of other Member States", or similar forbidden indirect tax measures to protect domestic products, as meant in art. 90. Moreover, these treaty rules apply only for products from within the EU.

It may be concluded that outside the scope of the EMU, the establishment and functioning of the internal market and the avoidance of distortion of competition, the EU has no right to impede on the sovereign rights of taxation of the Member States. However, by ex-

¹⁷¹ subject to the prescribed consultation procedures; e.g. art. 105,4 TEC provide for the consultation of the ECB for national legislative initiatives in areas of its competence

ercising these sovereign rights, the Member States have to respect the internal market principles and the more general principle of equal treatment or prohibition of unjustified discrimination. Furthermore, the external EU freedom of free movement of capital is also to be respected in establishing taxation rules.

As already indicated, the secondary EU tax law, harmonising indirect taxation, especially the VAT and the taxes on the raising of capital, is particularly useful for the realisation of a European CTT. In the light of the VAT experience, it is advisable, in view of a coverage of the CTT in Europe as comprehensive and concise as possible, to establish a European Directive for the harmonisation of the CTT where the tax exists (Belgium, France) and for the introduction in other Member States. This Directive would provide a common set of substantive rules concerning the definition of taxable persons, taxable events, localization, tax base, tax rate, tax liability and the prevention of fraud. The fact that the draft version of the CTT, which this contribution refers to, borrows many concepts from the Sixth EU-VAT Directive, using a uniform set of legal concepts and a common case law based on jurisprudence of over 400 ECJ cases, may facilitate the introduction of a European CTT into the EU body of law.

As an example, it may be relevant for the CTT to refer to a 1997 milestone case decided by the ECJ in the matter of the First National Bank of Chicago in which the Court ruled:

“On this question, the Court observes first of all that the currencies which are exchanged against other currencies in a foreign exchange transaction cannot be regarded as ‘tangible property’ within the meaning of Article 5 of the Sixth Directive, since money used as legal tender is involved. Foreign exchange transactions are thus supplies of services within the meaning of Article 6 of the Sixth Directive.

From the mere fact that no fees or commission are charged by the Bank upon a specific foreign exchange transaction it does not follow that no consideration is given. Moreover, any technical difficulties which exist in determining the amount of consideration cannot by themselves justify the conclusion that no consideration exists.

It must therefore be held that foreign exchange transactions, performed even without commission or direct fees, are supplies of services provided in return for consideration, that is to say supplies of services effected for consideration within the meaning of Article 2(1) of the Sixth Directive.

The answer to be given to the first question must therefore be that transactions between parties for the purchase by one party of an agreed amount in one currency against the sale by it to the other party of an agreed amount in another currency, both such amounts being deliverable on the same value date, and in respect of which transactions the parties have agreed (whether orally, electronically or in writing) the currencies involved, the amounts of such currencies to be purchased and sold, which party will purchase which currency and the value date, constitute supplies of services effected for consideration within the meaning of Article 2(1) of the Sixth Directive.”

This case demonstrates that an indirect taxation of currency transactions is not only very well compatible with EU law, but also technically feasible. It may be relevant to point to the fact that currency transactions by EU taxpayers with non-EU taxpayers are not exempted but zero-rated under the VAT. This implies that principally tax administrations could already control and investigate the taxable basis of the CTT turnover and transactions.

In the context of the implementation of the CTT at the EU level, two VAT techniques should be mentioned. Services performed on behalf of third parties fall under art. 6, § 4 of the Sixth EU-VAT Directive and are to be taxed as well. The VAT Directive also organises a reverse-payment system that transfers the duty to pay the tax to contracting parties established in the EU where the other party is established abroad. Both techniques are very

efficient to tax international transactions. These techniques are also proposed in the CTT draft and were adopted in the Belgian law.

The CTT is not prohibited as a transfer tax by the VAT-Directive that has an exclusivity clause in art. 33 of the 6th VAT Directive, nor by the EU Directive on the taxation of the raising of capital (TRC-Directive) art. 12 (cfr. Annex, footnote 6 and 7).

As the CTT does not provide for a credit mechanism for CTT paid "in amount" (input tax) and envisages the gross amount of currency transactions (not the value added by the traders), the CTT does not come under the prohibition of art. 33 Sixth EU VAT Directive. As to the compatibility with the TRC-Directive, a recent court case (Commission versus Belgium, d.d. 15 July 2004) is worthwhile mentioning:

"It is sufficient to state that the prohibition on levying taxation other than capital duty and the other taxes and duties mentioned in Article 12 refers only to the capital transactions expressly listed, without it being necessary, in order to define them, to specify the identity of the person liable to the tax."

Currency exchange transactions have not been listed in the TRC Directive.

It is clear that where the TRC-Directive allows Member States to tax transfers of securities other than on the occasion of the capital transactions expressly listed, such as the formation of a company or the increase of its capital, and not prescribing the Member States to effectively tax such transfers, is not a violation of the EC Treaty in general, nor more specifically of the capital liberalisation, a currency transfer tax as such can also not be deemed to be such a violation either.

Moreover, both Directives do not exclude each other, nor do they exclude in principle other transfer taxes (see art. 12 TRC and art. 33 Sixth VAT Directive).

The examination of the relevant fiscal provisions in the TEC demonstrates that, at the actual stage of development of the administration of taxes in the EU, it is appropriate to conclude that the EU is not in a position to introduce an EU-CTT which is administered at the EU level. It should, like in other tax matters, leave this to the Member States. The EU could however establish the necessary measures for the harmonisation, the implementation and the coordination of the legislation of Member States. Through its support, coordination and supplementation of actions of the Member States, especially with respect to administrative cooperation, the EU can organise the linkage of national tax administrations as well as the linkage to the control and cooperation mechanisms organised at the EU level. A European Directive would be the appropriate means for the implementation of a harmonised EU-CTT, as this would allow national administrative organisation and control "in the field".

4.1.2.3 The Economic and Monetary Union

As already mentioned (part 2.2.1.), the EU has the exclusive competence in the field of monetary policy in the euro-zone. The economic and monetary policy of the EU is dealt with in art. 4, 8 and Part III, Title VII, Chapters II-IV of the TEC. It implies a coordination of economic policies by the Member States and a single monetary policy and exchange rate policy, including a single currency in the Eurozone. Both policies lay down the principle of an open market economy with free competition within the broad guidelines of the EU (including a multilateral surveillance), favouring an efficient allocation of resources (economic policy, art. 98 TEC; monetary policy, art. 105 TEC).

The EU Council can establish measures necessary for the introduction of the euro as a single currency (art. 123.4 TEC). Since this implies the exchange of currencies involving the euro, the EU Council has the authority to impose conditions with respect to the payment system and can organise systems to control the use.

As briefly indicated in part 2.2.1., the ECB plays the most important role in the field of EU monetary policy. In consultation with the ECB, the Member States of the Eurogroup shall adopt common positions at international level (art. 111 TEC). This is managed within the Eurosystem, the network of the ECB and the national central banks of the Eurogroup. The Eurosystem is part of the ESCB, which is constituted by all central banks in the EU and governed by the ECB. The central banks operate independently from national or European political authorities (art. 108 TEC). The ECB establishes the guiding policies principles and is responsible for the currency exchange system of the euro vis-à-vis other currencies in the EU. The Eurosystem's basic task is to define and implement the EU monetary policy, to conduct the foreign-exchange operations, to manage the foreign reserves and to promote the smooth operation of payment systems.

As to the non-euro Member States, called "member states with derogation", several provisions do not apply (art. 122.3° TEC), such as the objectives and tasks of the ESCB. However, art. 105. 6° TEC does apply. This article allows the Council to confer upon the ECB specific tasks related to the prudential supervision on possible ECB policies.

Art.111.3° TEC empowers the EU authorities to conclude international monetary agreements with respect to systems of exchange rates, ensuring a single position does not apply to non Euro Member States.

The EU competence with respect to the non-euro Member States is thus rather limited. The TEC only prescribes at least one annual examination of the situation regarding the movement of capital and freedom of payments and the application of EU law by an Economic and Financial Committee, including the keeping under review of the monetary and financial situation of non-euro Member States. The Economic and Financial Committee is composed of Member States of the EU Commission and the ECB (art. 114.2 TEC).

The exchange rate policy of each non-euro Member States is however a "matter of common interest" (art. 124, 1° and 2° TEC).

The TEC provides moreover with appropriate procedures with respect to safeguard measures for non-euro Member States faced with monetary difficulties (art. 119 TEC) or a sudden crisis in the balance of payments (art. 120 TEC).

As the surcharge in the CTT is undoubtedly a "monetary" instrument to counteract undesirable currency fluctuations, especially detrimental to the weaker currencies and States, the role of the ECB as the holder of the monetary sovereignty of the Eurogroup is essential. The involvement of the ECB and the ESCB is not only necessary, it is also welcome, given the competences and the instruments it has at its disposal. The ECB could conclude the necessary agreements with the central banks in the Eurogroup to organise an appropriate support for the implementation and supervision of the application of the EU-CTT. The ECB could furthermore make appropriate recommendations to central banks in the other Member States to that effect. The Member States outside the Eurogroup have a large monetary sovereignty, but they are not outside the ESCB. Moreover, the ECB could conclude appropriate agreements with the private financial settlement institutions, such as the Target Agreement. The linkage with the Prudential Supervision of the financial sector could also be entrusted to the ECB. The EU Council may indeed confer to the ECB specific tasks relating to the prudential supervision of credit institutions and the stability of the financial system. This applies also to the non-euro Member States.

4.1.2.4 The EU development cooperation

The EU Development Cooperation policy and that of Member States is complementary (art. 177 TEC). In those policies the EU implements, which are likely to affect developing countries, the EU authorities have to take the objectives of development cooperation into account (art. 178 TEC). The EU may conclude agreements with third countries

and international organisations helping to achieve the development objectives, such as the Millennium Development Goals of the UN (art. 177.3 and 181 TEC). The EU and the Member States may take joint actions (art. 180 TEC). The EU can carry out cooperation with third countries, including financial aid, in consistency with the development policy and complementary to the actions of Member States.

Both the draft CTT Treaty (art. 17 Global Common Goods) and the Belgian Law (art 5 § 1,3°) have the aim to contribute to the development cooperation and therefore a CTT, introduced at Member States level and/or harmonised at EU level, basically concurs with this EU objective.

4.1.2.5 Conclusion

From the institutional perspective it may be concluded that the EU has no exclusive competence in indirect taxation and that Member States are thus free to introduce a CTT. Since the EU has exclusive competence in the area of monetary policy for the Euro-Member States, a CTT with a monetary surcharge requires a European intervention. Moreover, a CTT with a global or regional coverage could be better achieved at the EU level.

The principles of the internal market, including the freedom of capital and development-cooperation are areas of shared competence between the EU and its Member States

It may be concluded that outside the scope of the EMU, the establishment and functioning of the internal market and the avoidance of distortion of competition, the EU has no right to impede on the sovereign rights of taxation of the Member States. However, by exercising these sovereign rights, the Member States have to respect the internal market principles and the more general principle of equal treatment or prohibition of unjustified discrimination. Furthermore, the external EU freedom of free movement of capital is also to be respected in establishing taxation rules.

The examination of the relevant fiscal provisions in the TEC demonstrates that, at the actual stage of development of the administration of taxes in the EU, it is appropriate to conclude that the EU is not in a position to introduce an EU-CTT which is administered at the EU level. It should, like in other tax matters, leave this to the Member States. The EU could however establish the necessary measures for the harmonisation, the implementation and the coordination of the legislation of Member States. Through its support, coordination and supplementation of actions of the Member States, especially with respect to administrative cooperation, the EU can organise the linkage of national tax administrations as well as the linkage to the control and cooperation mechanisms organised at the EU level. A European Directive would be the appropriate means for the establishment a harmonised EU-CTT, leaving to Member States the administrative organisation and effective control of the CTT "in the field".

EU tax provisions require unanimity but an enhanced cooperation among at least 8 Member States could be considered.

As the surcharge in the CTT is undoubtedly a "monetary" instrument to counteract undesirable currency fluctuations, especially detrimental to the weaker currencies and States, the role of the ECB as the holder of the monetary sovereignty of the Eurogroup is essential. The involvement of the ECB and the ESCB is not only necessary, it is also welcome, given the competences and the instruments it has at its disposal. The ECB could conclude the necessary agreements with the central banks in the Eurogroup to organise an appropriate support for the implementation and supervision of the application of the EU-CTT. The ECB could furthermore make appropriate recommendations to central banks in the other Member States to that effect. The Member States outside the Eurogroup have a large monetary sovereignty, but they are not outside the ESCB. Moreover, the ECB could conclude appropriate agreements with the private financial settlement institutions, such as

the Target Agreement. The linkage with the Prudential Supervision of the financial sector could also be entrusted to the ECB. The EU Council may indeed confer to the ECB specific tasks relating to the prudential supervision of credit institutions (and the stability of the financial system). This applies also to the non-euro Member States.

4.1.3 Legal Assessment of the European Central Bank of the Belgian CTT - law and Comments by the EU Commissioner for Taxation ¹⁷²

4.1.3.1 Introductory note

Upon request of the Belgian Minister of Finance (see also TEC art 105.4), the European Central Bank delivered its opinion on the Belgian Currency Transactions Tax Law on November 4th 2004. The ECB did not accept the invitation of the Belgian Parliament to attend a hearing and discuss the opinion of the ECB on June 13th 2005.

To assess the Belgian law, it is useful to recall the division of competences in the EU in its relation to Belgium, a Member State of the Euro-zone, more specifically in the areas of

1. the monetary policy,
2. the tax policy and
3. the policy on development cooperation.

1. Monetary Policy

The EU has exclusive competence in monetary matters in the Euro zone, to which Belgium belongs. This implies that Belgium acts if empowered by the EU or when implementing EU acts.

The monetary component of the Belgian Currency Transactions Tax (hereafter the CTT), the 80 % - surcharge, is undoubtedly within the exclusive EU - competence.

Therefore, the Belgian CTT law takes this EU competence explicitly into account as will be indicated hereafter.

2. Tax policy

The tax sovereignty has not been transferred to the European Union, except concerning customs rights, antidumping and agricultural levies.

However, for all matters (of taxation) related to the internal market, there is a "shared" competence between the Member States and the EU.

More specifically for indirect taxes - a CTT is an indirect tax - the rules concerning the internal market provide explicitly for the EU competence in harmonisation of indirect taxes (which may possibly be levied autonomously by the Member States).

Since no EU initiative for harmonisation has been taken, Belgium is free to introduce a CTT. In using its sovereign fiscal competence Belgium must however respect two EU limitations:

- a) A Member State may introduce a CTT but only, in as far and as long as the EU does not use its authority to introduce or harmonize a CTT (which, as stated, is not yet the case with regard to the CTT) ; Belgium is thus free to introduce a CTT.

¹⁷² Within the context of this contribution implementation of the CTT within the legal framework of the EU law and only the legal assessment will be commented upon (based on a commentary prepared by the author for the Belgian Parliament in November 2004) ; the ECB-opinion deals in its first part with an economic assessment which has been commented upon by Peter Wahl in a WEED-paper: comment on the "Opinion of the European Central Bank" for the hearing by the Belgian Parliament of June 13th 2005.

- b) A Member State may introduce a CTT only in observance of the fundamental EU treaty rules, more specifically the rules of the internal market, where in casu the free movement of capital is most relevant (the freedom of movement of capital is moreover, also applicable to relations with non - EU Member States ; cf. hereafter).

3. Development Cooperation Policy

In development cooperation a specific "shared" competence applies, i.e. the EU has the competence to establish a policy, but: specifically for development cooperation, this policy may not lead to Member States being prevented from the exercise of their own competence.

The EU can thus harmonize and establish its own development policy but cannot prevent a Member State from acting. This applies a fortiori also to the introduction of a CTT to finance development cooperation.

The Belgian CTT aims at the financing of (EU) development cooperation (art. 5, § 1, 3° BCTT) and is thus within its competence (shared with the EU, but cannot be prevented by the EU).

4.1.3.2 *The opinion of the ECB and comments*

1. Exclusive EU competence in monetary issues

- The ECB opinion states in its pt. 13, 18 and 19:

13. The euro area's exchange rate-policy is an exclusive Community competence. As the purpose of the tax envisaged by the draft law is to influence the euros exchange rate vis-à-vis another currency, in particular to smooth exchange-rate developments and reduce volatility, the draft law would provide a national government with the means to impinge on the Community's authority to define and conduct exchange-rate policy. On these grounds, the draft law should be deemed incompatible with the Treaty, as its application would interfere with the Community's exclusive competence in the field of exchange-rate policy.

18. The second paragraph of Article 8 of the draft law provides that the tax rate of maximum 80 % will be established 'by a decision*' adopted after deliberation in the [Belgian] Council of Ministers and respecting Article 59 of the EC Treaty and the secondary law derived from it'. The draft law also provides that such a tax will only apply 'after the competent European authorities have given their agreement' (second paragraph of Article 13). Article 59 of the Treaty concerns safeguard measures with regard to third countries where, in exceptional circumstances, movements of capital to or from third countries cause, or threaten to cause, serious difficulties for the operation of Economic and Monetary Union. It provides for an exclusive Community competence, whereby the measures are taken by the Council on a proposal from the Commission and after consulting the ECB - and not by, or on, a proposal from a Member State. Therefore, the procedures defined by the draft law for the adoption and implementation of the tax rate of maximum 80% do not comply with Article 59 of the Treaty. Also, if and when the conditions for applying Article 59 of the Treaty are fulfilled, the Community is free to assess whether or not to use this provision, as well as to assess and take any safeguard measure(s) that it deems appropriate, without being subject to, or bound and restricted by, a Member State's legislation, procedures or measures.

(* It is understood that this will be a royal decree.)

19. The second paragraph of Article 13 of the draft law provides that the provision that a foreign exchange transaction is deemed to take place in Belgium if one of the involved currencies is the euro will only apply 'after the competent European authorities will have given their agreement.' The ECB refers on this issue to the preceding paragraph 18 on the compatibility of the draft law with Article 59 of the Treaty.

- The Belgian law fully respects the European exclusive monetary competence in the Euro zone.
- 1.1. It is not clear whether the ECB is of the opinion that the CTT at the low tariff is a monetary matter: as this is obviously not the case, one may presume that also the ECB is not of that opinion, though this requires clarification of point 19 of its opinion. The ECB may have misunderstood the meaning of the deemed localisation for tax purposes of a currency transaction. The Sixth EU VAT Directive and the implementing Member States VAT also determine where the place of a taxable currency exchange transaction is deemed to be localised, without this being a matter that needs to be assessed under art. 59 of the Treaty.
- Indeed, by way of analogy, it can be stated that national VAT legislations, harmonised by the Sixth EU VAT directive, are, in principle, applicable to currency exchange transactions (art. 13, B, d, 4° and C, b, provides for an exemption and an option to tax). This VAT on currency exchange transactions is clearly not a matter of monetary policy and is certainly not violating the European law.
- The European Court of Justice has already dealt with a VAT case on Exchange currency transactions (case: First National Bank of Chicago, C-172/96 d.d. July 14th 1998). The Court ruled "foreign exchange transactions are supplies of services within the meaning of art. 6 of the Sixth Directive". The European VAT Directive and the National VAT laws that implemented this provision are definitely not incompatible with European law in general, nor with the exclusive EU monetary competence, nor need the application of art. 59 EC Treaty procedures.
- 1.2. Article 8 juncto 13 of the Belgian CTT law does stipulate that Belgium will only apply the high CTT surcharge, upon the consent of the European authorities and within the boundaries of article 59 EC Treaty (turbulences) that provides for procedures to deviate from the freedom of capital with third countries in case of monetary turbulences.
- The exclusive competence of the European Union does not prevent the Member States from putting the necessary machinery in place so as to be able to implement a European decision. As was indicated in the preparatory documents of the Belgian CTT law (see doc 51088/002, pg. 16), the law offers an instrument to the European Central Bank and the European Council of Ministers for the turbulences that occur during a limited period of time. Therefore, there is no conflict with the exclusive monetary competence because the EU authorities have to decide - and thus remain free to decide whether or not to allow the instrument to function. The Belgian CTT does not bind nor restrict the EU authorities. Without the supporting legislation of the Member States, the EU could under art. 59 EC Treaty not impose a CTT at the high rate.
- In assuming that a Belgian Royal Decree will decide after deliberation in the Belgian Council of Ministers, the European Central Bank misread the Belgian law. As indicated in the Parliamentary documents (Doc. 51.088/001 pg 9, 15), the decision is to be taken by the European Council of Ministers.
- The approved text of the law (art 13, 2d paragraph) clarifies that for the "monetary" surcharge (art. 8, 2d paragraph) *and* for the levy on transactions whereby the euro is involved (as localisation currency: art. 5 § 1,3 ° cfr. supra), the preliminary consent of the appropriate European authorities is required and that the application must respect art. 59 EC Treaty.
- The Belgian law is thus only the "vehicle" in which the European monetary policy drives.

Furthermore, as the law determines (art. 13, 3° paragraph), the law enters in force only when all EMU Member States have introduced the tax or when a European Directive or Regulation prescribes the introduction or harmonisation of the tax.

A CTT law introduced in the whole EMU - implying unanimity - or based on EU secondary law, will therefore not be in violation of EU law.

When the EMU, as the ECB seems to state, includes all EU Member States and given the unanimity rule in fiscal matters, and the preliminary consent of the appropriate European authorities required by the Belgian law, there can be no violation of the European constitutional division of competence.

The Belgian fiscal CTT law, as "enabling machinery" does also not violate the exclusive monetary EU competence more than - so to speak - the sheer existence of the Belgian National Bank (which acts as an agent of the ECB, its shareholder, and whose governor, *qualitate qua*, is a member of the Executive Council of the ECB).

Conclusion

Belgian Tax Sovereignty, the shared competence for indirect tax harmonisation with the EU in combination with the exclusive monetary EU competence for the high CTT surcharge, and the fiscal unanimity rule means that Belgium is free to introduce a CTT at a low tariff (provided the internal market rules are respected, cf. hereafter) and that the high surcharge can only be applied after a European procedure of approval. The Belgian law does thus not conflict with the division of competences in the EU.

2. Free Movement of Capital

- The ECB opinion states in its pt. 14

14. Furthermore, under the ECB's analysis, the tax provided for in the draft law is incompatible with the free movement of capital and payments between Member States, and between Member States and third countries (Article 56 of the Treaty). This tax is indeed a measure imposed by a public authority which may or will, directly or indirectly, hinder the conclusion and/or execution of the capital or payment transfer involving foreign exchange on which the tax is imposed. Also, the tax will imply less favourable treatment of certain transactions in the currency of a non-euro area Member State or a third country compared to the same kind of transaction in euro only. It is underlined in this context that EMU's proper functioning depends on the fundamental freedom of capital movement and payments both within and beyond the boundaries of the EU. EMU is indeed based on completion of the internal market, of which the free movement of capital and payments is a centrepiece (Article 14(2) of the Treaty).

The ECB must certainly be aware that the freedom of movement of capital is not an absolute freedom, as the EC Treaty itself provides for exceptions (cfr. pt. 15 of the ECB opinion, hereafter sub 3) and as the European Court of Justice accepts exceptions on the basis of the "rule of reason", i.e. justifications based on general interest.

2.1 Non discrimination: the CTT at the low rate.

- a. The difference in treatment between the two financial markets (forex vs. domestic) is not based on discrimination but on a justified differentiation.

The different tax treatment of financial transactions (domestic vs. forex transactions) is justified by the fact that the transactions take place on totally distinct capital markets whereby the forex market, that has a fully distinct economic function for the market participants, has proper consequences and holds proper risks, namely currency exchange fluctuations, that do not exist in the purely domestic market. The ECB cannot be followed where it compares transactions in different currencies with the same kind

of transactions in euro only: such transactions are never comparable as the exchange risks are not present in transactions in one currency only. The ECB may have considered the payment of goods and services in different currencies (cfr. hereafter sub 2.2. in fine).

It is this forex market that, precisely through the freedom of capital and the globalisation of the economy, enjoys special economic advantages and benefits that do not appear in the pure domestic market with money transactions within one and the same currency. It is this entirely distinct proper international dimension of the taxable basis, the taxable substance, i.e. the exchange of two different currencies that justifies the distinction in the CTT which has as its main function (at the low rate) to finance development cooperation (the transfer of globalisation benefits to those countries of the South that are in the highest needs of these globalisation benefits). This appropriateness is recognized at length in the UNO report of the Quadripartite (Action against Hunger and Poverty, Report on Innovative Financing Techniques, Sept. 2004) and the French Landau Report.

- b. Moreover, under the low tariff, all exchange transactions are taxed, no matter which currencies are involved. Belgian taxpayers are not taxable if they use euros, pounds, dollars, etc.; Belgian taxpayers are taxable if they exchange dollars for yen, pounds for euros; none of the currencies are privileged.
- c. Within the European Union several currencies exist: besides the Euro and the British, Danish and Swedish currencies there are now also the 10 currencies of the newly admitted countries. The sheer existence of multiple currencies is not incompatible with the European Treaties, the EMU or the fundamental freedoms of the treaties. The European Treaties themselves, as it were, organise the multitude of currencies with value fluctuations. The existence of these differences as one of the criteria for a low rate taxation does thus not conflict with the European legal framework.
- d. By means of analogy, national VAT legislations harmonised by the Sixth EU Directive, are not applicable to money transactions within one currency, they are only applicable on currency exchange transactions (cfr. supra 1.2 in fine). This, apparently, is not a violation of the freedom of capital. For the CTT, the same principle applies.

2.2. In as far as the ECB is of the opinion that the CTT does not so much constitute a discrimination, but does constitute a restriction of free movement capital, the answer is that the tax does not restrict the "access to the forex market", nor the transactions that take place on that market, nor does the tax install a "national" market ; the tax functions solely in a neutral way towards the forex market, i.e. all forex transactions are taxed, whether the national currency or the Euro is involved or not. The CTT remains neutral toward the position of the market participant (his place of residence or establishment); the tax does not distort the competition between persons, nor the competition between forex transactions that are all equally taxed. The CTT is also not an exit nor an entry tax; it does not take into consideration origin, since it taxes all exchange transactions.

Furthermore, the Belgian law is neutral as it also prevents double taxation of CTTs in multiple tax jurisdictions (Art. 5 § 4).

Moreover, the CTT does not tax capital transfers nor payments (of goods, services, etc.) as the ECB seems to think (cfr. supra sub 2.1, a). Only exchanges of currencies (which may but need not be related to transfer of goods, services, capital and movement of persons) are within its scope.

Indeed, the CTT would, in its low tariff application (1 € per 10.000 €) to an exchange of currencies to pay for goods, services or capital, be too remote a restriction of intracom-

munity movements of goods, services, including financial services, or capital to qualify under the ECJ-jurisprudence as a hindrance of the EU internal market.

Participants to the market of goods, services and capital are not discouraged from using the euro in their dealings with other market participants because of a CTT levy, as the CTT does not tax the use of currencies for the payment of goods, services and capital, but only the use of currencies for the exchange against other currencies, an operation which requires its own risk assessment, which is part of the market negotiations of the participants.

There is no sufficient direct link between a transfer tax on the exchange and the main transaction to cause a restriction as interpreted under the EU freedom.

From a policy perspective one may even conclude that the use of the Euro for intra-community trade will not be a result of a CTT but rather of the economic evolution of the Euro as the most convenient (reserve) currency for cross-border intra-community trade; that a CTT may have a very remote encouraging effect to that extent, concurs with the basic objective of the EMU to curb the instability of a multi-currency system and to promote the use of a single currency. The other EU currencies are transitional derogations preceding the third stage of the monetary Union.

Economic studies establish that the financial markets would, without difficulties, absorb the CTT in its low tariff application. Indeed the tax may contribute to tax disparities between different means of payment which is as such not more restrictive than other taxes such as the substantial differentiation of VAT rates depending on the "legal" localisation of the transactions, the withholding taxes on wages, revenue from capital, real estate levies, etc.

2.3. Finally, in as far as the low rate CTT would be a restriction; it is entirely justified by a non-market distorting levy to finance the development cooperation policy, an EU treaty objective and as such an appropriate justification (cf. *infra*).

2.4. Concerning **the monetary surcharge** (that may apply to transactions with one specific currency in turbulence), discrimination or a restriction of the freedom of capital is obvious (as monetary policy often aims at influencing exchange rates) but allowed under the exemption in the TEC for matters of "public policy" (cf. *infra*).

2.5. Concerning the capital movement toward third countries, European law allows moreover explicitly a step back decision at European level (art. 57 TEC).

3. Exceptions to the freedom of capital

- The ECB opinion states in pt. 15

Furthermore, the ECB considers that the exceptions laid down in Article 57(1), Article 60(2), Articles 119 and 120, and Article 297 of the Treaty, which allow Member States to restrict under specific circumstances the free movement of capital of payments, do not cover the measures envisaged by the draft law. Also, Article 58(1)(a) of the Treaty only justifies a tax measure that distinguishes between taxpayers on the basis of their place of residence or the place where their capital is invested. However, the draft law does not distinguish according to taxpayers, but according to transactions. Considering the narrow interpretation of 'public policy' and 'public security' in Article 58(1)(b) of the Treaty, as well as the exchange-rate policy nature of the tax envisaged by the draft law (paragraph 12), the ECB is of the opinion that such a tax may not be introduced on such grounds. Similarly, the ECB is of the opinion that such a tax cannot be justified and objectively required for mandatory reasons of general interest.

- 3.1. As monetary policy must obviously and effectively be qualified as a matter of 'public policy', the opinion of the ECB that the (high) CTT surcharge cannot fall under the ex-

ception to the freedom of capital provided for in art. 58, §1b of the treaty (i.e. measures justified on grounds of public policy) can obviously not be shared. The ECB does surely not think that the monetary policy measures by Central Banks of 13 Member States (other than in the Eurozone) and its own measures, can not, as a matter of public policy, restrict under specific circumstances free movement of capital. Monetary policy is in the financial sector public policy "par excellence".

- 3.2. Furthermore, with respect to the non-monetary low tariff CTT, as was also mentioned above (2.3), the financing of EU development cooperation policy being one of the goals of the European Union, as stated in the EC Treaty, is surely a "reason of general interest (rule of reason)" that taking the proportionality into consideration does justify a restriction to the free movement of capital globally (if there is a restriction at all). Every tax or levy does "impose" a taxable basis. Mobile taxable bases are not per se and absolutely tax exempt under the EU law.
- 3.3. The articles 57, as interpreted by ECJ Case Law, and 60 §2 EC Treaty, do not cover the hypothesis of the CTT and the reference to these articles by the ECB is therefore probably irrelevant.
The articles 119, 120 and 297 EC Treaty can be read in connection with article 59 (cfr. supra).

4. The EMU, a "State"?

- the ECB opinion states in its pt. 16
The draft law considers as a 'State' the "European Economic and Monetary Union or every other territory with a single currency" (second paragraph of Article 4). EMU includes all Member States and, thus, also the Member States that have not adopted the euro as their currency (these Member States are either in the second stage or in the third stage with a derogation). A reference to EMU for purposes of defining a currency area is therefore inappropriate. Also, considering EMU as a 'State' is inconsistent with the draft law's intention to impose the tax on, inter alia, transactions involving the exchange of euro for the currency of a non-euro area Member State (paragraph 3), since this implies that the euro and the currencies of the non-euro area Member States are currencies of the same 'State'.

The ECB states that the EMU includes all Member States, also those that did not adopt the Euro as the single currency; the ECB reproaches the Belgian CTT law to consider the EMU to be a "State".

The ECB demonstrates a wrong reading of the article 4 of the CTT law. It reads: "the European Economic and Monetary Union or any other territory with a unitary currency", is qualified as "a State for the application of art. 4". That article 4 describes the taxable event and more precisely the transactions "to trade currencies of a State for currencies of another State". The Euro is for that purpose qualified as a "currency of a state" (i.e. including the single currency of the European Economic and Monetary Union, into the scope of application).

The BCCT thus does not consider the EMU as a State nor as a currency area. The terminology is only used to define a currency as an element of a taxable event.

Other regions in the world have also adopted a single currency. Also these currencies are currencies for the CTT and the region a "State" for the application of the CTT. So the remarks of the ECB are not at all to the point.

5. Development Fund

▪ the ECB opinion states in pt. 17

According to Article 5§1 of the draft law, 'the proceeds of the tax (...) shall be paid in full into a fund, managed by the European Union and to be allocated for cooperation and development, to promoting social and ecological justice and to conserving and protecting international public property'. A legislator of an individual Member State adopting this provision would attribute the management of a fund established at national level to the EU. However, the creation of new Community tasks by national legislation does not appear to be compatible with the Community legal framework and order.

Based on existing precedents, a fund for the financing of EU Development Policy, partly financed by some of the Member States only and managed by the European Union, can definitely be created in conformity with European Law.

4.1.3.3 Comments of EU Commissioner for Taxation

Upon request of the Belgian Minister of Finance, the EU Commissioner for Taxation, Bolkestein, gave on Sept. 1st, 2004, the following opinion (summary):

"From a purely legal perspective, it goes without saying that, in principle, the introduction of a tax on cross-border exchange operations may render those less attractive to normal investors. Therefore, such a tax may constitute a restriction to free movement of capital and payments, in the meaning of Article 56 and following of the EC Treaty. In particular, the fact itself that such a tax would only apply to exchange operations, meaning that operations with EU Member States outside the Euro-zone as well as with all third countries would, in principle, be subject to a less favourable treatment than the one applying to EU Member States within the Euro-zone (see Article 4 of the draft law), would also deserve a more in-depth analysis in the light of Article 56 EC.

According to well-established ECJ case-law, once the presence of a restriction to one of the fundamental Treaty freedoms is established, one should carefully assess whether such a restriction is necessary, proportionate and justified having regard to an imperative, non-economic reason in the general interest.

In this respect, I have take note of the fact that, according to Article 5 of the draft law, "... le produit de la taxe est, après déduction d'un pourcentage de perception fixé par le Roi, intégralement verse à un fonds, géré par l'Union Européenne, qui sera affecté à la coopération et au développement, à la promotion de la justice sociale et écologique et à la préservation et la protection des biens publics internationaux."

Whilst one may argue that those objectives broadly are "in the general interest", it is unclear to me what their exact scope is and, even more, why it is considered that a "Tobin tax" like the one designed in the draft law would be a necessary and proportionate tool to reach them."

The comments are apparently based on some assumptions that are not accurate since they are not based on the text of the Belgian CTT law.

- 1) The Commissioner comments upon "cross-border" exchange operations. This qualification is not accurate since all exchange operations are within the scope of the BCTT, and indeed all transactions in which two currencies are involved (also when the parties, the banks and the transactions are located wholly within Belgium and/or no borders are crossed; moreover cross-border transfers or other movements of currencies without exchanges into other currencies are not envisaged). As mentioned above, the currency exchange or foreign exchange markets are clearly distinguished from the national or domestic money or capital markets, where no currency exchange risks are run, and therefore no currency gains or losses made. As such, the exchange e.g. of Euros notes in Euro coins or Pound Sterling notes in Pound Sterling notes is not a currency exchange transaction.

This distinction between single currency transactions and dual currency transactions is also known in the EU-VAT law and, as mentioned above, is not per se a breach of the EU Freedom of Capital.

- 2) The Commissioner argues that since the tax would only apply to exchange operation with EU Member States outside the Eurozone as well as with all third countries and those operations would be subject to a less favourable tax treatment than the operations within the Eurozone, a more in depth analysis in the light of art. 56 (free movement of capital) would be deserved.

Again, the operations envisaged in the CTT are not taxable c.q. exempt according to whether they are effectuated within the Eurozone-territory or whether effectuated with other States (cfr. supra).

As mentioned above, under the EU-VAT law exchange transactions may be taxable and operations within one currency not, which does not imply that there is a breach of the EU freedom of capital.

Therefore, as the comment of the Commissioner is based on wrong assumptions, a further in-depth analysis may indeed clarify the views: the decisive criterion is the swap of currencies, not the territorial link of the parties, the banks or the operations to a Member State, a third country, or the Eurozone. An exchange of currencies (yen for dollars) between two Italian residents through an Italian bank is taxable, and not the payment in dollars by an Italian purchaser to an Italian vendor (e.g. for goods imported from Hong Kong) whether the freedom of goods or services may be hindered through a taxation of the means of payment (like the VAT) is a matter to be judged under those relevant freedoms.

- 3) The EU commissioner acknowledges that the transfer of the CTT revenue to an EU development fund may meet the "rule of reason" justification for restrictions to the freedom of capital, as this funding of EU development cooperation may arguably be "in the general interest". However the commissioner questions whether the proportionality test is met.

Reference can be made to the many economic studies (e.g. Jetin, in this publication, Spahn, Kapoor, etc.) and the listing of CTT-type taxes as one of the most prominent examples with most promising global revenues of New Financing Techniques for Development mentioned in the Quadripartite UN initiative (New York, September 2004), the Landau Report (France, Summer 2004), the UN University Papers (e.g. the Report of Atkinson c.s.) and the EU Commission working documents of 2005.

Indeed, the international currency exchanges market is the most important World market, financially speaking, and one of the most direct exponents of globalisation of the world economy.

Clearly the EU Commissioner takes a far less negative stand on the BCTT than the ECB; he uses terminology like: "may constitute a restriction, deserves a more in-depth analysis in the light of art. 56 EC, it is unclear what the exact scope is, why it would be necessary and proportionate tool, etc." He concludes by offering to enter into discussions if appropriate.

- 4) In the closing remarks (not quoted above) the EU commissioner states it to be unclear how a unilateral allocation of revenue to an EU development fund can be made, and to be puzzled by an entry into force of a national legislation depending

on a Eurozone-wide introduction or an EU legislative initiative. On both accounts one can refer to existing comparable precedents.

4.2 Further Implementation of a CTT in the EU Legal Framework: EU enforcement

This chapter examines the instruments which could play a valuable role in the enforcement of the CTT. It shows possible measures to ensure the correct application of the tax and the prevention of fraud.¹⁷³

Like the VAT and the Security Transfer Taxes, the CTT is to be a self-assessment system, incorporated into the regular administrative and bookkeeping financial operations of the taxpayers, mainly international financial institutions, financial intermediaries and multinational groups of enterprises. Apart from the direct participants in the foreign exchange markets, who would be subject to a reporting and compliance system (the multinational corporation), the major part of the tax will be levied indirectly by the financial intermediaries who secure the settlement of the transactions, by the financial institutions who centralise and execute the currency trading at “wholesale” level, by the currency dealers and others. The draft CTT and the Belgian law provide for a model that can be used as an inspiration.

The finance industry would thus be in charge of collecting the tax. Therefore, fiscal supervision as well as a system of administrative fines of a substantial financial importance would be crucial to have the adequate pro-active effect. This chapter does not elaborate on these compliance issues, which are a rather executive matter that each member state could fit into its current administration of taxation. The compliance of the control could be entrusted to the tax authorities of the member state of residence and subsequently to the Member States of the transferor, of the transferee, of the intermediary or – for non-EU residents – of the member state chosen for registration for CTT. The VAT registration of non-EU businesses in electronic commerce could serve as a model for the latter hypothesis (EC VAT Directive 2002/38 amending the sixth VAT and EC Regulation 792/2002 amending VAT Regulation 792/2002; J.O. L 128 of May 15, 2002).

This chapter deals with some important developments at the European level that may facilitate the international supervision, control and enforcement of the CTT in the EU. Part 4.2.1 discusses the European administrative cooperation in tax matters, which provides for a substantial support mechanism for cross-border tax administration and enforcement. This mechanism could be extended to the EU-CTT. Part 4.2.2 looks at the EMU and the EMS, which permit a governance of monetary policy at EU level, including a policy of prudential supervision of the financial sector that would allow a monitoring of the CTT. Part 4.2.3 focuses on the EU system of preventing and combating money laundering. Since 2000 the system has developed into a system for the protection of the international financial system. It may serve the cause of the CTT. Finally, the judicial and administrative cooperation in criminal matters is subject of part 4.2.4. This cooperation has reached a high level on the European agenda since 2000 and may contribute to the enforcement of an EU-CTT.

4.2.1 European administrative cooperation in tax matters

The administrative cooperation in tax matters within the EU envisages the possibility for tax authorities to control, assess and recover taxes across the borders. Two basic sets of instruments are to be considered in this context. The first one refers to the cooperation

¹⁷³ See also draft CTT (2002) art. 15 and Belgian Law art. 12

in the control and assessment of tax claims. The second set of instruments is concerning the cooperation in the recovery of taxes due.

The cooperation in the control and assessment of tax claims is mainly organised by two instruments. The EU Directive on Mutual Assistance in Taxation (77/799/EEC of 17 December 1977, as amended lastly by Directive 2003/93 EC of 7 October 2003), provides for an exchange of information to assist in a correct assessment of taxes on income and capital, excise duties, and insurance premiums. Transfer taxes are not covered by this Directive. The Directive allows the exchange of information between tax authorities of the EU, irrespective of the residence or nationality of the taxpayer. The information can also be exchanged for the assessment of other taxes i.e. those covered by Directive 76/308/EEC on the recovery of tax claims (art. 2 : cfr. hereinafter Recovery Directive). The exchange may take place on request, automatically or spontaneously, and it may take place as joint inspections. The CTT however does not enter into this Directive's scope either. It is thus commendable to extend the scope of the Recovery Directive in order to cover the CTT.

The other instrument that is relevant for the cooperation in the control and assessment of tax claims is the Council Regulation 1798/2003 of 7 October 2003. It regulates cooperation regarding the VAT and provides with a common system of exchange of information, including the Electronic Data Exchange, a network to ensure transmission between competent authorities in the area of customs and taxation by electronic means (art. 2, 19). This Regulation does not cover other indirect taxes than those on goods and services. But as currency transactions are a service listed in the Sixth VAT Directive (Art 13, B, d.3), the common system covers the possibility to exchange adequate information, even if these services are VAT exempt or zero-rated. The information may however not be used for other purposes, thus also not for the cooperation in the control and assessment of a EU-CTT. It is therefore advisable to extend the scope of this Regulation. It provides for information and inquiries on request, the presence of tax inspectors in other Member States, simultaneous controls, automatic and structured exchange, data storage (5 years) and exchange of information (electronic direct access) on intra-community transactions. This information may also be used for the assessment of other taxes i.e. those covered by the Directive 76/308/EEC on the recovery of tax claims (art. 41, 1). As already mentioned, the CTT does not fall into the scope of this Recovery Directive. The information may however also be used by the receiving state for other purposes if such use is allowed in the providing State (art. 41, 3). Both the Directive and the Regulation on Administrative Cooperation in taxation allow the information to be used for taxation covered by the Recovery Directive (cfr. hereafter), but the VAT-Regulation seems to have an even broader useful coverage.

As mentioned above, the recovery of tax claims in the EU is organised by the Directive 76/308/EEC, as last amended by Directive 2001/44/EEC, which entered into effect on 30 June 2003. This Directive allows the recovery of taxes throughout the EU, as if they were domestic tax claims. It has a broad field of application (import and export duties, VAT, excise duties, tax on income and capital, insurance premiums, interest, fines and costs). The Recovery Directive allows taking precautionary measures to guarantee the recovery. However, transfer taxes such as the CTT are not covered. It is highly recommendable to extend the scope of this Directive to cover the CTT. As indicated above, this would bring the CTT into the scope of the EU Directive on the Mutual Assistance in Taxation (i.e. tax-assessment and control) as well into the scope of the VAT Regulation.

Another type of European instrument concerning administrative cooperation in tax matters has been elaborated by the Council of Europe in Strasbourg and by the Organisation for Economic Cooperation and Development (OECD). The "Convention on Mutual Administrative Assistance in Tax Matters" dates from 25 January 1988, and entered into force on 1 April 1995. It has the broadest coverage in taxation. An exchange of information and

a recovery of tax claims are possible for almost all taxes and some security contributions. Transfer taxes are not explicitly included, but the scope allows the optional application to "other taxes". However, states can reduce its impact through reservations and options. A reference to this instrument has been included in art. 15§2 of the draft Treaty for a CTT (cfr. footnote 1).

In the framework of a coercive action program towards tax havens and offshore financial centres, resulting from the "Harmful Tax Competition" reports (2003), the OECD and the EU within the framework of its Saving Directive Initiative put high pressure on those countries to accept a model agreement on the exchange of information on request. The efforts have been successful in relation to European Tax Havens in the framework of the EU Saving Directive where more than 250 agreements have been concluded by June 2005. This model also does not explicitly cover transfer taxes and would thus not be of use for a CTT without modification. But it mentions the possibility to include indirect taxes (Multilateral Model art. 2). It also contains a far-reaching clause to curb bank secrecy and professional secrecy of trustees, foundations, etc. (art. 5 (4)).

Although not directly relevant for the application of the CTT, another instrument that may serve as an inspiration is the Convention of 18 December 1997 on the Cooperation in Matters of Customs Duties. This Convention regulates a far-reaching administrative and judicial cooperation, as EU Regulation 515/97 of 13 March 1997 also does.

Conclusion

The EU Administrative Cooperation in tax matters offers substantial instruments for cross-border tax assessments, controls and recovery within the EU. It would be a valuable help in the control, implementation and enforcement of the CTT. The scope of the instruments will however have to be enlarged to cover the CTT. This requires unanimity at the level of the EU, possibly limited to countries that engage into an enhanced cooperation.

4.2.2 Monitoring through the European System of Central Banks

The Monetary Union dimension of the EU is essential for the surcharge in the CTT system. Moreover, the Monetary Union embodies the "financial public interest" in the EU and realises a substantial part of the free movement of capital. The balance of power within the Monetary Union is technically and politically a delicate area.

As already outlined in part 2.2.3., the ECB is the most important actor in the area of monetary policy in the EU. It establishes the guiding policy principles and is responsible for the currency exchange system of the euro vis-à-vis other EU currencies. The euro bank notes are the only notes that have the status of legal tender within the euro-zone and can only be issued by the ECB or with its license. The ECB governs the Eurosystem, the network of national central banks of the Eurogroup, whose basic task is the definition and implementation of a common monetary policy in the EU.

The Eurosystem contributes to the conduct of policies of the authorities relating to the prudential supervision of the financial sector and the stability of the financial system (art. 105.5 TEC). The Council can unanimously confer specific tasks concerning policies of prudential supervisions of the financial sector to the ECB (art. 105, 6 TEC). Under the guidance of the ECB, the Eurosystem conducts foreign exchange operations, manages the foreign reserves and promotes the smooth operation of payment systems. If the application of the monetary surcharge of the CTT system is comparable to the interventions within the scope of the Eurosystem, the ECB can clearly use this policy instrument as a foreign exchange operation.

As mentioned above, the ECB and the national central banks are fully independent of the political authorities in the EU. Art. 108 TEC states:

“When exercising the powers and carrying out the tasks and duties conferred upon them by this Treaty and the Statute of the European System of Central Banks, neither the European Central Bank, nor a national central bank, nor any member of their decision-making bodies shall seek or take instructions from Community institutions or bodies, from any government of a Member State or from any other body. The Community institutions and bodies and the governments of the Member States undertake to respect this principle and not to seek to influence the members of the decision-making bodies of the European Central Bank or of the national central banks in the performance of their tasks.”

The primary objective of the ECB is price stability or freedom of inflation. Its independence is a function thereof. The secondary objectives of the ECB, if not prejudicial for the price stability, align with the objectives of the EU. But the financial resources of the ECB do not form part of the EU budget (art. 28, 30 and 32 of the Statute; compare financial assistance ACP-EEC Rome Convention). An example of its strong independence is the recent court decision in favour of the ECB, challenging the right of the EU to impose the control mechanisms of the European Anti-Fraud Office (Office Européen de Lutte Anti-Fraude, OLAF) on the bank.

The ECB can establish legal acts that form secondary community law with normative effects. It is not only the regulator at community level, but also at ESCB level. It can confer rights and impose obligations on economic agents and even address decisions with binding effect to them, even individually, in particular in the field of monetary policy and payment systems. Moreover, other community organs are under the duty to adopt “complementary” legislation in several different instances, for example with regard to the limits and conditions of sanctions to be imposed on businesses by the ECB.

For the surcharge system of the CTT, one of the instances where ECB and Council should share their legislative powers is of particular importance. That is to “define the scope” of other operational methods of monetary control not yet foreseen in the statute of the ECB, if a 2/3 majority of its Governing Council sees fit to use such other methods and “if they impose obligations on third parties” (art. 20 juncto 42 of the ECB Statute). In these cases the Council is not entitled to regulate the ECB, but is obliged to specify and concretise the powers given to the ECB by EU Treaty Law without discretion. The ECB is the primary regulator and the Council legislates complementarily, but only on recommendation of, or on consultation with the ECB. The Council may even renounce its right and rely on the ECB by passing its complementary competence to the bank (art. 34.1 of the ECB Statute). The EC institutions cannot legislate in the field of competences of the ECB. Art. 108 TEC does not allow circumvention of the prohibition to give instructions to the ECB through legislative measures.

Member States with derogation, i.e. Member States outside the Eurogroup, still have their own monetary policy and currencies. They can participate in the currency exchange mechanism that links their currency to the euro. Such mechanisms (i.e. EMS-2) are elaborated in an agreement of September 1st 1998 (O.J. C345/6) between the ECB and the national central banks. It provides for a standard fluctuation margin of 15 % vis-à-vis the euro. For Denmark and the UK separate protocols have been concluded. While Denmark makes use of the EMS-2 mechanism, the UK has kept more of its monetary competences. Although it goes beyond the limits of this study, it would be worthwhile to elaborate on the integration of a CTT implementation mechanism within the EMS-2.

As a result of the “differentiated” integration of the Member States that participate in the monetary union (the “ins”) and the Member States with derogation (the “pre-ins”, including all new Member States, and the “outs”, including Denmark and the UK), the ECB can only have recourse to the twelve central banks of the Eurogroup for the implementation of the monetary policy decisions taken by its Governing Council. As explained above, this net-

work of central banks is called Eurosystem. It is the operational part of the ESCB, the “euro part”. Participating central banks function as ECB agents.

The “outs” are national central banks that hold the monetary sovereignty of their states. The “out” position of Denmark and the UK was justified by historical circumstances and was not to be repeated by the new Member States, which all belong to the category of the “pre-ins”. The latter group of countries are participating in the monetary union with derogation (cf. Treaty of Accession, Conditions art. 4). These “pre-ins” are not part of the Eurozone yet, but the power of the ECB over their national central banks is somewhat stronger than over the central banks of the “outs”. However, both groups of countries participate in the General Council of the ESCB and consider their exchange rate policy as a “matter of common (EU) interest”. They also pursue their monetary policy with the primary objective of price stability, as the ECB does. Article 2 of the statute applies to “pre-ins” and “outs” as well. As part of the ESCB they observe the principle of “System Integrity”. They have to cooperate with the ECB and the other central banks to achieve an efficient conduct of monetary policy throughout the EU. A number of agreements have been concluded between the ECB and the non-participating central banks, e.g. the ERM-2 Agreement (September 1st 1998, O.J. C 345/6). Non-participating central banks also have to adhere to the Target system, the real time gross settlement system, allowing an EU-wide settlement of payments among central banks.

Art. 23-5 of the Statute of the ECB allows both the ECB and the national central banks to establish relations with central banks, financial institutions and international organisations. This includes the conduct of foreign exchange operations and all types of banking transactions. With respect to concluding external agreements under Public International Law with international institutions, it is relevant to note that neither the ESCB nor the Eurosystem has legal personality. The ECB acts at the international level when the tasks of ESCB are involved. However, Member States may still conclude international agreements without prejudice to the EU competence concerning the monetary union, to whom the monetary sovereignty was transferred. There is thus room for Member States for independent external action, e.g. to support foreign CTTs, provided that the monetary competence of the ECB at the European level is respected.

The national central banks may act under international law, if their national law permits. However, the national central banks, integrated into the ESCB, are subordinated to the Governing Council of the ECB. The statute of the ESCB confers legal personality to the ECB; the TEC confers specific tasks to the ECB, which requires legal contacts with other subjects of law, and art. 23 of the Statute gives the ECB specific external competences, such as to establish relations with central banks and financial institutions, to conduct banking transactions with other countries and with international organisations, and to act at the international level when the tasks of the ESCB are involved (art. 6, 1 and 2 Statute). The ECB can thus act independently at the international level. In this position the ECB could conclude the mentioned agreement on an exchange rate mechanism with the central banks outside the Eurozone (ERM-2 Agreement 1998, O.J. C 345/6).

Art. 111.3 TEC stipulates that the EU Council can act with respect to agreements on the euro with third states and monetary and exchange rate systems with states or international institutions. Although the external competence in the field of monetary policy is held by the ECB, the Council decides on positions to be taken on issues of particular relevance to the EMU (art. 111.4 TEC). Art. 111.3 TEC provides that the Council is competent for external agreements concerning monetary policies or exchange rate systems, when such agreements are needed and neither the Member States nor the ECB are competent. This may be the case if the external agreement has to be binding for the community institutions, the ECB, and the Member States, e.g. an agreement on an exchange rate system for the

euro in relation to non-EU currencies. An international agreement to conduct multilateral surveillance may also enter into that category. If the EU Council enters into a formal agreement on an exchange rate system, the ECB has to implement the obligations stemming from such an agreement (i.e. decide about the modalities, not about the substance). More room to manoeuvre for the ECB could be available under agreements concerning monetary or foreign exchange regime matters concluded by the EU Council.

The ECB is competent to conduct foreign exchange operations. This includes the concluding of private law agreements with financial institutions and public international law agreements with third countries, their central banks and international organisations. When there are no binding agreements with non-EU countries or currency zones, the ECB can act autonomously and the Council can issue non-binding "general orientations". The ECB is also responsible for the exchange rate system of the euro with regard to non-euro Member States currencies, the EU Council only being competent for agreements with third countries. Being accountable for the EU monetary policy, including the non-participants that are full EU members, the ECB contributes to the abrogation of derogations or exemptions inside the Union.

The ECB cannot impose its policy on the central banks of the non-participating Member States unilaterally. It must therefore conclude agreements with those central banks. This was the case with the ERM-2 agreement (1998, O.J. C 345/6). The Council, however, established a procedure for decisions on central rates and the standard fluctuations band (i.e. involving the ECB, national central banks, the ministers of the Member States, the EU Commission and the Economic and Financial Committee).

The ECB is competent to enter into international agreements on payment systems (art. 110 TEC and art. 22 of the Statute). It can make Regulations to that effect. The ECB and the national central banks can provide payment facilities, and the ECB can rely on the facilities of the national central banks. In 1998, the ECB and all central banks in the EU concluded an agreement on real-time gross settlement systems, the Target Agreement, which operates under the control and supervision of the ECB, while technical implementation lies with the national central banks.

The ECB can also contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system (art. 105, 5° TEC clarified by art. 25 of the Statute of the ESCB). Prudential supervision is not an exclusive EU competence. The ECB has only an advisory capacity and may exceptionally also participate in international agreements, like in the case of the Basle Committee on Banking Supervision. However, the Council can confer specific tasks in the field of prudential supervision upon the ECB (unanimously under art. 105, 6° TEC). At the level of the Member States, the function of supervision is often held by the national central banks or, like in France and Finland, by a dependent body.

Conclusion

As the politically independent ECB plays the central role in the EU monetary policy and controls the use of the euro, it is essential to recognise its potential role and regulatory and supervisory impact for an EU-CTT with a monetary driven surcharge system. The implementation of the CTT in the EU requires the full cooperation of the ECB. Considering that the monetary policy has become an exclusive EU competency for the Eurogroup and a "Matter of Common Interest" for other Member States, where it is subject to a common surveillance system of the Economic and Financial Committee (art. 114 TEC) and to the intervention of the EU in crisis situations (art. 119 TEC), the ESCB, governed by the ECB, has been well established and could play a vital role in the CTT system.

In view of the delicate balance of power in the TEC and the Statute of the ESCB, the ECB and the EU Council should cooperate to include the CTT surcharge into the scope of the operational methods of monetary control. This would require an approval of the governing council of the ECB with a 2/3 majority. Especially taking the necessary protective measures with regard to the CTT for non-euro Member States and third countries would require the cooperation of the EU Council. With respect to third countries, one may conclude that the ECB could settle appropriate agreements with foreign authorities, if this fits together with the EU objectives and the primary goal of price stability, but would need the involvement of the EU Council where its competence is exceeded. In the context of the CTT it may be appropriate that the ECB be entrusted by the EU Council with the task to install the CTT registry as a condition for the license to operate in the financial sector, i.e. to execute and settle currency exchange transactions.

4.2.3 From anti-money laundering to EU protection of the financial system

The EU Directives on money laundering from 1991, 2001¹⁷⁴ and 2005 (a regulation replacing the first and second Directive, hereafter "ML Directive") aim at setting a high standard in protecting the financial sector and other vulnerable activities from the harmful effects of the proceeds of crime. The ML Directive recalls that the General Agreement on Trade in Services (GATS) allows "measures to protect public moral" and "for prudential reasons, including for ensuring the stability and integrity of the financial system". The Directives also recall that "there has been a trend towards a much wider definition of money laundering based on a broader range of predicate or underlying offences, as reflected for example in the 2003 revision of the 40 Recommendations of the Financial Action Task Force".

The ML Directives have effectively given the force of European law to those of the 40 Recommendations of the Financial Action Task Force (FATF), which are de facto world standards for anti-money laundering that deal with the financial sector and independent professionals involved in the sector. Amongst others, the Directives cover the obligations on the identification of customers, record keeping, preventive reporting of suspicious transactions to competent authorities, as well as rules on criminalizing of money laundering, on seizures and confiscation, and on international cooperation. A rather small threshold of 15.000 euro is set for the combined transactions.

The Directives have a broad coverage of the financial sector. This includes credit institutions, financial institutions (including currency exchange offices and money transmission remittance offices) including insurance companies, investment firms, and collective investment undertakings. The Directives also cover the branches of such institutions, whose head offices are outside the EU, as well as the independent professions active in the financial sector, such as auditors, accountants, notaries and lawyers.

The Directive prescribes that the obligation to identify also applies to persons on whose behalf the identified customer is acting, unless the customer or the intermediary is a financial institution from a member state or from a country with equivalent requirements. Apart from the financial institutions and other intermediaries and professionals in the financial sector, the Directive prescribes that the supervisory bodies of the financial institutions and those empowered to oversee the stock, foreign exchange and financial derivatives markets shall inform the ML authorities if they discover facts that could constitute evid-

¹⁷⁴ Directive 2001/97/EC of 4 December 2001 (O.J. L 344 of 28 December 2001, p. 76), amending Directive 1991/308/EC of 10 June 1991 (O.J. L. 166 of 28 June 1991, p. 77), hereinafter the ML Directives (the latter to be transposed in internal law by 15 June 2003); the regulation has been approved by Council on June 7th 2005.

ence. The prudential authorities of the financial sector are thus involved in the system to fight ML, including serious tax offences.

The illicit activity of money laundering is also broadly defined. Relevant in the context of the CTT is that “the conversion or transfer” of funds, knowing their illicit origin or this origin being concealed, or “the acquisition, possession or use” of such funds, is considered to be an illicit activity. The illicit knowledge “may be inferred from objective factual circumstances”.

In the context of a global (or regional) CTT, the wording of the Directives is important, as it stipulates that illicit activities “shall be regarded as such, even where the activities which generated the funds to be laundered were carried out in the territory of another member state or in that of a third country.” Moreover, the definition of “organised crimes”, one of the underlying offences of the ML Directives, covers all kinds of activities, wherever the activity takes place. If the non-compliance with the CTT was considered to be a “serious” underlying offence, the ML Directives would apply to European based financial institutions or the European based branches of non-EU based financial institutions that know or should know, on the basis of “objective factual circumstances”, that the currencies converted, transferred, acquired, possessed or used originate from currency transactions where the CTT was evaded. In the view of the diligence prescribed by the ML Directives for financial institutions (for example adequate procedures of internal control and communication), the negligence in gathering information from other (offshore) branches and subsidiaries of European based financial institutions, from other (offshore) affiliated subsidiaries or branches of non-EU based financial institutions dealing with their EU branches or subsidiaries, or from foreign branches or affiliates of their clients, would likely be sufficient factual circumstances from which illicit knowledge may be inferred.

The ML Directive has thus a very broad international scope that may allow it to monitor and curb tax fraud in international currency transactions.

The Directive defines as an underlying “criminal activity [...] any kind of criminal involvement in the commission of a serious crime”. Serious crimes are, amongst others, not only “the activities of criminal organisations”,¹⁷⁵ but also “fraud, at least serious, of the EU’s financial interest”¹⁷⁶ and offences which are punishable by a maximum sentence of more than a year or of at least 6 months.

It is recommendable to define the breach of the CTT legislation as a serious crime so as to enter the scope of the ML Directives. The notion of “serious crime” may also be relevant for the applicability of the EU Conventions on administrative and judicial cooperation in criminal matters to the CTT, a question that will be dealt with in the next part of this study (3.4.).

If like the Belgian CTT law does, the revenue from the CTT was to be transferred into EU funds for development cooperation, humanitarian aid and environment policy, or the funding of such EU policies administered by the EU Commission,¹⁷⁷ the “financial interests” of the EU would be at stake. The financing of the European Development Fund is done by the Member States, but the Fund is managed by the EU Commission (Internal Agreement, OJ 2000, L 317/555). Therefore, it is covered by the instruments for the protection of the communities’ financial interests (cf. Explanatory Report on the Convention on the protection of the European Communities’ financial interests, approved by the Council on 26 May 1997; OJ C 191, 23 June 1997, p. 1, sub III, 1.1). The second Protocol of the

¹⁷⁵ defined in Joint Action 98/733/JHA (O.J. C. 351 of 29 December 1998, p.1)

¹⁷⁶ as defined in art. 1(1) and art. 2 of the Convention on the protection of the European Communities’ financial interests (O.J. C. 316 of 27 November 1995, p. 48). The Convention on the protection of the European Communities Financial Interest of 1995, and the first (1996) and the second (1997) Protocol.

¹⁷⁷ the decision-making process to allow such funding of EU policies is not studied in the context of this contribution

Convention on the protection of the EC's financial interests (OJ C 221, 19 July 1997) aims at preventing the refusal of mutual assistance, solely because the offences are considered to be tax or customs duty offences (art. 6 of the Protocol). As a result, when the revenue goes into such EU funds, a CTT would fall into the scope of the instruments for the protection of the Communities' financial interests, including the investigative authority of the OLAF. The CTT would thereby also fall under the protection of the ML Directive.

Other related EU initiatives demonstrate the increased development of financial supervision and international cooperation being fuelled by the debates on organised crime and on financing terrorism. Many of these initiatives might become relevant for the supervision of the compliance with the CTT legislation. Examples are:

- The 1997 Action Plan to combat organised crime (OJ 15 August 1997, C 251/1).
- The 1998 Joint Action Plan on ML and the seizure of instrumentalities and proceeds from crime (O.J. 9 December 1998, L 331/1).
- The 1998 Action Plan on security and justice (calling for judicial cooperation in criminal matters regarding ML and organised crime and Europol exchange of information on ML) (O.J. 23 January 1999; C 19/1) leading to the Protocol on ML regardless of offences of origin (O.J. 13 December 2000, C 358/1), to the Europol Convention of 1995.
- The Protocol (fight against financial crime, information on bank accounts and bank transactions) of 16 October 2001 (O.J. 21 November 2001, C 326/1) to the Convention on Mutual assistance in Criminal matters of 29 May 2000 (O.J. 12 July 2000, C 197/1).
- The cooperation between the Financial Intelligence Units (17 October 2000, O.J. 24 October 2000, L 271/4) (i.e. competent authorities to receive the suspicious transactions reports from the financial sector).
- The negotiation with the USA on the basis of art. 38 of the Treaty of the European Union, on mutual legal assistance (extending the EU 2001 Protocol on bank accounts and bank transactions to the 2000 Convention) and on extradition.

It is important to note in this context that the 1959 European Convention on assistance in legal matters (art. 2, a) and the 1990 ML Convention (art. 18, 1, d), both from the Council of Europe, Strasbourg did allow refusal of cooperation regarding fiscal offences in the requesting state. The first Protocol of 17 March 1978 to the 1959 European Convention art.1.1 however eliminates that right of refusal. Furthermore, it is particularly relevant that the EU Protocol on bank information does not allow refusal of mutual assistance on the grounds that it concerns only "fiscal" offences (art. 8 of the Protocol), nor that the requested State does not impose the same kind of tax.

The authoritative brain trust, from which many of the international instruments quoted originate, is the aforementioned "Financial Action Task Force". The FATF has been created by the G7, joined by the EU and eight other states, in 1989. A year later, another nine States joined the FATF. In the context of the implementation of the CCT, the FATF Recommendations are important.

The FATF Recommendations 35-40 also elaborate on the international judicial and administrative cooperation. The 40 recommendations and interpretative notes have been reviewed in 1996 and in 2003, including the elimination of the refusal for tax offences. Eight separate recommendations have been made as a result of the US-driven debate on financing of terrorism (October 2001). The FATF Recommendations on financing terrorism call for a compulsory licensing or registering of all entities that provide a service for the transmission of money, including through an informal money transfer system or network (Rec. 6). The recommendations also call for measures to impose on financial institutions: the obligation to include accurate information on the originators of funds transferred; for this information to remain with the transfers all the way through the payment chains; and, where such full information is lacking, to conduct enhanced scrutinizing and monitoring of fund transfers for suspicious activity (Rec. 7).

The UN and the Council of Europe also include instruments to combat money laundering, which are relevant in the context of the CTT. The Council of Europe agreed upon a Convention on money laundering on 8 November 1990 in Strasbourg. It was, technically, largely inspired by the UN-Vienna Convention of 20 December 1988. But the latter only deals with the laundering of drug money, whereas the Strasbourg Convention concerns the criminalizing of laundering funds from any illicit origin, although states have the right to be selective. Both, the Vienna Convention (art. 5 § 1 and 3) and the Strasbourg Convention (art. 4 § 1) stipulate that each state should see to it that judges or competent authorities can seize banking files, with no right of refusal on the basis of bank secrecy.

As to the criminalizing of the financial activity, the Strasbourg Convention introduces the rule that the underlying illicit origin does not need to fall within the scope of the national jurisdiction. This rule facilitates the criminalizing of transnational activities. The Strasbourg Convention also states that the knowledge of the illicit origin can be evidenced by inferring from “objective factual circumstances”. This means that everybody who knows or should have known, in view of the circumstances, about the illicit origin of funds can be held accountable. However, art. 18 of the Strasbourg Convention allows the right of refusal of international cooperation where the underlying illicit origin is a tax offence. No right of refusal can be based on the law on bank secrecy, like in the Vienna Convention, but the requested state may require an approval by a judge or a juridical authority.

Conclusion

As mentioned above, the EU has established a more far-reaching international instrument to combat money laundering: the Directive 91/308/EEG of June 1991, amended by the 2001 and the 2005 Directive (replacing the former). The Vienna Convention was again of substantial inspiration, but the EU Directives went effectively much further than drug-related crimes. They also ban the refusal of cooperation on the basis of illicit origin from the tax offences, and on the basis of bank secrecy laws. The UN and Council of Europe Conventions may however be an adequate foundation from which, in the light of the FATF recommendations, adequate international repression of EU-CTT fraud could be organised.

The three instruments, the UN-Vienna Convention (art. 5 § 3), the Strasbourg Convention, and the EU Directives opt for a criminal law repression of financial offences and organise an intensive police and international justice cooperation to that effect. On the other hand, the EU Directives elaborate a preventive or pro-active approach by implicating the financial sector in the pro-active reporting of suspicious transactions.

4.2.4 Judicial and administrative cooperation in criminal matters

The conventions on cooperation in criminal matters imply that judicial authorities can pursue financial investigations, gather evidence and take precautionary measures in a repressive context. It is to be distinguished from administrative cooperation in tax matters, which envisages the possibility for tax authorities to control, assess and recover taxes across the borders. The anti-money laundering cooperation has both a repressive and a pro-active dimension; the pro-active part is in many countries handled by a Financial Intelligence Unit.

The TEU proclaims operational cooperation between Member States in the prevention and detection of criminal offences (art. 29 et seq. TEU). Administrative cooperation is to be ensured (art. III- 61d and 66 TEC), as well as judicial cooperation in criminal matters (art. 31 TEU) and police cooperation (art. 30 TEU). The enhanced cooperation among a limited number of Member States is possible (e.g. art. 40 et seq. TEU), and in the area of particu-

larly serious crimes with a cross-border dimension, including organised crimes, money laundering and suspicious financial transactions, is envisaged.

The TEU determines Europol's tasks (art. 30.1 TEU) as well as Eurojust's tasks (art. 31.2 TEU), focusing on the cooperation in relation to serious crimes. The TEC stipulates explicitly that the EU and Member States should counter fraud and illegal activities affecting the EU's financial interests and organise close and regular cooperation (art. 280 TEC).

An EU Treaty of 29 May 2000 organises the mutual assistance in criminal matters. It envisages serious and organised crimes. The 16 October 2001 Protocol focuses on information on bank accounts and bank transactions. The EU Action Plan to combat "organised crime" of 28 July 1997 recommended (Rec. 29) to legislate on organised crime with respect to tax fraud. Money laundering is also considered to be a serious crime (art. III – 172 EUC). The Schengen Agreements (19 June 1990) already provide for legal assistance in criminal matters, including on excises, VAT and custom duties. In the 1959 (Strasbourg) Convention on Assistance in Criminal Matters, fiscal offences may be grounds for refusal to cooperate (art. 2a), but a Protocol of 17 March 1978 has lifted this exception. However, reservations are still permissible, as well as the condition of dual criminal liability. The EU Convention on Assistance in Criminal matters (2000) supplements the 1959 Strasbourg Convention. Part of the Schengen Agreement is incorporated. Some of the restrictions, including fiscal exclusion were lifted in art. 8 of the Protocol of 16 October 2001 (O.J. C 326 of 21 November 2001).

The judicial cooperation in the EU has a rather repressive character. It pertains the gathering of evidence, seizures, rogatory letters, hearing of persons (witnesses, experts etc.) as a part of criminal procedures. Eurojust, an EU body created by the Treaty of Nice, is a support organisation and coordinator of Member States investigating and prosecuting authorities on the basis of national and Europol investigations. Moreover, a European Judicial Network was created by the EU Joint Action of 29 June 1998 (J.O. 7 July 1998 L 191). It is a network of national contact magistrates.

The police cooperation in the EU, as envisaged by the Schengen Agreement, implies more than repressive action. It also covers pro-active investigations and operational cooperation, like the exchange of information, the right of pursuit, observations, etc. It does not include coercive actions. An online accessible police database has been built up: the Schengen Information System (SIS). The customs authorities have also created their common database (Convention of 26 July 1995, J. O.C. 27 November 1995, 316/34). The police cooperation in the EU is in large parts organised by Europol (art.30 TEU), an EU body created by the Europol Convention of 26 July 1995. Europol is a support organisation and coordinator of Member States police authorities in preventing and combating serious crime.

The EU police and judicial machinery and networks to fight serious offences and illegal activities affecting the EU financial interests offer solid instruments to counteract fraud. It is to be recommended to consider CTT fraud to be a serious crime, which can be sentenced by more than one year imprisonment, and an offence against the EU's financial interests, especially if the revenue from CTT is to be managed through a European fund for development cooperation, including environmental objectives. Through this the implementation of the CTT at the EU level would be reinforced by a well established international cooperation that could fight CTT evasion.

4.3 Conclusion

From the institutional perspective it may be concluded that the EU has no exclusive competence in indirect taxation and that Member States are thus free to introduce a CTT.

Since the EU has exclusive competence in the area of monetary policy for the Euro Member States, a CTT with a monetary surcharge requires European intervention. Moreover, a CTT with a global or regional coverage could be better achieved at the EU level.

The functioning of the internal market, including the freedom of capital but also the harmonisation of indirect taxes, and development cooperation are areas of shared competence between the EU and its Member States.

The Member States may exercise their competence, but only to the extent the EU has not exercised its competence or has ceased to exercise it.

It may be concluded that outside the scope of the Economic and Monetary Union, the establishment and functioning of the internal market and the avoidance of distortion of competition, the EU has no right to impede on the sovereign rights of taxation of the Member States. However, by exercising these sovereign rights, the Member States have to respect the internal market principles and the more general principle of equal treatment or prohibition of unjustified discrimination. Furthermore, the external EU freedom of free movement of capital is also to be respected in establishing taxation rules.

Although the development cooperation is also considered to be an area of shared competence, the EU can take action and conduct a common policy, but that competence may not result in Member States being prevented from exercising their competence. It can reasonably be concluded that the CTT enters into these competences of Member States. Therefore, the EU could harmonise legislation in this area, but it cannot prevent Member States from acting themselves.

EU Tax provisions require unanimity, but an "enhanced cooperation" among at least 8 Member States could be considered.

The appropriate instrument to realise a coordination or harmonisation of the CTT in the EU is a Directive. This is a legislative act binding as to the result, but leaving the choice of forms and methods to national authorities. The VAT, which is the most elaborated, harmonised indirect tax in the EU, may be the appropriate model.

The secondary EU tax law harmonising indirect taxation, especially the VAT and the taxes on the raising of capital, is particularly useful for the realisation of a European CTT. In the light of the VAT experience, it is advisable, in view of a coverage of the CTT in Europe as comprehensive and concise as possible, to establish a European Directive for the harmonisation of the CTT where the tax exists (Belgium, France) and for the introduction in other Member States. This Directive would provide a common set of substantive rules concerning the definition of taxable persons, taxable events, localization, tax base, tax rate, tax liability and the prevention of fraud. The fact that the draft version of the CTT, which this contribution refers to, borrows many concepts from the Sixth EU-VAT Directive, using a uniform set of legal concepts and a common case law based on jurisprudence of over 400 ECJ cases, may facilitate the introduction of a European CTT into the EU body of law.

The principles of the internal market, including the freedom of capital and development cooperation are areas of shared competence between the EU and its Member States.

The examination of the relevant fiscal provisions in the TEC demonstrates that, at the actual stage of development of the administration of taxes in the EU, it is appropriate to conclude that the EU is not in a position to introduce an EU CTT which is administered at the EU level. It should, like in other tax matters, leave this to the Member States. The EU could however establish the necessary measures for the harmonisation, the implementation and the coordination of the legislation of Member States. Through its support, coordination and supplementation of actions of the Member States, especially with respect to administrative cooperation, the EU can organise the linkage of national tax administrations as

well as the linkage to the control and cooperation mechanisms organised at the EU level. A European Directive would be the appropriate mean for the implementation of a harmonised EU CTT, as this would allow national administrative organisation and control “in the field”.

The EU Administrative Cooperation in tax matters offers substantial instruments for cross-border tax assessments, controls and recovery within the EU. It would be a valuable help in the control, implementation and enforcement of the CTT. The scope of the instruments will however have to be enlarged to cover the CTT. This requires unanimity at the level of the EU, possibly limited to countries that engage in enhanced cooperation.

As the surcharge in the CTT is undoubtedly a “monetary” instrument to counteract undesirable currency fluctuations, especially detrimental to the weaker currencies and States, the role of the ECB as the holder of the monetary sovereignty of the Eurogroup is essential. The involvement of the ECB and the ESCB is not only necessary, it is also welcome, given the competences and the instruments it has at its disposal. The ECB could conclude the necessary agreements with the central banks in the Eurogroup to organise an appropriate support for the implementation and supervision of the application of the EU-CTT. The ECB could furthermore make appropriate recommendations to central banks in the other Member States to that effect. The Member States outside the Eurogroup have a large monetary sovereignty, but they are not outside the ESCB. Moreover, the ECB could conclude appropriate agreements with the private financial settlement institutions, such as the Target Agreement. The linkage with the Prudential Supervision of the financial sector could also be entrusted to the ECB. The EU Council may indeed confer on the ECB specific tasks relating to the prudential supervision of credit institutions and the stability of the financial system. This applies also to the non-euro Member States.

As the politically independent ECB plays the central role in the EU monetary policy and controls the use of the euro, it is essential to recognise its potential role and the regulatory and supervisory impact for an EU CTT with a monetary-driven surcharge system. The implementation of the CTT in the EU requires the full cooperation of the ECB. Considered that the monetary policy has become an exclusive EU competency for the Eurogroup and a “Matter of Common Interest” for other Member States, where it is subject to a common surveillance system of the Economic and Financial Committee (art. 114 TEC) and to the intervention of the EU in crisis situations (art. 119 TEC), the ESCB, governed by the ECB, has been well established and could play a vital role in the CTT system.

In view of the delicate balance of power in the TEC and the Statute of the ESCB, the ECB and the EU Council should cooperate to include the CTT surcharge into the scope of the operational methods of monetary control. This would require an approval of the governing council of the ECB with a 2/3 majority. Especially taking the necessary protective measures with regard to the CTT for non-euro Member States and third countries would require the cooperation of the EU Council. With respect to third countries, one may conclude that the ECB could settle appropriate agreements with foreign authorities, if this fits together with the EU objectives and the primary goal of price stability, but would need the involvement of the EU Council where its competence is exceeded. In the context of the CTT it may be appropriate that the ECB be entrusted by the EU Council with the task to install the CTT registry as a condition for the license to operate in the financial sector, i.e. to execute and settle currency exchange transactions.

The EU has established a more far-reaching international instrument to combat money laundering: the Directive 91/308/EEG of June 1991, amended by the 2001 and the 2005 Regulation (replacing the former Directives). The UN-Vienna Convention was again of substantial inspiration, but the EU Directives went effectively much further than drug-re-

lated crimes. They also ban the refusal of cooperation on the basis of illicit origin from the tax offences, and on the basis of bank secrecy laws.

If the non-compliance with the CTT was considered to be a “serious” underlying offence, the EU Money Laundering Directives would apply to European based financial institutions or the European based branches of non-EU based financial institutions that know or should know, on the basis of “objective factual circumstances”, that the currencies converted, transferred, acquired, possessed or used originate from currency transactions where the CTT was evaded. In the view of the diligence prescribed by the ML Directives for financial institutions, (for example adequate procedures of internal control and communication), the negligence in gathering information from other (offshore) branches and subsidiaries of European based financial institutions, from other (offshore) affiliated subsidiaries or branches of non-EU based financial institutions dealing with their EU branches or subsidiaries, or from foreign branches or affiliates of their clients, would likely be sufficient factual circumstances from which illicit knowledge may be inferred.

The Money Laundering Directives have thus a very broad international scope that may allow it to monitor and curb tax fraud in international currency transactions. In the context of a global (or regional) CTT, the wording of the Directives is important, as it stipulates that illicit activities “shall be regarded as such, even where the activities which generated the funds to be laundered were carried out in the territory of another member state or in that of a third country.” Moreover, the definition of “organised crimes”, one of the underlying offences of the ML Directives, covers all kinds of activities, wherever the activity takes place.

The Directive defines as an underlying “criminal activity [...] any kind of criminal involvement in the commission of a serious crime”. Serious crimes are, amongst others, not only “the activities of criminal organisations”, but also “fraud, at least serious, of the EU’s financial interest” and offences which are punishable by a maximum sentence of more than a year or of at least 6 months. It is recommendable to define the breach of the CTT legislation as a serious crime so as to enter the scope of the ML Directives.

The notion of “serious crime” may also be relevant for the applicability of the EU Conventions on administrative and judicial cooperation in criminal matters to the CTT. The EU police and judicial cooperation to fight serious offences and illegal activities affecting the EU financial interests offer solid instruments to counteract fraud. It is to be recommended to consider CTT fraud to be a serious crime, which can be sentenced by more than one year imprisonment, and an offence against the EU’s financial interests, especially if the revenue from CTT is to be managed through a European fund for development cooperation, including environmental objectives. Through this, the implementation of the CTT at the EU level would be reinforced by a well established international cooperation that could fight CTT evasion.

The UN and Council of Europe Conventions may moreover be an adequate foundation from which, in the light of the FATF recommendations, adequate international repression of EU CTT fraud could be organised.

The three instruments, the UN-Vienna Convention (art. 5 § 3), the Strasbourg Convention, and the EU Directives opt for a criminal law repression of financial offences and organise an intensive police and international justice cooperation to that effect. On the other hand, the EU Directives elaborate a preventive or pro-active approach by implicating the financial sector in the pro-active reporting of suspicious transactions.

Annex of Chapter 4 : Tobin-Spahn Tax on Financial Transactions and Article 56 EC : An Opinion, Prof. Mr. L.A. Denys, in : European Taxation, Nov. 2001, p. 430 et seq., International Bureau of Fiscal Documentation.

EUROPEAN UNION

**Tobin-Spahn Tax on Financial Transactions and Article 56 EC: An Opinion
Prof. Mr. L.A. Denys***

THE QUESTION AND THE COMMISSION'S ANSWER

Mr. Jonas Sjöstedt MEP put the following Question to the European Parliament (February 2001):

Article 56 of the EC Treaty reads:

1. Within the framework of the provisions set out in this Chapter, all restrictions on the movement of capital between Member States and between Member States and third countries shall be prohibited.
2. Within the framework of the provisions set out in this Chapter, all restrictions on payments between Member States and between Member States and third countries shall be prohibited.

Can the Commission say whether a tax on financial transactions, the so-called Tobin Tax, is compatible with Article 56 of the EC Treaty?

The answer of the Commission reads:

that a tax of general application as originally conceived by Prof. Tobin ("Tobin Tax"), if introduced by a Member State, is likely to be contrary to Article 56, together with Articles 12, 39, 43, 49 and the corresponding articles of the EEA Agreement;

that such a tax, if introduced at Community level, is also unlikely to be possible under Article 57(2) of the EC Treaty, since that Article provides for restrictive measures only in a limited number of areas.

I. COMMENTARY ON THE ANSWER OF THE EU COMMISSION

*Does the EU Commission consider the Tobin Tax¹ to simply be contrary to the EC Treaty?^{**}*

A careful reading of the EU Commission's answer does not allow a conclusion to that effect. On the contrary! In the first part of the answer the Commission gives its opinion that "the original Tobin Tax would likely be contrary to Article 56 together with Articles 12, 39, 43, 49"^{***} and the corresponding articles of the EEA Agreement". From this statement we learn that:

- I. (a) by the addition of "*likely*" the Commission indicates that it has at the very least its doubts, without, however, giving the Tobin Tax the benefit of the doubt;
- II. (b) the Commission refers to three of the four EU freedoms of movement and not to the free movement of goods (Article 23 et seq. EC). In this respect it is also not immediately clear whether the Commission feels that the probable incompatibility

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**The debate on the Tobin Tax is taking place mainly among fiscal economists. A concrete proposal that is suitable for a comprehensive (tax) legal review on the basis of (European) tax law is not available. The considerations here are accordingly limited to the review on the basis of the European fundamental treaty principles concerning a levy that can be conceived of as a transfer tax on the exchange of currencies in international financial transactions.

***These fundamental treaty provisions concern the free movement of capital and payments (Art. 56) together with the non-discrimination principle (Art. 12), the free movement of persons (Art. 39), to which the freedom of establishment (Art. 43) also belongs and the freedom to provide services (Art. 49).

with the freedom of movement of persons and services is only meant in their relationship with the freedom of movement of capital and payments;

- III. (c) the EU Commission expressly only refers to the “tax of a general application as originally conceived by Prof. Tobin”. The EU Commission therefore does not give its opinion on a refined version (for example, the two-tier structure as proposed by Prof. Spahn and the international financial transaction “payment” tax, etc.); and
- IV. (d) the Commission only gives its opinion of a tax “if introduced by a Member State”. The Commission accordingly does not take a position on an introduction by several or all EU Member States (for example, of the euro zone and the others), whether or not upon a European initiative (see, however, below), and whether or not limited to the application with reference to non-EU currencies.

In the second part of its answer the Commission does, however, state that it is of the opinion that the original Tobin Tax, “if introduced at community level, is also unlikely to be possible under Article 57(2)* of the EC Treaty”. This reflection of the Commission is probably influenced by a judgment** of the European Court of Justice, according to which the export of currencies could not be considered to be one of the capital transactions enumerated in Article 57(2) EC. As such, the Commission, however, fails to clarify its view. The Commission thus does not really give its opinion on a harmonized Tobin Tax to be introduced by EU Directive or Regulation in all Member States by virtue of Article 93 (harmonization of indirect taxation) possibly in conjunction with Article 59 (safeguard measures with regard to the movement of capital to and from third (non-EU) countries in exceptional circumstances that threaten to cause serious difficulties for the monetary union for a period not exceeding six months).

The Commission has its doubts, and does not feel that it is its immediate responsibility to establish clarity.

II. ACCEPTABILITY OF A TOBIN TAX AT THE LEVEL OF EUROPEAN LAW

In the considerations below, which contain a few clarifications for the benefit of a reader not trained in European tax law, reasons are found for resuming the Tobin Tax discussion in the European forum. The acceptability of a Tobin Tax must be examined at the level of European law in view of:

- the articles on taxation; and
- the fundamental articles of the treaty that govern the Internal Market and the free movement of capital.

Does the European Union or one or more Member States have the competence to introduce a Tobin Tax?

There is only one explicit European treaty article on taxation that is relevant for the review of a Tobin Tax (which is an indirect tax).***

Article 93 EC Treaty provides:

The Council shall, acting unanimously on a proposal from the Commission and after consulting the European Parliament and the Economic and Social Committee,

*Art. 57(2) EC allows the EU Council to take measures in the field of the movement of capital with third countries insofar as they concern direct investment, establishment, financial services and admittance of stocks to the capital markets.

**ECJ, 14 December 1995, Cases C-163, 164 and 250/94, Sanz de Lera et al.

***Customs, agricultural and anti-dumping levies excluded. According to case law, financial transactions (particularly foreign currency transactions) are not transactions in “goods” upon which an import duty can be levied. Moreover, import levies are unified at the EU level. The question thus arises as to the compatibility of Tobin Taxes on the payment of goods with the prohibition of disguised import and export taxes (an issue not discussed in this opinion).

adopt provisions for the harmonisation of legislation concerning turnover taxes, excise duties and other forms of indirect taxation to the extent that such harmonisation is necessary to ensure the establishment and the functioning of the internal market within the time-limit laid down in Article 14.

This must be read together with the “principle of subsidiarity” of Article 5 EC:

In areas that do not fall within its exclusive competence, the Community shall take action, in accordance with the principle of subsidiarity, only if and insofar as the objectives of the proposed action cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale or effects of the proposed action, be better achieved by the Community.

The European Union itself can thus not (without adapting the treaty) introduce an EU Tobin Tax (i.e. a European tax). The European Union *can* prescribe by means of a *harmonization measure* that the Member States must introduce a national (in that case EU- harmonized) Tobin Tax. The European Union can also harmonize a Tobin Tax introduced autonomously by (some) Member States.

As the European Union has already harmonized some indirect taxes, the Member States must respect these rules when conceiving a new Tobin Tax. For instance, as such, the taxes on the raising of capital were partially harmonized. In the TRC Directive of 1969, Articles 10, 11 and 12 are relevant for a Tobin initiative.*

Also, VAT is to a large extent harmonized. In the Sixth VAT Directive, Article 33 may, for example, be relevant for a Tobin Tax proposal.**

Commission proposals have also been made with respect to the harmonization of indirect taxation on stock transactions that were, however, not passed by the EU legislator (the Council) despite positive recommendations by the EU parliament and ECOSOC.

If a Tobin Tax were to be (partially) contrary to a harmonization tax directive then a Member State could only introduce the tax after the EU legislator has amended the directive (which requires unanimity in the Council).

*Art. 10 of the TRC Directive:

Other than capital duty, the Member States may not levy any other taxes, in whatever form, in respect of the transactions of capital companies, associations or legal persons in respect of:

The transactions as intended in article 4; (in particular the contribution and raising of capital)
The contribution, loans or output, realised within the context of the transactions as intended in article 4 [...]

Art. 11 of the TRC Directive:

The Member States shall not levy taxes, in whatever form, in respect of: the drafting, the issue and the quotation of securities on a stock exchange, the issue or trading of securities, bonds or other similar securities, as well as certificates of these objects, irrespective of the issuing party; loans, including interest, as taken up against the issuance of bonds or any other tradable securities, irrespective of issuer, and all associated formalities, as well as the drafting, issue and the quotation of stocks on a stock exchange, the issue or trading in these securities or other tradable securities.

Art. 12 of the TRC Directive:

1. In deviation to that determined in articles 10 and 11, the Member States may levy: duties of any kind on the transfer of securities transfer duties, [...], according to the transfer of immovable property on its property or assets; transfer duties on assets [...], in so far as the transfer of these assets is for consideration other than shares in the company [...] [...] taxes over the added value.

2. The rights as intended in article, sub b), c) [...] are the same, irrespective of whether the statutory seat of the capital company, association or legal person is located in the territory of the Member State who levies the tax. These duties may be no higher than any other taxes as levied in the Member State in respect of other similar transactions.

**Art. 33 of the Sixth VAT Directive: Without prejudice to other Community provisions, the provisions in this Directive shall not prevent a Member State from maintaining or introducing taxes on insurance contracts, taxes on betting and gambling, excise duties, stamp duties and, more generally, any taxes, duties or charges which cannot be characterised as turnover taxes.

The Member States have, in general and therefore also with respect to the Tobin Tax, retained their sovereign tax competence. Each Member State can thus “in principle” introduce a Tobin Tax itself. “In principle” implies, however, under European law – and this is very far-reaching – that a Member State must respect the fundamental European treaty principles (see below) because of the primacy of European law and the loyalty principle of Article 10 EC.

The same applies with respect to secondary European law (for example, legislation already harmonized). In so far as a Tobin Tax would be incompatible with the existing directives (for example, the VAT), a Member State could not introduce a Tobin Tax on its own; the mediation of the EU legislator is then required (i.e. unanimity of the Council).

III. ACCEPTABILITY OF THE TOBIN TAX IN VIEW OF FUNDAMENTAL EUROPEAN TREATY ARTICLES OF A NON-TAX NATURE

Is the Tobin Tax incompatible with the principles of the European Union and the EMU and the freedom of movement in the Internal Market, which is based upon the non-discrimination principle, the freedom of movement of capital, payments, goods, services and persons?

1. The Tobin Tax in general supports in both its main objectives *two fundamental aims of the European Union*: development policy and monetary stability.

The main objectives of the Tobin Tax, namely financing the (sustainable) development of developing countries and promoting currency stability (combating harmful currency speculations) fit in completely with the EC Treaty aims of a policy of development cooperation and promotion and the Economic and Monetary Union (EMU) (as listed in Articles 2 and 3 EC). Development cooperation is oriented to promoting the sustainable development of developing countries, and more particularly the poorest, to the integration of the developing countries into the world economy, and to the fight against poverty there

(Article 177 EC Treaty).^{*} Monetary objectives (EMU) have as a main goal maintaining price stability (Article 4.2) (by means of a single currency and an exchange rate policy), sound government finances and monetary conditions (Article 4(3) EC).^{**}

Article 59 EC^{***} grants the Council the power to interfere in the movement of capital with third countries if the proper operation of the Economic and Monetary Union so demands it, by means of safeguard measures for no longer than six months. In the case of a sudden crisis in the balance of payments, EU Member States outside the Euro zone can also take safeguard measures in accordance with the procedure of Articles 119, 120 and 122(6) EC in consultation with the European Union. Monetary safeguard measures may also be justified on the basis of (public policy) Article 58(1)(b) EC.

From a legal-technical point of view, there is no reason why the high tariff in the Spahn two-tier structure could not be such a safeguard measure (if necessary, subject to unanimity, given that it is also a fiscal decision). From the structure of the Treaty and the cited treaty articles it can be deduced that the Economic and Monetary Union rules and the

^{*}The Treaty of Nice (December 2000) reinforces this by laying down that the EC take measures of economic and financial cooperation with third parties that are coherent with the development policy of the EC (Art. 181 A).

^{**}See also Art. 105 and further Art. 99(4) (economic policy), Art. 111 et seq. (policy on non-Community currencies is a matter for the Council).

^{***}Art. 59 EC:

Where, in exceptional circumstances, movements of capital to or from third countries cause, or threaten to cause, serious difficulties for the operation of economic and monetary union, the Council, acting by a qualified majority on a proposal from the Commission and after consulting the ECB, may take safeguard measures with regard to third countries for a period not exceeding six months if such measures are strictly necessary.

powers of the Council with respect to currencies of third countries take precedence over the free movement of capital. Therefore, (and as the Commission probably also assumes,) the Tobin Tax is not per se and in principle incompatible with the EC Treaty and the EMU, which aim at a (common) development policy and monetary stability.

2. A crucial test for the Tobin Tax is *the European nondiscrimination principle*, that, inter alia, contains an almost complete prohibition of discrimination on grounds of nationality or similar criteria (Article 12 EC and in the four fundamental freedom of movement articles).

One of the first questions* is whether the Tobin Tax on foreign currency transactions violates the general non-discrimination principle, in other words whether it implies an illegal discrimination, or is rather based on a justified differentiation.

Under the non-discrimination principle equal situations must be treated equally, and different situations require different treatment. Therefore, in the first instance, the comparability ((1) comparability test) of the situations is analysed. Subsequently it is verified whether the (distinction in) treatment is reasonable ((3) justification test), and proportional to the objective ((4) proportionality test), in as far as the objective is legitimate ((2) legitimacy test). If the Tobin Tax passes these tests, there is no illegal discrimination, but a justifiable differentiation.

In practice, the question amounts to whether taxing transactions in foreign currencies without taxing transactions in the domestic currency is an illegal discrimination.

(1) Comparability test

Are financial transactions in foreign currencies comparable with those in domestic currencies?*

It is clear that there is an essential economic difference between the two kinds of transactions, and that precisely that difference is taken into consideration for the Tobin Tax. The two types of financial transactions (domestic vs. foreign exchange financial transactions or payments) take place on entirely different and distinct capital markets. The exchange of foreign currencies has its own clear underlying economic function for the market players with appropriate economic consequences and risks, which make it possible to determine that these transactions have completely different characteristics to those of the domestic financial transactions (which may appear from an extensive economic analysis, but in the context of the fiscal discussion, the value fluctuations are essential, with the inherent risk dimension, the possibility of speculation and the corresponding need to cover the risks that are lacking in the case of financial transactions in one currency all of which are certainly relevant characteristics).

Unlike domestic financial transactions, there are two currencies involved in foreign exchange financial transactions, and there is always a conversion, an exchange to another currency. Notably these characteristics are envisaged in the Tobin Tax, defined as a tax on international exchange transactions in currencies that fluctuate in value and that are also object of a genuine distinctive risk-bearing trade with supply and demand, which in turn affects the value fluctuation and so the stability of the currency. That is not the case for financial transactions in one (domestic) currency. The international transaction belongs to the international capital market and dealings because it implies the conversion of two currencies, and on the occasion of this conversion the Tobin "transfer" tax is levied.

It should also be noted with respect to the difference between the euro and the other EU currencies that the option has been included in the EC Treaty for Member States to

*This question is also relevant not only within the European Internal Market, but also in relation to third countries, because the free movement of capital also extends to third countries and a prohibited restriction is also understood to mean an arbitrary discrimination.

**For the sake of simplicity, it may be assumed that in the euro zone both the euro and the EU currencies with irrevocable fixed rates of exchange are domestic currencies.

maintain the actual different situation of their currencies, which implies that taking this actual difference as the guiding principle of taxation is not in itself against the fundamental rules of European law.

(2) Legitimacy of the objectives

In the assessment of the legitimacy of the objectives of the Tobin Tax it can be stated, as it is above, that they concur with the EC Treaty objectives: promoting currency stability and financing international development cooperation.

(3) Justification of difference in treatment

In the light of these objectives it appears justified to distinguish international financial currency transactions in particular as material and relevant bases and taxable events, rather than transactions on the domestic money market. These transactions dovetail very well with the advantages and the risks of the global economy, and it is therefore appropriate to relate the contribution to sustainable development of notably poor countries, whose economies are especially vulnerable as a consequence of the "globalization" of the world economy, to the bases of international financial transactions.

There is a comparable precedent for such a difference in treatment in the EU recognition of the justified distinction between residents and non-residents for income tax, taking into consideration the ability-to-pay principle and source principle.

Moreover, Article 58(1)(a) EC concerning movement of capital (in principle only with respect to third countries) considers explicitly that a distinction made in function of the place of residence or the place where the capital is invested may be justified in tax legislation.

(4) Proportionality

The question of proportionality, i.e. whether the Tobin Tax is not disproportional (overkill), is answered by using the necessity criterion: is the tax necessary or is there a less "restrictive" alternative tax that guarantees the realization of the objective?

Given the very low tariff in the Spahn variation (and thus the minimum impact on transactions) and the large returns as a consequence of the large scale on which the tax is introduced, the Tobin Tax appears very efficient, and an alternative with a similar effect that is less burdensome for the market players is difficult to conceive. The high-tariff version (intends overkill) is part of the monetary policy, and is therefore of a different order, where the non-discrimination principle, given the exceptional situation of excessively harmful currency fluctuations is per hypothesis not at stake.

(5) Per se forbidden discrimination based on nationality or similar criteria

In Article 12 EC (to which the Commission also refers in its answer) nationality is regarded as an absolute, per se illegal distinguishing criterion.

Tobin Tax proposals have been put forward that can be completely neutral with respect to the nationality criterion or de facto similar criteria, such as the residence or place of establishment of the market players, the origin or destination of the goods, services or capital as well as to the nationality of the currency, as only the conversion of one currency into the other is subject to taxation. Moreover, as indicated above, a tax distinction according to the place where the capital is invested* (within or outside the European Union) is explicitly allowed under Article 58 EC (in relation to third** countries).

*In some circumstances the purchase of a foreign currency may be considered to be a capital investment.

**This is relevant for a tax on the conversion of euro and other EC currencies not justified as a monetary measure.

Based on the considerations above, it cannot be concluded that a Tobin Tax would in principle be contrary to the EC non-discrimination principle because the tax is based upon a justifiable differentiation between domestic financial transactions and foreign exchange transactions.

IV. ACCEPTABILITY UNDER THE FUNDAMENTAL PRINCIPLES OF THE INTERNAL MARKET

One of the fundamental objectives of the EC Treaty is the Internal Market, characterized as a space without internal borders in which the free movement of goods, persons, services and capital is guaranteed (Article 14 EC).

Does the EU free movement of capital oppose the Tobin Tax?

In the current state of Community law,^{*} all restrictions on financial transactions^{**} are, in principle, prohibited by virtue of Article 56 EC.

Appropriate restrictions, however, are still possible for capital movement by virtue of explicit treaty articles: Article 58(1)(a) allows, as already mentioned, tax laws distinguishing according to the place of residence or investment; Article 58(1)(b) EC allows restrictions to prevent infringements of tax and the prudential supervision of financial institutions, measures of administrative and statistical information, and restrictions for reasons of public policy (monetary measures are recognized as public policy); Article 57(2) EC allows EU

Council restrictions for capital transactions with respect to third countries in four^{***} spheres, and Article 59 EC allows exceptional monetary community measures in the area of free movement of capital (see above and note 10).

Although a tax on foreign currency transactions can be considered to be a restriction in principle on the movement of capital, since it increases the cost of international capital allocation, it is not necessarily prohibited for that reason. If a restriction is not a per se illegal nationality discrimination, a tax may, however, have a deterring effect and create (or may create potentially) an effective burden to the free movement of capital.

Assessed in terms of both intention and effects, the Tobin Tax with its low tax rate (in the Spahn proposal) is, according to its supporters, in line with the market, meaning it does not actually nor potentially deter the market players; most commentators agree that the tax will not increase the cost of capital (or of moving of capital) significantly. As such, the tax may not amount to a restriction.

The principle of the free movement of capital is furthermore not absolute:^{****} it serves the objective of a free Internal Market,^{*****} but this objective must be balanced against the objective of tax measures.

^{*}For a comprehensive study of this area of EC law, see Mohamed Sideek, *European Community law on the Free Movement of Capital and the EMU* (Deventer: Kluwer Law International, 1999).

^{**}Foreign currency transactions that are payments which are inextricably linked with the movement of goods, persons or services are not assessed under capital liberalization, but rather under the relevant free movement rules (see below).

^{***}Not including investments in foreign currencies as such (see note * on the second page of this annex).

^{****}The European Court of Justice (e.g. Case 203/80, *Casati*) recognized public policy as a permissible restriction to capital movements, reasoning that "complete freedom of movement of capital may undermine the economic policy of one of the member states or create an imbalance in its balance of payments"; see also Case 148/91, *Veronica*) recognizing the restriction of freedom of capital for cultural policy and Case C-275/92, *Schindler*) for social policy (promotion of lotteries); see also (freedom of persons) Case 41/74, *Van Duyn*, restriction of "socially harmful" conduct.

^{*****}For that matter, it may be noted that in the relation with third countries in general "the principle of the internal market" cannot be used as an interpretation guideline to specify the freedom of capital (apart from the effect in or for the EU Internal Market).

As fiscal competence remains with the EU Member States, it is clear that the national tax measures that serve a budgetary objective may be at odds with the EC rules that serve the Internal Market as objective and that the Member States are obliged to respect loyally (Article 5 EC). Tax measures that are diverted from their budgetary objective to obstruct free movement in the Internal Market will therefore be unacceptable.

If the objective of a tax measure, however, were not to obstruct free movement but the measure results in the restriction of free movement then there must be an assessment of whether this is justified:

- under the grounds of justification explicitly allowed under the treaty (see above), as well as
- under the “Rule of Reason” (a corrective rule with its origin in ECJ case law).

Under the Rule of Reason a restrictive levy may be acceptable if it:

- (1) is justified by compelling reasons of public interest;
- (2) is suitable for guaranteeing the realization of the objective;
- (3) does not go further than necessary to achieve the objective;
- (4) is applied without discrimination to all market players; and
- (5) is not incompatible with specific EC law.

The tests in this matter are very similar to the differentiation tests mentioned above.

Under the Rule of Reason, the Tobin Tax, if restrictive, must be justified and objectively required for the safeguarding of compelling reasons in the public interest; to assess this the introduced tax should not be disproportional to the intended objective, and the aim of the tax measure and the free movement norm are balanced against each other.

As stated above, the low tariff proposal of the Tobin-Spahn Tax fits in with legitimate EU objectives that serve the public interest. Less obstructive options for the low tariff variation with similar budgetary effect do not exist and there is no question of overkill. The higher tariff variation on the other hand, which is supposed to combat harmful currency fluctuations, requires a justification within the framework of the monetary policy (which is a Community matter).

The Tobin Tax must be applied *without discrimination*, that is to say, to all market players and relevant transactions (unless objectively justifiable, non-discriminating distinguishing criteria are used) (see above). Even in its low tariff variation the question arises as to whether a Member State restricts the Internal Market by means of a Tobin Tax in a discriminatory way: this must be assessed from the non-discrimination principle point-of-view as discussed above.

Finally, the Tobin Tax must not be incompatible with specific EC law (such as the tax harmonization directives; see above with respect to the Tax on the Raising of Capital and VAT Directives and the explicit permission under Article 58(1)(a) EC).

The conclusion is therefore that under the EC free movement of capital and related payments principle, Member States may introduce a Tobin Tax with a *low tariff*, which thereby does not really discourage the movement of capital or which, under the Rule of Reason, is justified in the light of its legitimate objectives, that concur with the EC Treaty objectives, and that does not unreasonably or disproportionately restrict the movement of capital.

The Tobin Tax with a *high tariff*, however, whose main aim is not budgetary, but in fact to combat harmful currency fluctuations, serves essentially a monetary policy, which within the scope of the EMU also requires action at the European level. This high tariff tax is, therefore, not necessarily contrary to the EC Treaty if used as an instrument of monetary policy in EU policy.

Do the principles of free movement of goods, persons and services oppose the Tobin Tax? The other fundamental rules of free movement must also be respected. The EU Commission refers for that matter to a possible incompatibility with the free movement of persons (including establishment) and services. Foreign currency transactions can be related to goods, labour and services for which they can be the payment, remuneration or *quid pro quo*.*

A Tobin Tax on payments in foreign currencies can therefore be indirectly restrictive for the free movement of goods and services. Whether the effects of these restrictions have a discouraging effect or are justified demands, in principle, the same analysis *mutatis mutandis* as under the movement of capital, as summarized above. Current case law appears rather to be reluctant in characterizing fiscal measures to be prohibited indirect restrictions of the free movement of goods, services and persons.** Therefore, the principles of free movement of goods, persons and services do not oppose under the Rule of Reason a Tobin Tax that in light of its objectives does not unreasonably or disproportionately restrict the movement of payments.

SUMMARY OF THE OPINION

The author comes to the following conclusions:

- Does the EU Commission consider the Tobin Tax simply to be contrary to the EC Treaty? The Commission has its doubts, and does not feel it is its immediate responsibility to establish clarity;
- The acceptability of a Tobin Tax must be examined at the level of European law, i.e. in view of:
 - the articles on taxation;
 - fundamental articles of the treaty that govern the Internal Market including the free movement of capital;
- Does the European Union or one or more Member States have the authority to introduce a Tobin Tax in view of European fiscal norms? The EC Treaty articles (1) do not oppose a Tobin Tax; and (2) make it possible to prescribe the introduction of a harmonized Tobin Tax (at the national level) or to harmonize at the European level the Tobin Taxes introduced at a national level. The European secondary tax legislation must be observed by a national Tobin Tax (and, where necessary, can be adapted by unanimity). Upon the introduction of the Tobin Tax, the Member States must respect other fundamental principles of (non-tax) European law;
- Is the Tobin Tax incompatible with the principles of the European Union and the EMU, freedom of movement in the internal markets without borders, based upon the non-discrimination principle, the free movement of capital, payments, goods, services and persons? There is a concurrence of the objectives of the European Union/EMU and the Tobin Tax: the Tobin Tax, aiming at development policy and monetary stability, is therefore not in principle incompatible with the objectives of the EC Treaty and the EMU; A crucial test for the Tobin Tax is the European non-discrimination principle that, *inter alia*, contains an almost complete prohibition of discrimination on grounds of nationality (Article 12 EC) and also in the Internal Market's four fundamental principles of freedom of movement. It cannot be concluded that the Tobin Tax would in principle be contrary to the EU non-discrimination principle because the tax is based upon a justifiable differentiation; Under the EU free movement of capital and related payments Member States can introduce a Tobin

*Studies estimate these exchange rate transactions at 5% of international financial transactions.

See note * on page 2 of this annex.

Tax with a *low tariff* which thereby does not really discourage the movement of capital, or that is, under the Rule of Reason, justified in the light of its legitimate objectives that concur with the EC treaty objectives, and that does not unreasonably or disproportionately restrict the movement of capital. The Tobin Tax with a *high tariff*, however, the main aim of which is not budgetary but, in fact, to combat harmful currency fluctuations, thus serves essentially a monetary policy, which within the scope of the EMU also requires action at European level within the framework of the EMU (within a partnership between EU and national governments, and also in the international sphere). This high tariff tax is therefore not necessarily contrary to the EC treaty if used as an instrument of monetary policy in the EU policy. Also, the free movement of goods, persons and services do not oppose under the Rule of Reason a Tobin Tax that, in the light of its objectives, does not obstruct payments unreasonably or disproportionately.

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