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Finnish-Soviet Clearing Trade and Payment System: History and Lessons

SUOMEN PANKKI
Bank of Finland

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Preface

The Finnish-Soviet clearing system is often referred to as a special case among international clearing arrangements. Having started already in 1945 on an annual basis and being renewed for five-year periods over the years 1951–1990, the regime lasted for 46 years. Until the 1960s Finnish-Soviet clearing was generally only one of many similar clearing arrangements which Finland maintained with its trade partners in the east and west. By the end of the 1960s, most western European countries had dismantled their clearing arrangements with the eastern European countries. Finland, however, continued to maintain clearing agreements with the Soviet Union and with a number of other socialist countries. The decision of the Soviet government to abolish central planning irrevocably removed the possibility of continuing the Finnish-Soviet intergovernmental clearing regime, which was subsequently terminated at the end of 1990.

Finland conducted centrally managed intergovernmental foreign trade arrangements starting with the post-war regime of almost fully controlled foreign trade and payment systems and ending with the current fully deregulated foreign trade, payment and financing regime towards the end of the 1980s. These developments constituted a unique laboratory for testing the viability of clearing in a controlled versus a liberalized environment. It also allowed for a comparison between Finnish-Soviet clearing and other similar arrangements in the past and present. It made it possible to use the Finnish experience to determine the narrow conditions under which a system of international clearings is useful.

Trade with the Soviet Union played an important role in Finnish foreign trade policy. The role of the Bank of Finland in the management of the intergovernmental clearing regimes was originally that of an account-keeper. The holder of accounts was the Finnish government. In the case of the Finnish-Soviet clearing arrangement, however, the involvement of the Bank of Finland was bound to grow beyond this role, particularly in the 1970s and 1980s. Efforts to keep the clearing account operational in an environment which was otherwise increasingly deregulated called for controls that were bound to affect not only trade policies but trade itself.

Traditionally, discussion in Finland has treated clearing problems from the viewpoint of trade policy. However, in this book trade policy questions are discussed only to the extent necessary to provide readers with background and explanations for problems connected with payment system management. The purpose is to shed some light on the clearing payment mechanism and the associated procedures and techniques applied in the management of clearing. This side of clearing operations is not generally well known and has often been misunderstood. Since persons once involved in the operation of clearing management were still around and documents were available, the Bank of Finland felt that an effort to collect and record the salient information would constitute a worthwhile project. It is therefore hoped that this book will also serve as a reference source for future research.

November 1995

Kalevi Sorsa
Member of the Board of Management

Acknowledgements

This study of the Finnish-Soviet clearing system has been prepared in the Unit of Eastern European Economies of the Bank of Finland. I consider the opportunity given to me a unique one. Having worked in clearing management with the former Bilateral Trade Department of the Bank of Finland up until it was disbanded in 1991, I still had colleagues around who had been involved in the practical work of clearing management and there was access to documents and other sources of information. Time will inevitably corrode some of these sources.

The subject itself is controversial, and therefore also interesting. This was reflected even in some of the comments i received from my colleagues who had been involved in clearing. Having read my draft, some of them felt, that their "own" area had been underexposed. I am of course not free from this bias. On the contrary, my original intention was to confine the work to the area I knew best by experience and to describe and assess only the clearing payments administration and clearing-related foreign exchange controls. It soon became clear that it was not possible to treat these areas reasonably in isolation from a wider context.

I remain deeply indebted to Pekka Sutela, Jouko Rautava and Vesa Korhonen of the Unit. Their contributions in the form of suggestions and critical comments on several drafts helped me decisively in finalizing this study. Kari Pekonen provided encouragement and constructive criticism. Useful comments and corrections also came from Esko Aurikko, Inkeri Hirvensalo, Hannu Wiksten and Kaarina Piipponen, Kari Holopainen and Tapio Aho. My thanks also go to Glenn Harma for helping to improve the language of the text. Tiina Saajasto and Petra Sinisalo took care of the technical finalization of graphs, tables and text. The ultimate responsibility is that of the author.

Helsinki, 10 October 1995

Juhani Laurila

Contents

1 Introduction and Definitions

1.1 On the subject

The subject of this study is the clearing arrangement between Finland and the Soviet Union in 1945–1990. The clearing trade formed a base for the economic relations between these two countries. It provided the Finnish business community, industrialists, politicians and authorities with a protected and familiar framework for promoting trade with the Soviet Union for more than 40 years. Questions about the legitimacy of clearing were occasionally raised from time to time after the 1960s, both in Finland and the Soviet Union. The usual conclusion was that there was not sufficient reason to change the system. Otherwise, one had to be at least sure that trade with freely convertible currencies would create better conditions for the development of trade between the two countries.

The Finnish-Soviet clearing system was often presented, particularly in Soviet propaganda, as an example of how a large socialist country and a small capitalist country can engage in useful cooperation and trade. Finland's foreign trade with non-socialist countries comprised about 80 per cent of its total foreign trade. This trade with western market economies underwent major changes from the fully controlled trade that still prevailed in the 1950s to completely deregulated trade by the end of the 1990s. A less publicised but equally interesting aspect is that Finland, being a market economy itself, experimented with a regulated, centralized trade regime with socialist countries side by side with increasingly – and by the end of the 1980s fully – deregulated and decentralized trade with market economies, using convertible currencies.

This study describes how it was possible for this two-tier system to be technically and administratively carried out in practice. The findings of the study support the view that clearing could be maintained with the support of the free market system. Prices and exchange rates were more keenly followed in the Finnish-Soviet clearing trade than, for instance, in CMEA clearing arrangements. As soon as convertible currencies could be used in Finnish-Soviet trade to settle trade-related payments, clearing was displaced by the more dynamic free market system.

The Finnish-Soviet clearing system differed from other bilateral international clearings. It was the first and last of all clearing arrangements between the industrialized market economies and the Soviet Union. This leads us to ask what were the specific circumstances that allowed for the longevity of this arrangement? How did the Finnish-

Soviet clearing system differ from many largely similar clearing arrangements that operated and indeed still operate today in different parts of the world? What are the possible lessons to be learned as to the future applicability of this kind of payment system?

On the one hand, this study will focus on the description and evaluation of the clearing payment system more than on the clearing trade. The Finnish-Soviet clearing payment system is less well known than the trade system. Finnish contemporary discussion was mostly confined to actual trade developments and problems. Any possible payment problems were handled with the due discretion of the banks. Therefore the clearing mechanisms and technical solutions were little known and understood. For this reason an effort is made here to meticulously record their most central technical features before they are firmly locked up in archives and forgotten.

On the other hand, it is not possible to describe and rationally assess the payment system apart from the trade regime. Therefore, an effort has been made to put the Finnish clearing trade into a historically and internationally commensurable context. The purpose is to identify similarities and differences between the objectives and approaches taken.

Developments in the 1980s will be given more exposure than the earlier history. The 1980s were the most stormy period in the history of the Finnish-Soviet clearing arrangement and led to the demise of the clearing system at the end of 1990. The period 1945–1970 was relatively calm from the standpoint of the clearing arrangement. During the period, the Finnish-Soviet clearing arrangement was administered as one of many such arrangements which Finland had with other countries in the 1950s and yet in the 1960s. At the same time, extensive monetary controls were maintained. The regulative legislation forbad everything what was not specifically allowed and the administrative task was fairly easy. In the process of deregulation, this principle was turned around during the 1970s and particularly in the 1980s. Then everything became allowed except what was specifically forbidden. This turned clearing administration into an insulated island in the midst of increasingly deregulated foreign exchange administration. Clearing administrators were left alone to defend clearing in a rapidly changing economic and financial environment.

In this first section general concepts, definitions, overall objectives and preconditions for international clearing systems are introduced. To provide the reader with some background in clearing trade, Finland's trade with east and west is described in section 2. The orientation of Finnish trade towards the west goes all the way back to the last part of the nineteenth century when the Grand Duchy of Finland formed an autonomous part of Russia. As will be seen, Finland's trade relations have always been strongly influenced by the swings in world politics and characterized by strong partnerships with Germany and Great Britain. Section 2 also contains a statistical review on development of clearing payment flows and stocks in 1960–1990 based on balance of payments statistics available the statistical appendix.

The emergence of clearing arrangements in Finland was connected with the worldwide Great Depression of the 1930s. Finland concluded its barter or mini-clearing agreement with Estonia in 1932 and clearing payment agreement on 16 May 1933 (Bäckman 1954, pp. 18–19). Finland also participated in the gradual dismantling of the international clearing arrangement of post-war Europe. The destiny of the Finnish-Soviet clearing arrangement was to collapse along with the collapse of an entire epic in world history. The larger collapse comprised the dissolution of the Soviet Union and the disappearance of the organizations involved in the Finnish-Soviet clearing regime.

An effort will be made to find broad-ranging answers for foreign readers and to perhaps introduce some new aspects to Finnish readers by discussing Soviet-Finnish clearing in an international context. Historically, the EPU and the CMEA and other multilateral arrangements started as groups of bilateral arrangements, similar to the Finnish-Soviet clearing arrangement. The purpose here is to examine the extent to which the objectives and conditions of Finnish-Soviet bilateral clearing differed from these other clearing arrangements and what features they had in common. The applicability of clearing systems is studied briefly in light of the discussions of van Brabant, Bofinger, Rosati et al., as regards the applicability of clearing arrangements and payment unions in reviving trade and developing convertibility and payment transfers in the CEEC and between CEEC and the CIS.

In section 3 the institutional and technical features are described in fairly great detail. One purpose of this chapter is to document these features while the source material and knowledge of the persons involved in the clearing operations is still available. Another purpose is to illustrate how complex and demanding the administrative aspects of clearing evolve if the system is maintained in a deregulated and competitive market environment like that of Finland in the 1980s. The purpose of the technical annex is to provide reader with a concrete example about some computational complexities in monitoring the effects of foreign exchange rate changes on clearing assets and liabilities. This aspect should be relevant when assessing the viability of payment systems and clearing in transitional situations.

Various aspects, strengths and weaknesses of Finnish-Soviet clearing are analyzed in section 4. This study does not aim to pass judgement on whether or to what extent clearing was "good" or "bad" for Finland. Costs and benefits can be enumerated as is done in section 4.2. Rather, in this context doubts are expressed as to whether even any forthcoming serious research in economic history will be able to pass any final, unambiguous overall judgement on this question. Still, most of the allegations remain outside the scope of this study and are left for future research.

Section 4 also discusses the Finnish experience with the most central issues in the administration of clearing: 1) the significance of and problems involved in maintaining the clearing balance, particularly between unequal partners as to size and economic strength, 2) the importance of constantly following market-determined prices and foreign exchange rates, 3) the effects of financing and the importance of maintaining a balance between clearing and convertible currency trade when they are administered side by side, and 4) the role and efficiency of controls in such a situation. A few conclusions can be derived from the Finnish experience. These are briefly summed up in section 5.

There is not much source literature about the management and manageability of the Finnish-Soviet clearing arrangement on the Finnish side. In this context the critical assessment of Tervonen (1993) should be mentioned. Salminen (1983) has analyzed the institutional set-up and the interplay of various agents and pressure groups from business, politics and administration in decision making related to Finnish-Soviet trade. Salminen notes that the interests of pressure groups are integrated and mixed (1983, p. 34) and not very transparent, because the decision makers are scattered among different ministries and offices (see eg Kallonen 1987). In this study these questions and problems will be approached from the viewpoint of the financial administration of the clearing arrangement.

One analytically interesting angle is provided by Obláth and Pete. According to them, Finnish-Soviet clearing was made institutionally and functionally viable by the application of the duality principle. This principle implied that clearing had to be isolated from, but also integrated with, the rest of the economy (Obláth – Pete 1985, pp. 183–185). These ideas will be revisited in this study in order to see how the application of these principles reinforced the clearing arrangement in the liberalized economic environment of the 1980s, and how they ultimately also reduced the manageability of the Finnish-Soviet clearing arrangement.

The purpose of the study is not to develop a theoretical framework for analysing the macroeconomic effects of the arrangement on the Finnish economy. Some researchers even claim that it is not possible to develop a theoretical framework that would explain the Finnish-Soviet clearing arrangement. According to them, the theory of international trade, although generally valid, cannot be readily applied to the analysis of specific administrative arrangements between two such different types of economic systems (Kivikari 1983, pp. 24–25; Reinikainen & Kivikari 1984, pp. 408–409; Volk 1985, p. 395).

Despite these warnings Tolonen, for instance, made an effort to develop an analytical framework for showing how bilateral trade flows affect a market economy trading with a centrally planned economy. He found, for example, that the effects transmitted by clearing trade regimes and price shocks to the market economy could be both cyclical and countercyclical (Tolonen 1987a and 1987b). The unexpected strong cyclical variations of the Finnish-Soviet clearing trade were analyzed also by Dahlstedt (1975), Hemmilä–Koponen (1975), Seppovaara (1983) and others.

An important and comprehensive study on the role of Finnish-Soviet clearing trade and its macroeconomic effects was done at the Research Institute of the Finnish Economy (ETLA 1986). It used input-output analysis to identify the effects of clearing trade on employment and imported inputs. It also analyzed the effects of oil price changes on clearing and the effects of clearing trade on Finland's macroeconomic performance. This study, like many others, concludes that clearing was beneficial to the Finnish economy. This view has been most strongly expressed by Finnish industry, one of the major beneficiaries of Finnish-Soviet clearing (see also Kivikari 1985, Koivumaa–Valtonen 1990, Sutela 1992).

As an English language source on the contemporary discussion, we would recommend "Finnish-Soviet Economic Relations", edited by Kari Möttölä, O.N. Bykov and I.S. Korolev and published in 1983. The book contains a representative selection of articles written by contemporary Finnish and Soviet trade policymakers, officials and researchers directly involved in the Finnish-Soviet clearing regime. The articles provide the reader with a fairly authentic synopsis of the facts and the spirit of the period when the clearing trade was at its peak and the problems created by rapidly falling oil prices were not yet felt. The book's appendices contain full English texts of the most important treaties and agreements concerning Finnish-Soviet clearing.

Kivilahti and Rautava have brought the developments up to date in their articles published in the Bank of Finland's Monthly Bulletin and other publications (Kivilahti 1977, 1985, Kivilahti – Rautava 1990). Also the texts of Holopainen and Hirvensalo are recommended (Holopainen 1981, 1982, 1983 and Hirvensalo 1979, Hirvensalo – Kivilahti 1977). All these authors have been personally involved in the operation of the Finnish-Soviet clearing arrangement. The approach taken by Hirvensalo in "The clearing System for Payments between Finland and the U.S.S.R. (with an English summary) is very close to the approach taken in this study (Hirvensalo 1979).

Kajaste has studied specifically the issue of clearing prices, that is, whether clearing prices were advantageous to Finnish exporters. In the more analytic recent studies Sutela has touched upon several controversial aspects of Finnish-Soviet clearing (Sutela 1991c, 1992). Sutela has also considered the reasons for the abandonment of Finnish-Soviet clearing (Sutela 1991b). This discussion will be revisited in section 2.4.1. Section 4 elaborates on the issue of clearing becoming redundant and unmanageable in a deregulated and cost-conscious economic environment.

An exhaustive list of studies on Finnish-Soviet trade relations is not the aim here. A recent review on earlier macroeconomic studies has been prepared, for example, by Hirvensalo (1993, pp. 24–29).

Results of this study confirm the fairly widely-held view that Finnish-Soviet clearing worked well in the regulated economic environments of the 1950s and 1960s for which it was intended. As a trade system the Finnish-Soviet system failed because it was not able to adjust the trade volumes to rapidly changing prices. The benefits were accompanied by certain costs. The costs were often carried by quarters other than those that received the benefits. This in turn created difficulties and differences of opinion as to the usefulness of clearing. Major problems in clearing administration were caused by the unpredictability of exogenous factors like changes in oil prices. Although the changes could have been anticipated, those in charge of the clearing did not have adequate means to adapt the trade flows in order to maintain the clearing trade "on a high and balanced level".

The longevity of Finnish-Soviet clearing was based on the political decision of the Soviet Union to maintain a high level of trade with Finland. Whether the payment system was part of the deal cannot be definitely answered. Probably the majority view shared by both parties was that trade based on convertible currencies would have represented a leap into the unknown and so bilateralism was accepted as the more secure alternative to maintain the continuity and high level of trade. Finnish-Soviet clearing itself was never used as a transitional instrument for promoting the convertibility of currencies or multilateralization of trade, as was true of some other international clearing arrangements.

The lessons to be drawn from the Finnish experience suggest that clearing can be used to overcome the obstacles to trade created by non-convertibility and the lack of access to banking services. The budget constraint for clearing must be seen to maintain a sound regime. Prices and foreign exchange rates are market related and should always be visible. Financing should be limited to technical credit. As soon as the partners' currencies become convertible and clearing cannot be maintained concomitantly with the convertible currency trade, the former must give way. The principal lesson to be derived from Finnish-Soviet clearing is that in such circumstances convertible currencies displace clearing payment systems because of their own dynamism, flexibility and other merits.

1.2 The technical definition of clearing

Attempts have been made to define a clearing system. The word "clearing" refers to the technique whereby financial claims are settled against each other in order to reduce them to a single claim and to minimize the number of payment transfers. This technique has been widely applied in the past and present, both nationally and internationally, by governments, banks or firms in the same sector. The framework in which the settlement or clearing technique is applied is called the clearing system or clearing arrangement.

There is a great variety of clearing arrangements. Most authors are content with listing a few different kinds of clearing arrangements or the most salient features of them. Clearing systems can be described as being centralized, bilateral or multilateral, intergovernmental, or to include balancing or rely on non-convertible currencies or other techniques of settlement. They are compared with barter, countertrade, compensation trade and other commercial arrangements (eg Bäckman pp. 9–15; Gmür 1978, pp. 8-19; Hirvensalo 1978, pp. 18–23; Kivilahti 1977, pp. 12–26 and 115–119; Viitala 1985, pp. 8–11). In the following an effort is made to develop definitions and criteria to enable one to determine the qualities of the Finnish-Soviet clearing system and locate it unambiguously among the large family of clearing systems of the past and present.

Many clearing systems consist of both a **clearing trade system and a clearing payment system**. Clearing trade system denotes a bilateral arrangement for managing trade flows and maintaining bilateralism; a payment system is a technical arrangement that is necessary for transferring payments.

The distinction between a clearing trade and clearing payment system is useful and particularly important for the assessment of the Finnish-Soviet clearing system. A clearing trade system as such should not be expected to solve problems pertaining to payment intermediation or financing. A clearing payment system should not be expected to balance the trade between two countries. Reasonably balanced trade is a precondition for orderly payments settlement and growth of trade. Still, trade can be balanced without any specific clearing payment system. Payment arrangements have existed without any specific trade regime.

1.2.1 Clearing trade system

The simplest and most primitive form of trade system is based on barter. No money is used; the parties act as buyers and sellers in the same person. Barter is primitive because of its extremely high transaction (and even transportation) costs. Someone wanting to sell something so as to buy something else has to find someone else wanting to buy what he has to sell and prepared to sell what he wants to buy (a dentist who wants to get some bread needs to find a baker who has a tooth ache). Finding someone with matching asymmetrical needs, i.e. bringing about such a "double coincidence of wants", is very costly. The high transaction cost prevents the volume of trade from expanding. The volume of trade remains small and qualitatively inefficient (Tarkka pp. 26–28).

In an intergovernmental clearing system the governments assume a monopolistic role as middleman. This does not exclude the possibility of private or semiprivate enterprises establishing permanent clearing arrangements. In centrally planned, highly regulated or transitional economies the governments act as traders and administrators of trade. **Centralization** reduces transaction costs and hence, other things equal, enables an increase in the volume of trade. To maintain the achieved trade volumes exports and imports must be kept in reasonably close balance. In a centralized trade system, as in governmental barter trade, the authorities agree on what measures are necessary to increase or balance trade and carry out balancing by using quotas, licensing, prior authorizations etc.

In **bilateral clearing** export earnings can be used to pay for imports from the counterpart only. The export proceeds are therefore earmarked and so imports have to equal exports. This equality constitutes a budget constraint in a clearing system. One way of observing the budget constraint, i.e. keeping the clearing in balance, is to make the clearing trade system closed or restricted. Consequently, bilateral clearing systems discriminate against third parties.

An individual country's budget constraint can be softened by **multilateralizing** the clearing trade. The clearing claims from the clearing counterpart can be set off, for instance, against purchases from a third clearing country that is indebted to the counterpart. The volume of trade thus increases. The original claims are reduced, as is the need for convertible currency settlement of trade financing. The closed nature of the set of related bilateral clearings remains.

Even multilateral clearing systems are closed whereas free trade is, at least in principle, open to all potential participants. The equilibrium is determined by the market mechanism and possible current account deficits are covered ex post facto by capital movements and financing from foreign exchange reserves. Barter, countertrade and compensation trade are often cited as characteristics of clearing. However, many modes of barter can be applied, and indeed are widely applied, as sub-systems in a free trade regime. For instance, when major individual tenders are placed in the international markets and the market mechanism alone is not considered capable of restoring balance, countertrade may be used to maintain balance.

1.2.2 Clearing payment system

An international clearing payment system is a restricted arrangement. It is open to two or more partners (bilateral and multilateral systems). These partners pay for their imports and receive payments for exports in their own national currencies. The non-convertibility of either or both of the partners' national currencies is a basic precondition for the operation of an international clearing payment system.

Certain characteristics follow:

1) the national monies of the trading partners do not cross national borders or borders of currency-areas;
2) the accounts must be credited and debited using a clearing accounting currency;
3) the account-keepers must be prepared to pay exporters in their national currencies and require that importers to cover their purchases in their national currencies;
4) clearing surpluses and deficits can be reduced only by increasing clearing imports or exports respectively, or by settling the difference, or part of it, with convertible currencies.

Item 4) means that clearing is basically a cash payment system. Whenever the value of export transactions equals import transactions, the clearing account is said to be in balance, i.e. that the clearing budget constraint holds. Whenever this is not the case, the account holder with net clearing receivables is obliged to finance them in his national currencies, up to an agreed limit. Beyond that limit the debtor counterpart is usually obliged to provide the account holder with convertible currencies.

Capital movements usually complicate clearing administration. Moreover, if the balancing requirements are not observed, the account holder accumulating excessive receivables accepts the risk that the counterpart may not be able or willing to settle them in the future. If the receivables are non-interest bearing (as in case of Finnish-Soviet clearing), the account holder having receivables also has to absorb the financing costs.

The purpose of an **international clearing system** is to enable the participants to overcome obstacles to trade. The non-convertibility of currencies is a serious hindrance to the development of trade. Non-convertibility is often accompanied by other obstacles such as scarcity of hard currency reserves, underdeveloped banking etc. The solution offered by a payment system is to enable the trade partners to conduct trade using their national currencies. A central agent is necessary to clear the claims. Ultimate differences in cleared claims have to be settled by adjusting the trade, financing the deficit or settling in convertible currencies (or also gold in the past).

The separate clearing of each individual barter deal would result in a large number of bilateral transactions. Having a central trader settle the claims of all individual partners from both sides (countries) substantially reduces the number of payment transfers and the need for liquid funds (or in international trade, convertible currency reserves). Combining transactions or claims over a period, the settlement procedures and financing require acilities for actual payment transfers. Thus, a supporting payment system becomes necessary.

One of functions of any payment system is that the two non-convertible currencies involved be made **commensurable** through a third accounting currency that does not serve as a medium of payment, but only as a unit of account and store of value. If prices in clearing trade and the exchange rate of the unit of account are not market determined, a set of supplementary rules on pricing and currency conversions is necessary to express the values of the non-convertible national currencies in relation to each other.

Multilateralism is facilitated by introducing transferability between existing bilateral payment relations. **Transferability** in a payment system obtains when a member country can use its bilateral credit to offset debits in its commercial relations with any other member country (Kaplan – Schleiminger, p. 24). Consequently, transferability obtains only in a multilateral payment system. In a set of bila-teral systems between members with non-convertible currencies, the unit of account introduces commensurability for each pair of non-convertible currencies separately.

The introduction of transferability requires that at least three conditions be met. First, member countries must agree on transferability. The surpluses must be covered in a satisfactory way, i.e. the potential surplus countries must be willing to use their surpluses to import from third member countries (Kaplan – Schleiminger, p. 24). Second, the prices must be market determined. Administrative price setting and manipulation would effectively undermine transferability, as in the CMEA (Kenen, pp. 248–251). Third, continuous and excessive financing of clearing imbalances must be avoided. Clearing credits should be limited to technical credits that are needed only to keep the clearing payment system operational.

An international multilateral clearing arrangement can be developed further into a **payment union** by adding an internal or external source of financing.

When a means of payment can be transferred freely to any entity in any country in exchange for goods and services, financial assets, or another means of payment, it is said to be fully **convertible** (Kenen, pp. 252–253). Bilateral and multilateral clearing systems and payment unions have been instrumental in the multilateralization of international trade and the introduction of convertibility. Once convertibility has been achieved, the payment system has fulfilled its task and becomes redundant. Some historical evidence is given below.

A **national clearing system** operates within a country with a national currency and is characterized by full convertibility. Its purpose is to enable participants to save on their liquid reserves.

National clearing systems are not included in this study. Making use of clearing, i.e. the settlement of mutual claims, they deserve to be mentioned here as predecessors of international clearing systems and payment unions. To promote trade, clearing settlements were carried out by clearing houses already in medieval Europe (Italy and France) and in Japan. First, clearing houses active in banking were established in London (1775), New York (1852), Paris and Vienna (1872), and Berlin (1883). Today national payment and settlement systems, such as the Helsinki Money Market Centre Ltd (HMMC), the Bank of Finland's Interbank Funds Transfer System (BOF system), the Federal Reserve's Fedwire or the Swiss Interbank Clearing (SIC), are also referred to as clearing systems.

Chart 1.1 **Clearing terminology**

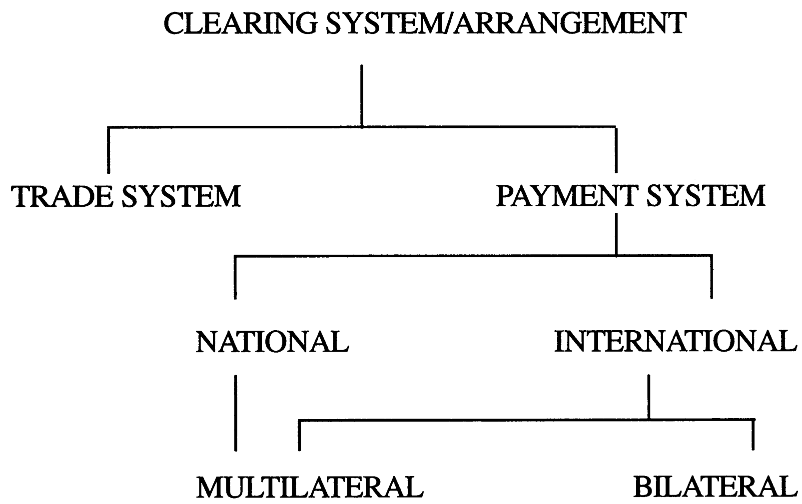


Chart 1.1 summarizes the terminology that will be used in this study. It also sets out the areas of application of clearing techniques. The subject of this study, the Finnish-Soviet clearing system, can now be categorized as an international bilateral clearing arrangement with separate trade and payment systems. In essence, Finnish-Soviet clearing can be defined as the right to import through clearing to the extent that clearing funds are accrued from clearing exports and deposited on account with the clearing partner's bank (Holopainen 1983, p. 174). The resulting payment and accounting mechanism is explained below in section 3.3.

1.2.3 The life cycle of clearing

To evaluate the Finnish-Soviet clearing system, it is helpful for purposes of comparison to examine the objectives of bi- or multilateral clearing systems of the past served and why they succeeded or failed. The European Payment Union (EPU) provides an example of a set of bilateral clearing arrangements that was instrumental as a starting base for the development of multilateral trade and the introduction of convertibility between the currencies of its members. The Council for Mutual Economic Assistance (CMEA) shared similar objectives in the socialist block but was never able even to achieve transferability between bilateral clearings. Both the (successful) EPU and the (unsuccessful) CMEA provide interesting historical evidence concerning the objectives and preconditions necessary for a successful clearing system.

Although different trade regimes and payment systems may exist independently in a technical sense, a historical **life-cycle of a bi- or multilateral clearing regime** can be sketched based on their development. The clearing life-cycle starts with bilateral international clearing. A group of such systems is multilateralized by making the claims of individual bilateral clearings transferable. When reinforced with financial arrangements, the system becomes a payment union. Given certain conditions, the process will end with the free convertibility of currencies and multilateral trade. Should the preconditions not exist, the process may stagnate. Alternatively, the bilateral clearing may serve other, narrower objectives from the outset.

Usually the emergence of bilateral clearing systems relates to crises, wars or circumstances in which ordinary trade and banking are not possible. The Great Depression of 1929–1933 made convertible currencies scarce and therefore most countries started to restrict their use. During and several years after World War II the currencies of Western Europe were not convertible.

To prevent trade from collapsing totally, Western European countries resorted to bilateral clearing arrangements. At this **first stage** clearing supports and creates trade that is hindered by non-convertibility and the absence of banks that are capable of effecting payment transfers. Trade related payments were transferred through a network of bilateral clearing accounts with built-in credit lines. Central banks as account holders netted credits against debits monthly. Whenever a credit line was exceeded, the debtor country had to settle the excess debt by paying the creditor country in gold or dollars. There were less successful attempts to multilateralize these arrangements in 1948 and 1949.

In western Europe there was a network of more than 400 bilateral payment arrangements in force still in 1954. At least 18 European countries, including Finland, had at least 15 bilateral agreements. Around 60 per cent of the international payments were channelled through clearing accounts until 1958, when EPU member countries moved to a convertible currency regime. They were soon followed by other Western European countries. In 1965, the number of existing bilateral payment arrangements had dropped to about 80 (de Vries 1969, pp. 300 and 310).

In international bilateral trade relations, the weaker party's inability to increase its imports usually constrained trade. Pressures on convertible reserves for settling the accumulating bilateral clearing debts increased. Bilateralism discriminated against third parties. To soften the budget constraints of bilateralism, the countries became encouraged to enter to the **second stage** of the clearing life-cycle, to multilateralize their bilateral clearings so as to make their currencies transferable and later directly convertible.

The agreement on the European Payment Union (EPU) was signed by 18 countries, including all the OEEC countries, in 1950, creating a clearing union for payments effected in any member currency. The objectives of the EPU were 1) to provide restart capital made available by the United States through its European Recovery Programme (Marshall Plan), 2) to promote intra-group trade through gradual elimination of existing bilateral clearings and 3) as a final step, to convert the member currencies in to fungible assets that would be managed by the EPU for the purpose of effecting payments between members.

The Bank for International Settlements (BIS) acted as an agent. At the end of each month the BIS consolidated bilateral balances and netted them into a single surplus or deficit for each member vis-à-vis the EPU (Kaplan – Schleiminger 1989, pp. 91–92, Kenen 1991, pp. 255–257).

The EPU encouraged the interplay of market forces and took advantage of the strength of the US dollar. The EPU benefited from a number of systemic savings resulting from a sound and disciplined clearing arrangement: reduction of payment processing costs, securing of technical payment transfer procedures and reduction of credit and liquidity risk.

In June 1957, the CMEA member countries agreed to multilateralize their trade and to settle the related payments on a multilateral basis using transferable roubles. It soon turned out that member countries were not anxious to run trade surpluses with other member countries because there were only "soft goods" of inferior quality available for transferable roubles. All goods of better quality were sold against hard currencies or in bilateral trade with member countries or in countertrade.

The "transferable rouble" never became truly transferable. Payments were denominated in transferable roubles but claims were seldom settled in them. Financing provided by the International Bank for Economic Cooperation (IBEC) for CMEA trade and the International Investment Bank (IIB) for CMEA investment projects was also less attractive because it was provided in transferable roubles.

No market mechanism existed in the CMEA to allow the demand and supply to determine prices and exchange rates. Instead, the CMEA maintained complicated and cumbersome administratively determined prices. The value of exports and imports between CMEA member countries was "balanced" each year by manipulating trade prices and volumes (Bond 1991, p. 23, Kenen 1991, pp. 248–252).

The manipulative balancing necessary to maintain the CMEA trade was possible because the Soviet Union was willing to absorb the hidden costs of the CMEA trading system. The Soviet Union received inferior quality machinery, equipment and consumer goods from the CEE countries against oil, gas, chemicals and minerals, which were marketable on the world markets. The world prices of the latter were often higher than those charged by the Soviet Union to the CEE countries. The losses were compensated by political and strategic benefits.

In the **final stage** of the EPU, with the increasing convertibility centrally administered, clearing arrangements were gradually displaced by more efficient de-centralised trade and banking. The members of the EPU had gained convertibility in the sense of Article VIII of the IMF by 1958 and the EPU could be dissolved. International watch-dog and financing organizations (IMF, BIS, OEEC) were necessary to guide and assist member governments even after the EPU was disbanded (ECE 1990, p. 146, Kaplan – Schleiminger 1989, p.94).

Rosati lists many differences between the EPU and CMEA: 1) the EPU was established to create convertibility between economies with no need for major economic restructuring, whereas the CMEA economies were in need of such restructuring, 2) the EPU participants conducted the bulk of their external trade among themselves; this was not true for the CMEA countries. 3) the EPU countries did not need to establish market economies from first principles, as did the CMEA economies 4) EPU countries could gain preferential terms in their intra-union trade via economies of scale and could protect the scarce foreign exchange reserves of their central banks without excessive discrimination against non-members; this was not possible for the CMEA countries 5) the EPU had adequate mutual political trust and confidence not to undermine the liquidity of the union; the CMEA countries lacked such political unity. Finally, 6) the CMEA lacked both the kind of framework for cooperation provided for the EPU by the OEEC and the substantial external financial aid provided through the Marshall Plan. For these reasons Rosati concludes in favour of bilateral clearing arrangements or the provision of credits to alleviate foreign exchange shortages in the CMEA region (Rosati 1992a, pp. 76–81).

Indeed, the CMEA stagnated in its second stage. The so-called transferable rouble never achieved transferability. Due to Moscow-centred planning and dependency, genuine multilateralization was never achieved. The CMEA system was marred by distorted prices, an unattractive transferable rouble and insufficient financial discipline. As such, the regime was too inefficient and cost-blind to be able to take advantage of the possible systemic benefits that otherwise could have accrued from the clearing system. Eventual cost savings, if any, were probably negated by heavy administration and bureaucracy. The Soviet government initiated the dissolution of the CMEA at the CMEA summit in January 1990. It was decided that CMEA countries, beginning in 1991, should start to use market prices in all foreign trade and to settle the related payments in convertible currencies (Bond 1991, p. 23). The CMEA was disbanded in June 1991.

There was a fairly intensive discussion of the usefulness of clearing arrangements and payment unions for supporting trade between the CEECs. Bofinger-Gross (1992), van Brabant (1990 and 1991a, b and c), Soldaczuk (1990), Orlowsky (1993) and the United Nations (ECE 1990) elaborated on the Central European Payments Union (CEPU) or Interstate Payment Union (IPU). The aim of this arrangement was to alleviate the payment problems experienced by the ex-CMEA countries during the transition. According to these proposals the CEPU or IPU was to be set up much like with the EPU and assisted by the BIS and EBRD and to use the ECU as a unit of account (van Brabant 1991c, pp. 129–132). According to a proposal, seven countries including the Soviet Union were to be included (Bakos 1993, pp. 1036–1037, van Brabant 1991c, pp. 120–122).

Orlowski (1993) notes that the payment union has several drawbacks and therefore proposed a moderated variant without trade management but with short-term technical credits for clearing trade payments (Interstate Payments Mechanism (ISPM)). Most of the proponents of CEPU suggested it mimic the architecture of the EPU. However, Rosati (1992a, 1992b) points out that despite prima facie analogies, there are important differences between western Europe "then" and eastern Europe "now". Due to these differences the CEPU would be neither economically justified nor politically feasible in the realities of the early 1990s.

2 Clearing Trade in the Economic History of Finland

2.1 Finland's trade with east and west

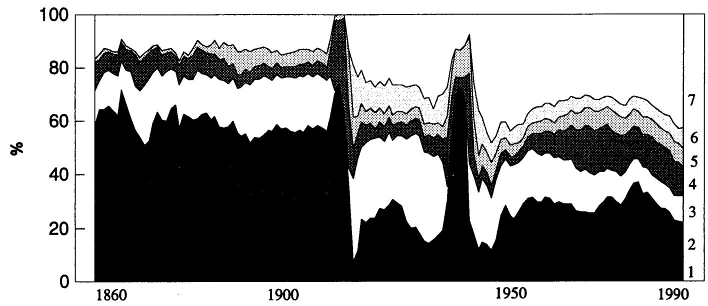
Finland's trade with her eastern partner has always been strongly affected by political tides. Even when Finland's trade with her most important western partners – Sweden, Germany and Great Britain – remained stable over lengthy periods of time, the level of Finland's eastern trade was marked by relatively wide variations (see figure 2.1).

Changes in the level of trade between Finland and Russia (the Soviet Union in 1861–1990) reflect three different stages in Finland's history: 1) as a Grand Duchy of Russia (1809–1916), 2) in the period of wars and their interim (1917–1944) and 3) the period of gradual liberalization coinciding with the Finnish-Soviet clearing era (1945–1990; see table 2.1). The data in figure 2.1, starting from 1861, show that Finland's trade with Russia averaged 40 per cent of total trade in 1861–1916 but with a declining trend. By the eve of the first world war Germany had displaced Russia as Finland's largest trading partner. During the period 1917–1944 this share fell to 2 per cent. During the period 1945–1990 the share was 16 per cent on average. In the case of Finland the year 1990 marks the completion of the gradual liberalization process. Not only had all its bilateral clearing arrangements been dismantled but its foreign exchange regulations vis-à-vis all countries were fully dismantled by end-1990.

Table 2.1 **The percentage of Finland's trade with the Soviet Union in selected periods, 1861–1993**

Period	Per cent of total trade	
1861–1916	40	– as Grand Duchy
1917–1944	2	– wars & iterims
1945–1990	16	– clearing era, gradual liberalization
1981–1990	19	– "the 1980s"
1991–1993	7	– after clearing

Figure 2.1 **The distribution of Finland's trade with its most important trade partners, 1861–1993**



1 Russia/the Soviet Union
2 Germany
3 Great Britain
4 Sweden
5 Denmark & Norway
6 United States
7 Other countries

Source: Vattula 1983, pp.232–241 and Statistical Yearbook of Finland, various years.

After separation from Sweden in 1809 Finland became an autonomous Grand Duchy of Czarist Russia and maintained a high level of trade with Russia until 1917. In this period, from the beginning of 1840, Finland comprised an autonomous customs area with its own schedule of tariffs. The exports of Finnish goods to Russia enjoyed duty-free quotas or lower tariffs than those levied on imports from other countries. Finland's imports from Russia were also duty free with minor exceptions.

Due to this preferential customs treatment, trade between Finland and Russia flourished up until 1880. By that time exports of the paper industry accounted for half of all Finnish exports to Russia and comprised one-third of Russia's total paper consumption. The Finnish paper and engineering industries, taking advantage of the Russian markets, expanded until 1883. These industries experienced a severe setback due to an economic slump as well as the onset of Russian protectionism (Pihkala 1970, pp. 78, 82–83). Once the exports of paper and paper products revived again in the 1890s, increasingly larger shares were diverted to Germany and Great Britain. The engineering industry received orders from the Russian army after the Russo-Japanese war and during the First World War until 1917 (Hjerppe 1989, p. 161).

Similar shifts took place on the import side. Finland's imports were evenly divided between consumer goods and raw materials both from the western countries and from Russia. Grain imports became important particularly during the latter half of the nineteenth century. After 1890 German flour displaced Russian grain (Hjerppe 1989, p. 164). As a result of these developments Germany became Finland's largest trading partner. Trade with Russia declined from 40–60 per cent in the 1860s to around 30 per cent from the beginning of this century to the first world war.

Finland's trade with Russia came to a halt in 1917 and remained at a minimal level during the 1920s and 1930s. Traditionally Russia had been an important export market for Finnish paper exports prior up to the first world war. Paper exports were soon resumed after the peace of Tartu in 1922, but they stayed far below the previous levels due to the closed nature of the newly established Soviet Union. To expedite industrialization in the 1930s the Soviet Union was more interested in importing machinery and other metal industry products than in importing paper. Finland's growing agricultural self-sufficiency reduced the need for grain imports from the Soviet Union. Trade was also disturbed by mutual hostile attitudes culminating in the outbreak of war between Finland and the Soviet Union in 1939. A trade agreement which included a most-favoured- nation clause and called for the establishment of a clearing system in 1940 was mitigated by the outbreak of a new war in 1941 (Karjalainen 1982, p. 182).

In the 1920s and 1930s Finland was quick to reorient its trade toward the West, particularly the United Kingdom, Germany and the United States. Great Britain rapidly became Finland's most important export country. About 40 per cent of Finland's exports went to Great Britain. These consisted mainly of wood and paper industry products. Germany was most important in Finland's imports. As a result, the composition of Finland's foreign trade since then has been much the same as that in Sweden and Denmark, which are also small open economies (Hjerppe, pp.158–166; figure 2.1).

Deliveries in 1944–1952 related to the war indemnities substantially exceeded commercial exports during these years with the exception of 1952. The necessity of producing war indemnity material is often considered to have created a base for the modern Finnish metal and engineering industries (see eg Karjalainen, p.183). However, Hjerppe, for example, points out that the Finnish metal and engineering industries had already developed during the 1920s and 1930s to a higher level of sophistication than was needed for the Soviet war reparations. Submarines, for instance, were delivered to the Finnish and German navies already in the 1920s and 1930s. Therefore no new factories were constructed for this specific purpose. Instead, the existing factories were converted from the production of war materials to those needed for war reparations (Hjerppe, pp. 162–163). However, the war reparations probably opened doors for the commercial export of Finnish metal and engineering products to the Soviet Union.

The foundations for bilateral trade for the coming forty years were laid down in 1950. Finland was the first market economy country to sign a five-year agreement on the exchange of goods with the Soviet Union, for the years 1951–1955. This decision opened a 40-year period of clearing trade covering eight consecutive 5-year agreements in 1951–1990. The procedures and institutions used were created so as to match the approach followed in the Soviet administration.

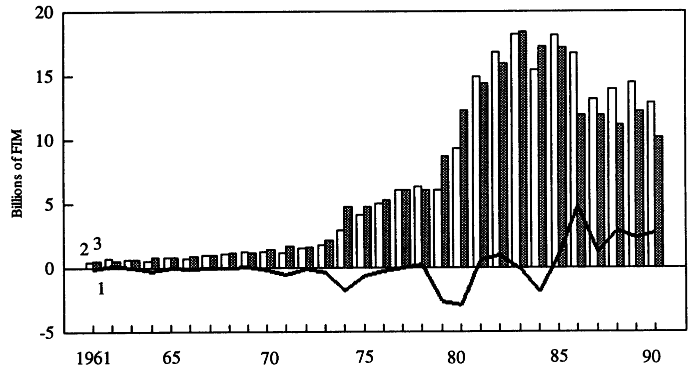
2.2 Clearing trade, payments and financing

Finnish-Soviet clearing trade developments will be described in the balance of payments framework derived from the available balance of payments statistics for the years 1961–1990 (figures 2.2, 2.5–2.7 are based on data in the Statistical Annex). Trade financing will be described in terms of both flows (figure 2.6) and stocks (figure 2.7) in order to illustrate the central role the financing and ensuing claims played in filling the gap between the current account balance and the technical credits (or tied reserve changes) between clearing account holders.

Historically the bulk of the clearing trade consisted essentially of **trade in goods**: in 1961–1990 exports of goods comprised on average 76 per cent of total exports and imports of goods 91 per cent of total imports. The invisibles (services and factor payments) represent a relatively small but constant flow over the period 1961–1990, if related to the payments flow for total trade (items 2 through 5 in figure 2.5).

Figure 2.2 **Trade in goods between Finland and the Soviet Union**

billions of FIM at current prices, 1961–1990

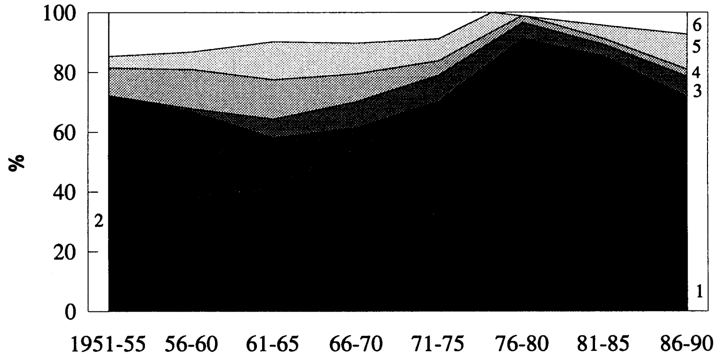


1 Trade balance
2 Exports
3 Imports

The commodity structure of imports changed considerably during the clearing era. Imports of agricultural products comprised almost half of all imports during the first half of the 1950s. By the mid-1970s the share had fallen nearly to zero. The share of energy imports (SITC 32–35) accounted for slightly over 20 per cent of total imports in the beginning of the 1950s. By the end of the 1980s the share of energy had grown to almost 85 per cent, it fell slightly to about 75 per cent in 1990 (figure 2.3).

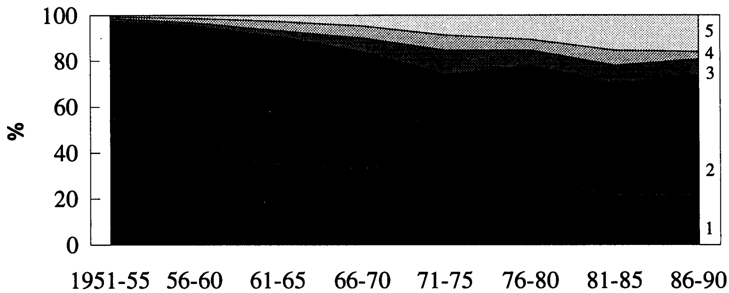
Exports of the metal and engineering industries maintained their export share at 40–60 per cent of total exports during the entire clearing era. The share of pulp and paper exports has been slowly declining during the whole period, from around 50 per cent at the beginning of the 1950s to slightly over 20 per cent in the second half of the 1980s. The shares of consumer goods and food and beverages increased during the entire period from a few per cent to 10–20 per cent of total exports (figure 2.4).

Figure 2.3. **Composition of imports from the Soviet Union by commodities classified as in the annual protocols by 5–year framework agreements, 1951–1990**



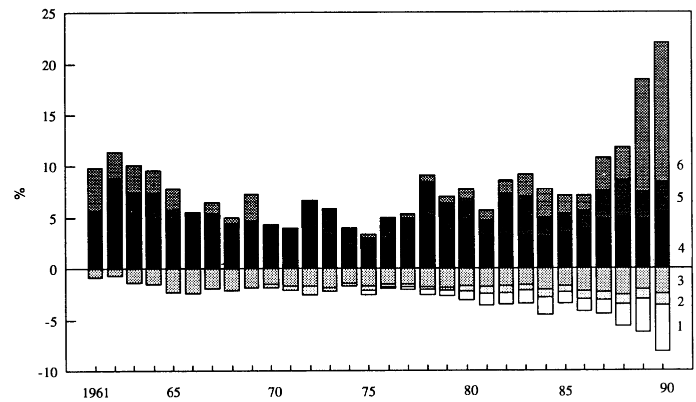
1 Energy
2 Agricultural products
3 Timber
4 Metals, scrap
5 Machinery
6 Other

Figure 2.4 **Composition of exports to the Soviet Union by commodities classified as in the annual protocols by 5-year framework agreements, 1951–1990**



1 Forest based
2 Metallic based
3 Textiles
4 Food
5 Other

Figure 2.5 **Share of invisible and convertible currency trade in total Finnish-Soviet gross trade (GT), 1961–1990**



1 Conv. currency expenditure, % of GT
2 Factor expenditure, % of GT
3 Service expenditure, % of GT
4 Service receipts, % of GT
5 Factor receipts, % of GT
6 Conv. currency income, % of GT

Figure 2.5 shows the share of invisible and convertible currency trade in total Finnish-Soviet trade during the last 30 years of clearing.

Finnish **service** earnings averaged 8 per cent of total export earnings in 1961–1990. They derived mainly from freight, ship repairs and project export services. **Factor** receipts were over the period on average about 12 per cent of total exports. They were earned mainly from exports of construction projects and to some extent from interest receipts on loans in 1961–1990. About 4 per cent of total expenditures on service imports originated from purchases of tourist and freight services. Factor expenditures, almost 5 per cent, consisted mainly of interest payments.

Convertible currency payments appear both on the import side and – particularly in the 1980s – on the export side. Clearing payment agreements stipulated that all commercial payments between Finland and the Soviet Union had to be effected in clearing roubles. Consequently, Finnish foreign exchange regulations restricted the use of convertible currencies to such imports as were covered by hard currency payments from the Soviet Union or third countries. As for export payments, the practice was more liberal due to efforts to keep the clearing in balance.

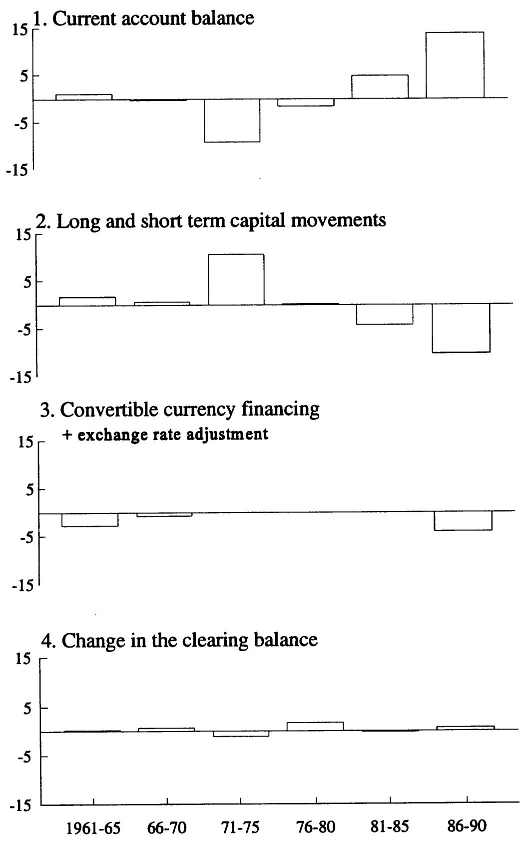
The Soviet Union paid around 5 per cent of the current account expenditures in convertible currencies in 1961–1965. The purpose of this was to compensate the convertible currency content of Finland's exports to the Soviet Union. This practice was discontinued in 1966 (Hirvensalo 1979, p. 59). The inflow, particularly in the 1980s, continued to reduce pressures to increase the clearing export surpluses. The share of the convertible currency outflows averaged 5.8 per cent of total import expenditures and the convertible currency inflow 11.5 per cent of total export receipts in 1985–1990. The respective percentages were 10.7 and 23.7 in 1990, the last year of clearing.

The Bank of Finland authorized convertible currency payments for imports only to a very limited extent in order to keep the clearing in balance. Therefore the outflow of convertible currency payments stayed at the relatively low average level of 1.6 per cent of total import expenditure in 1961–1990. The corresponding average inflow of hard currencies was 3.9 per cent of total export receipts.

Figure 2.6 gives a breakdown of the financing for the clearing trade with the Soviet Union for five-year periods. One observes that there were strong imports of long- and short-term capital in the first part of the 1970s and exports of capital in the 1980s. The financing of the current account **deficit** took place by reducing the non-convertible reserves and importing capital from the Soviet Union. Both measures – taken alone or together – result in a decrease of the net clearing surplus or, in the case of deficit, an increase of the clearing net deficit. During most years the combination of these measures with opposite effects (inflow/outflow and increase/decrease of tied reserves) have taken place. The current account **surpluses** were in principle financed by increasing the central bank's tied reserves (or increasing the net clearing balance) or increasing capital exports (lending to the Soviet Union, which likewise increases the net clearing balance). Capital exports are shown as negative and increases in the non-convertible reserves of the Bank of Finland as positive increments in the lower part of figure 2.7 (regarding the effects of various transactions on the clearing balance, see section 3.3 and chart 3.6 below).

Figure 2.6 **The current account for Finnish-Soviet trade and its financing**

Annual averages for five-year periods, 1961–1990, as percentage of total trade with the Soviet Union



1 Current account, surplus ($X_{g+s+f} > M_{g+s+f}$) positive.

2 Long and short term (less than 1 year's duration) capital import (borrowing) is positive, export (lending) negative. Includes advance payments accociated to exports of ships and construction projects, oil import credits and other import credits (SUR-limits).

3 Convertible currency financing: import and export payments through third countries and other convertible currency trade. Exchange rate adjustment: effect of the change in the external value of rouble on the SUR-claim or debt, profit is positive.

4 Change in the clearing balance. Here the increase of clearing surplus (or decrease of the deficit) is positive. Includes only CLSUR-payments.

Had the trade between Finland and the Soviet Union been based on cash payments alone, the balance on the current account should have been equal to the clearing rouble balance on the clearing account. As illustrated by figure 2.7, a major part was financed by the accumulation of short- and long-term assets. Short term net lending to the Soviet Union took place in the 1960s and during the second half of the 1980s and short-term net borrowing from the Soviet Union during 1971–1985. The long term net borrowing continued until the second half of the 1980s when it turned to net long-term lending.

Figure 2.7 confirms that during the 30 years covered by the available balance of payment statistics the clearing trade between Finland and the Soviet Union was subject to substantial fluctuations all the time, with the minor exception of the latter part of the 1960s, when it remained fairly well balanced. In general, the fluctuations were larger in the Finnish-Soviet trade than in Finland's trade with western countries (Hirvensalo 1979, pp. 77–78).

There were imbalances and fluctuations in the clearing trade as well as on the clearing payments account already during the 1950s and 1960s. The long-term debt balanced out the short-term receivables and oil prices and the USD exchange rate remained stable. Nor was the interest acknowledged as a significant cost factor by the central bank authorities, as it was later, particularly in the 1980s. The early imbalances seem to justify the assumption that besides the fluctuations in oil prices and US dollar exchange rates there were also other factors causing imbalances (Rautava 1988, p. 3).

The sudden increases in the external value of the USD in 1971 and the oil price increases in 1974 and 1979 sharply reduced the clearing balance (increased the Finnish clearing debt to the Soviet Union). Finnish exports reacted with strong growth. Once the oil prices collapsed, export volumes could not be rapidly reduced to adjust the value of exports to the fall in the value of imports.

The effect of these developments during the latter part of the 1980s is reflected in the increase of receivables on the clearing account and the short-term claims representing postponements of paid oil deliveries. During the last years of the 1980s the share of long-term receivables also increased. Part of the increased receivables were moved into a special account in 1987. In 1988 a credit line was opened to secure the continuation of project deliveries without creating excessive clearing surpluses. In exchange, stricter conditions for the clearing account were agreed.

The clearing balance figures accumulated from end-year flow figures (as the ones in figures 2.6 and 2.7) are lower, for instance, than the average balances for each calendar year. The Soviet Union slowed down the flow of export payments to Finland (incoming clearing payments) towards the end of each calendar year and transferred these payments later during the first months of the following year. The actual reasons for this procedure are not known. The phenomenon most likely reflected the Soviet budgetary cycle. From the standpoint of clearing management, the acceleration of transfers of outgoing clearing payments (for oil imports) and slowing down of incoming (export) payments amounted to a momentary decline in the clearing balance on a monthly and/or daily basis to a level below the credit limit, implying that the excessive use of clearing credit was discontinued for the moment. The end-year clearing balances (eg those given in the Statistical Annex) were smaller than those based on annual or monthly averages. Therefore the end-year statistics understate the size of clearing surpluses and the chronic nature of the surpluses, often referred to in this study.

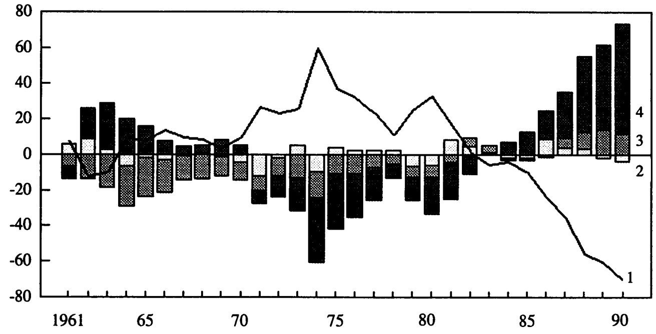
As with most bilateral clearings, the Soviet-Finnish clearing payment system maintained technical credit limits (swing, overdraft or credit plafond). The purpose of these limits to was impose budgetary discipline on the parties in order to keep the clearing in balance but yet to allow enough flexibility for technical delays that are normally accepted when transferring payments. The credit limit was an agreed ceiling on the amount of own-currency financing the account holder with an excess of clearing receivables would provide. Any financing beyond the credit limit was provided by the counterpart clearing account holder (who settled the excess in convertible currencies). The payment mechanism will be explained in more detail in section 3.3 below.

The clearing credit limits were changed from time to time to allow for changes in trade volume. During the period 1961–1990 the clearing limits amounted to about 5 per cent of the total clearing trade on average. During 1971–1990 the credit limits were adjusted six times as follows (letters A–G refer to figure 2.8): A) since 1966 CLSUR 18 (equivalent to the limit of CLSUR 80 million since 1961 before the devaluation of rouble in 1961), B) on 13 Dec 1972 CLSUR 30 million, C) on 1 Jan 1976 CLSUR 50 million, D) on 22 Dec 1976 CLSUR 100 million, E) on 15 Apr 1981 CLSUR 150 million, F) on 15 Dec 1982 CLSUR 300 million, and G) 1 Jan 1990 CLSUR 200 million. Naturally, the relative size of the clearing limits varied not only according to agreed changes (figure 2.8) but also because of continuous and sizable variations in the clearing trade (figure 2.9).

Figure 2.7

Financial claims covering the cumulative current account balance 1961–1990

% of gross clearing trade (GCT) with the Soviet Union

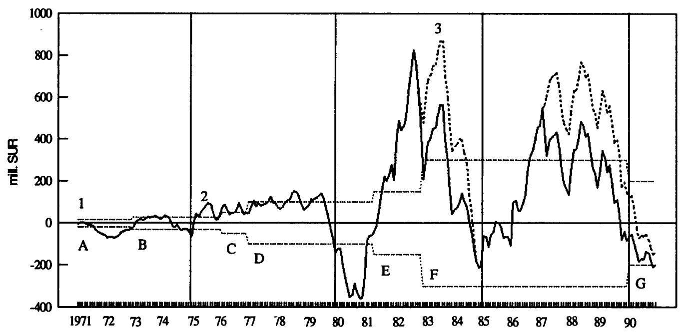


1 Cumul. CA of clearing trade, (+ = deficit), % of GCT
2 Clearing debt (–), % of GCT
3 Long-term debt (–), % of GCT
4 Short-term debt (–), % of GCT

Figure 2.8

Balances on clearing account and special accounts and the credit limits between Finland and the Soviet Union 1971–1990

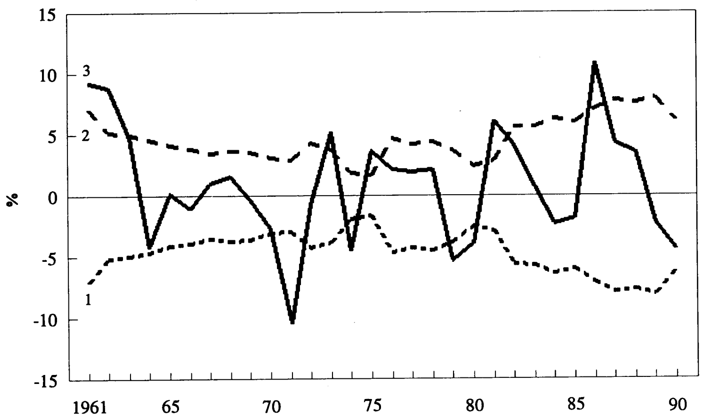
monthly average balances in million clearing roubles



1 Credit limits on the clearing account
2 Balance, monthly average
3 Balance, incl. special interest-bearing account

Figure prepared by the bilateral trade department, 31 Jan 1991

Figure 2.9 **Clearing credit limits in relation to gross clearing trade (GCT) 1961–1990, per cent**



1 Clearing debt limit, % of GCT
2 Clearing assets limit, % of GCT
3 Clearing balance, end-year

Beyond this technical or automatic clearing credit, trade credits and financial credits were also channelled through the clearing accounts. Long-term capital movements accumulating **long-term clearing debts** consisted mainly of import related supplier and financing credits. The major arrangements include the so-called "gold-loan" from the Soviet Union, import financing credit from the Soviet Union in 1959 and special account credits to the Soviet Union in 1982–1984 and 1987–1990.

In the 1960s the short-term debts stemming from advance payments for ships were by and large cancelled out by the **long-term debt** (figure 2.7). One of the major loans was a **financing loan** of CLSUR 112.5 million (CLSUR 500 million prior to the devaluation of the rouble in 1961). The Soviet Union granted this loan in 1959 to finance purchases from the Soviet Union. Another loan was the so-called "**gold loan**" ("disbursable in gold, US dollars or other convertible currencies") of 40 million roubles with a maturity of ten years. This was obtained from the Soviet Union in 1955. Medium-term suppliers' credits for imports from the Soviet Union were granted after the mid-1960s. Long-term import credits were related for project imports.

In addition to this, medium-term suppliers' credits for imports were granted by the Soviet Union after the mid-1960s. Long-term import credits related to project imports (like the Loviisa nuclear power station starting from 1970) and project export prepayments were granted in the 1970s. Imports and exports of equity capital and loans to Soviet subsidiaries in Finland and – from 1987 – to Finnish joint ventures in the Soviet Union are also included in the long-term claims. Their share of the total claims remained negligible.

The long-term clearing receivables also include balances on two **special account arrangements** that were implemented in 1982 and 1987. These arrangements were used to prevent Finnish exports from collapsing by extending some of the excess clearing surplus over several years into the future. The special accounts – according to the wording of the agreement – were "fixed-term clearing accounts" to be used for smoothing out the wide variations in the clearing account balance.

The first special account agreement was signed in 1982 for the purpose of transferring a maximum of 300 million roubles (about FIM 2.2 billion) from the clearing account to a special account during in the period 1 November 1982–31 March 1983. This special account of the VTB was opened at the Bank of Finland.

The Soviet Union, as the debtor party, agreed to disburse this amount by crediting the main clearing account and debiting the special account. The repayment took place by crediting the special account and debiting the main clearing account as follows: CLSUR 50 million in 1984, CLSUR 125 million in 1985 and the last CLSUR 125 million in 1986. The debtor paid 6 per cent interest p.a. on the outstanding balance and had the right to repay the debt prior to maturity.

In the context of negotiations on the annual trade protocol for 1987, a separate protocol was signed to transfer on 30 January 1987 the amount in excess of the 300 million rouble credit limit, rounded to the nearest five million roubles. The Bank of Finland and the VTB agreed in a supplementary banking agreement that the excess amount, 287 million roubles (rounded to 285 million), was to be transferred from the clearing account to a "special account" opened at the Bank of Finland in the name of the VTB. The amount was transferred to the special account on 6 January 1987.

As in the case of the previous special account agreement, the Soviet Union, as the debtor party, agreed to disburse this amount by crediting the main account and debiting the special account. Also the repayment was to take place by crediting the special account and debiting the main account as follows: CLSUR 50 million at the end of 1989, CLSUR 125 million at the end of 1990 and finally CLSUR 125 million or whatever was left, by 1991. The debtor (VEB) had the right to transfer the repayments through the main account provided that it had sufficient funds (CLSUR receivables) on that account to cover the payment. Early repayments were allowed. The VEB agreed to pay interest semiannually at 6 per cent p.a. on the actual balance.

Short-term capital movements accumulating **short-term clearing debts** included advance payments related to ship deliveries to the Soviet Union and changes in the payment terms for oil deliveries from the Soviet Union.

The construction of ships to be delivered to the Soviet Union was financed with **advance payments**. These CLSUR credits were originally recorded in a separate zero-interest rouble-denominated "advance payment account", separate from the clearing account. This account was opened already in 1949. The advance payments often implied credits with maturities of from two to three years (Hirvensalo 1978, p.51).

Disbursements of these advance payments or financial loans were covered by national currencies. The Soviet creditor (FTO or purchaser organization) actually made the payments to the VTB in advance in Soviet roubles. Then a corresponding CLSUR debt appeared on the balance sheet of the VTB. A corresponding net increase on the asset side of the Bank of Finland balance sheet was recorded, but neither convertible currencies nor Soviet roubles, i.e. "real money", crossed the border. Then the Bank of Finland, according to the payment orders from the VTB, disbursed markkaa in an amount equivalent to the CLSUR receivable to the Finnish shipyard or other firm in charge of the project or the delivery. Hence, whenever Finnish-Soviet clearing was used to obtain financing from the Soviet Union, the convertible currency financing was provided by the Bank of Finland, not by the Soviet Union. Moreover, the Bank of Finland provided this financing free of charge to the extent that the clearing trade with the Soviet Union produced a net surplus on the clearing account. This was due to the fact that the technical clearing credits were non-interest bearing. This was, however, a systemic feature, built into the clearing arrangement. The procedure with all the above mentioned features had been duly approved by both parties.

The underlying clearing mechanisms are presented in detail in section 3.3 (see charts 3.5 and 3.6 in particular). The costs to the Bank of Finland are explained in section 3.5 (table 3.2 and figure 3.2).

The beneficiaries on the Finnish side were the shipyards and construction firms. The shipyards were paid more than 75–80 per cent of the total value of delivery before the ship was delivered as late as in the 1970s. These conditions were tightened in the 1980s. In the latter half of the 1980s the share of advance payments was only 25 per cent (ETLA 1986, p. 17). In the case of factory construction, which was less important than ship exports, the advance payments comprised only 15–20 per cent of the contract value (Hirvensalo 1978, p. 52).

The payments had liquidity effects on the money market that were the same those caused by an increase in convertible reserves (Hirvensalo

1978, pp. 61–62). They created undesired inflationary pressures and were not in harmony with the other monetary and credit policies pursued by the Bank of Finland. On top of it all, the Bank of Finland was faced with the possibility that the 5-year agreement would not be renewed.

To correct the situation, the Bank of Finland made an effort to persuade the Government to provide adequate markka cover from the budget. The effort failed. As an alternative solution these capital movements were included in the clearing system from the beginning of 1958. This was a result of negotiations between prime ministers Fagerholm and Bulganin in February 1957. After that, however, the Bank of Finland faced a new problem, i.e. how to keep the clearing adequately balanced so as to be able to earn sufficient markka funds by selling clearing roubles to importers. Thus the Bank of Finland drifted into accepting responsibility beyond the technical role of holding the account and transferring clearing payments on behalf of the government.

Looking at figure 2.7, one might be inclined to conclude that advance payments also assisted in keeping the clearing in balance. Instead of paying for individual deliveries in large lump sums, the instalments reduced the large fluctuations in clearing payment flows. However, this was not the result of a deliberate policy to keep the clearing account in balance. On the contrary, the borrowing and lending seem to have taken place quite autonomously, without regard to the current account or clearing account situation. During the 1950s, 1960s and the 1970s capital movements were not used to bring the current or clearing accounts into balance.

During the 1980s the special account arrangements of 1982 and 1987, as well as the convertible currency facility, represented attempts to reduce the fluctuations on the main clearing account and bring the clearing balance within the clearing credit limits. This was due to the fact that the responsible clearing administrator again anticipated that the 5-year framework agreement might not be renewed.

There was also a facility for **long-term import credits** to Finnish enterprises, set up to promote and diversify imports from the Soviet Union. Finnish commercial banks were assigned quotas by the Bank of Finland to extend import credits so as to promote the purchase of Soviet manufactured goods. The volume of these credits never became very large. The arrangement was discontinued in 1986, when it turned out that the facility was used to finance purchases of oil, coal and other raw materials from the Soviet Union.

A major item of the short-term capital flows accumulating short-term clearing debt was **oil trading**. Oil trading did not come into the picture until the 1980s. Oil was traded to bring the clearing accounts into balance. In the Finnish balance of payments statistics, oil trading was left outside the trade statistics because of its "artificial nature". Instead, it was recorded as an addition to the outflow of short-term capital, thus reducing the balance on the general account to be financed through a decrease in CLSUR reserves ("tied reserves") equal to the decrease in surplus or increase in deficit on the clearing account.

During the years 1982-1984 the state-owned Finnish oil company Neste Oy purchased 4.25 million tons of crude worth USD 981 million from the Soviet Union. This trading oil was imported through clearing, i.e. it reduced the net clearing surplus. Neste then resold the oil to the West. The export proceeds thus increased the convertible currency reserves. In this way part of the non-convertible currency reserves were converted into convertible currencies. In less technical terms, by means of oil trading part of the clearing receivables were settled in convertible currencies. Instead of the Soviet party selling the oil directly and using the convertible currency proceeds for amortization of its clearing debt to Finland, Neste Oy stepped in to perform the selling on behalf of the Soviet Union.

Oil trading was resumed again in 1986 and continued until the end of the clearing trade. This time the Soviet-owned "Suomen Petrooli" also participated. Trading oil export receipts amounted to 6.4 per cent of total export receipts from the Soviet Union in 1981–1985 and 13.6 per cent in 1986–1990.

2.3 Finland's trade policy and clearing arrangements

In the 1950s, within the framework of the European Payment Union, the central European countries multilateralized their mutual trade and made their currencies convertible. They also began to dismantle their clearing arrangements with the socialist countries. Particularly during the cold war, trade flows between east and west were reduced to a minimum. In these circumstances any major project or deal would have pushed the clearing out of the balance. Clearing badly suited services trade and trading. Pricing problems and management of foreign exchange risks were additional reasons for the preference for free trade (Volk 1985, p. 396).

Still during the first half of the 1950s the share of Finland's eastern trade averaged about 16 per cent of total trade. More than 50 per cent of Finland's foreign trade (all trade with socialist countries and a significant part of the trade with western countries) took place under clearing arrangements at that time (Bäckman 1954, p. 47 and Hirvensalo 1979, pp. 11–12). Though remaining outside the Marshall aid programme and the EPU, Finland started early in the footsteps of her western European trade partners on the road to liberalization. Within the framework of the "Helsinki Club" of the OEEC, formed in 1957, Finland also soon forged multilateral trade and payments relationships with its western trading partners (Kivilahti 1985, p.26). In 1958 Finland, in line with most western European countries, established current account convertibility (Lehto-Sinisalo 1992, pp. 13, 35). By mid-1959 Finland had already dismantled exchange controls to the level of the other Scandinavian countries.

Since then Finland has proceeded to develop its monetary and foreign exchange policy instruments as well as its banking and payment systems so as to reach the degree of sophistication of its western partners. One of the major benefits of deregulation was the improved availability of financing from sources other than the domestic banks. In particular, firms have increased their direct borrowing from both domestic and foreign sources (about the deregulation and liberalization in Finland, see Rautava 1994, about lifting the foreign exchange regulations, see Lehto-Sinisalo 1992).

At the same time, Finland was consistent in its policy of integration and cooperation with western economies. Finland became a member of the IMF in 1948, signed the GATT Agreement in 1950, joined the United Nations and the Nordic Council in 1955, became an associate member of EFTA in 1961 (full member in 1986), joined OECD in 1969, concluded a free trade agreement with the EEC in 1974, and joined the Council of Europe in 1989.

These developments combined with the decentralization of trade in the Soviet Union during the latter half of the 1980s marked a low point in Finnish-Soviet clearing. The clearing system was not at all the appropriate mechanism for intermediating financing. In addition, Soviet exporters began to prefer hard currencies to the now semi-hard clearing rouble and to ask themselves why they should limit their choices to Finnish-made products. Due to deregulation of foreign trade in the Soviet Union, the clearing trade was no longer an attractive alternative to the Soviet Union. The Finnish competitive advantage turned to a disadvantage for Soviet buyers (Sutela 1991a, pp. 201–202, Sutela 1991b, p. 314, Hirvensalo 1993, p. 28; for more detailed discussion, see section 2.4.1 below).

Finland was long the only market economy still using a clearing arrangement with the Soviet Union and other socialist countries. Hence, during the clearing era Finland found itself in a fairly unique situation. On average 80 per cent of its total foreign trade took place according to the western pattern of free trade and a convertible Finnish markka. The other 20 per cent of its foreign trade was administered by means of a system its western trade partners had abandoned.

Finland was, indeed, the last industrialized capitalist country to give up clearing trade with the Soviet Union and to dismantle its clearing arrangements with the (former) socialist countries, with Bulgaria in 1992 and with the Soviet Union at the end of 1990. Finland was preceded in this respect by Austria in 1971 and Sweden already in 1966. The large Finnish enterprises involved in eastern trade, which were the main beneficiaries of the trade, and the political circles in which they had influence feared that the abolition of less important clearing arrangements with other socialist countries would create a "domino effect" and jeopardize the continuation of clearing with the Soviet Union. The attitude generally prevailing in Finland and probably also in the Soviet Union was expressed in the Long-Term Programme: "the clearing account system operating in conformity with the five-year trade and payment agreements continues to play a positive role in the development of economic and commercial relations between Finland and the USSR". According to Holopainen, this reflected the idea that there is no reason for changing the payments system unless one is sure that a system using convertible currencies would bring about better conditions for the development of Finnish-Soviet trade (Holopainen 1983, p. 180, also Karjalainen 1982, p. 193).

Finnish-Soviet clearing was acknowledged as a political necessity by Finland's western partners and the international watch-dog organizations. The International Monetary Fund continued to exert some pressure on Finland to dismantle these discriminatory arrangements. The Articles of Agreement (VIII and XIV) of the International Monetary Fund call for abolition of discriminatory payment arrangements between member countries.

Once Rumania, the People's Republic of China and Hungary had joined the International Monetary Fund, Finland agreed to settle transactions with them in convertible currencies in 1982, 1983 and 1985 respectively (Kivilahti 1985). In 1970 Finland initiated "freely convertible currency experiments" with Czechoslovakia and Poland. These experiments were restricted only in the sense that the USD was to be used with Czechoslovakia until 1984 (after that all convertible currencies could be used). With Poland payments had to be made in USD (since 1985, also in FIM). The payment agreements were terminated with Poland and Czechoslovakia on 1 April 1990 (see Chart 2.1).

Chart 2.1 **Synoptic table on selected bilateral clearing payments systems involving Finland**

Name of country or countries	Period in effect. Clearing unit of account (UA) Credit limit in – clearing UA – % of imports from the partner ctry.	Settlement rules
Bulgaria	1948–1990, First USD, then FIM. 0.75 mill. USD, later 25 mill. FIM, 10 % in 1976. Conv. Curr.: exports 1990, imports 1992	End-year balance on excess of credit limit of CLFIM 25 mill. settled in convertible currencies within 3, later 4 months To end the clearing, only payments from Finland to Bulgaria were channelled through clearing
China	1953–1983 FIM, 8.4 million FIM, 19 % in 1976.	Debtor has to pay the balance in excess of credit limit on demand in four months in convertible currencies
Czechoslovakia	1959–1970, USD, since then annually renewed free currency agreement "freezing" the clearing. Formal end in 1990.	
German Democratic Republic	1959–1989. USD, later FIM, 2.5 mill. USD, later 70 million FIM 6.8 % in 1976	When the balance in excess of credit limit prevailed more than three months, debtor had to pay it in convertible currencies
Hungary	1948–1985. USD, 2 million USD, 5.9 % in 1976 Convertible currencies since 1985.	Whenever the balance exceeded the credit limit, creditor could restrict exports. Debtor could pay the excess with conv. currencies or gold.
Poland	1947–1970, USD, since then annually renewed free currency agreement freezing the clearing agreement. Formal end in 1990.	
Rumania	1951–1982, SUR, 0.36 million SUR, 3.4 % in 1976. Convertible currencies since 1982.	If the balance at the end of calendar year exceeds the credit limit, debtor had to pay the excess in convertible currencies (in force 1968–1981)
The Soviet Union	1951–1990, SUR, 300 million SUR until 1989, then 200 million SUR (see details in the text). Convertible currencies since 1.1.1990.	Parties take measures to eliminate the bal. in excess of the credit limit within 3 months. After this the creditor may suspend exports or require payment in convertible currencies.

The IMF's tolerance towards these arrangements is probably explained by the fact that turnover in these clearings was negligible and they were liberally managed. The trade flows with the small clearing countries were fairly small compared to the Finnish-Soviet trade. The share of exports and imports with these clearing countries varied between 2 and slightly over 4 per cent of total Finnish exports and imports. The discontinuation of these small clearings did not cause a notable effect on trade flows.

The clearing agreements involving Finland in 1982 can be divided into three categories: 1) clearing with the Soviet Union, which represented the purest form, comprising both trade and payment systems. Payments between the two countries were effected through clearing accounts and trade was regulated by means of intergovernmental five-year and annual protocols on the exchange of goods. 2) The clearing regimes with Bulgaria, German Democratic Republic and Hungary consisted only of payment systems: trade flows were not regulated but payments were channelled through clearing accounts. 3) With Poland and Czechoslovakia no trade protocols were drawn up. The payments were effected in convertible currencies, with Poland in US dollars (also in Finnish marks since 1985). Considering the fact that formal bilateral payment agreements were in force, these arrangements were often referred as "free currency experiments" to emphasize their experimental or transitional nature en route to free trade or, eventually, back to full clearing. Finally, trade with Albania and Rumania was conducted on a multilateral free currency basis (Holopainen 1982, p. 4, see also the detailed description of Hirvensalo – Kivilahti 1977, pp. 20–24).

2.4 Dismantling of the trade and payments system

2.4.1 Countdown

The need for free currency trade was acknowledged in the Long-Term Programme for the Development and Intensification of Economic, Commercial, Industrial, Scientific and Technical Co-operation until 1990, signed between Finland and the Soviet Union in May 1977. This Programme states that "the Parties will aim at developing further mutual payment arrangements, modes of payment and credit relations, and provided that each Party is interested, will examine the possibilities of shifting over to payments in freely convertible currencies".

It was merely a historical coincidence without any acknowledged association with the above-mentioned "Long Term Programme – until 1990" that the clearing arrangement between Finland and the Soviet Union was, indeed, terminated at the end of 1990. The message of the long-term programme was soon crowded out by new problems created by the second oil crisis, even though the question was later raised from time to time. Other contemporary agreements, like the Agreements on the Exchange of Goods and Payments of 1981–1985 and 1986–1990, were satisfied to refer only to the necessity of developing the payments basis, methods of payment and credit relations between the two countries.

The pace of events seemed to accelerate towards the end of the 80s parallel with the reforms and economic dissolution of the Soviet Union. A timetable presenting the administrative measures to first renew the clearing and then to abolish it is presented in chart 2.2. It also includes relevant major events indirectly pressing towards the demise of Finnish-Soviet clearing.

The collapse of oil prices from a high level in 1986 and the economic situation together with administrative reforms in the Soviet Union in the second half of the 1980s, created the problems that first come to the fore in 1986: due to the fall of the oil price the value of goods imports from the Soviet Union was only 75 per cent of goods exports from Finland to the Soviet Union, creating a large surplus that was costly to the Bank of Finland.

During 1986–1988 the highest level of trade policy decision makers became concerned that clearing as a payment and trade system did not work properly. The unprecedented steep fall of oil prices in 1986 turned the clearing deficit of FIM 667 million at the end of 1985 into a surplus of FIM 3302 million at the end of 1986 (see the table in the Statistical Annex, bottom line).

The clearing balance had undergone wide fluctuations also in the past, particulary, in relation to the volume of trade (see figures 2.6–2.8). At this time the Finnish decision-makers and clearing administrators faced new sources of concern. First, the turnover on clearing trade was larger than in the past. Second, the cost consciousness that spread throughout the economy in connection with the deregulation of monetary and foreign exchange policy, particularly in the latter part of the 1980s, also raised the concern of authorities about costs associated with large or permanent clearing surpluses. Third, the economic reform policies initiated in the Soviet Union evoked early unexpressed fears that the acceptance of large clearing surpluses could imply acceptance of excessive liquidity risk.

Chart 2.2 Chronology of the clearing arrangement between Finland and the Soviet Union and related events

13.8.1986	Official notification by the Minister of Foreign Affairs, Mr. Laine, of the Soviet Union exceeding its clearing overdraft
August 1987	Chairmen of the Economic Commission decided to establish a payments working group
9.9.1988	Intergovernmental protocols on introduction of stricter conditions on the clearing from the beginning of 1990 and protection against rouble devaluation from the beginning on 1989. For this purpose the Payments Agreement 1984 and Banking Agreeement 1985 had to be changed
5.1.1989	Agreement on Amendments of the Banking Agreement of 13.11.1989 to accommodate changes in the intergovernmental protocols
8.2.1989	Agreement on protection of direct investments
26.10.1989	Payments agreement 1991–1995 signed
22.5.1990	Protocol on the use of freely convertible currencies in payment of certain transactions after 1990; never applied
6.12.1990	The Soviet government confirmed its position about discontinuation of the Finnish-Soviet clearing without any transitional period from the beginning of 1991
27.12.1990	Signing of protocols on discontinuation of the clearing arrangements, both on intergovernmental and banking levels
1.1.1991	Start of free currency trade with the Soviet Union. Opening of USD-denominated liquidation account and CLSUR account to obtain incoming clearing payments
31.1.1991	Account for incoming clearing payments closed. The Bank of Finland stops selling CLSUR and quoting FIM/CLSUR
30.5.1991	Transfers through the liquidation account were discontinued. The account was kept open for purposes of revision
28.6.1991	The CMEA discontinued
1.7.1991	No more clearing dollar payments were effected through the liquidation account
1.8.1991	Procurement agreement signed. Of barter purchases of defence materials from the Soviet Union, 40 per cent was used to amortize claims on the special account
15.8.1991	Agreement on protection of direct investments came into force
31.8.1991	The bilateral trade department of the Bank of Finland was disbanded
21.12.1991	The Soviet Union was dissolved at Alma-Ata
31.12.1991	Due date of the debt outstanding on the special account. VEB paid only interest of SUR 1.8 million (USD 3.1 million) but not the debt outstanding of SUR 60 million (USD 102.8 million).
13.1.1992	The Supreme Soviet of the Russian Federation decided to continue the activities of VEB and put it in charge of management of the former Soviet Union's debts.

20.1.1992	The agreement on Friendship, Cooperation and Mutual Assistance between Finland and the Soviet Union was annulled by note to foreign minister A.V. Kozyrev signed by foreign minister Paavo Väyrynen.
15.4.1992	The outstanding balance on the special account after transfers to procurement account was converted to US dollars producing a balance of USD 76 million receivables from VEB
1.9.1993	The Licensing Office was discontinued
end 1993	The outstanding balance on the special account with the Bank of Finland was settled by the Finnish Government. Later public and publicly guaranteed outstanding claims were rescheduled in the Paris Club and the private claims in the London Club (Laurila 1993, pp. 67–70).

In August 1986 the alarm bell was sounded: for the first time, official notification based on article 7 in the payments agreement concerning excessive use of the clearing overdraft facility was forwarded to the Soviet government implying a demand for corrective action. According to this article, negotiations on corrective measures for adjusting the trade were to be started prior to a request to settle the excess over credit limit in convertible currencies.

Negotiations on annual trade protocols in 1986 turned out to be difficult. It was felt that convertible currency settlement was not feasible – the Soviet Union had not resorted to it in 1979 (Koivisto 1994, p. 221). Thus the trade had to be adjusted so as to bring the clearing into balance.

The Soviet side did not agree on reductions of Finnish exports to the Soviet Union but instead insisted that Finns should increase their imports from the Soviet Union. Considering the competitiveness of Soviet manufactured products in comparison with western products, it was not easy to find new imports from the Soviet Union that would be marketable in Finland. Moreover, the balancing effect of consumer goods including major durables turned out to be marginal. According to some calculations, for example, a fall in the oil price of one US dollar/barrel was equivalent to one year's automobile imports from the Soviet Union to Finland in the mid-1980s.

On the other hand, the availability of Soviet imports became more restricted. Only part of the import commitments were realized. Soviet exporters – particularly when trade became more liberal in the Soviet Union – preferred to serve first customers paying in convertible currencies. Exports to the Soviet Union had to be cut back more and more sharply: about FIM 5 billion (USD 1 billion) worth of export licences for potential exports were refused in 1988.

At times Finnish exporters were not yet fully aware of the problems involved with the payment system. Nor did the Soviet side regulate their imports – the Soviet Union established its own licensing office in May 1988 to regulate its imports from Finland. The Finnish Licensing Office was left alone to regulate exports to the Soviet Union.

The Soviet foreign trade organizations and trade authorities started to ask for credits also from Finnish exporters selling through the clearing. According to the Soviet authorities, the provision of export credits would be in line with international practice. For instance, in December 1987 a Soviet purchaser of Finnish ships announced that it would stop ordering from a Finnish shipyard unless it agreed to a one-year postponement of the CLSUR 126 million (about FIM 850 million) payments due in 1988. In fact, the Soviet party preferred to use the opportunity created by the postponement to purchase other items through clearing.

From the Finnish point of view, with all these demands from the Soviet counterparties, clearing became far less at-tractive than had been the case. Instead of receiving advance payments for ship deliveries, Finland was now asked to finance these deliveries more or less directly from western sources. In addition these demands would have further complicated the effort to keep the clearing in balance.

Both parties acknowledged these problems and made efforts to solve them. The decision to establish a working group on payments under the Economic Commission in August 1987 opened up a forum for cooperation by the authorities in charge of payments and financial matters.

As a result of negotiations in September 1988 the terms of the clearing account were tightened as follows:

1) the credit limit was lowered from 300 million roubles to 200 million roubles;

2) the balances in excess of the 200 million roubles at the end of March, June, September and December, were to be automatically and immediately paid by the debtor in freely convertible currencies;

3) balances in excess of 100 million roubles were to earn interest at rates in line with the international financial markets;

4) the clearing rouble balances were to be protected against the devaluation of the rouble; and

5) enterprises could price their commercial contracts in FIM or other convertible currencies or in roubles indexed against devaluation (this had been possible already before, but the enterprises were reminded of the importance of protecting themselves against exchange risk).

In exchange for the tightening of clearing terms, the Finnish authorities agreed that Finnish Export Credit Ltd and the Finnish commercial banks would open export credit lines. Export credits could be repaid through the clearing account. Technically the arrangement was a form of credit extension to the buyer: Finnish exporters would obtain their payments for eligible export deliveries from the Finnish Export Credit Ltd., which would then extend the corresponding credit to the VEB. The credit was passed to the Soviet importer, which was now invoiced by the VEB according to the debt service schedule. According to the credit agreement concluded between the Finnish Export Credit Ltd and VEB, the credit line was opened in November 1988 and closed in January 1991. The loan was to be repaid during 1989–1995 and interest was to be determined on a commercial basis.

The largest commercial banks soon opened their own credit lines, using the arrangement between the Finnish Export Credit and the VEB as a model and similarly receiving guarantees from the Government Guarantee Fund. At the closure of the credit line in January 1990 the net use of it was close to 350 million roubles, equivalent to about FIM 2.4 billion or almost USD 0.5 billion.

The Banking Agreement was amended on 5 January 1989 to allow for changes required by the inclusion of the protection clause against possible devaluation of the rouble. The technique was basically similar to the one in the special account, explained in Technical Annex.

Later, in May 1990 the Finnish and Soviet parties agreed on bringing all joint venture operations under the free currency regime. The Finnish participants in Finnish-Soviet joint ventures felt that they were put in a worse position than other joint venture participants from convertible currency countries because they were not permitted to earn convertible currencies by selling their products in Finland. Finnish-Soviet joint ventures, being Soviet residents, were jurisdictionally in the same position as any other Soviet resident when conducting trade with Finland, and so had to export to Finland through clearing. This agreement, due to come into force from the beginning of 1991, was annulled with the termination of clearing.

The outcome of these developments was not foreseen yet in 1987 or 1988 nor necessarily even in 1990. For instance, in connection with president Gorbachev's visit to Finland in October 1989, ministers Ilkka Suominen and Konstantin Katushev signed a 5-year agreement covering 1991–1995 based on inter-governmental clearing as were the eight previous 5-year agreements. However, the Soviet Union's own interests triggered by its reform policies, aimed for instance at earning convertible currencies also from trade with Finland, its early decisions to apply for memberships in the GATT, IMF and World Bank, developments regarding European integration etc. all signalled the final countdown for the Finnish-Soviet clearing arrangement (Koivumaa – Valtonen 1990, pp. 100–101). It soon became obvious also to the Finnish authorities that bilateral clearing would be poorly, if at all, suited to trade with a Soviet system in the process of transition and marked by the decentralization of decision-making and growing uncertainty (Kivilahti – Rautava 1990, p. 6).

A growing number of younger generation economists of the Academy of Science and its institute IMEMO asserted that clearing arrangements were doomed to vanish as soon as the situation normalized. They agreed on the feasibility of a mixed system for a period of transition and adaptation. Opinions of officials in the Soviet Ministry of Foreign Trade also moved towards termination of clearing in 1989 and 1990.

Discussion in the Finnish mass media in 1990 can be described as confused and even panicky. The major eastern trade enterprises, particularly in the metal and engineering industry, did not agree to even consider the possibility of not having at least a temporary continuation of clearing so as to allow them to adapt to convertible currency trade. They found it difficult to accept arguments coming not only from the Bank of Finland but also increasingly from the Soviet side to the effect that the centralized trade administration in the Soviet Union would be discontinued from the beginning of 1991.

The Soviet foreign trade regime was depoliticized during the latter part of the 1980s. In the new situation, political trade had simply become un-affordable to the Soviet Union. Now, only trade based on economic and commercial criteria was acceptable. Moreover, in the foreign trade administration administrative commands were replaced by economic incentives, which were not operative in the clearing system. The right to hold foreign currency being given to the Soviet foreign trade organizations (FTOs) serves as an example of the new incentives: an FTO was obliged to surrender only 60 per cent of its export proceeds. It could keep the other 40 per cent to pay for imports or to hold as currency deposits. The bilateral regime which limited competition and narrowed the range of choices in exports and imports was no longer advantageous to the Soviet side in terms of economic criteria.

Thus the Finnish-Soviet clearing system became incompatible with the new conception of Soviet foreign trade. After the abolition of central planning from the beginning of 1991, the Soviet administration was no longer in a position to determine the volumes to be imported or exported in Finnish-Soviet trade. The Soviet Union reduced its economic aid to third world countries, signalling the depoliticization of its foreign trade. It was no longer advantageous to the Soviet Union to tie part of the proceeds from its oil exports to pay for imports from Finland when it could spend the same money on a wider assortment of products from all over the world. Therefore the Soviet authorities pointed out that Finland had lost the privileged position it used to have compared to other trade partners of the Soviet Union. From the viewpoint of the Soviet Union, in the process of overhauling the entire foreign trade system there were no grounds for having Finland as the only exception. Finally, the administrative features of the clearing system were not compatible with the spirit of Soviet foreign trade reform or with the regional decentralization and delegation of foreign trade rights and decision-making (Sutela 1991b, pp. 201–202). Sutela also gives a number of reasons why Finland should go over to full convertible currency trade and reject all blueprints for special arrangements (Sutela 1991b, pp. 202–204, see also Koivisto 1995, pp. 367–370).

The protocol of May 1990 on the use of freely convertible currencies in payment of certain transactions reflected the Finnish preference for a gradual shift to the use of freely convertible currencies. This protocol suggested the free use of convertible currencies in payments for certain transactions such as transfers of equity capital to joint ventures in the Soviet Union, the Finnish trade of Finnish- Soviet joint ventures, a major part of service payments and payments related to loans not directly involved in the financing of clearing trade. In order to preserve bilateralism in the midst of growing free currency trade, it was also stated that goods originating from third countries would be traded in Finland and in the Soviet Union according to the general customs tariffs.

Termination of the clearing arrangement was taken up by the Soviet authorities in June 1990 and later on several occasions (Repo – Lehtinen 1992, p. 3). The Soviet authorities explained that though there was a strong lobby in the Soviet foreign ministry (MVES) concerned that Finnish-Soviet trade could collapse, the dismantling of central planning and decentralization of foreign trade would imply that from the beginning of 1991 the central ministries would neither have support from any kind of plan nor subsequently be authorized to negotiate quotas or to place orders with Finnish suppliers.

As mentioned above, gradual dismantlement of clearing was strongly advocated by the major Finnish Soviet exporters in the metal and engineering and forest industries. Transitional periods of from three to five years, "oil clearing" and other alternatives for gradual movement to free currency trade were considered in discussions between Finnish and Soviet trade authorities in 1990 (Koivumaa – Valtonen 1990, p.102). Finally, on 6 December 1990 in connection of the Finnish Independence Day reception in Moscow the deputy prime Minister Sitaryan confirmed the final Soviet position according to which the Finnish-Soviet clearing arrangement was to be terminated by the end of December 1990 without any transitional period (Koivisto 1995, p. 371 and Repo – Lehtinen 1992, p. 5).

Already since 1989, the Bank of Finland in particular was becoming increasingly restive about signs of a worsening liquidity situation for the VEB, as evidenced by a number of internal memos in the Bank of Finland. Moreover, irregularities and delays in the transfer of clearing and convertible currency payments occurred in 1989. The accumulated payment arrears to Finland by mid-1990 amounted to FIM 430 million, of which the share of clearing payments was FIM 130 million. The Soviet authorities announced that the inability of the Soviet Union to earn sufficient convertible currencies due to lower oil prices, bottlenecks in the production of exportables and difficulties in obtaining short-term financing from western banks were the reasons for the arrears. To solve the problem, the Soviet Union had increased its gold sales (Minister Sitarjan, according to Izvestiya 22 May 1990 and academician Bogomolov, according to Helsingin Sanomat 28 May 1990).

The possibility of the Soviet Union ending with a default was discussed already in 1990 in a number of internal memos. The outlook was still too clouded to make preparations for the change in trade policy decision-making that was to follow: first the absolute termination of the clearing arrangement, followed by the dissolution of the Soviet Union and the conversion of the VEB into a bad bank. The VEB had prematurely repaid SUR 225 million of its debt on the special account and there seemed to be no reason to assume that the rest, SUR 60 million, would not be repaid as scheduled. Therefore, the funds on the special account were not transferred to the main clearing account, which was brought into balance by trade policy measures.

2.4.2 Rundown

The clearing payments account was terminated at the end of 1990. Formally, the Finnish-Soviet clearing arrangement was abolished through an inter-governmental protocol and the system of accounts and payments by a supplement to the protocol signed by the account-keeping banks (i.e. by the Bank of Finland and the VEB. The protocol and its supplement were both signed on 27 December 1991. These documents defined the procedures to be followed in the rundown of a major part of the administrative bureaucracy that had been required for the management of the clearing trade and payments system. Balances from the clearing subaccounts held in commercial banks were transferred to the clearing rouble account with the central bank already during December 1990. The bilateral trade department, which had been set up to support the clearing payment operations, discontinued operations at the end of August 1991. The Economic Commission and all of its working groups terminated operations on 15 October 1992. The Commission was replaced by a new administratively lean Economic Commission on 10 August 1992, the permanent staff of the Ministry for Foreign affairs being in charge of preparations for annual meetings. The Licensing Office was discontinued in September 1993.

An **account for payments in process** denominated in CLSUR was opened for the month of January 1991 solely for the purpose of transferring clearing payments effected by the VEB during 1990 but not received by the Bank of Finland until the end of the year. Only incoming CLSUR payments were effected through this account. This also implied that the Bank of Finland continued to purchase clearing roubles from Finnish exporters to the end of January 1991. In fact, the Bank of Finland quoted the FIM/CLSUR rate for the last time on 31 January 1991, when this account was closed and the Bank of Finland stopped buying and selling clearing roubles.

In order to take care of payments related to delivery agreements signed during 1 January 1990 – 31 March 1991 and had an approved export permit from the Licensing Office, a USD-denominated **liquidation account** was opened reciprocally. The debtor was obliged to pay the creditor on 30 June 1991 the amount of the outstanding balance on these accounts as of 31 May 1991, after which the liquidation account were to be closed. In fact, the accounts were kept open for some time for checking purposes though no more payments were transferred through it.

In the protocol that set out the terms of the liquidation account, an allowance was made for the accumulation of excess balances by applying limits similar to those set in the previous clearing protocol signed on 9 September 1988: the balance in excess of USD 180 million was LIBOR-interest bearing, the balance in excess of USD 360 million was subject to free currency settlement. In addition the Soviet party was entitled to repay the outstanding balance on the special account provided that it had enough funds (surplus) on the liquidation account to cover the repayment (Collection of Finnish Laws and Decrees no. 39/91, Suomen säädöskokoelman sopimussarja no. 3–5, 16.1.1991).

Additional pressure for foreign exchange controls arose from the fact that Soviet exporters, having earned clearing roubles on exports to Finland, wanted to use them to pay for imports from Finland so as to avoid converting them to ordinary roubles. Generally this was not possible because Finnish exports to the Soviet Union had to be drastically cut in order to get the clearing account into balance prior to its termination. Use of the liquidation account was limited to the transfer of payments from the Soviet Union for deliveries that had been authorized by the Finnish Licensing Office prior to end-1990.

The outstanding debt of the Soviet government to the Finnish government on the **special account** was 60 million clearing roubles, equivalent to slightly over USD 100 million as at the end of 1990. To get this debt repaid, an inter-governmental barter agreement on purchases of defence materials against selected Finnish exports was signed in August 1991. According to this agreement, 40 per cent of Finnish purchases from the Soviet Union was to be financed by reducing the Soviet Special account debt to Finland. The entire debt should be repaid by the end of 1995. The other, 60 per cent was to be covered by selected Finnish exports to the Soviet Union. For this purpose the Finnish Ministry of Defence would transfer 60 per cent of each import delivery in USD to a **procurement account** opened by the VEB with the Bank of Finland. The VEB participated in the arrangement because, according to Soviet legislation, accounts abroad on behalf of the Soviet government could be opened only by the VEB. Based on payment orders received from the VEB, funds from the procurement account were released to cover payments to Finnish exporters for deliveries that had been approved by the Soviet party for counter-purchase.

Unfortunately, this arrangement did not work without friction due to the complexity of the arrangement. This time there was no overdraft facility. Funds were released from the account only if 1) imports exceeded exports and 2) there was a payment order from the VEB, which owned the account. However, exports started to grow faster than imports. The Finnish Ministry of Defense transferred USD funds to the "procurement account" only after it had received an import delivery. Moreover, the VEB was slow to release money from the account for payment to Finnish exporters because of organizational changes in the VEB which were taking place at that time.

Finnish exporters delivered their merchandise once they received confirmation of their eligibility for inclusion on the counter-purchase list. Believing that no guarantee would be necessary with the backing of the Ministry of Defense and the central bank, many exporters were embarrassed to find that they did not receive their export payments at due date owing to a lack of cover on the procurement account. This was the result of the lack of a payment order from the VEB, which was needed prior to the release of funds from the account to a Finnish exporter.

The arrangement provides an illustration of the problems which are bound to emerge due to the complexity of a clearing or counter-purchase arrangement, if the controversial issues are not adequately acknowledged and arbitrated in advance and the implementation is not coordinated from the outset. A further discussion on these subjects will follow below in section 4.4.

Finally the original balance on the Special Account, CLSUR 60 million (slightly over USD 100 million), was converted into clearing US dollars in April 1992. By virtue of the barter arrangement, these receivables from the Soviet Union were reduced to USD 76 million. The Finnish Government assumed the claim by disbursing that amount to the Bank of Finland in 1993.

The clearing balances on the **main clearing account** were fairly successfully settled by matching the incoming and outgoing payments originating from different types of clearing subaccounts and transactions.

Claims of about FIM 3.0 billion (USD 0.6 billion) originating from the export credit line which was agreed in 1988 for the purpose of financing the continuation of clearing exports were included as government guaranteed receivables and were to be discussed at the Paris Club. Outside the Finnish-Soviet clearing arrangement, the Finnish commercial banks had participated in the 1980s in consortia making syndicated loans to the Soviet Union. These receivables, not guaranteed by the government, amounted to about FIM 2.5 billion (USD 0.5 billion) at the end of 1990 and were later transferred for negotiation at the London Club.

Finally, there were letters of credit and cash payments partly originating from the clearing trade (related to supplier credits etc.) that were in arrears, according to rough estimates, by up to FIM 2 billion (USD 0.4 billion). Thus, the total receivables amounted to FIM 7.5 billion (USD 1.5 billion) at the end of the clearing trade, of which clearing trade proper accounted for some FIM 3.7 billion (over USD 0.7 billion; Laurila 1993, p.64).

Of all the western countries, Finland was the most adversely affected by the dissolution of the Soviet economy. The collapse of Finnish-Soviet trade, the share of which had fallen almost every year (with the exception of 1985) from a level of over 25 per cent in 1982–1983 to the neighbourhood of 10 per cent in 1991 and finally to 4 per cent in 1992, was estimated to have caused some 25 per cent of the total loss of 150 000 jobs in 1991 and accounted for one-third of the 6 per cent decline in total output (Rautava – Hukkinen 1992, p. 5).

3 Description of Finnish-Soviet Clearing

3.1 Institutional setup

Over the 40-year history of the Finnish-Soviet clearing arrangement, there developed a comprehensive legal framework with special bodies for running the system. During this period the agreements were extended to cover technical, scientific, cultural and other fora of cooperation. With its other clearing partners, Finland had far more modest arrangements. The principal agreements and procedural relations concerning the Finnish-Soviet clearing arrangement are summarized in chart 3.1. The institutions, which were the main actors, are presented in chart 3.2.

As the charts show, the system was hierarchical. The higher the level of the agreement, the longer the period it covered and the higher the level of political decision-makers and institutions that procured the agreement. The institutional system was also symmetric as almost every institution involved had its counterpart in the Soviet Union. The payment system (chart 3.5) and the array of accounts (chart 3.7) were also marked by symmetry. The purpose of this system of agreements, procedures and institutions was by coordination and planning to secure the continuity and balanced growth of trade and good political relations (Linnainmaa 1988, pp. 29–46). For a more detailed description of institutional and functional set-up of these systems in the Soviet Union see for instance Hirvensalo (1979), Holopainen (1981 and 1982), and Katila (chapter III).

The **Treaty on Friendship, Cooperation and Mutual Assistance** of 1948, particularly article 5 thereof, constituted a political basis for the commercial five-year agreements (Liukkonen 1982, p. 44). This agreement was thereafter always referred to, as were all other associated agreements, in the introduction for every lower level inter-governmental agreement. Later, the **Final Act of the CSCE** (the Conference on Security and Cooperation in Europe) of 1975, also came to be considered a political cornerstone of Finnish-Soviet relations.

Efforts were made to set up guidelines for different forms of economic cooperation, extending up to 15 years. The first **Long-term Programme** for "the Development and Intensification of Economic, Commercial, Industrial, and Scientific and Technical Cooperation between the Republic of Finland and the Union of Soviet Socialist Republics until 1990" was signed in 1977. It was extended and revised in

1981 and 1987. The idea was to revise and extend these programme every fifth year in connection with negotiations on each new five-year agreement. The purpose of the agreements was to integrate the basic five-year agreements with each other and to reduce the variations caused by the planning cycle (paragraph 1: "General Principles").

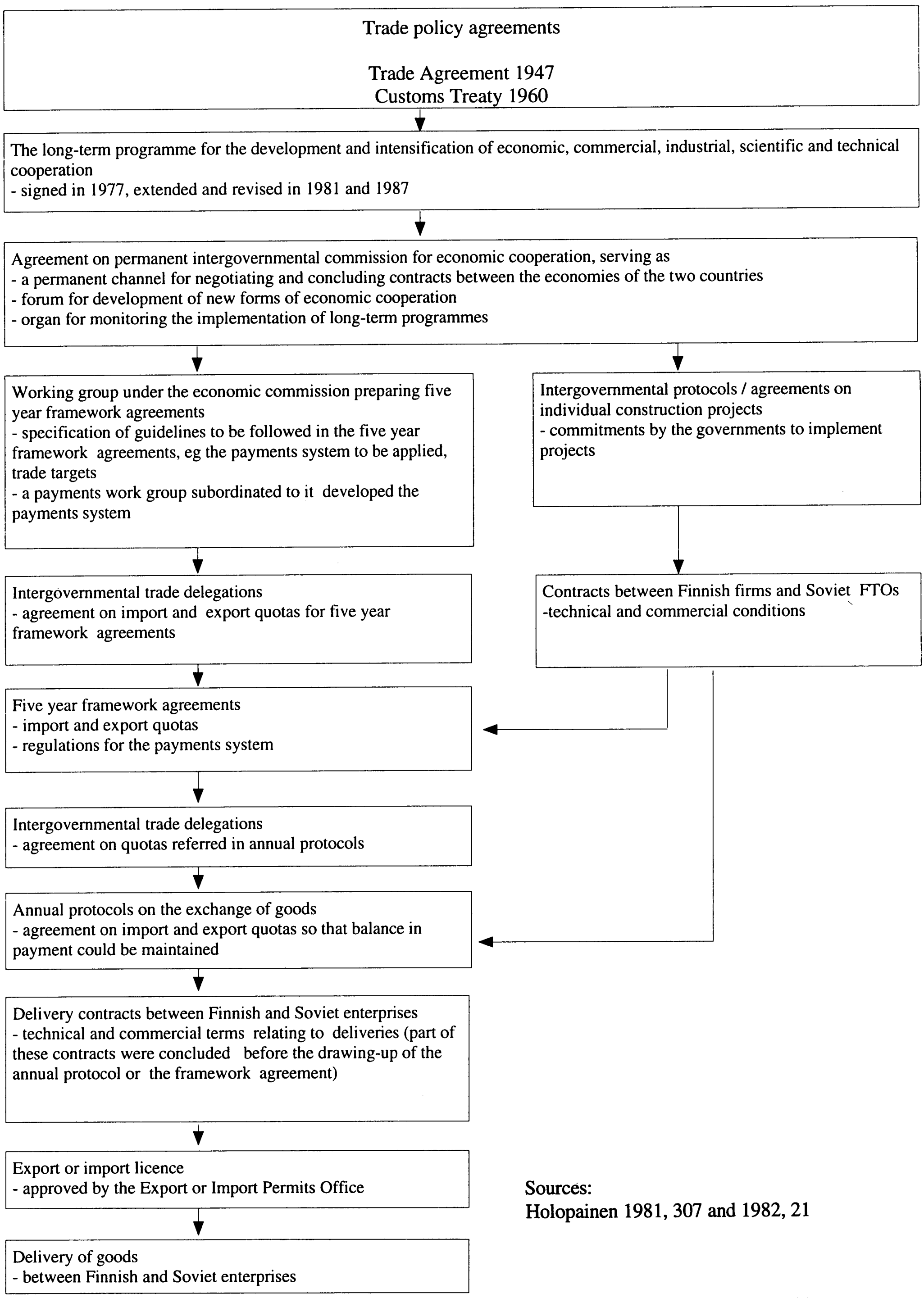
The very first trade agreement, a protocol on the exchange of goods and services and USD-denominated payments was signed between the Finland and the Soviet Union already in June 1940. The war one year later interrupted this trade. The first post-war protocol, which came into force in February 1945 was extremely narrow barter agreement. It entitled Finland to purchase grain, sugar and other foodstuffs and to pay for them with exports of prefabricated wooden houses and battleship repairs. Until 1950 the trade was based on USD-denominated protocols drawn up for one year at a time. Both prices and quantities were agreed so as to balance the trade (Rantanen, pp. 44–45).

The bilateral nature of trade between Finland and the Soviet Union is defined in the "Treaty of Commerce between the Republic of Finland and the Union of Soviet Socialist Republics" or **Trade Agreement** concluded in 1947. According to Article 1 of that agreement, "The Contracting Parties shall by all means possible develop and strengthen their mutual trade relations on a basis of equality and reciprocity". This statement of the trade agreement is considered just a starter, because after 1951 more lasting bilateral clearing trade relations were based on five-year agreements on clearing trade. In the trade agreement of 1947 the parties agreed to grant each other most-favoured-nation status.

The **Customs Treaty** of 1960 removed tariffs from manufactured products traded between Finland and the Soviet Union. Finland joined the GATT and later EFTA as an associate member. Finland concluded a free-trade agreement with the EEC in 1973, but continued to maintain the customs treaty. Finland also agreed to provide the Soviet Union with advantages comparable to those accorded its western trade partners in the EEC. It should be noted that the Soviet Union did not pledge reciprocity in this respect. In 1973 Finland proposed negotiations with the Eastern European CMEA countries on the reciprocal removal of remaining trade barriers. The agreements were concluded in 1974–1978 (Kivilahti 1988, pp. 34–35).

The contractual framework for the Finnish-Soviet clearing arrangement consisted of five-year agreements and annual trade protocols. During 1946–1990 altogether eight five-year agreements were signed and implemented. Each agreement determined the volume and content of trade for the forth coming five-year period.

Chart 3.1 **Main agreements and procedures for trade between Finland and the Soviet Union**



Sources:
Holopainen 1981, 307 and 1982, 21

The **Five-Year Agreements,** though called "payment agreements", focused on the exchange of goods and set concrete targets for trade. They contained lists of imports and exports, specifying the volumes or values of the goods to be delivered by one country to the other. The goods were grouped for quota setting by type of merchandise. To a certain extent, the agreements also covered imports and exports of services as well as border trade.

The purpose of the five-year agreements was to facilitate the decisions of the contracting parties on how much they would be prepared to buy or sell and to maintain the over-all balance required for the sound management of the bilateral trade system. The lists were prepared in cooperation with the Finnish firms and Soviet foreign trade organizations (FTOs) actually engaged in the trade. The agreed quotas provided a concrete basis for conducting trade. These quotas were not restrictively applied. In fact, actual supply and demand conditions were allowed to determine the level of trade at any given time (Holopainen 1982, p.5).

The five-year agreements stated that world market prices should be used as references and that the official SUR quotations by the Gosbank were to be applied. The account holders were the central banks: for Finland the Bank of Finland and for the Soviet side the Gosbank, to the end of 1961, then the Foreign Trade Bank (VTB) to 1988 and finally that the Bank for Foreign Economic Relations (VEB) to 1990.

The stipulation that world market prices were to be used as references did not hinder the parties' ability to negotiate and agree on prices. Indeed, the prices of individual deliveries were left to be negotiated and contracted directly between supplier and purchaser. Those Finnish enterprises involved in the eastern trade operated and competed in the market environment and set their prices accordingly. World market prices, to the extent available, were used as references or starting points in price negotiations between the partners.

In the first half of the 1950s, bilateralism was modified by concluding **tripartite protocols** on the exchange of goods. The first such protocol was concluded between Finland, the Soviet Union and Poland already in June 1949. The purpose of this arrangement was to find the appropriate means of payment for coal that Finland imported from Poland. Thereafter the tripartite agreements became a means of bringing Finnish-Soviet trade into balance. In all cases, with exception of China, Finland imported from a third country and paid by exporting to the Soviet Union. Soon thereafter, similar protocols were signed with Czechoslovakia, the Democratic Republic of Germany, Hungary and the People's Republic of China. These protocols were signed for one year at a time. In the latter half of the 50s the tripartite agreements died out because the third countries had increasing difficulties in finding imports from the Soviet Union that were eligible as payments for their exports to Finland (Hirvensalo 1978, p.31).

Finland was the first capitalist country to conclude an intergovernmental **Treaty on Scientific and Technical Cooperation** with the Soviet Union, in 1955. It was followed by the Treaty on the Development of Economic, Technical and Industrial Cooperation and other treaties on technical and scientific cooperation. As mentioned in another context, the Long-term Programme of 1977 elaborated on this and produced a number of new programmes in the field of science and technology.

The cooperation agreement between Finland and the CMEA was signed in May 1973. On the basis of the agreement a joint commission for Finland and the CMEA countries was set up to organize multilateral cooperation. The agreement represented an attempt to organize multilateral cooperation between socialist countries and a market economy (Korolev 1983, p. 79, Romanov – Simonyan 1983, p. 155). Cooperation took place in the areas of industrial cooperation, design, standardization, research and development. For instance, during the period 1975–1980 Finland and the CMEA countries signed 29 multilateral and bilateral agreements in areas such as engineering, chemistry, transport, wood, woodworking, pulp and paper industries, oil and gas and environmental protection. By 1988 some one-hundred economic or scientific-technological agreements aiming at multilateral cooperation had been signed on the basis of the Finnish CMEA commission (Kivilahti 1988, p. 34).

Similar agreements on economic, scientific and industrial cooperation agreements were also concluded with other CMEA countries: Czechoslovakia and Rumania as well as Bulgaria, Hungary and Poland. Reciprocal abolition of trade barriers were agreed in specific "Kevsos-agreements" concluded with Bulgaria, Czechoslovakia and Hungary in 1974 and Poland in 1978 (Korolev 1983, pp. 79–81).

Since the CMEA was open only for socialist countries, Finland, being a capitalist country, had to resort to special arrangements to deal with the CMEA. For this particular purpose a special commission consisting of representatives from Finland and the CMEA countries was set up to discuss and agree on forms and terms of cooperation (Holopainen 1982, p. 7). As a result, Finland did not participate in the activities of the CMEA. Instead, the "multilateralization" efforts were narrowed down to the commercial, industrial, technological and scientific sphere but did not cover trade or customs. The bilateral norms of trade had already been defined in other agreements. In practice, the most important areas of cooperation were 1) construction projects, 2) production, particularly in the area of ship building, and 3) third countries, such as Cuba, Iran, Iraq, India and Pakistan. Usually the Finnish party participated as a sub-contractor in these projects. Due to the fact that each project required its own specific tailoring, a special working group was established to support this mode of cooperation (more in Erma 1983, pp. 86–89, Korolev 1983, pp. 79–85, Schiavone 1981, pp. 92–94).

Cooperation in the implementation of major construction projects in the territory of Finland, the Soviet Union and third countries had continued during the 1970s. Among the major projects were the reconstruction of the Saimaa Canal in 1963–1968, construction of the natural gas pipeline from the Soviet Union to Finland, two 440 MW units for the Loviisa nuclear power station in Finland, the Kostamus (Kostomuksha) mining complex in the Soviet Union, including construction of a town for more than 5000 inhabitants, etc. (Kulev 1983, pp. 122–136, Möttölä 1983, pp. 311–320).

Joint projects in third countries were located mainly in the near-East and north African countries. About fifteen firms with Soviet ownership operated in Finland, involved mostly in trading and promotion of sales of Soviet products in Finland.

Direct investment flows to the Soviet Union could be started in 1987 and in some cases payment could be channelled through clearing accounts. Immediately after the termination of clearing, Finnish firms participated in 207 operational joint ventures or were in the process of starting their operations in the Soviet Union. Half of these joint ventures located within the territory of now independent Estonia (Laurila 1992, pp. 7–8).

Fairly little cooperation was possible in banking in terms of direct contacts between Finnish and Soviet banks. All payments were channelled through the clearing accounts of the Bank of Finland and the VEB. Financial operations through clearing were highly restricted. Some Finnish commercial banks opened representative offices in Moscow and participated in syndicated loans to the Soviet Union in the 1980s. Also, the tentative request (raised for the first time by Mr. Dementshev, chairman of the Gosbank, in connection with his visit to Finland in December 1986) that possibilities be considered for establishing a Soviet-owned bank in Finland that would participate in clearing operations was turned down by the Finnish authorities. This would have set a precedent for unequal treatment of foreign banks in Finland and would have cast a shadow on banking relations between Finland and other western countries.

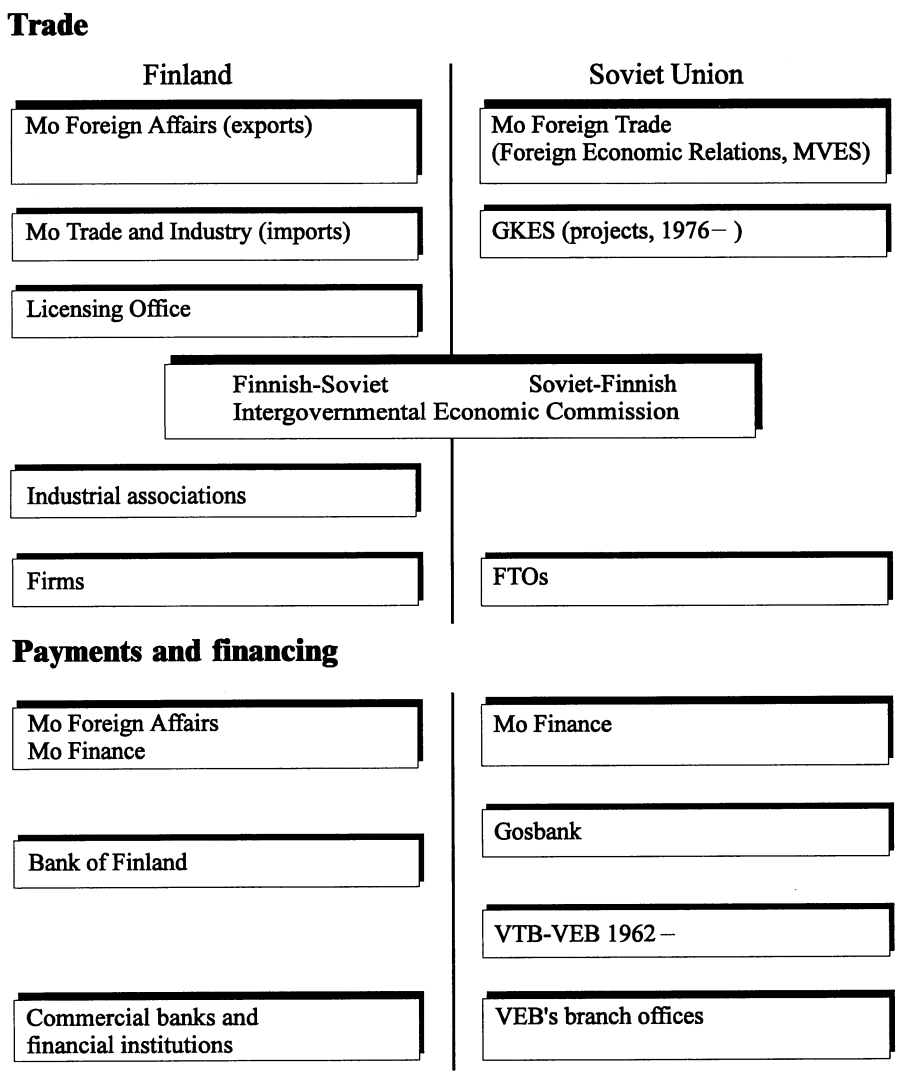
A fairly specific subspecies of clearing trade, **Finnish-Soviet border trade**, deserves mention here. It took place in the form of direct regional bartering and was launched in mid-1958 for trade between Finland and Leningrad. Border trade exports from Finland consisted mainly of consumption goods and imports (mainly timber) from Leningrad and, later on, from the expanded border trade area. The selection of import goods from V/O Lenfintorg (a foreign trade organization in Leningrad) remained quite limited and thus the share of border trade never grew to more than 2–3 per cent of the total value of Finnish-Soviet clearing trade (Keskinen 1987, pp. 290–291).

The border trade payment system was accommodated entirely within the Finnish-Soviet clearing system. It was not regulated by a separate agreement. Instead, in each 5-year agreement, annual protocol and quota there was a special heading for border trade (Rantanen 1983, p. 47). The border trade regime was in the hands of a permanent working group for border trade under the Economic Commission. Authorizations had to be obtained beforehand from the Finnish Licensing Office. In principle, each individual barter transaction had to be balanced. Payments were transferred through the rouble clearing account. On the Soviet side V/O Lenfintorg had the sole right to carry out border trade. After mid-1987, Estimpex, Interlatvija, Litimpex and a number of other enterprises such as Leningrad-Impex and Kola Association (in 1989) received similar rights. They searched for appropriate partners from a fairly large area of about 60 million people in 1987. The border trade area on the Soviet side included the Baltic republics, the autonomous republics of Karelia, Komi, Bashkir and Udmurtia as well as 19 provinces (oblast) of the Russian Federation, including the Gorki and Moscow areas (but not the city of Moscow) in 1987.

In Finland clearing was administered by the Ministry of Foreign Affairs (exports), the Ministry of Industry and Trade (imports), the Licensing Office (licensing), and the Bank of Finland (payments), convening within the framework of the permanent Economic Commission to cooperate and deal with its counterpart on the Soviet side (chart 3.2).

The Permanent Finnish-Soviet Intergovernmental Commission for Economic Cooperation (Economic Commission) was established in February 1967, for five years at a time, by a presidential decree. It functioned as an administrative short cut through the hierarchical bureaucracies of the central governments. Its purpose was to eliminate the demarcation line between public and private decision-making in Finland (Salminen 1983, pp. 3, 34, 43) and to offer a forum for cooperation between the two governments.

Chart 3.2 **Institutions for clearing trade and payments administration in Finland and the Soviet Union, 1951–1990**



Remarks: Mo = Ministry of; for other abbreviations, please consult the list of abbreviations.

The Economic Commission maintained a permanent secretariat both in Helsinki and Moscow. It served as a forum for trade policy decision-makers from the two countries. Formally, the Economic Commission was in charge of the development of new forms of cooperation and monitoring the implementation of long-term programmes. The tasks of the Economic Commission were 1) to study questions connected with the possibilities of further development of economic relations between Finland and the Soviet Union, 2) to prepare proposals aimed at the continuous expansion of Finnish-Soviet economic ties, 3) to deal with questions related to the implementation of commercial and other economic agreements between Finland and the Soviet Union, and 4) to coordinate Finnish-Soviet economic cooperation (Rantanen 1983, p.49).

The annual plenary meetings of the Economic Commission – usually held in September-November of each year – were chaired by the prime minister, with the Minister for Foreign Affairs and Minister of Trade and Industry as alternates. Meetings were attended by 18–20 permanent members representing the directors of major industrial associations and major eastern-trade companies. The Bank of Finland was also represented. In addition there were some 20 working groups doing preparatory work and meeting when necessary with their Soviet counterparts.

The Economic Commission in practice served as a forum for trade policy leaders, whereas the operational responsibilies fell largely to the Ministry for Foreign Affairs and the Department for External Economic Relations (Kauppapoliittinen osasto).

Important from the view point of the development of the clearing payment system was the work performed by the **working group on payments and financial questions**, established in 1988. The establishment of the financial working group under the Economic Commission contributed to the development of the clearing mechanism by bringing together bankers and financial experts from the public sector. The system was reformed, however, along conventional lines by introducing a protective procedure against rouble devaluation (see Technical Annex) and the more efficient clearing of 1989–1990.

Establishment of the working group on payments and financial questions opened the doors for direct discussions between competent financial experts from both sides on systemic questions and helped in the search for practical solutions. Payment and financial questions had tended to remain unsolved in the ordinary trade negotiations. Often trade authorities were not well informed about the financing and payment issues. Delegates from the Bank of Finland participated in trade delegations in the capacity of experts on banking, payments, financing and foreign exchange control. Their counterparts in the Soviet administration were dispersed in the Ministry of Finance, Gosbank and VEB and therefore participated in trade negotiations only occasionally. Consequently, in negotiations concerning annual protocols the issues of system development were crowded out by more current issues about quantities to be exported and imported or how the annual trade could be brought into balance.

From the viewpoint of the practical management of the clearing trade system, one important organ was the Finnish **Import and Export Permit Office (Licensing Office)** working under the auspices of the Ministry of Trade and Industry. Licensing activities were initiated already on the eve of the war, when the State Council decreed a Licensing Commission on 1 September 1939 to monitor exports and imports. The permanent office was established on 1 September 1953 to regulate foreign trade. During the 1980s the Licensing Office concentrated on the regulation of clearing trade. Licensing activities were gradually dismantled and the office was closed on 1 September 1993, having operated for exactly 40 years. The remaining responsibilities (eg licensing high technology exports) were moved to the Ministry of Trade and Industry.

During the 1980s the regulation of the rapidly growing Finnish-Soviet clearing trade became a principal task of the Licensing Office. The Licensing Office was the most central executive organ to regulate this trade. This was reflected by the fact that all decision-making authorities were represented on the board of directors of the Licensing Office: Ministry for Foreign Affairs, Ministry of Trade and Industry, Ministry of Agriculture, Ministry of Finance, and the Bank of Finland.

Notably, in the Soviet Union there was no licensing office up until May 1988, when it was established to govern the recently gradually deregulated foreign trade. The one-sided responsibility increased the burden of work of the Finnish Licensing Office in the 1980s.

The **Finnish firms** were free to choose whether or not to participate in clearing. For those firms that chose to participate, the Finnish **industrial associations** acted as coordinators between the ministries and themselves. These associations are private organizations established by their member firms, and they assisted in obtaining the proposals for clearing exports and imports and forwarded the proposals to the ministries. In doing this, they assumed a passive role, not being involved in the substance.

The other important organization for the administration and management of Finnish-Soviet clearing – and the most central from the viewpoint of clearing payments intermediation – was the **Bank of Finland**, i.e. the central bank. As in almost all other countries, in Finland the government had given the Bank of Finland a mandate to hold the accounts and transfer the clearing payments.

Historically, the Bank of Finland had been given a role in foreign exchange controls through legislation on safeguarding export trade, which came into force in 1933 (Bäckman 1954, pp. 17–20 and 60–72; Kastari 1955, pp. 215–216). At that time the Government introduced payment agreements with certain western countries. In this connection accounts were opened and the payment transfers were directed through the Bank of Finland. Also the membership of the Bank of Finland on the board of directors of the Licensing Office can be ascribed to this role (Kastari 1955, p. 225, and 1959, p. 652).

The question of the ultimate ownership of the assets and liabilities was first raised already in the 1930s. The liquidity crisis in the Soviet Union in 1991 raised the question again. Based on the findings of a working group with representatives from the Ministry of Finance, Ministry for Foreign Affairs and the Bank of Finland, the Counsellor of Justice confirmed in August 1991 that the balances on the accounts with the Bank of Finland were the responsibility of the Government. Of course, all the essential measures must have been authorized beforehand by the Government.

For the sake of administrative expediency, the Bank of Finland delegated part of its regulative powers to the **commercial banks**. This delegation of control within the limits and conditions set by the Bank of Finland is based on a decision of the Council of State. By virtue of this delegation, customers could get their payments authorized at the counter. As will be explained in detail below, the Bank of Finland monitored the compliance of the commercial banks and their customers with the foreign exchange regulations.

Another reason for delegation of the payment transfers and their control to the commercial banks was the Bank of Finland's intention to stand on its position as a central bank. Therefore it avoided interventions or even direct contacts with the firms engaged in Soviet trade and preferred to operate only through the major banks authorized to settle clearing rouble transactions (Obláth – Pete 1990, p. 98). These aspects of delegation and monitoring will be discussed below from the viewpoint of controls in section 3.4.

For a number of practical reasons, the position of the Bank of Finland grew to be even more central than originally intended:

– the Bank of Finland financed the clearing overdrafts at its own expense. The balances on the clearing account were recorded in the Bank of Finland's balance sheets as a part of the foreign exchange reserves. These balances were usually in surplus and were non-interest bearing.

– the Bank of Finland conducted the foreign exchange control and monitoring necessary to keep the clearing regime operational

– the Bank of Finland collected the data on trade and payments from customs, commercial banks and the Licensing Office and compiled statistics to be used in making forecasts of trade developments for trade negotiations, monitoring trade and payments developments and compiling the balance of payments statistics.

– the Bank of Finland was given a mandate to handle the banking operations related to the clearing payment arrangement on behalf of the government. This was reflected in the standard paragraph of the payments agreements, stating that "The Bank of Finland and the Foreign Trade Bank of the USSR will jointly agree on the technical banking arrangements necessary for the transfer of funds referred in this agreement." (Para 9 in the Finnish-Soviet payment agreement).

3.2 Clearing trade management

The overall operational objectives for planning and control in Finnish-Soviet clearing trade were:

1) to maintain balance between imports and exports at a high or the highest possible level of trade;

2) to ensure that individual export and import deliveries were consistent with the quotas set in the annual trade protocols;

3) to ensure that bilateralism was maintained in the clearing of exports and imports.

The Economic Commission was in charge of planning and agreeing on the level and balance of the trade as well as the main rules to be followed. The work was performed with the help of the ministries and the Bank of Finland. The results materialized in the five-year agreements and annual protocols. These documents served as guidelines for authorities, and particularly for the Licensing Office, which was in charge of implementing the plans in accordance with the annual protocols.

The Licensing Office exerted advance control by granting import and export permits. In addition it monitored the compliance of importers and exporters with the permits in cooperation with customs and the banks. The purpose of the Licensing Office control was to keep the clearing trade bilateral and to maintain the clearing trade balanced at the highest possible level. The Licensing Office checked that the annual protocol quotas were observed by the entrepreneurs. On the export side, the Licensing Office checked that the domestic content of exported goods was adequate, usually around 80 per cent. Materials and semifinished goods of Soviet origin were treated as domestic (because they were imported through clearing). According to estimates of the Licensing Office, domestic content was about 85 per cent on average during the 1980s. Less than two years after the discontinuation of Finnish-Soviet clearing, the domestic content of exports to the Russia had fallen to about 65 per cent (Aho 1993, p. 7).

The purpose of the domestic content requirement was to maintain bilateralism by hindering third countries from channelling their exports to the Soviet Union through the Finnish-Soviet clearing. On the import side, the Licensing Office checked that goods originating in the Soviet Union were not circulated through third, convertible-currency countries to be settled in convertible currencies.

Chart 3.3 **General authorization guidelines of the licensing office during the latter half of the 1980s**

	Clearing trade	Convertible currency trade with clearing countries
Import	Permit, importer had to show permit to customs when declaring imports of – oil – food – animals	Permit required for all imports
Export	Permit required for all exports the value of which exceeded FIM 2000 per delivery + domestic content requirement	Permit required for all exports (automatically given)
Trading	Authorization of the BOF required	

Chart 3.3 illustrates the extent of the authorization activities of the Licensing Office in the latter half of the 1980s. Some imports, such as oil, food and animals, were licensed globally to apply to all countries.

The Licensing Office had some leeway, depending on the clearing balance situation. In a deficit or small surplus situation export quotas could be exceeded. Also, in considering the domestic content, the nature of the product could be taken into account. The staff of the Licensing Office was 25–30 persons during the 1980s, and they processed about 60 000–70 000 import and export permits a year (Aho 1993, p. 9).

On the Finnish side, the President of the Republic appointed a trade delegation to handle the negotiations. The actual work of forecasting, planning and negotiating the export and import volumes for the annual protocols took place in the Ministry for Foreign Affairs, Ministry of Trade and Industry and the Bank of Finland. The annual trade protocols were drafted by three working groups: export group, import group (dealing mainly with volumes to be exported and imported) and finally the payments working group, bringing together the combined effects of planned export and import volumes in the clearing balance. Most of the actual work of calibrating trade volumes and fore casting was performed in the Bilateral Trade Department of the Bank of Finland.

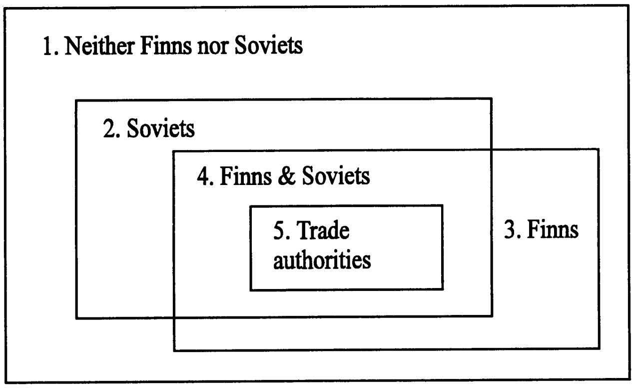
Trade negotiations proceeded quota by quota on the export and import side. Only volumes were negotiated. Prices were assumed to remain unchanged from the time of the negotiation. In any case, the prices were to be negotiated later by the contracting parties. The Bank of Finland's Bilateral Trade Department conducted a specific follow-up of the progress of ship and project exports to the Soviet Union and their financing. Also, information on imports of crude oil and oil products were obtained directly from importers (Korhonen 1988, p. 16).

As an internal exercise at the Bilateral Trade Department, weekly, monthly and quarterly checks were done in order to adjust the forecasts in light of actual developments. The round of protocol negotiations was launched every autumn, starting with actual developments and comparing them with the forecasts.

By monitoring delivery dates and corresponding payment dates, made available to the Bank of Finland by the exporting and importing enterprises, these and other leads and lags and financing loans could be taken into account. Using the information received from the export and import working groups and taking into account import and export financing, services and border trade, the "balance of payments" working group summed the amounts of both exports and imports to come up with the clearing balance at prevailing prices.

Unfortunately, the planners involved in the Soviet-Finnish clearing trade could neither foresee nor affect most of the factors, changes in which determined the level and the balance of the trade. Chart 3.4 (presentation according to Tervonen, internal memorandum) illustrates schematically from an institutional point of view, how little the Finnish authorities could affect the factors that determined both the level and the balance of the clearing trade. The authorities could to an extent affect the volume of imports, but their role was mainly to do their best to accommodate the shocks and surprises coming from the outside and still maintain Finnish-Soviet trade at the highest possible level and in reasonable balance.

Chart 3.4 **The spheres of influence of the Finnish and Soviet trade authorities**



Remarks:

Factors falling in sphere 1:
- Market price of crude oil
- Other world market prices
- USD exchange rate

Factors falling in sphere 2:
- SUR/USD rate quoted by the Gosbank
- Domestic demand for oil in the USSR
- Domestic production and transport capacity for oil in the USSR
- Availability of import goods other than oil

Factors falling in sphere 3:
- Estimated exports of Finnish firms to the USSR
  - Domestic prices of export products

Factors falling in sphere 4:
- Volume of imports from the USSR

Factors falling in sphere 5:
- Volume of Finnish exports to the USSR
  - clearing balance: surplus, deficit or balanced?
  - possible financing

Procedurally, in the annual negotiations, the import volumes were fixed prior to attempting to do the same on the export side. The indicative volume of imports from the Soviet Union was a joint decision by the parties, falling within sphere 4 of chart 3.4. When making the projections, the world market prices prevailing at the time of the negotiations – usually in October-December – were applied in drafting the annual protocol for the following year. Thus, the negotiators of the annual protocols refrained from guessing at changes in exchange rates and export and import prices during the coming year. The related problems will be discussed and illustrated further in section 4.4 "Reasons for the chronic imbalances".

Pre-negotiation meetings were arranged in the latter half of 1980s to adjust agreed volumes to actual developments. This was necessary to take into account oil and other price changes, USD exchange rate variations as well as discrepancies between planned and actual deliveries under each quota. For instance, due to the collapse of oil prices an additional protocol on increased oil imports from the Soviet Union was signed on 27 June 1986. The authorities from both sides could jointly decide on other related questions, such as quotas for border trade, services, possible trade financing and the clearing balance itself.

In principle, the only change the Finnish trade authorities could make independently was **to reduce the volume of Finnish exports** (sphere 5 in chart 3.4). In practice this was not possible, but the volume of Finnish exports tended to follow the quotas fixed in the annual protocols (Korhonen 1988, p. 18). Even here the room for manoeuvre was limited. Contracts signed and in force could not be abruptly cancelled.

On the other hand, there were an number of factors unequivocally beyond the reach of decision of both the Finnish and the Soviet party (sphere 1 in chart 3.4). Changes in the most important determinants of Finnish-Soviet trade, such as the external value of the US dollar and the world market price of oil, were sizable and sudden. As noted above, about 75–80 per cent of Finland's imports from the Soviet Union consisted of oil and its derivatives, which were priced in US dollars at the world market price.

The rest of the imports from the Soviet Union and all exports could be priced only in clearing roubles. In all cases, the conversion from contracting currency to roubles would take place by applying the Gosbank's quotations. In Finland again, all conversions between the CLSUR and FIM had to take place applying the Bank of Finland's quotations.

The external value of the clearing rouble was again administratively determined by the Gosbank but, through its currency basket, was affected by changes in the external value of the USD. The conversion from US dollars to roubles took place using the SUR/USD rate quoted by the Gosbank ($[\mathrm{SUR/USD}]_{\mathrm{GOB}}$). Oil importers in Finland, Neste (state ownership), Teboil and Suomen Petrooli (Soviet ownership), had to purchase the clearing roubles needed to pay the import bills according to the FIM/SUR rate quoted by the Bank of Finland as a cross rate from the FIM/USD and SUR/USD rates using the formula $\mathrm{FIM/SUR}_{\mathrm{BOF}} = (\mathrm{SUR/USD})_{\mathrm{GOB}}/(\mathrm{FIM/USD})_{\mathrm{BOF}}$.

3.3 Clearing payment management

The holding of clearing accounts is generally the obligation of the central banks of the member countries that have signed the clearing agreement. In Finland the holder of the main account was the central bank (Bank of Finland); in the Soviet Union the account holder was the Gosbank until 1962 when the VTB (since 1988 the VEB) took over the responsibility.

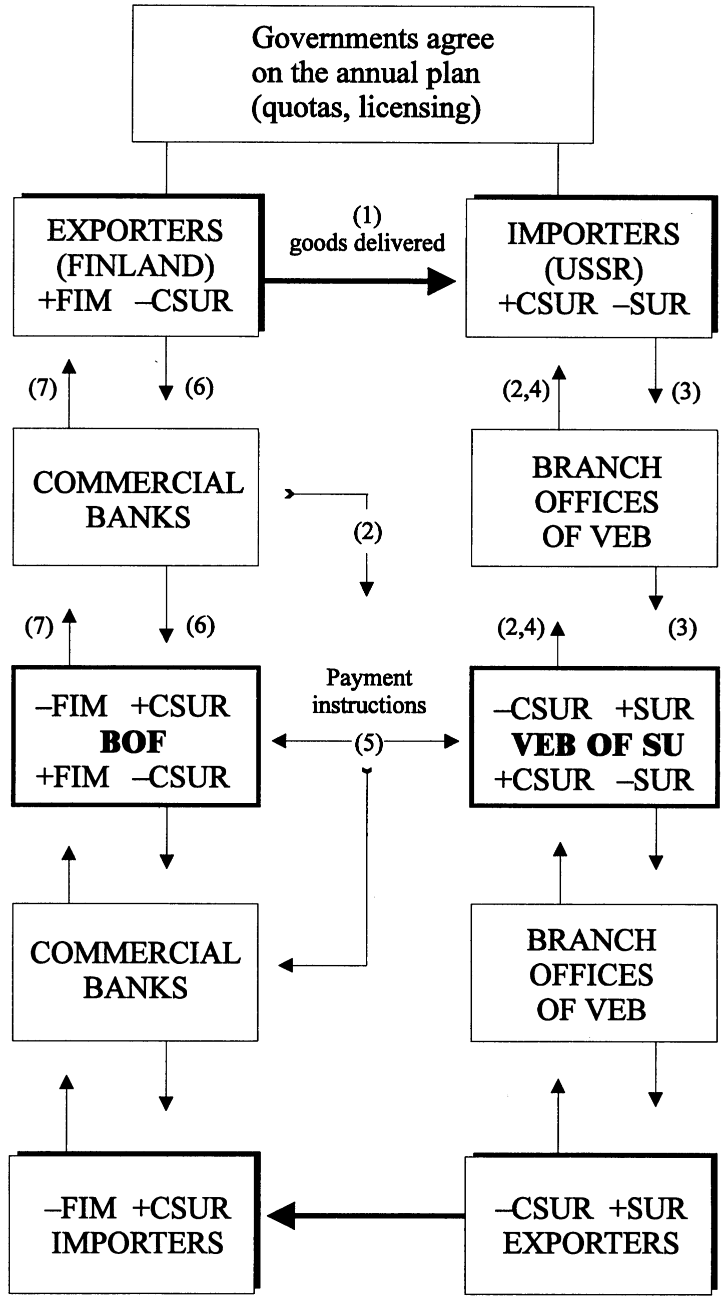
It is important keep in mind, that **any excess of exports could be balanced only by increasing imports**. In terms of clearing financing and accounting this implied that 1) the clearing receivables of the Bank of Finland on its account with the VEB could only be used to pay for Finland's imports from the Soviet Union, and that 2) the only way the Bank of Finland could replenish its markka-cover to purchase clearing roubles from exporters was to sell clearing roubles to Finnish clearing importers.

Chart 3.5 shows the technical implementation of the Finnish-Soviet clearing arrangement. The Bank of Finland had opened a clearing account with the VEB in which all export claims were to be recorded; the VEB had opened a similar account with the Bank of Finland. The accumulated receivables could the be used only to pay for imports from the Soviet Union to Finland. In addition to these main accounts, a number of subaccounts were opened to expedite payment transfers (chart 3.7). All clearing payments were, however, channelled through the main accounts.

The payments were effected through these accounts as follows: Having delivered the merchandise (1 in chart 3.5) the Finnish exporter turned to a Finnish commercial bank. The Finnish commercial bank sent collection orders and other commercial documents to the VEB. Thus the Soviet importer was invoiced through the VEB (2). The Soviet importer then purchased, using internal (ordinary) roubles (3), clearing roubles (4) from the VEB. The Bank of Finland then received a payment order or advice of payment related to the collection order (5). At this point the clearing surplus increased (deficit decreased) or, with other words, the non-convertible reserves of the Bank of Finland increased. Once notified by the VEB, the Bank of Finland converted the clearing roubles into markkaa. The conversion included an inflow of clearing roubles (only in the Bank of Finland's accounts) to the Bank of Finland and an equivalent outflow of Finnish markkaa from the Bank of Finland to the Finnish exporter (7). Thus the non-convertible reserves of the Bank of Finland increased and convertible reserves decreased.

The lower part of chart 3.5 depicts an import transaction which is a mirror image of an export transaction. The import transaction ends up as an inflow of Finnish markkaa to the Bank of Finland and a reduction in the Bank of Finland's CLSUR reserves.

Chart 3.5 **Implementation of the payment system in Finnish-Soviet intergovernmental bilateral clearing**



Similarly, Soviet importers purchased clearing roubles with internal (national) roubles and Soviet exporters sold clearing roubles against internal roubles (with purchasing rights from Finland through clearing). The nationals of both parties only used their **national currencies**. A third currency, in this case the clearing rouble, acted only as a **unit of account**. No payments in cash were transferred between the central banks. Only payment orders on each and every payment transfer were exchanged for accounting purposes by mail, telex and, during the very last years, by SWIFT. In addition, the Bank of Finland sent statements of account to the VEB. The VEB in turn reconciled the statements and informed of possible discrepancies.

To avoid misunderstanding, it should be emphasized here that the Finnish markka was (officially since 1958) and continues to be a freely convertible currency (Lehto–Sinisalo 1992, pp. 13 and 35). The Soviet rouble was not convertible. According to Soviet foreign exchange legislation, roubles could not be legally taken out of Soviet territory. As mentioned above, the clearing roubles (CLSUR) and clearing markkaa (CLFIM) were not currencies at all, but merely units of account.

In general, a net increase in exports increases the incoming clearing payments and hence the clearing surplus (or it reduces the deficit); a net increase of imports has the opposite effect. The effects of the various kinds of transactions on the clearing balance are shown in chart 3.6.

Chart 3.6 **Effects of various transactions on the clearing balance of the Bank of Finland**

Outgoing clearing payments leading to increase in clearing surplus or decrease in clearing deficit	Incoming clearing payments leading to decrease incl. surplus or increase incl. deficit
– import payments – advance payment to counterpart – transfer of funds from main cl-account aside to a special account = to debit the VEB's special account with the BOF and to credit the main clearing account – repayment to counterpart for financial loan – disbursement of financial loan to counterpart	– export payments – advance payments received from counterpart – repayment of funds from special account to the main clearing account = to credit the VEB's special account with the BOF and to debit the main clearing account – receipt of repayments of financial loan extended to counterpart disbusement of financial loan from counterpart

Outgoing clearing payments reduce the clearing surplus or increase the deficit. There is an inflow of FIM from the Finnish money market to the Bank of Finland. Incoming clearing payments increase the clearing surplus or reduce the deficit and cause a corresponding outflow of FIM from the Bank of Finland to the money market. Supplier's credits represent only advances or postponements of clearing payments.

The most important account was the main clearing account, ("Account no. 5"). All clearing payments, including the relatively modest flows of clearing markka payments, were finally channelled through this account. At the end of each calendar year (or whenever either of the parties requested it) balances on subaccounts 5 and 5A were transferred to the main account. The accounts and subaccounts numbered 5 were CLSUR-denominated clearing accounts for commercial payments. Subaccounts numbered 5A were CLFIM-denominated clearing accounts for non-commercial payments. Also FIM and SUR accounts opened at Finnish commercial banks were for non-commercial payments of the banks' clients. Transfers of convertible currency payments from Finland to the Soviet Union could take place outside of the clearing accounts only once they were authorized by the Bank of Finland. The entire system of clearing accounts and sub-accounts is summarized in chart 3.7.

Chart 3.7 **System of clearing accounts between Finnish and Soviet banks**

with whom> who opens	BOF Helsinki	VEB Moscow	VEB Leningrad	VEB Tallinn	Finnish c. banks
BOF Helsinki		a 5 sa 5A	sa 5 sa 5A	sa 5 sa 5A	
VEB Moscow	a 5 sa 5A				sa FIM
VEB Leningrad	sa 5 sa 5A				sa FIM
VEB Tallinn	sa 5 sa 5A				sa FIM
Finnish c. banks		sa SUR			

Remarks: a = account, sa = subaccount. All accounts in clearing roubles except VEB accounts with Finnish commercial banks (c. banks in the last column of chart).

These CLSUR accounts were opened for the sole purpose of effecting all commercial payments between Finland and the Soviet Union. All CLFIM subaccounts were opened to effect non-commercial money transfers. The volume of CLFIM transactions always remained small compared to CLSUR transactions.

The non-commercial clearing payments represented transfers to cover 1) traveller's cheques denominated in markkaa, 2) maintenance costs in respect of diplomatic, commercial, cultural and other representative offices of Finland and the Soviet Union, 3) royalties and artists' fees, pensions, alimonies, inheritances, gifts and other payments not related to trade in goods or services, and 4) participation fees for congresses (Foreign Exchange Regulations of the Bank of Finland). The balances of these clearing-markka accounts always remained relatively small due to the non-commercial nature of the transactions. The clearing-markka balances were frequently transferred to the main clearing-rouble account with the Bank of Finland.

Already in the 1930s major Finnish commercial banks had opened their own accounts with Roscombank (predecessor of the VTB). These accounts were converted into CLFIM-denominated subaccounts for the CLSUR-denominated bilateral main account (Hirvensalo 1979, p. 58). The decentralization of accounts was, however, merely nominal. The bulk of the payment flows was always channelled through the main account.

The accounts opened with Finnish commercial banks were used to expedite services on the Finnish side. The subaccounts opened with the Leningrad and Tallinn offices eliminated the need to circulate payments via Moscow. The opening of Leningrad accounts was triggered by the increased payment volumes generated by the border trade. The Bank of Finland opened clearing accounts in June 1988 with the Estonian Republican bank, which was at that time a branch office of the VEB. The purpose was to expedite the increased volumes of payment transfers between Finnish and Soviet-Estonian enterprises with Finnish ownership and to avoid circulating payments through the Leningrad branch of the VEB.

In addition to the permanent accounts shown in chart 3.7, also Finnish enterprises, with the permission of the Bank of Finland, opened a number of temporary SUR-denominated accounts with Finnish commercial banks. The clearing payment transfers through these accounts were usually related to the implementation of a project in Finland or to loans involving numerous incoming and outgoing payments. By having these accounts the firms could avoid paying excessive agios to commercial banks. The accounts were usually closed as soon as the underlying transaction (eg a construction project) had been completed.

Particularly during the 1980s the balances on accounts with Finnish commercial banks tended to increase excessively. Therefore, after 1986, the VEB gave the Bank of Finland the right to transfer monthly balances to the main account. Only the balances necessary for current transactions were left on subaccounts. The Bank of Finland committed itself to providing commercial banks with sufficient coverage to conduct these transactions. The markkaa on the subaccounts opened by the VEB with Finnish banks were to be converted into roubles using the FIM/CLSUR rate quoted by the Bank of Finland at the date of transfer.

Import bills were paid in convertible markkaa by the Finnish importers using the FIM/SUR quotations plus the banks' service agios. In addition to these service agios, the commercial banks charged their clients their standard commissions and other fees. Finnish exporters obtained their export receipts in Finnish markkaa after deduction of banks' service agios, commissions and other fees.

Between the Bank of Finland and the customers the payments could be routed through alternative channels depending on the payment mode. The major part of clearing payments (80–90 per cent in both volume and value terms) were effected in the form of collection orders. Letters of credit were used only to minor extent, by certain firms when paying or receiving freight and/or harbour payments. Orders of collection and letters of credit were processed by the Bank of Finland and the commercial banks jointly. Clean payments were handled by the central bank and customer (firm) directly except that the payment was transferred to the customer by crediting his account with a commercial bank.

During the first half of the 1970s all documents were forwarded through the Bank of Finland. During the latter half of the 1970s the Finnish commercial banks established representative offices in Moscow. In this context, they expressed their willingness to participate in processing payments of their own customers. The Bank of Finland and VEB had agreed not to charge each other for banking services. The commercial banks wanted to take part in the clearing of payment transfers in order to earn premia or agios for their services. In the latter part of the 1980s the Bank of Finland started to quote only central rates instead of selling and buying rates.

The margin was fixed ± 0.012 FIM per CLSUR around the central rate quoted by the Bank of Finland. Let us assume that the central rate is 7.00 FIM/CLSUR. The commercial banks were prepared to buy clearing roubles from exporters for 6.988 FIM/CLSUR less their own commissions and other fees. The Bank of Finland again would buy them from the commercial banks at a price of 6.996 FIM/CLSUR. Thus, the service agio for the commercial banks was 6.996–6.988= 0.008 FIM per

CLSUR, and to the Bank of Finland 7.00–6.996= 0.004 FIM per CLSUR. The formula worked symmetrically in the opposite direction: the commercial banks sold clearing roubles to importers at a rate of 7.012 FIM/CLSUR plus their own commissions and other fees. The rate at which the Bank of Finland converted the commercial banks' clearing roubles was 7.004 FIM/CLSUR. In the case of clean payments, i.e. where the Bank of Finland dealt directly with the clearing exporters or importers, the Bank of Finland kept the entire service agio of 0.012 FIM per CLSUR. Note that the service agios were fixed markka amounts charged or paid per rouble (notation FIM per CLSUR above), i.e. they were not affected by change in the FIM/CLSUR exchange rate.

These service agios were set by the Bank of Finland and were never changed. The service agios were maxima; commercial banks could reduce them if they wanted. This never happened, although Finnish firms, and particularly the handful of oil importers who were in a monopolistic position and received the bulk of the payments, tried to put pressure on the commercial banks to reduce the service agios.

During the 1980s the Bank of Finland effected only clean payments (25 per cent in volume and 10 per cent in value terms) without the help of the commercial banks. The total through-put of the Finnish banking system amounted on average to about 20 000 outgoing and 25 000 incoming clearing payments a year in the 1980s, corresponding to values of USD 2.7 billion of import payments and USD 3.2 billion of export payments respectively (table 3.1).

Table 3.1 **Volumes and values of different modes of clearing payment transfers transmitted by the Finnish banking system in the 80s, annual averages**

	Export-related incoming payments	Import-related outgoing payments
No. per banking day of		
– Collection Orders	30–60	30–60
– Letters of Credit	4–5	4–5
– Clean Payments	50	30
– Total average	100	80
Average annual volume[1)]	25 000 transfers	20 000 transfers
Average value of X or M		
– a year in the 80's	USD 3.2 bill.	USD 2.7 bill.
– a banking day[1]	USD 12.81 mill.	USD 10.87 mill.

Source: discussions with officials in charge of these activities in the 1970s and 1980s.

1) Assuming that there are on an average 250 banking days a year. The rate of conversion USD 1 = FIM 5.50 is applied here.

Projects implemented jointly with the Soviet Union created a large number of both incoming and outgoing CLSUR payments. In these cases, the Finnish partner firms were authorized by the Bank of Finland to open CLSUR-denominated accounts exempt from surrendering obligations (within 8 days of obtaining foreign currency receipts) to avoid excessive agio expenses. A number of such accounts were opened on a fixed-term basis by firms implementing projects jointly with the Soviet Union in Finland or having an exceptional number of import and export payments to be effected simultaneously or within a limited period of time.

3.4 Controls and monitoring of clearing payments

The operational rules for controls were codified in the "Foreign Exchange Regulations", published and updated by the Bank of Finland. Parliament delegated controlling power through the Council of State to the central bank. According to the "Foreign Exchange Act" the central bank may, based on the decision of the Council of State, "... so as to forestall any serious disturbance threatening the country's external liquidity and stable monetary conditions ..." by means of prior authorizations or other methods control both invisible transactions and capital transactions (including direct and portfolio investments) between residents and non-residents. The legislation was enforced in periods of five years and was almost completely liberalized by the end of 1990 (legal texts No 954, Foreign Exchange Act, Issued in Helsinki 13 December 1985 and legal text No 955, Decision of the Council of State on the Execution of the Foreign Exchange Act, Issued in Helsinki on 13 December 1985 with later amendments).

The rationale for clearing payment controls lay in the fact that compliance with the requirement of effecting all commercial payments between the two countries through clearing accounts was not in the parties' own interests. Both sides would have preferred to maximize their own benefits by paying for imports to the greatest extent possible in clearing roubles and charging for exports to the greatest extent possible in convertible currencies.

The objective of clearing payment controls was to see that the CLSUR was used in all commercial transactions. On the one hand, the aim was to keep the convertible and clearing currency systems separated from each other so as not to finance eastern trade with convertible currencies. As applied in Finland, all payments to the Soviet Union for **clearing imports to Finland** were effected in clearing roubles and not in freely convertible currencies. As to **clearing exports from Finland**, the task was to monitor that only those clearing export payments from the Soviet Union which were backed by a clearing license from the Licensing Office were transferred in clearing roubles. All other export payments had to be obtained directly in convertible currencies.

To introduce flexibility to the clearing trade, particularly in the 1980s, the Bank of Finland allowed, or in certain cases required, the use of convertible currency settlements in bilateral transactions. Usually this was the case when the transaction was later covered by convertible currencies (as in trading operations or in transit traffic through the Soviet territory).

This objective for clearing payment controls implied, in terms of operative foreign exchange controls, that the Finnish side was to avoid or to minimize the net inflow of clearing roubles and the net outflow of hard currencies. The regulator had to see to it that the convertible outflows were covered by convertible inflows and inconvertible inflows by corresponding inconvertible outflows in each of the transactions. If not, the authorization had to be declined.

According to the "Foreign Exchange Regulations" prior authorization was required in the 1980s specifically for

– transfers of current payments exceeding FIM 10 000, and related to exports or imports of goods were to be effected only in the currency and to the amount given in the export or import license issued by the Licensing Office;

– transfers of current payments for exporting or importing services of more than FIM 10 million required prior authorization by the Bank of Finland;

– the extension of export credits with maturity of more than three months and all financing credits required prior authorization by the Bank of Finland;

– prepayments not based on export licences issued by the Licensing Office;

– obtaining or granting financial loans;

– opening and holding convertible currency accounts with Finnish banks. This was possible for Soviet residents on condition that the account was not credited with funds acquired by selling clearing roubles to the bank, i.e. the funds could not originate from bilateral trade with the Soviet Union;

– opening and holding markka accounts by Soviet citizens working or studying in Finland temporarily, provided that the funds originated from their salaries earned in Finland or the Soviet Union and were used to cover personal expenses during their stay in Finland. At the end of the stay the residual balance was to be transferred to the Soviet Union in clearing roubles, and

– setting off receivables and liabilities.

In applying the regulations, the Bank of Finland considered it important that all applicants be treated equally. To follow this principle over time meant that establishment of advance rules in writing and their distribution to potential applicants. This method was applied in the case of compensation projects (from 1986) and direct investments (from 1987) to the Soviet Union. The conditions applied by the Bank of Finland during most of the 1980s were as follows:

– **direct investments to the Soviet Union:** the Finnish investor could pay his share of the basic or equity capital in convertible currencies provided he had rights, stated in the founding documents, to transfer dividends and, in case his participation were liquidated, to repatriate his share in convertible currencies. These stipulations in the founding documents were safeguards against unfair demands on the part of the Soviet partner. Guarantees against eventual interventions by Soviet authorities was acquired by means of intergovernmental agreements for protection of investments. During 1987–1990 the Bank of Finland gave more than 250 authorizations to Finnish participants to invest in Soviet joint ventures or to establish a fully owned foreign company. However, the sales of a Finnish-Soviet joint venture to Finland could take place only through clearing (Laurila 1992, p. 8);

– **trading:** authorized provided the end-purchaser paid the Finnish trader in freely convertible currencies;

– **transit traffic services:** payment to the Soviet carrier could be effected in convertible currencies in cases where the merchandise was exported to a convertible currency country (often Japan, Iran or Turkey) because compensation was included in the convertible currency proceeds from the exports. For imports, the Soviet carrier was paid for 50 per cent of the transportation costs in convertible currencies;

– payments related to **insurance and international reinsurance:** covered in convertible currencies whenever the compensation was paid in convertible currencies;

– accommodation of credits through clearing within **compensation and buy-back compensation** projects. One of the main conditions was that the compensation projects for the Soviet Union had to generate new imports to Finland. Loans to finance the construction of a factory or production line could be disbursed through clearing provided the debt service payments were made pari passu with the compensation deliveries. There were only five approved applications in the 1980s. Two of these projects were later converted into joint ventures;

– covering the use of **credit cards** in the Soviet Union alternatively with convertible currencies or clearing markkaa. The annual agreements were individually tailored for each Finnish commercial bank;

– **project exports** and **subcontracts,** which could be settled in convertible currencies to the extent the foreign currency element of the export licence would allow;

– **licenses and royalties:** purchases of licenses through clearing. Royalties, however, could be paid in convertible currencies to the extent the sales proceeds from third countries were in convertible currencies.

The list is not exhaustive. It should, however, help one appreciate the attempt to integrate clearing into the rest of the increasingly deregulated Finnish economy. It was necessary to maintain clearing as an attractive alternative to Finnish firms and to respond to the increasing competition in the Soviet markets. Some of these problems of the latter half of the 1980s will be elaborated below in section 4.5, "Issues regarding controls".

For the sake of administrative expediency the Bank of Finland delegated some of the regulative powers to the commercial banks. Also the commercial banks wanted to transfer clearing roubles in order to earn service agios. To make clearing trade attractive it was important that the buying or selling of clearing roubles did not differ from that of any other currencies. By virtue of this arrangement the clearing customers could get their payments authorized immediately over the counter. Naturally these arrangements also became costly to the commercial banks. In order to regulate and monitor the clearing payments, the commercial banks had to assign clerks and advise them on the application of foreign exchange controls and provide the Bank of Finland with follow-up reports. Using these reports, the Bank of Finland then monitored compliance of the commercial banks and their customers with the foreign exchange regulations.

A reporting system was developed which combined data from the customs authorities, Licensing Office, commercial banks and the Bank of Finland. In collecting data, a number of multi-copy forms were used so that the different monitoring parties would receive duplicate information. The data was then entered into computers. Typically such a form contained the amount, the currency identification number of the payer and the name and country of the receiver. There was also a payment code indicating either that the payment was based on prior permission of the Bank of Finland or the classification of the purpose of the payment from the Foreign exchange regulations of the Bank of Finland. Due to the immaterial nature of services, all service payments had to be authorized in advance by the Bank of Finland.

From the beginning of the 1980s this monitoring was supported by means of computerized transfer and processing of data on payments from the commercial banks, corresponding data on export or import declarations from customs as well as export and import licensing information from the Licensing Office. By bringing together and matching the payment, delivery and license data, the Bank of Finland could monitor the decisions made at the counters of commercial banks.

For instance, Bank of Finland could trace those import deliveries from the Soviet Union which had been paid for in convertible currency rather than clearing roubles. Sometimes, again, clearing rouble payments related specifically to export deliveries had to be paid in convertible currencies. The computerized system noted possible inconsistencies between licences (authorizations), customs declarations and the amounts and currencies of actual payments.

Contacts with the parties on the basis of computer produced lists disclosed whether the observed inconsistencies were caused by actual infringement, misinterpretation or misunderstanding of the parties involved. In unclear cases the Bank of Finland asked for clarification or explanation from the authorizing commercial bank or from the firm that was behind the transaction. Often the inconsistencies turned out to be mere mistakes in codification or errors in data collection, entry or processing. In any case, this procedure allowed the Bank of Finland to follow up on the application of quotas and compliance with the payment restrictions.

As regards licensing, only items requiring the authorization of the Licensing Office were subjected to the export control procedure. Virtually all clearing trade required licensing. Some licensing, such as that for importing agricultural products, was "global", i.e. it applied equally to all countries; some applied only to clearing countries (chart 3.3).

As it happened, the majority of enterprises followed the rules of fair play vis-à-vis the authorities. The few firms that showed signs of noncompliance were quickly singled out and could then put under more intensive surveillance and, in exceptional cases, were invited to discuss with the controlling authorities how to improve their compliance with the "Foreign Exchange Regulations". Also, the fairly small number of the Finnish firms involved in clearing trade facilitated the control and monitoring work (see section 4.3 and table 4.1).

3.5 Currency management and the costs involved

The balance on the clearing account, or "tied reserves" of the Bank of Finland, comprised part of the foreign exchange reserves of the Bank of Finland. Being on the balance sheet, they affected the Bank of Finland's profit and loss account. An increase (decrease) in tied reserves increased (decreased) liquidity in the domestic money market, as did an increase (decrease) in convertible reserves (Hirvensalo 1978, pp. 59–61). The buying and selling of clearing roubles took place against Finnish markkaa as in the buying or selling of any other foreign currency.

There were also a number of differences between the tied reserves and the convertible reserves of the Bank of Finland. First, these non-convertible claims were called "tied reserves" because they could be liquidated only through clearing imports to Finland, and the clearing debt only through clearing exports to the Soviet Union.

Second, the value of these tied reserves in comparison with the convertible reserves, was diminished by the fact that the tied funds could not be liquidated through imports from any country other than the Soviet Union. The value of the tied reserves from the view point of the Finnish economy depended on how valuable these imports were as substitutes for western imports and how readily they were available (the majority of imports consisted oil and oil products; see figure 2.3 in section 2.1). The built-in rigidities in the trade negotiation system, the low quality of bulk of the Soviet manufactured products as well as the questionable ability or willingness of the Soviet government to deliver reduced the availability and value of these reserves (Hirvensalo 1978, pp. 58–59 and 1979, pp. 124–125).

The value of tied reserves was maintained nominally at the level of convertible reserves, because the main determinants were derived from the western economy. First, world market prices were to be applied as references for the trade in goods and services between the two countries. Of course, prices were bilaterally negotiated in each individual contract between Finnish and Soviet companies, the former operating as profit maximizers in a market environment. Second, also the rouble quotations by the Bank of Finland and Gosbank were tied to quotations in the international foreign exchange markets (as described elsewhere in this study; see also Oksanen 1984, p. 8 and Nars 1984, p. 80) with minor deviations (see section 4.6).

Third, the size of convertible reserves was as a rule determined by the desired liquidity level and intervention capacity, conditioned by expectations of future developments of the economy in relation other economies (see eg Lehto 1994, pp. 11, 56). The tied reserves were expected to be zero or close to it within the credit limits, but they could be negative without causing any major problems. This is not the case with convertible reserves.

Fourth, convertible reserves can be invested to earn returns. Tied reserves cannot be invested but may bear interest as agreed between parties. Finnish-Soviet clearing balances did not earn interest.

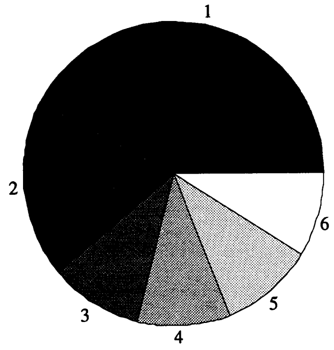
The maintenance of the value of CLSUR-denominated reserves was fairly simple until 1971. The value of the Soviet rouble and the value of the clearing rouble were both tied to gold. The Soviet rouble was revalued every tenth year. The value of the rouble had been defined as 0.167673 gram of fine gold (up to 1 March 1950) making (USD 1 = SUR 5.30). After that, the rouble was made equivalent to 0.222168 gram of fine gold (USD 1 = SUR 4.00) to the end of 1960. On 1 January 1961 the rouble was revalued and given a new gold content of 0.987412 gram of fine gold. This gave the rouble a larger gold content than the dollar, which was considered politically important by Soviet authorities (USD 1 = 0.888671 gram). Hence USD 1 = SUR 0.90, until 24 December 1971 when the rouble currency basket was introduced (Schiavone 1981, pp. 139 and 141).

The CLSUR reserves on the main account were protected against changes in the external value of the rouble up to the end of 1971. The payment agreements stated that the real value of clearing account balances should be preserved. Accordingly, in a protocol signed on 9 March 1961 the Finnish and Soviet governments agreed that all rouble claims and payments as from 1 January 1961 were to be multiplied by 0.225 (= 0.222168/0.987412). From 1972, under the floating exchange rate regime, the Soviet Union based the external value of the rouble on a currency basket of 14 currencies of its most important trade partners. The USD and GBP had the largest weights. The Gosbank held the weights and the currency composition unchanged until 1981, when the number of currencies was reduced to six and the weights were assigned as shown in figure 3.1 (Hirvensalo 1979, pp. 61–63).

In 1971 the United States also detached its currency from gold. This brought the gold exchange standard of the US dollar to an end. The large fluctuations in the dollar hindered the management of Finnish-Soviet trade through oil imports from the Soviet Union. The oil was priced in the US dollars at world market prices.

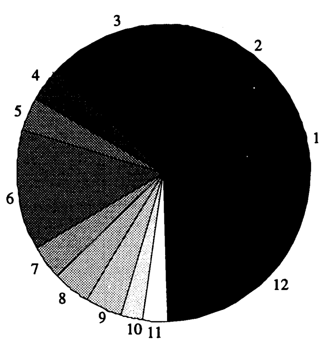
The Soviet side had protected its CLSUR balances against the risk of devaluation of the Finnish markka. As for the CLFIM-denominated subaccounts for non-commercial payments and with lesser volume of transfers, the VEB had currency risk protection against possible changes of the external value of the Finnish markka. In case a devaluation of the

Figure 3.1 **Rouble basket of the State Bank of the USSR and FIM baskets of the Bank of Finland**



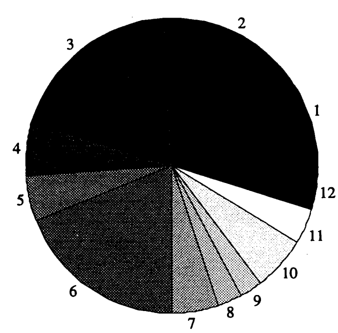
1 USD, 42,0 %
2 DEM, 19,0 %
3 CHF, 10,0 %
4 FRF, 10,0 %
5 GBP, 10, 0 %
6 JPY, 9,0 %

Currency weights of FIM currency basket by end–1983



1 USD, 8,5 %
2 GBP, 13,2 %
3 SEK, 15,9 %
4 NOK, 3,9 %5
5 DKK, 3,6 %
6 DEM, 13,1 %
7 NLG, 3,8 %
8 BEC & CHF, 4,1 %
9 FRF, 4,1 %
10 ITL, 2,4 %
11 JPY, 2,7 %
12 SUR, 24,6 %

Currency weights of FIM currency basket from 1984 onwards



1 USD, 10,6 %
2 GBP, 15,0 %
3 SEK, 19,6 6
4 NOK, 5,8 %
5 DKK, 5,0 %
6 DEM, 18,9 %
7 NLG, 5,1 %
8 BEC, 2,7 %
9 CHF, 2,5 %
10 FRF, 6,0 %
11 ITL, 3,9 %
12 JPY, 4,9 %

Finnish markka was considered insignificant by the parties, no compensation was necessary. Should either of parties demand it, balances from the CLFIM-denominated subaccounts 5A on the Soviet side would be transferred to the main account at the CLSUR/FIM rate prior to the devaluation, in order to compensate for the loss. However, the markka payment flows were non-commercial and small in value. Therefore the practical significance of this clause always remained negligible.

In the clearing trade there were three sources of exchange rate risk (Oksanen 1984, pp. 10–11):

1) the FIM value of the FIM currency basket (devaluation or revaluation of the Finnish markka). The Finnish authorities decided on the basket (or index) determining the external value of the FIM. In case of devaluation of the Finnish markka the value of the CLSUR receivables (or debt) expressed in FIM increased.

2) the SUR value of the SUR currency basket (devaluation or revaluation of the rouble). The Soviet authorities decided on the external value of the rouble. Devaluation of the rouble would have reduced the value of CLSUR receivables or debt.

3) the value of the SUR basket in relation to the FIM basket (eg a change of the USD exchange rate, because the USD had larger weight in the rouble basket than in the FIM basket).

The third factor can be derived from the first two. The eventual change of the currency composition of both baskets and the relative changes of the exchange rates of those currencies that belong to each basket determine the CLSUR/FIM risk to the central bank.

From 1971 to the end of the 1980s no special measures were taken by the Finnish authorities to protect CLSUR-denominated claims against fluctuations in the external value of the rouble. The Bank of Finland removed the rouble from the markka currency basket from the beginning of 1984. Keeping the rouble out of the convertible currency basket, as well as quoting it independently, was considered a reflection of the bilateral nature of trade between Finland and the Soviet Union (Puro 1984, p. 29). Technically, the removal of the rouble from the index implied only that its weight was re-allocated among the remaining 12 convertible currencies (see figure 3.1). This change had no effect on rouble quotations in Finland. The Bank of Finland continued to quote the markka rate for the rouble on a daily basis using the rouble rate for the dollar as a point of reference.

Between 1974–1983 the Bank of Finland quoted forward exchange rates for the rouble but discontinued the practice because the commercial banks could balance their SUR position by following the combination of convertible currencies in the rouble basket. Moreover, the Bank of

Finland came to accept an inappropriately large uncovered rouble position. The net returns to the Bank of Finland from forward exchange sales amounted to nearly FIM 1.2 billion in 1981–1983 (table 3.2).

With the new political and economic developments in the Soviet Union during the latter part of the 80s it became evident that the external value of the rouble could weaken substantially, leaving Finnish exporters with their rouble claims unprotected. There were at least two alternative solutions to the problem: indexation or replacement the CLSUR with a convertible currency.

The latter solution was preferred by the Finnish side, and the question was taken up from time to time. Accepting the USD or any of the "strong" European currencies (DEM, GBP, CHF) or a basket currency such as the ECU as the clearing currency would have allowed the Bank of Finland and Finnish exporters to fully hedge themselves against foreign exchange risk. In addition, a third party currency would have been impartial and would have put to rest the idea of balancing the clearing accounts by tampering with exchange rates between the clearing and domestic currencies. There were precedents, like USD clearing with Yugoslavia and CHF clearing with China.

The idea of changing the clearing currency was dismissed by the Soviet side. The USD was rejected because of its volatility and because third party currencies did not have – according to the Soviet view – any role to play in the bilateral Finnish–Soviet clearing trade. The use of a basket currency would have been impractical, for instance, when making direct purchases from the Soviet Union.

Indexation finally found acceptance and was applied to the special account in 1987 and to the main clearing account in 1989. The idea was simply to relate rouble changes to the Finnish markka (a halving of the external value of rouble would double its value in Finnish markkaa to preserve the markka value of the rouble). Depreciation of the external value of the rouble was measured using the Gosbank currency basket. The change in the external value of the rouble between any two points in time is obtained by computing the arithmetic mean of the ratios quoted at each point in time for each basket currency, weighted by its respective percentage weight in the basket. The technical details of the computation are described in Technical Annex.

The formula works symmetrically. During the latter part of the 1980s the rouble was not devalued but revalued. In this case the Bank of Finland gave up the gain it would have had without the protection against rouble devaluation. The Finnish authorities, however, considered the risk to be heavily biased towards a sudden rouble devaluation.

The above discussion relates to the protection of balances on the various clearing accounts. Thus the indexation protected only the claims of the Bank of Finland, not the contracts of exporters or importers. As to the current payment flows, changes in the external value of the Finnish markka had effects on the markka value of the rouble that were similar to the effects on the value of any other currency. For this reason contracting the clearing exports in convertible currencies became more common in the 1980s as a means to protect against possible devaluation of rouble. Moreover, Finnish exporters and importers could protect themselves partially by resorting to forward purchases or sales or other hedging technique.

The commercial banks developed a forward CLSUR market in the 1980s in order to assist firms in hedging their rouble risks. This market was based on changes in the rouble basket currencies. In the absence of genuine rouble exchange markets, the premia were fairly high. They were in effect a kind of insurance fee to cover the eventuality that the Soviet authorities might change the SUR value of their basket (by changing the weights) without advance notice.

A major concern to the clearing account holder, the Bank of Finland, was the costs incurred in maintaining the clearing account, although the average annual cost (FIM 0.36 billion gross and FIM 0.1 billion net per year, see table 3.2) was not a substantial magnitude in the macro-economic context. One of the principal motives of Bank of Finland officials in underlining the importance of maintaining balance in clearing trade and payments was to minimize the expenses to the Bank of Finland. Also, prudential and sound banking seemed to require this. With the eventual discontinuation of the clearing, the central bank officials became concerned about the liquidity risk involved.

In computing the opportunity costs involved, interest paid on certificates of deposit and (in 1987–1990) the HELIBOR rate were used as references. Whenever there was a surplus balance on the clearing account it created a net FIM outflow from the Bank of Finland to the domestic money market. In order to absorb this extra liquidity, the Bank of Finland sold certificates of deposit and so lost the interest earnings it would otherwise have earned. Thus the reference interest used in computations is the interest paid on certificates of deposit, except in 1987–1990 when the Bank of Finland used other instruments. The accumulated amount of this opportunity cost was FIM 3.6 billion (USD 1.4 billion) in 1981–1990 (at 1990 prices, deflated with the CPI; see table and figure 3.2). Other reference interest rates could be applied in the computation, but they would not significantly alter the outcome (Rautava 1988, pp. 13–14).

Table 3.2

Accumulation of returns and costs to the Bank of Finland from clearing operations 1981–1990

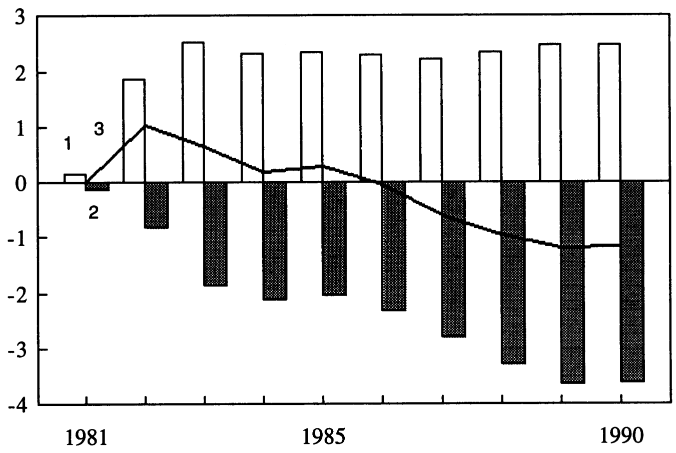
mill. FIM, return = (+) and cost = (–)

Clearing-specific returns:	
– Computational interest	–3 612
Ordinary net returns:	2 475
of which	
– Actual interest returns	649
– Actual interest expenses	–32
– Reserve adjustments	847
– Service agios	–142
– Returns from forward exchange trade in roubles 1981–1983	1 153
Net returns to the BOF	–1 137

Sources: Rautava 1988, pp. 13–17 and updating memos and the Accounting Department of the Bank of Finland.

Figure 3.2

Bank of Finland's cumulative returns (+) and costs (–) and net associated with the clearing accounts 1981–1990, mill. FIM



1 Agios, adjustments, earned interest and other returns
2 Computational interest
3 Net earnings

The "ordinary net returns" of FIM 2.5 billion (USD 0.5 billion) in table 3.2 directly affect the Bank of Finland's profit and loss account. These items represent, however, returns or expenses as normally relate to the maintenance of convertible foreign exchange reserves as well. Therefore the actual source of concern is confined to the "clearing- specific costs" in table 3.2. These costs result from the fact that the technical clearing credit between the clearing account holders was non-interest bearing.

These clearing-specific costs covered by the Bank of Finland benefited Finnish exporters and the VEB. Finnish exporters avoided the financial cost that would have accrued to them, if they had to wait their turn once the clearing had gone into deficit bringing in adequate markka coverage for the clearing account with the Bank of Finland. The VEB again could enjoy interest-free clearing credit from the Bank of Finland. One should be reminded that these costs were caused by the built-in features in the clearing system itself, not by individual decisions by any of the partners in clearing.

4 Sources of Strength and Weakness to the Finnish-Soviet Clearing

4.1 The Finnish-Soviet clearing as a political system

An effort will be made here to discuss the reason, why maintenance of the Finnish-Soviet clearing arrangement was considered important in both Finland and the Soviet Union. In Finland discussions emerged from time to time on the costs and benefits of the Finnish-Soviet clearing system. Unfortunately, there is not much documentation from the Soviet side as to why it considered it important to maintain the clearing arrangement with Finland, having already dismantled all clearing arrangements with the other industrialized market economies.

Without doubt, the question of Finnish-Soviet trade was more important to Finland than to the Soviet Union. Still the Soviet Union attached more attention and resources to its trade with Finland than the size of the Finnish economy, compared with other industrialized market economies, would have warranted. Finland was the largest exporter to the Soviet Union of the OECD countries up to the end of the 1960s. From the beginning of the 1970s Finland ranked between second and fifth, after Germany, the United States, Japan and occasionally France. For instance, the shares of Austria, Sweden and the United Kingdom remained under 5 per cent of Soviet imports from OECD countries (ETLA 1986, pp. 51, 156–157).

What made Finland different from other countries in the eyes of the Soviet Union? After all, Finland was not the only country in Europe that had proclaimed its aim to stay outside the conflicts of large powers. Similar policies were pursued by Austria, Sweden and Switzerland. Comparison between these countries discloses certain elements explaining the differences.

Beyond the policy of neutrality, Austria had many features separating it from Sweden and Switzerland and bringing it closer to Finland with regard eastern trade. Finland and Austria each shared a common border with the Socialist block, established their political status after the second world war, and had earlier experience in eastern trade and still maintained a significant share of its trade with the CMEA countries. Sweden and Switzerland lacked these features. Therefore their eastern trade never reached significant volumes. For these reasons the eastern trade relations of Finland and Austria were more politically oriented than those of other countries (Kivikari 1983, pp. 51–57).

There were also significant differences between Finland and Austria. Finland's geopolitical location is far from the rest of Europe with a land border of nearly 1300 kilometres with the Soviet Union or Russia. Austria is located more or less in the heartland of Europe. There were no Soviet troops in Finnish territory but Finland paid substantial war indemnities to the Soviet Union, which provided a springboard for commercial relations. The redemption deliveries ("Ablöselieferungs") Austria paid in context of the departure of the Soviet troops did not necessarily help to create commercial relations to the same extent as the war indemnities did in Finland. Although Austria's trade with the CMEA countries is comparable to that of Finland's, its share of Soviet imports – less than 5 per cent of imports from the OECD countries – is small compared to Finland's 10 per cent plus.

Also, Austria's clearing arrangement with the Soviet Union from 1955 to 1971, was quite anaemic compared with the Finnish-Soviet clearing arrangement. Only current transactions could be transferred; no capital movements beyond a narrow technical credit band were allowed. Payment relations with the Soviet Union remained transparent due to strict and disciplined application of the clearing principles. According to the Austrian currency law ("Devisengesetz, paragraph 19), a payment agreement with a country has to be managed in such a way that all payments are settled within that framework and no other payments can take place (Fröhlich 1964).

The principal reason for the early abolition of many clearing arrangements the Soviet Union and other CMEA countries had with central European countries, including Austria was the strict application of clearing principles. The prohibition against extending clearing credits and the requirement that all commercial payments had to be channelled through the clearing accounts effectively prohibited the implementation of all major projects and the further expansion of trade. The only possibility left was to abolish the prohibitive clearing legislation and put the trade on a convertible currency basis.

Finnish-Soviet clearing was more flexibly applied in order to overcome the systemic constraints of rigidly managed clearing for trade. At the same time it became less transparent and harder to keep in balance. These aspects will be discussed below.

Seen from the Soviet point of view, **Finnish – Soviet trade served as a showcase example of trade and friendly and mutually advantageous cooperation between a small capitalist country and a large socialist country**. For a representative and authoritative testimony, we will only quote A.N. Manzhulo (Deputy Minister of Foreign Trade of the USSR) and Yu. V. Piskulov (Deputy Head of the Department of Western Trade in the Ministry of Foreign Trade of the USSR):

> "... Soviet-Finnish economic cooperation is often and justly cited as an example of the implementation of the principles of peaceful co-existence of states representing different socio-economic systems. These principles, which were elaborated by the founder of the Soviet state V. I. Lenin and which are consistently pursued in the foreign policy of the Soviet Union, eg in the form of the Peace Programme of the 24–26th Congresses of the CPSU, incorporate the objective necessity of not only peaceful co-existence of states with different systems but also of their economic cooperation within the framework of the world economy ..." (Manzhulo – Piskulov, p. 34).

Neither the above quotation nor the Soviet sources in general refer to the clearing arrangement proper. Instead they usually commend Soviet-Finnish trade and economic cooperation in general. One may ask whether the existence of the clearing system was a essential element in the show-case after all?

At least one can say that the Finnish-Soviet clearing arrangement came administratively and organizationally close to the Soviet approach. Being inter-governmental, hierarchically organized and centrally administered, the clearing arrangement came institutionally and procedurally close to the Soviet administrative tradition. The framework of the Economic Commission assisted in maintaining personal contacts. The 10–15 year long-term programs, five-year agreements and annual protocols and the bilateralism itself gave the partners the assurance of continuity. Even the unit of account, the clearing rouble, is conceptually the same accounting money (beznalitchny deneg) that was used in inter-organizational transactions in the Soviet Union.

Finnish-Soviet trade was based on the political decision of the Soviet government to assign part of Soviet import needs to Finland. For instance, Finland was the sole western supplier of ships to the Soviet markets (ETLA 1986, p. 157). From the point of view of the Soviet Union the Finnish-Soviet bilateral clearing arrangement served as a support system to secure a high level of trade. It belonged to a specific group of clearing arrangements the Soviet Union had with China, Finland, India and Yugoslavia. All these clearings were pitched at a high political level. Their continuity was secured by means of long-term agreements. All arrangements included economic commissions headed by a Soviet deputy prime minister and administered by means of 15-year, five-year and one-year agreements, making exceptionally close co-operation possible. Any bilateral overdraft exceeding pre-agreed credit limits had to be settled either in convertible currencies or by accommodating the supply of merchandise. This shows that the Soviet Union considered foreign trade with these four countries especially important.

During the inter-war period and after the war in the 1940s and 1950s the Soviet Union underlined the importance of political security for trade. Indeed, disagreement over these priorities prevented the conclusion of a trade agreement between Finland and the Soviet Union during the World War interim. After the war the Agreement for Friendship, Cooperation and Mutual Assistance of 1948 acknowledged these interests and thus opened the way for a trade agreement. The Soviet Union, however, modified its stance in the 1960s. Favourable developments in trade and economic cooperation were seen to reflect good political relations. The maximization of the clearing trade volume and the related problem of simultaneously keeping the clearing balanced increased the role and need for intervention by high-level political decision-makers in Finland. According to his diaries, President Paasikivi was continuously involved with Finnish-Soviet trade questions. Presidents Kekkonen and Koivisto both volunteered and occasionally were requested to intervene in trade policy decisions or negotiations (Suomi 1994, pp. 142–148, Koivisto 1994, pp. 219–228, Koivisto 1995, pp. 83–85, 368–369).

There was not unanimity in the Soviet Union about the clearing system itself. During the 1970s, after the Soviet Union had disbanded its clearing arrangements with other western European industrialized market economies, the question of switching to convertible currency trade was occasionally raised in the Finnish-Soviet context. The discussion grew louder in the latter half of the 1980s during the process of deregulating foreign trade in the Soviet Union. The replacement of an administrative command system with economic incentives disclosed the discriminatory features and limitations of bilateralism to the freedom of choice. Also, cost consciousness emerged and unearthed the high costs of the security and continuity supported by bureaucratic methods.

Parallel developments took place in Finland. Along with the dismantlement of monetary and foreign exchange regulations and growing difficulties in balancing the clearing trade after the oil price decline in 1986, cost consciousness increased. There had been wide fluctuations in clearing in the past, but now attention was turned to the costs caused by the clearing fluctuations and the growing difficulties with their administration in the deregulated environment.

During the wars also Finland's own convertible currency reserves were depleted to the extent that it could only handle its payment transfers within the framework of clearing arrangements (ETLA 1986, p. 17). In the fully regulated environment following the Second World War, Finnish-Soviet clearing also helped the Soviet Union economize on its scarce convertible currency reserves. Still, during the 1960s, the Soviet Union openly admitted that it could not afford to pay for its imports with convertible currencies and therefore resorted to bilateral barter arrangements (Suomi 1994, p. 144). This is presumably one of the reasons why Finland's share of Soviet imports from the OECD countries was the largest until the 1970s. Beyond this, Finnish-Soviet clearing did not share objectives with the bilateral international clearings of the life-cycle model (section 1.2.3), i.e. of serving as an instrument for the multilateralization of trade and the introduction of convertibility.

Finland had multilateralized its trade with its western partners by abolishing all bilateral clearings at an early stage in the 1950s and 1960s, introducing markka convertibility and joining its partners in economic and financial cooperation. The Soviet Union again made efforts to introduce multilateralization, and at least transferability, in its trade and financing relations with other socialist countries in the CMEA.

The abolition of clearing was seen as a jump into the unknown. As long as the clearing trade developed favourably, i.e. increased, it was difficult to suggest anything better which could as well guarantee the high level of trade (Sorsa 1988, p. 7 or Holopainen 1983, p. 180). Still, in the 1980s the bilateral trade system was increasingly seen as something alien to the spirit of the market economy and was suspected to have negative macroeconomic effects on Finland.

4.2 Discussion of benefits and costs in Finland

In the following the most frequently alleged pros and cons are merely listed to illustrate the large range of aspects (similar lists can be found eg in Kajaste 1993, p. 119, Hirvensalo 1993, p. 29). To verify many of the assertions would require major research efforts. Ultimately, it is hardly possible to calculate any sort of consolidated net effect of clearing on the Finnish national economy. The costs and benefits were not commensurable. Some of the costs and benefits could not be attached to any value (eg employment effects), some of them were abstract (eg political values and good will). These varied over time but were most clearly felt and perceived in the 1980s. Some costs and benefits accrued to the whole economy, others to individual economic sectors or enterprises, at the expense of the other sectors or enterprises. Many effects cannot be unambiguously identified unless the opportunity costs and benefits are known, that is, what the costs and benefits would have been without clearing.

Counter-cyclical effects. Finnish-Soviet trade had counter-cyclical effects on Finland's overall foreign trade. During times of high oil prices, Finland's exports to the western countries declined. At the same time, the purchasing power of the Soviet Union due to its increased oil export earnings increased. Finnish exporters were quick to take advantage of this. Kajaste points out that from the first oil crisis to the end of clearing exports had a smoothing effect on the cyclical development of exports and output. Beyond the overheating caused by the strong growth of exports to the Soviet Union, in the 1980s the cyclical behaviour of the Finnish economy was exceptionally stable, partly due to the influence of Soviet trade (Kajaste 1992, pp. 8–9).

High profitability. The prices and profitability of Finnish exports to the Soviet Union were higher than to the western countries (Hirvensalo 1993, p. 29). The reason for such profitability was the lack of effective competition (lack of market access or information) that made it possible for price differences to exist (Kajaste 1993, p. 121). Finnish firms were profit seekers who operated under competitive market conditions and therefore had ready access to price information from western markets. The representatives of Soviet organisations had reference information and knew that the quantities and qualities of the merchandise were already fixed, while the prices were left open. Although they aimed at pushing prices as low as possible, they did it knowing that if they failed, the losses would always be covered through the central budget.

Springboard effect. Finnish exporters could use the Soviet markets as a springboard to the western markets. Soviet markets represented an expansion of home markets in the sense that Finland could develop and produce exports for which there was no demand in Finland (such as nuclear powered ice breakers and ships in general; Tolonen 1985, pp. 300–303, and Kajaste 1993, p. 116).

Continuity. Long-term contracts, for instance in the ship building industries, increased security in terms of permanent employment and financing. Pushing forward the planning horizon made possible medium- and even long-term calibration of ship yard capacity. For that purpose, the Soviet Union tied part of its oil to the payment of its purchases from Finland instead of selling it against freely convertible currencies to buy goods from any country (Linnainmaa 1988, pp. 29, 46, Sutela 1991a, pp. 201–202 and 198, Sutela 1991b, p. 314).

Employment. Finnish exporters were protected from external competition. This gave firms continuity of production and so employment was guaranteed. Moreover, Soviet-Finnish clearing trade employed some of the most labour intensive sectors of Finnish industry. In the first half of the 1980s exports to the Soviet Union employed on average about 140 000 persons or 6 per cent of the total labour force (ETLA 1986, pp. 160–161).

Economies of scale in exports. The unit costs of Finnish exporters were lower in Soviet trade than in trade with other countries because of economies of scale and low marketing costs, such as in the Finnish paper industries in 1981. Also industries that were not competitive in western countries or in Finland could find a protected market in the Soviet Union (Tolonen 1985, pp. 300–302, Kajaste 1993, pp. 116–119).

Reduction of transaction costs. The centrally managed trade reduced risks and transaction costs. One could by and large depend on inter-governmental frameworks and on receipt of payments, the account holders being governmental banks. The clearing arrangement offered a convenient framework for the administration of trade by authorities and representatives of large companies, well adapted to the centrally managed trade administration of the Soviet Union and not detrimental to the functioning of the Finnish market economy (Hirvensalo 1993, p. 29).

Systemic benefits from clearing. The clearing system was managed in a way that was well adapted to the requirements of Soviet central planning (section 3 above) but did not excessively hamper the workings of the Finnish market economy. The clearing system was flexibly administered to avoid the limitations of bilateralism. In contrast with some other international clearings, particularly in the former CMEA, the rouble exchange rate has not be used as a policy instrument (section 1.2.3).

Excessive dependency with image losses. Finland was featured as the only developed western market economy still using clearing with the Soviet Union. In this light there is a shade of abnormality in Finnish-Soviet relations. An excessive share of eastern trade was seen as bringing an unnecessarily high degree of political and economic dependency on the Soviet Union. It was feared in Finland that an excessive share of Finland's industrial capacity would be tied to sales to the Soviet Union. According to president Paasikivi, 20 per cent of Finland's total trade would constitute the critical limit beyond which the dependency would became excessive (Eronen–Susiluoto, p. 15). Also, the Soviet economy and political system cast a shadow on Finland's image in the west as a free and modern developed western market economy.

Protection. Finnish exporters were protected from external competition. They did not need to compete for the scarce foreign exchange funds the Soviet Union had in its disposal (Volk 1985, pp. 396–397). Due to the protection offered by clearing, Finnish business opinion did not adhere to the view that bilateral trade was disadvantageous to Finland. In autumn 1990 most companies were still opposed to shifting from bilateral trade to conventional trade in convertible currencies. This view was also consistently advocated by the Finnish industrial associations.

Structural costs. Protection favoured less competitive industries and in the longer run distorted the structure of production. Finnish exports have been more rigid than the exports of other OECD countries in responding to changes in Soviet demand (Hirvensalo 1993, p. 29, Hukkinen 1990, p. 47, Kajaste 1993, p. 117). The macroeconomic effects of the sudden rise in the price of oil at the beginning of the 1980s is discussed by Haaparanta (1981, pp. 485–487 and 1982, pp. 408–409) and Leppä (1982, pp. 404–408)

Costs of bilateralism. The inferior quality of Soviet products made it difficult to find products to import which would find markets in Finland or other western countries. Beyond oil, oil products, energy, raw materials and some investment goods, it was difficult to find anything marketable to import from the Soviet Union. Differences in technical standards applied on the Soviet side created particular problems to Finnish exporters. Import deliveries from Russia were usually delayed for various reasons (production delays, problems in transportation or organization etc.).

The growth of trade was constrained by the weak development of imports and by bilateralism. The western content of exports was limited to 20 per cent of the value of merchandise. This combined with difficulties in extending clearing credits reduced the competitiveness of Finnish exporters in Russian markets.

Bilateralism also deprived the partners of the possibility of seeking the most advantageous markets for selling or buying. Thus, in bilateral trade, as compared to multilateral trade, earnings from exports were at risk of remaining smaller and the price-quality relation in imports of being worse.

Costs of centralism. There was no feedback from end-users in the Soviet Union (Kajaste 1993, p. 119). The absence of direct contacts also prohibited Finns from taking advantage of their historical trade contacts with St. Petersburg or Estonia (Eronen–Susiluoto 1980, pp. 9–12; see a further description in section 4.3 below).

Currency problems. Particularly in the late 1980s an increasing number of Soviet enterprises refused to accept payments for products or services in clearing roubles, having got the legal right to sell them against hard currencies. Additional problems emerged when the Soviet Ministry of Finance, in its capacity as foreign exchange authority, considered the Finnish markka to be non-convertible, being the currency of a country having clearing relations with the Soviet Union. This interpretation caused harm to a number of firms and individuals who, having accepted Finnish marks and deposited them in accounts with the VEB, were then told that they could not be used for settlement of the hard currency claims.

The non-convertibility of the clearing rouble also reduced the availability of certain desired imports from the Soviet Union (chemicals, raw materials etc.). Soviet suppliers, having been given the right to sell directly abroad and to retain 40 per cent of their export proceeds in convertible currencies, were no longer interested in selling against clearing roubles because this limited their purchasing rights to Finland only.

Bureaucracy. The clearing trade was bureaucratic (Kajaste 1993, p. 119). The trade system included corporatist elements. Sectoral and subsectoral organizations and industrial associations fixed quotas in the trade agreement negotiations with the Soviet government. The centralized administration of trade combined with these corporatist methods led to discrimination against small and medium-sized enterprises.

Other systemic costs of clearing. The non-convertibility and lack of credibility of the clearing rouble, discriminatory features (bilateralism, discrimination against small firms, bureaucracy) qualify as systemic features. In addition the inclusion of clearing credits, measures necessary to control clearing payments and other factors discussed in detail below (sections 4.4–4.6) made clearing complex and sometimes even cumbersome and frustrating to manage by those in charge and often difficult to perceive by the outsiders.

4.3 Special features of the Finnish-Soviet clearing arrangement

As noted before, clearing trade averaged 16 per cent of total trade in 1945–1990. The major part of the trade, 84 per cent, was conducted with western countries. The more liberalized Finland's trade with its western partners became, the bigger the controversies became. The central problem of clearing administration was how to make two different systems, one regulated and centralized and the other increasingly deregulated and decentralized, work together technically and administratively. Obláth and Pete have described this in terms of **isolation** and **integration** in the administration of the Finnish-Soviet clearing system. These elements were often present simultaneously in the clearing system, and they can be seen more or less as special features of the Finnish-Soviet clearing arrangement. In the following the principal forms of manifestation of isolation and integration are reviewed.

Spillover effects. The Finnish-Soviet clearing arrangement, while comprising an integral part of the Finnish payments- and financial system, had to be isolated from the foreign exchange and foreign capital markets on the one hand, and from the domestic money market, on the other. Thus interventions were necessary at two levels: first, payment transfers and capital movements had to be regulated in the increasingly liberal financial environment. Second, liquidity effects on domestic money markets had to be neutralized. These liquidity effects were caused by the fact that any major increase or decrease of tied reserves triggered a markka outflow from the BOF to the money market or a markka inflow from the money market to the BOF, respectively. The neutralization of the money market effects of the disbursement of advance payments or other major export payments may have caused distributional effects that were disadvantageous to Finland's western trade.

Particularly the financing of the net surplus exports to the Soviet Union was prone to take place at the expense of western trade. Moreover, Finland was – and still is – a net importer of foreign capital. To the extent Finland was required to finance its exports to the Soviet Union, it followed that Finland had to obtain the refinancing from western capital markets and in this sense to work as an agent for the Soviet Union in tapping western financing. This burdened the creditworthiness of Finland and raised the cost of borrowing from abroad. This might have marginally burdened the borrowing possibilities of firms involved in trade with western countries. Balance of payment spillovers also occurred whenever bilateral exports involved substantial amounts of western imports.

Pricing and determination of exchange rates. A further example of integration of the clearing payments system with the rest of the economy was that any Finnish importer could purchase with Finnish markkaa the clearing roubles needed to make payments to any commercial bank for imports from the Soviet Union. A Finnish exporter could sell his clearing roubles to any Finnish commercial bank and receive Finnish markkaa. From the viewpoint of the customer, exporter or importer, once having had his transaction licensed or authorized, he could simply go to any commercial bank and purchase or sell clearing roubles against markkaa just as he would with any other currency. In this sense the clearing system was well integrated with the rest of the economy.

The Finnish-Soviet clearing system ensured commensurability between the non-convertible rouble and the Finnish markka, as described in section 4.3. and discussed further in section 5.7. The system was also supported by the observance of world market prices. One may assume that this was preferable to the case of intra-CMEA clearing, for example, due to the fact that Finnish firms operated in a market environment and were encouraged to maintain profit maximizing behaviour.

Voluntary participation. One of the most central issues was that Finnish enterprises could not be forced to participate in the Soviet-Finnish clearing trade. It was important to protect the integrity of private or semiprivate companies from intervention by the Finnish authorities, and indirectly also from the eventual pressures coming from the Soviet side, when deciding whether or not to participate in the clearing trade. Ideally, their decisions had to be made voluntarily and based on profit seeking behaviour. In this sense, the firms had to be separated from the clearing regime.

Indeed, the Soviet trade authorities exerted much pressure to persuade the Finnish party to purchase more Soviet products other than oil and raw materials. The Finnish trade officials had to remind Soviet negotiators occasionally that the Finnish government was not in a position to command or pressure Finnish enterprise either to sell to the Soviet Union or to purchase USSR-made manufactured goods beyond their own initiative and choice.

Procedurally the simultaneous isolation and integration of the business enterprises was arranged so that the ministries had to turn to the industrial associations with requests to explore the willingness of their member firms to come up with offers and proposals to export or import through clearing. It is essential that these sectoral associations were totally privately owned and financed by their member enterprises. Thus they were in no position to exert pressure on their members but acted as middlemen, transferring information and acting as coordinators between trade authorities and private enterprises. The ministries (Foreign Affairs for exports and Trade and Industries for imports) then in cooperation with these industrial associations reconciled the received proposals within the framework of quotas from the annual trade protocols. Government authorities maintained contacts with these associations while representatives of the latter were members of the Economic Commission and participated in government level negotiations with the Soviet party. Once the quantities had been agreed, the prices were negotiated and contracts signed later between the exporter and importer. The implementation was monitored with the assistance of the associations (Holopainen 1981, p. 314, Obláth-Pete 1985, p. 178).

Clearing made attractive. In order to integrate the clearing payment system with the rest of the economy, business transactions not easily compatible with bilateralism had to be accommodated by the clearing system in order to keep it competitive with convertible-currency trade. The related control problems will be discussed in detail in section 5.6 below.

As mentioned above, Finnish private enterprises and commercial banks participated in the clearing trade on their own free initiative (Obláth and Pete, pp. 109–112). Therefore the clearing system had to be made competitive with the opportunities offered by trade with the western countries and, during the latter half of the 1980s, with the convertible-currency trade with the Soviet Union.

The government could not allow sanctions to become overly burden some on the clearing customers – Finnish exporters and importers. On the contrary, to persuade firms to divert part of their exports or imports through clearing, credits were made available, particularly to exporters. The government absorbed financing costs on behalf of firms. Sometimes this was the result of intensive bargaining and lobbying in connection with trade policy decisions. Tax relief for exports of vessels or coverage of the losses from oil trading are examples of this. As pointed out elsewhere, these features caused problems in keeping the clearing trade in balance.

In order to keep the clearing functional, foreign exchange regulations had to be elaborated so as to integrate certain commercial transactions with elements not easily compatible with clearing. These elements were capital movements (necessary in compensation trade, in major construction projects and ship orders and in direct investments in joint ventures) and transactions requiring a blend of clearing roubles and hard currencies or multilateralism (trading, direct investments). The control problem here was to keep the payment flows in different currencies balanced. In particular, it was considered important to see that the hard currency outflows were not covered by clearing rouble inflows ("to prevent eastern trade from being financed with hard currencies" – an element of separation again here).

As pointed out in another context, hard currency trade with the Soviet Union was considered a step into the unknown and risky to the maintenance of the level of Finnish-Soviet trade. The task of clearing management was hence to keep the clearing as a competitive alternative to Finnish enterprises. The efforts to integrate the system aimed mainly at improving the level of service connected with clearing and at keeping Finnish businessmen informed of business opportunities so as to maintain competitiveness in the Soviet markets. These efforts to cast elements (eg direct investments, trading, or use of credit cards) into the same mould as the non-convertible bilateral cash-payment version of clearing were often doomed to end up in halfway or compromise solutions.

Systemic discrimination against small firms. Sutela (1992, pp. 24–25) points out that even though the firms did not become executers of political decisions, the system discriminated against small firms and favoured big ones. This was a system-specific feature reflecting the large size of many Soviet orders and represents a systemic involuntary isolation. Small firms simply could not deliver in large amounts. Discrimination against small firms was systemic also in the sense that as a matter of administrative expediency it was more comfortable to keep the group limited in number.

Systemic discrimination did not apply only for the oil imports, which were in hands of the state-owned oil company Neste Oy and of Teboil with Soviet ownership, but also as regards exports. The large size of Soviet orders meant that only the largest Finnish export companies were able to handle them. Still, a large number of Finnish small and medium-sized firms were involved in the clearing trade as subcontractors. They were also well represented in the border trade and, since 1987, in joint venture activities. Admittedly, joint venture activities just started in 1987 and the border trade never amounted to more than 2–3 per cent of total clearing trade.

Table 4.1 **Distribution of goods exports to the Soviet Union among Finnish enterprises 1989**

Number of firms, ranked from the largest exporters	Share of total exports to the Soviet Union, FIM 14.5 bill.
5	40
10	53
22	66
40	75
50	79
116	90
250	100

Source: The Finnish Board of Customs. The total number of Finnish exporters was 1688 and the number of business enterprises in Finland was 120 000 in 1989.

According to the Finnish Board of Customs, exports of the 10 largest exporters accounted for 40 per cent of exports in Finland's total foreign trade, and the 100 largest for 80 per cent. The corresponding figures on Soviet-Finnish trade amount to over 50 per cent and almost 90 per cent respectively. On the import side, the situation was even more polarized: imports from the west were less concentrated than exports to the west. By contrast, imports from the Soviet Union were in fewer hands than exports to the Soviet Union (Finnish Board of Customs: Foreign trade, Volume 2, years 1982–1986).

As a result of this systemic discrimination against small and medium-sized firms, Finnish-Soviet trade was more concentrated than Finland's trade with western countries. The concentration of clearing trade in the hands of a few major enterprises on the Finnish side made the trade and clearing management administratively feasible and less costly, because contacts had to be maintained with relatively few firms. From the view point of the participating firms the transaction costs were minimized, not only in regard to financing but also in terms of sales promotion.

A significant disadvantage of centralization, however, was that it effectively continued to isolate Finnish exporters from end-users in the Soviet Union. As described in section 2.1, as a Grand Duchy of Russia in 1809–1917, Finland maintained substantial trade with Russia, 40 per cent of its total foreign trade on average in 1861–1916 (table 2.1). The Soviet era deprived the Finns of the possibility of taking advantage of the direct political, economic and cultural ties they had developed with St Petersburg and its adjacent areas. This does not entirely exclude the possibility that also clearing relations did add some content to "closeness" (Eronen–Susiluoto 1980, pp. 9–12, 21–22). The above applies in certain aspects even more to Estonia.

4.4 Reasons for the chronic imbalances

With exception of the second half of the 1960s, Finnish-Soviet clearing was continuously out of balance. A number of factors inherent in the clearing system and its management can be readily pinpointed. In the following, four major sources of or reasons for problems in the management of Finnish-Soviet clearing are singled out and discussed. These are:

– **the difference in the sizes of the partners**, Finland being a small and the Soviet Union a large economy;

– **only volumes (not values)** could be regulated by the trade administrators;

– **the incentives and sanctions worked in the wrong direction** or were inadequate for bringing the clearing into balance

– **complexity** of the clearing arrangement, leading to **lack of transparency**.

The rigidity with respect to trade volumes, which made it hard to bring the clearing into balance, was further increased by **the difference in the sizes of the partners**. It was not so much Finland's capacity to increase its exports to the Soviet Union that restricted the expansion of trade but rather Finland's ability and willingness to increase its imports from the Soviet Union. The Soviet demand for goods through clearing continually exceeded the capacity of the Finnish economy to absorb the supply of marketable Soviet products. Moreover, at times Finnish enterprises had to run at full capacity to keep up with large individual orders from the Soviet Union.

The differences in size and economic potential were reflected in domestic trade policies and trade negotiations. Finnish exporters, exerting substantial power as a political pressure group, were not too enthusiastic about cutting their exports to the Soviet Union. In this, they received full support from Soviet importers who did not willingly accept reductions in imports from Finland. Instead, the Finnish party was urged by the Soviet party to make every effort to increase and diversify its imports from the Soviet Union. Diversification implied that Finland, besides importing oil, oil products, energy and raw materials, should try to increase its imports of manufactured goods from the Soviet Union in order to bring the clearing into balance.

Hence the double coincidence of wants (explained in section 2.1 above), one of the preconditions for barter, could not be realized in the aggregate, in the case of Finnish-Soviet clearing. The demand of the Soviet Union for the Finnish products generally exceeded the ability of the Finnish economy to absorb imports from the Soviet Union. Ultimately, Finland's limited possibilities to absorb more imports (oil and oil related products, fuels and raw materials) combined with the inability of the Soviet Union to produce a range of manufactured goods competitive with the western imports set the limits for further expansion of the clearing trade.

Second, it was **the volumes in clearing trade, not the values**, that had to be adjusted. This was not administratively feasible for a number of reasons.

Changes in the price of oil and in the external value of the US dollar were, from the viewpoint of Finnish-Soviet clearing management, exogenous and unforeseeable. Neither the US dollar exchange rate nor the world market price of crude could be predicted. And even so, neither trade authorities nor participant firms would not have been able to influence them (see section 3.2 and particularly chart 3.4). Given that market-determined prices and exchange rates were not tampered with, as was the case in Finnish-Soviet clearing, the clearing authorities and firms were left with possibility of adjusting the volumes of clearing exports and imports to eliminate excessive variations of prices so as to keep the clearing in balance.

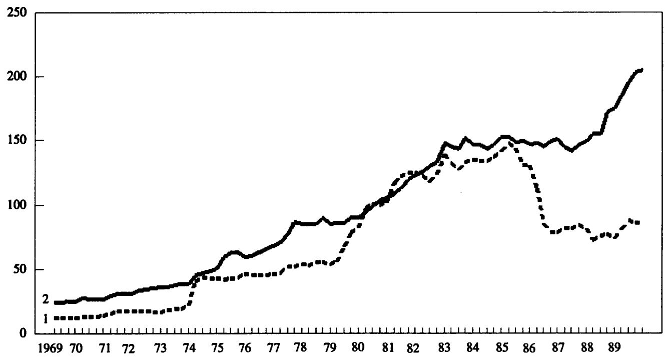
Figure 4.1 presents the unit price indices for Finnish clearing exports and imports. The impacts of the oil price increases of 1974 and 1979 as well as the declines are clearly visible. The drastic improvement in the terms of trade from 1986 on made balancing the clearing difficult but did support the claim that these exports were profitable. Changes in the export unit price index were more modest than those of the import unit price index.

Generally, annual protocols on the exchange of goods and services were drawn up in October–December of each year using the prevailing prices. Figure 4.2 illustrates the changes in volumes assuming that the clearing administrator had correctly anticipated the average of export and import unit price changes for the coming four quarters and would be able to quarterly adjust the actual export and import volumes so as to absorb the effects of unit price changes.

To eliminate the import price changes caused by the first oil crisis in 1973–1974, the clearing administrator would have to reduce oil import volumes to half the volume that was actually imported in 1973. To absorb the price effect of the second oil crisis in 1979, import volumes should have been cut to three quarters of the actual volumes. In order to absorb the collapse of the oil prices in 1986, import volumes should have been gradually increased to almost 1.5 times the actual imports. During the other periods the price change impact was smaller. For instance, in 1978 and 1983–1985 the values of clearing imports and exports turned out as planned, because unit price changes were close to nil.

Figure 4.1

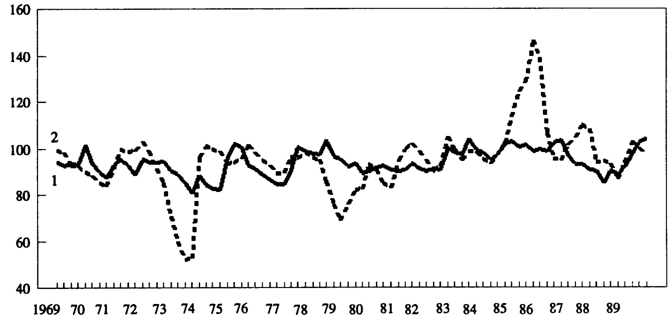
Unit price indices for Finnish exports to, and imports from, the Soviet Union, 1980 = 100



1 Unit value index for imports
2 Unit value index for exports

Figure 4.2

Hypothetical adjustments of trade volumes to absorb price changes. Moving annual averages of future quarterly price changes known and volume adjustments made quarterly



1 Index for adjustment of import volumes necessary to compensate the export price changes
2 Index for adjustment of export volumes necessary to compensate the import price changes

Although a clearing administrator with full information on the future unit prices of clearing imports and exports could adjust volumes to eliminate price change effects on the total value of future clearing exports and imports, it would only keep the total values of exports and imports unchanged but would not necessarily result in a balance in clearing. In the example (figure 4.2), export volumes are adjusted to changes in export prices and import volumes to changes in import prices. This adjustment would hardly result in a balance, and a further adjustment of volumes would be necessary.

The possibility of adjusting volumes in the clearing trade was limited because trade was dominated by major deliveries and construction projects with time spans extending over several years. Finnish enterprises, having their order books filled for years ahead, were not willing to suddenly cancel or postpone some of their deliveries based on legally binding contracts. The Licensing Office had its hands tied because a major part of the quotas agreed in the annual protocols were almost filled already in the first quarter of each year. This base load of major deliveries and projects strictly limited the possibility of substantially reducing export volumes so as to offset price gyrations and achieve balance in the clearing.

Given the tendency towards export surpluses, **the incentives and sanctions for keeping the clearing trade balanced worked in the wrong direction**. The clearing penalties and disincentives never hit the enterprises so as to induce corrective behaviour but were instead absorbed by the trade authorities. Finnish exporters enjoyed subsidized financing, as the Finnish authorities absorbed the costs. The Bank of Finland had agreed to pay Finnish exporters in cash according to the payment orders arriving from the VEB and hence carried the burden of financing on behalf of the exporters until the refunding arrived because of increased clearing imports. Had the Bank of Finland, for instance, stopped purchasing clearing roubles from Finnish exporters whenever it ran out of markkaa earned from the sale of clearing roubles to Finnish importers, the Finnish exporters would not have received immediate cash payment and would have been forced to carry the financing costs caused by the delay in payment receipts. In fact, the principle of the cash payments, which implied that Finnish exporters received their export payments immediately in Finnish markkaa, probably served as the major incentive, as no financing or export insurance costs were involved.

There was also some flexibility on the import side. Payments for oil deliveries took from 30 to 120 days. Even here, the Bank of Finland financed the credits by accepting markka payments for the sale of clearing roubles to oil importers later than would have been the case if the oil deliveries had been paid for in cash. Other imports were paid for in cash. In this case, again, the Bank of Finland did not have to finance the import credit, but the absence of import credit was a disincentive at least for some potential Finnish importers.

The overdraft facility of the clearing mechanism, which generally carried a net clearing surplus, represented a two-way subsidy system supporting exports from Finland to the Soviet Union. The clearing claims caused by net export surpluses to the Soviet Union represented free credit from the Bank of Finland both to the Finnish clearing exporters and to the VEB in support of Finnish exports. Neither the Finnish exporters nor the VEB paid anything for the availability or use of this overdraft. Nor did the VEB forward this benefit to the Soviet importers by granting them equivalent import credits.

The one-sided incidence of the financing costs on the Finnish party, and on the Bank of Finland in particular, culminated in ship and project prepayments. The actual creditor on the Finnish side was, as described in section 2.2, not the VEB or the Soviet importer but the Bank of Finland. The Bank of Finland simply paid the FIM amounts according to the payment orders it received from the VEB.

Whether obtaining or extending credits, the financial transactions seemed to make the clearing arrangement more difficult to manage. The final effects depended of course on trade developments. The advance payments for ships probably evened out the payment flow, assuming that the alternative would have been lump sum payments per ship. Also, "special accounts" representing clearing loans to the Soviet Union were made for the purpose of smoothing out the clearing balance fluctuations.

Article 7 of the payment agreement stipulated that in case credit limits were breached, the parties should take measures to eliminate the excess within three months. After that time the creditor could suspend exports or demand that the debtor settle the excess in convertible currencies (see the synoptic table 2.1). This sanction was never applied as such. One reason for this might have been the narrowness of the credit limits in relation to the volume of Finnish-Soviet trade (Holopainen 1983, p. 179). Even in 1976, after the limits had been widened from 3.4 per cent of the total clearing trade in the 1970s to 7 per cent in the 1980s (see figures 2.8 and 2.9 above), the article 7 procedure was considered by clearing administrators to be politically too costly and therefore not feasible.

Another consideration was the reciprocal application of fair play rules, which has been referred in this context: when there was a sudden rise in oil prices the Soviet authorities abstained from these procedures. Therefore, when oil prices feel suddenly, the Finnish side considered it unfair to resort to this procedure (Koivisto 1994, p. 221). Instead, other approaches were used, such as special accounts or oil trading, which were politically easier, though alien to clearing.

The actual deterrents were not explicitly stated in the agreements. There were underlying and growing concerns about the persistency and costs of the clearing receivables as well a fears that the Soviet party would not be able to settle the imbalance unless it was reduced. The objectives of maximizing the level and balancing the clearing had became incompatible (Tervonen 1993, p. 18).

The incidence of the clearing penalties was also peculiar, from the viewpoint of keeping the clearing in balance. The deterrents or penalties and obligations were targeted at the responsible administrators themselves, not to the clearing users. Administrators, however, are there to administrate and should be disciplined enough to perform their work without outside coercion, deterrents or financial obligations. The objects of the administration were the users and beneficiaries of clearing, i.e. the exporters and importers.

Complexity and **lack of transparency** made it hard to reform and redesign the payment system. The administrative methods were too slow to react to sudden unpredictable changes. The administrative system was fairly heavy, complex and probably not sufficiently transparent (Kallonen 1987, pp. 37–48). During the early decennia Soviet-Finnish clearing was handled as one of many clearings Finland had with both socialist and western countries. The management of any clearing in these circumstances was a fairly simple task.

Discontinuation of most of the other clearings and liberalization of Finland's trade with western countries in the 1970s and particularly in the 1980s led to a situation in which the regulated sector had to build up its own separate administration and create new support systems for controlling and monitoring so as to mark and defend the frontiers against trespassing in both directions. The responsibilities became more divided and, as a result of piecemeal reforms, often somewhat obscure in their administration. Banking matters had to be handled with discretion to protect the private interests of the firms. This limited the possibility of making clearing-related problems more widely understood. On top of all that, Soviet practices (setting the external value of the rouble, setting internal prices) and intentions were not always known or well understood.

The lack of knowledge about incidence of pricing, penalties and subsidies may serve as an example of the lack of systemic transparency. Lowering the price at which clearing roubles were purchased from exporters to prevent the excessive growth of exports would therefore have punished firms other than those which were to blame for causing the imbalance. There were even informal discussions on arranging auctions between importers and exporters. The Bank of Finland declined from using methods that would haphazardly discriminate against participating enterprises – a practice whose validity can be questioned because all market based interventions are "unjust" in this sense. However, the payment agreements should have been altered to accommodate these changes, but the Soviet party could not be expected at that time to be very receptive to these kinds of ideas. Had the Soviet party agreed, reciprocity would have also given a free hand to the Soviet party to tamper with the rouble exchange rates applied in clearing trade. This would have further reduced the possibility of sound clearing management.

As a further example of the unclear division of responsibilities, one could cite the question of who was the creditor with respect to Finnish-Soviet clearing receivables, the Finnish government or the Bank of Finland alone. The mass media usually referred to the "clearing claims of the Bank of Finland". Indeed, these claims were visible in the balance sheets and burdened the Bank of Finland's profit and loss account.

The juridical aspects were presented above in section 3.1. In practice, the ownership of these claims was cleared and confirmed after Finnish-Soviet clearing was terminated. As a result, the Finnish government assumed the claims de jure and finally also de facto by purchasing its claims originating from the special account at the end of 1993.

Due to the complexity and lack of transparency of the clearing arrangement, probably a majority of the Finnish clearing exporters believed that an inter-governmental arrangement involving the Bank of Finland and the Vnesheconombank implied a full guarantee of timely payment receipts. That belief saved them the costs of export insurance and possible bridge financing. On the other hand, export payment delinquencies, which sometimes occurred during 1989–1992, because the soviet purchaser was unable to pay or even ceased to exist, found some Finnish exporters totally unprotected.

4.5 Issues regarding controls

The objectives and framework of the clearing payment controls and monitoring were explained above in section 3.4. in terms of why they were maintained. Here the problems involved are discussed with a view to understanding why the quantitative clearing payment regulation and monitoring became increasingly inadequate and inefficient during the last years of the 1980s.

Although the Bank of Finland's quantitative control techniques were based on tradition, alternative control approaches were discussed from time to time, particularly in the 1980s. One instance of alternative controls is the timing of payments as control instrument (Seppovaara 1983, pp. 67–68).

The use of customs and tariffs was outside the scope of the agreements. Once the rouble was dropped from the Finnish foreign exchange index in 1984, a regional foreign exchange policy towards the Soviet Union that would not have adverse effects on rest of the trade became possible in principle. The Bank of Finland could have, by lowering the FIM/CLSUR exchange rate, reduced the willingness to export and increased the willingness to import. The idea of applying foreign exchange intervention was first proposed by Oksanen in 1984 (Oksanen 1984, pp. 10–13).

However, rouble quotations were never tampered with beyond the minor adjustments explained in detail in section 4.6. Hence both the letter and spirit of the payment agreement were honoured. It was feared such tampering would further reduce the transparency and manageability of the clearing system. For the Finnish side clear-cut rules consistently followed guaranteed a better solution than occasional intervention measures, most likely to be countered by similar measures from the Soviet side. The reactions on the Soviet side would have been more or less unpredictable and sooner or later would have led to two-tier pricing. Oil price negotiations in particular would have been more complicated than before. Moreover, resorting to exchange rate interventions would have required that the payment agreements be correspondingly amended. The argument that market-related control measures would be preferable to the quantitative controls, would not likely have found much ideological understanding or acceptance from the Soviet side at that time.

When the clearing control rules became more complex, a special challenge for practical control work was to be consistent and to treat all applicants equally. The approach was to formulate the rules carefully in advance from the outset and so avoid the need for changing them too often. Some room for deliberation had to be left to the controller in the central or commercial bank. The applicants were invited to personally discuss their cases with the bank, an approach that was applied nearly systematically in the case of establishing joint ventures. The applicant was heard and given advice and the controller obtained more information useful in moderating the rules so as to avoid excesses or unfairness.

The drawback in this approach was that it was tedious and time-consuming. Even though the general set-up was clear and applicants were given written guidelines, most of the cases had special features which had to be tailored to ensure compatibility with the clearing system. In 1987–1990 almost 300 applications to participate in joint ventures were approved. Virtually no applications were turned down due to the fact that in preliminary discussions with the Bank of Finland the potential applicants decided either to design their participation acceptably or to give up the idea.

Chart 4.2 **Problem areas in clearing payment controls**

Problem area => Type of transaction ↓	1) Currency balance	2) Capital flows	3) Third party participation	4) Complexity	5) Monitoring
Direct trade (export and import of goods)	X				
Invisible trade (exports and imports of human and capital services: transit and other transport, insurance payments, royalties etc.)	X				X
Trading, cooperation with third countries	X	X	X	X	
Large (ship) deliveries and (construction) projects	X	X			
Direct investments	X	X	(X)	X	X
Compensation trade, set-offs, barters	X	X		X	X

Chart 4.2 summarizes the problems the controller was faced by type of transaction. The need for foreign exchange controls to administrate clearing payment flows, and the related problems, emerged in five areas:

1) the maintenance of currency balance. This was to avoid covering clearing rouble transfers with convertible currencies (Finnish-Soviet trade was not to be financed with convertible currencies). In more general terms, the use of the clearing rouble had to be insulated from the use of convertible currencies;

2) the inclusion of capital flows. This was caused by the general tendency to maximize the level of trade and keep the clearing in balance, so that capital flows, instead of trade flows did the adjusting, and by accommodating to clearing projects or deliveries which traditionally had

been financed with medium or long-term loans (deliveries of ships, construction projects, buy-back compensation trade etc.);

3) third party participation representing a deviation from the principle of bilateralism. The inclusion of a third party complicated the controls and monitoring (relates to the following point 4);

4) the introduction of more complex transactions including a third party, use of convertible currencies, credits, setoffs and other features alien to the principle of bilateralism and the use of non-convertible clearing currency only; and

5) liberalization of trade, payments and capital movements with western trade partners. It became difficult – if not impossible – to keep track of the increasing number of ways to circumvent the clearing controls and monitoring system. At the very end the controls began to discriminate against law abiding firms and persons (about the process of liberalization see Lehto-Sinisalo 1992 concerning exchange controls and Rautava 1984 concerning financial markets in general).

There were plans to streamline the system at the very start of the dismantlement of clearing in 1990. It was proposed that clearing would involve only payments related to the oil imports and the acceptance of these funds as payments for exports. Consequently all payments related to invisible trade and a substantial part of the trade in goods and services would have been settled in convertible currencies and hence would here have fallen outside of the foreign exchange control. At any rate, the share of hard currency trade had already increased towards the end of the clearing era. The average shares for hard currency trade during the first half of the 1980s were 3.2 per cent of total exports to the Soviet Union and 2.7 per cent of total imports from the Soviet Union. In the second half of the 1980s the corresponding figures were 8.7 and 6.3 per cent respectively. During the last year, 1990, these figures were 17.2 and 12.0 per cent (figure 2.5 on page 33).

The reasons for abandoning the authorization of individual transactions and regulations in general were as follows:

1) reduction of the bureaucratic work related to handling applications to use convertible currencies in payments to the Soviet Union. The number of such applications received by the Bank of Finland was about 1300 in 1990. In the final year there were 25 persons directly involved in negotiating, planning, monitoring, authorizing and maintaining payment transfers and a number of other persons more indirectly involved. Moreover, the clearing payment transfers and controls occupied a large number of commercial bank employees.

2) the regulation was inefficient due to easy circumvention by circulating payments that should have been effected through clearing via

third countries, most often through Swedish banks. This led to unequal treatment of applicants. Sometimes those applicants who duly applied were refused whereas those who failed to do so could have their payments effected in convertible currencies;

3) the Soviet Union introduced multiple exchange rates for the rouble from the beginning of November 1989 (section 4.6). This opened the door to foreign exchange arbitrage. One way was 1) to acquire an authorization to export services through clearing from the Bank of Finland (for instance by producing a fake consulting agreement, the authenticity of which was impossible to verify), 2) then to buy roubles to pay for these services in the Soviet Union at a low internal rate (eg the special rate, figure 4.4), and 3) to use the roubles to purchase clearing roubles from the VEB and finally 4) cash in the clearing roubles for markkaa once the CLSUR-denominated payment order arrived at the Bank of Finland. The official FIM/SUR rate, and hence also the profit for arbitrageur, was ten times higher than the special rouble rate (see figure 4.4). It should be obvious that the entire transaction was fraudulent and that the losses would be covered by the Bank of Finland;

4) the clearing rouble was no longer appreciated as a means of payment by Soviet exporters, who wanted to obtain convertible currencies. The Finnish clearing purchasers either lost their deals to free currency customers or either had to pay higher prices or accept worse alternatives;

5) The convertibility of the Finnish markka suffered from the curious interpretation the Soviet Ministry of Finance according to which the Finnish markka, being the currency of a clearing country, was to be classified as non-convertible. Consequently, firms and private persons who had accepted Finnish markkaa in good faith were surprisingly prohibited by the VEB from using them to settle convertible currency obligations;

6) the Russian purchasers insisted on receiving credits, as they did from the other free currency countries. As these requests were declined by the Finnish side, Finnish imports became less attractive and less competitive to the Soviet purchasers;

7) the Finnish partners in joint ventures were in a worse position than their competitors from other free currency countries in being obliged to and receive payments through clearing;

8) the Soviet Union paid a larger part of its imports from Finland in convertible currencies than did Finland for imports from the Soviet Union. Hence a problem of arose with the lack of reciprocity, which was taken up occasionally by the Soviet side. Convertible currency trade would eliminate this reciprocity problem.

The list could be made longer. The unbearable situation was partially caused and aggravated by the fact that the payment and capital movements with convertible currency countries, almost 90 per cent of total trade in 1990, had been totally liberalized by that time. The foreign exchange control and monitoring systems turned out to be technically inadequate to cope with this situation.

The Finnish experience supports the view of Rosati (section 1.2.3) that international clearings do not have a place beside multilateral trade with convertible currencies. Finland "then" in the 1950s and 1960s differs from Finland "now" in the 1980s. This does not exclude the possibility of usefully applying clearing payment systems under conditions of non-convertibility and absence of banking services. To maintain the manageability of a clearing payment system, only current transactions should be admitted and world market prices, to the extent available, should be used as references. The clearing currency should be the US dollar or any other major international currency the exchange rates for which should be constantly observed. To the extent that financing is provided beyond the necessary technical credit, it should not come from the parties involved but preferably from an outside financial institution or international organization.

4.6 Issues of external reserve management

During the 1980s, with the gradual liberalization of trade, payments and capital movements between Finland and western countries, more attention than before was drawn to cost factors caused by changes in foreign exchange rates and how to protect oneself against the risks involved. The problem with the rouble, and consequently with the clearing rouble, was its non-convertibility. In the absence of rouble markets, which could have impartially assigned a value to the rouble, the clearing rouble regime began increasingly to resemble a game, where the leaders of the game were the Gosbank and the VEB and the other participants were the Bank of Finland, Finnish and foreign commercial banks and major Finnish enterprises involved in the clearing trade. Indeed, all parties in this game succeeded in taking turns at making profits.

The Finnish and some foreign commercial banks, knowing the structure of the rouble currency basket, could easily predict the forthcoming SUR/FIM (or SUR/USD in the case of oil imports from the Soviet Union) quotation of the Gosbank. Also, knowing that the Bank of Finland would hold literally to the official nominal quotations of the

Gosbank (as agreed in the payments agreements) Finnish commercial banks, could now arbitrate by following the developments of the rouble basket currencies and timing export and import payments accordingly. Commercial banks' clients profited from this – at the expense of the Bank of Finland. To put a stop to this, the Bank of Finland joined the game, which was possible without violating the payments agreement.

Clearing payments were often effected in large lump sums, which allowed Finnish commercial banks (also some foreign commercial banks from time to time) and oil importers to engage in arbitrage by timing their payments. The Bank of Finland quoted the FIM/USD rate daily at noon, Gosbank weekly at noon on Mondays. Major movements in the FIM/USD rate could be anticipated on Monday mornings, so the party would buy or sell FIM or USD depending of the direction of the movement and profit from counter trades in the afternoons. Finnish oil importers could do the same: anticipating the SUR/USD rate, they could choose between the morning and afternoon quotations to convert roubles into dollars and finally dollars into the Finnish markkaa. Even the Bank of Finland was given its chance to conduct minor arbitrage. This was based on information from the Gosbank to the Bank of Finland only that there was an extra quoting for the rouble every time the value of the rouble changed more than one per cent against its basket currencies.

There are reasons to believe, however, that the Gosbank took advantage of the stipulation in the payments agreement that it had the right to quote the exchange rate to be applied to clearing payments. At times when Finland had a deficit or minor surplus on the clearing account, the Gosbank consistently devalued the rouble. At times of surpluses, the rouble was revalued (figure 4.3).

Had the Gosbank's rouble quotation been absolutely clean, with the weights unchanged, a change in the value of the rouble in relation to changes in the external values of the rouble basket currencies would have taken place on a one- to-one basis i.e. the index value would have been 1.00. In other words, if the rouble quotations had been computed mechanically from international quotations, the "clean" index would have been 1.00 at all times. However, the "dirty" float of the rouble caused its value to differ from its value in terms of the basket currencies by less then 8 per cent in the 1980s (see Figure 4.3).

Figure 4.3 **Changes in rouble quotations in relation to changes in its basket currencies**

The intentions of the Soviet foreign exchange authorities are not known. Still, some observations can be made from figure 4.3. First, the "dirty" element or tampering with the Gosbank quotations follows movements in the Finnish-Soviet trade balance, the balance on current account and the clearing balances. The appreciation of the rouble served as an incentive for Finnish exporters and Soviet importers: the former received more Finnish markkaa for their deliveries, the latter paid with a rouble that had more purchasing power. The possible effects on Finnish imports from the Soviet Union were the opposite.

Of course one could question why the Soviet Union would bother to let her official rouble quotations be determined by such a minor factor as its clearing trade with Finland. The fact remains, however, that Finnish-Soviet clearing was the only arrangement through which the rouble could earn hard currency. And, for that matter, Finland ranked as one of the Soviet Union's most important western trade partners. Most other clearings that the Soviet Union was involved in with other hard currency countries used a currency other than the rouble as the unit of account.

As far as is known, the foreign trade coefficients applied by the Soviet foreign trade authorities did not apply to Finnish-Soviet clearing trade. Thus for any Soviet FTO or other organization CLSUR 1 = SUR 1. Instead, a Soviet FTO or other organization was given the right to import through Finnish-Soviet clearing 35–40 per cent of the value of its clearing exports to Finland. With the revaluation of the rouble and the clearing rouble, the purchasing power of the rouble in terms of Finnish markkaa increased. Given the scarcity of foreign currencies, one can to conclude that the right to import from Finland was fully utilized.

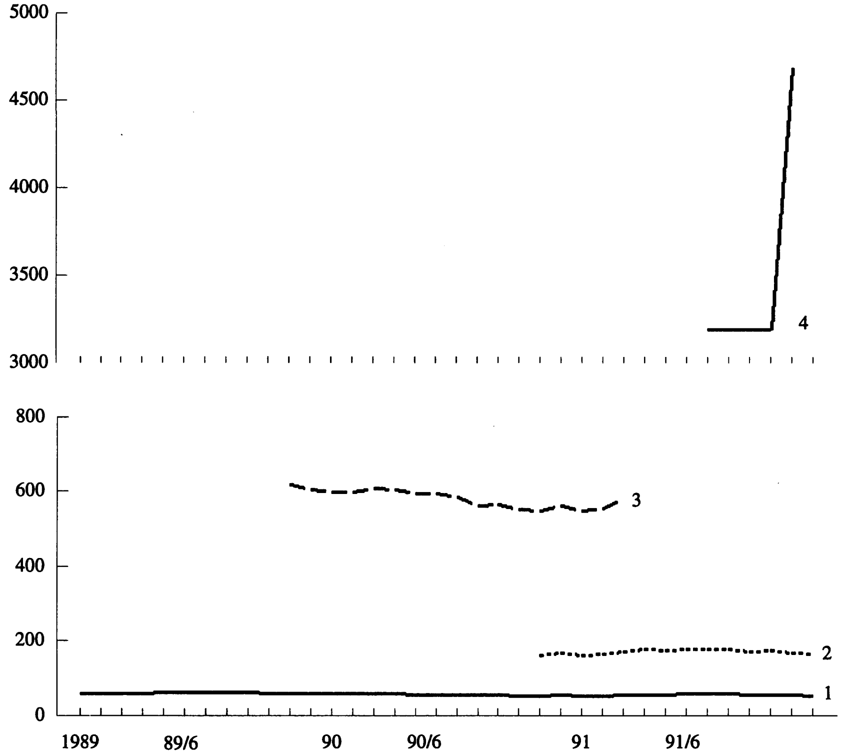
As noted above, the manipulation remained fairly moderate within the range of about 8 per cent. The revaluation of the rouble might have marginally affected Finnish exporters' willingness to export and made markka prices correspondingly dearer to Finnish importers in 1982–1983 and during the latter half of the 1980s. On the Soviet side, imports from Finland were implemented according to the state plan and the prices did not have any real role to play. From the viewpoint of bringing the trade into balance, these measures may have had an adverse effect.

Beyond the above described "dirty floating" the rouble quotations do not explain the alleged profits of Finnish exporters from Soviet trade. It does not make so much difference on what level the exchange rate has been fixed at the outset – whether one dollar would be equivalent to 6000, 6.0, or 0.06 roubles. Neither would the changes in the external value of the rouble, as compared to clean quotations or quotations protected by an index clause, constitute a source of profit to Finnish exporters or discriminate among importers beyond the arbitrage possibilities discussed earlier.

There are probably reasons for the alleged profits obtained by some Finnish exporters other than the level of or changes in the rouble exchange rate. Finnish firms again acted as profit seekers. The starting point for the Soviet price negotiators was somewhat different. The quantities to be delivered had been fixed beforehand. Prices were often negotiated afterwards by people other than those who had negotiated the delivery. The Soviet negotiators were instructed to lean on world market prices, whenever available. In addition, the Soviet FTOs and organizations operated under soft budget constraints that made them cost-blind and so made the price questions less important.

During the last years of the 1980s the clearing management faced growing problems. To the embarrassment of Finnish markka holders in the Soviet Union, the convertibility of the Finnish markka in the Soviet Union was suddenly restricted by the Soviet Ministry of Finance. No explanations were given. The only (questionable) logic that could be applied was that the markka was the currency of a country with which the Soviet Union maintained a clearing arrangement. A further embarrassment to the clearing administration was the Gosbank's decision on 25 October 1989 to introduce a commercial exchange rate that was one-third of the official exchange rate. No advance notice was given to the Finnish foreign exchange authorities (figure 4.4). Not being sure what rate to apply to convert the clearing payments, the Bank of Finland had to stop quoting the FIM/CLSUR rate and all clearing payment transfers for two banking days, on 1–2 November 1990, in order to get confirmation of the official exchange rate to be applied in the future (notification of the Bank of Finland 47/1990, 1 November 1990 "Clearinmaksuliike pysäytetään toistaiseksi" "Transfers of clearing payments will be stopped for the time being"; also in the Helsingin Sanomat 2–3 November 1990, Uusi Suomi 2 November 1990). Application of an incorrect rate of conversion would have led to cancellation of hundreds of clearing payments, which would have been not only embarrassing but would have led to a technically insuperable task.

Figure 4.4 **Multiple SUR/USD exchange rates quoted by the State Bank of the USSR, 1989–1991**



1 Official
2 Special / tourist
3 Commercial
4 Tourist

Unfortunately, from the viewpoint of clearing control, the introduction of the multiple currency system in the Soviet Union opened the doors to illegal arbitrage, an example of which was given above on page 119. In summary, the possibilities of orderly clearing currency management clearly began to slip out of the administrators' hands during the two last years of the Finnish-Soviet clearing arrangement.

5 Concluding Remarks

Finnish-Soviet clearing was a political arrangement. It was based on a decision of the Soviet government to make purchases from Finland in the context of its planning system. One of the political pillars of the clearing system was the agreement of friendship and cooperation. For the Soviet Union this trade served as an example of trade and cooperation between a small capitalistic country and large socialistic country. For the Finnish side the aspect of keeping trade apart from politics and giving trade the primacy, had been important already in the interwar period. In the new political climate after the war, the political aspects became acceptable to Finns once Finland's demands for staying outside of big-power conflicts became accepted. On the other side, after the 1960s, the Soviet Union changed its stance and began to emphasize the maximization of the level of clearing trade as a manifestation of good political relations. The pressure to maximize the trade led to further politization of the clearing trade and to difficulties in maintaining the clearing trade in balance.

Finnish-Soviet clearing never served purposes similar to those of the EPU or CMEA clearings, nor did Finland ever join either of these organizations. The principal objective of Finnish-Soviet clearing was the maximization of trade between the two countries. Finnish-Soviet clearing never – implicitly or explicitly – served the purpose of furthering the multilateralization of trade or convertibility of the partners' currencies. Finland achieved these objectives by developing her economic and financial relations with the rest of Europe pari passu with the other Nordic countries. The Soviet Union never aimed beyond the multilateral transferability of the rouble with the other CMEA members. Finnish-Soviet clearing made the Soviet rouble commensurable with the Finnish markka and, through it, convertible against other currencies. It probably saved on both countries scarce convertible currencies, particularly during the 1950s and 1960s, or maintained a higher level of trade than would have been possible using hard currencies.

Like the other clearing payment systems, Finnish-Soviet clearing displayed many of the technical qualities of international clearing payment systems. It could be used and was used to 1) promote trade, 2) save on convertible currencies for use in convertible trade, 3) make the non-convertible currency commensurable (with the markka), 4) organize payment intermediation so as to compensate for the Soviet Union's inadequate banking services, 5) provide the participants with financing, and 6) reduce transaction costs between partners.

As a trade system, the Finnish-Soviet system failed because the clearing administrators were not able to adjust the trade volumes to the rapidly changing prices. Particularly in the 1980s the Soviet side put more emphasis on trade maximization. This led to an asymmetric pattern of Finnish trade, as it readily boasted Finnish exports but could reduce exports only with difficulty and a considerable time lag. The operational responsibility of controlling the trade flows was left, among others, to the Finnish Licensing Office.

Financing the Finnish-Soviet trade was always a problem, particularly with clearing. Finland has always been a net importer of foreign capital. In this respect the receipt of advance payments in the 1970s was more convenient than extending export credits. Once the advance payments were replaced by export credits in the 1980s, the credits also had to be refinanced in the western capital markets. However, one of the strange features of clearing was that the advance payments in the 1970s also had to be paid by the Bank of Finland in convertible Finnish markkaa to the Finnish exporters, hence tying up a part of the convertible reserves. Regardless of whether Finland borrowed or lent through clearing, clearing surpluses ensued, which had to be financed either through reducing convertible reserves or borrowing from abroad. In sum, the non-convertible trade was financed with convertible currencies, and thus any interest-free clearing surplus was a cost to Finland. In addition, the Bank of Finland had occasionally to intervene in the money market to neutralize the effects of major clearing payments. The ensuing redistributional effects most likely favoured the Finnish exporters involved in eastern trade.

Clearing credits complicated the maintenance of balance in clearing. Sometimes clearing capital flows had balancing effects (as in the case of advance payments in the 1970s), and sometimes imbalancing effects (mainly in the 1980s). Advance payments from the Soviet Union reduced the room for future Finnish exports. This was also the case for debt service payments by the Soviet Union. According to the Finnish experience, the inclusion of credits in clearing always reduced its transparency and required well coordinated administration and sophisticated accounting. Moreover, when finally in the 1980s the liberalization of the Finnish economy improved the availability of financing, the improvement did not carry over completely into Finnish-Soviet clearing.

Clearing became too slow and less competitive in its ability to react to the rapidly changing liberalized economic and financial environment. Protection from outside competition was considered to be advantageous by both sides. With the liberalization in Finland, the costs and limitations of clearing became more obvious. The same thing took place on the

Soviet side in the final years of the 1980s, as soon as foreign trade decision-making was decentralized and the Soviet organizations could independently decide what and where to buy or sell and to keep for themselves part of the convertible currencies earned from exports. Clearing became administratively too slow: the decision making process was too slow to react promptly to unpredictable exogenous changes, and the instruments available were inadequate. The clearing system had grown too complex and had lost its transparency: it became harder to see who were the beneficiaries and who paid the bills. There were a number of benefits, but probably also costs, both for Finland and the Soviet Union, varying over time. The costs and benefits were unevenly distributed also within the Finnish economy. Clearing trade also caused number of positive and negative effects on Finnish trade with hard currency countries. Many of these effects should offer interesting subjects for future research in economic history.

Finnish-Soviet clearing was an appropriate approach for Finland to maintain a dual system of normal decentralized trade and a dual currency system (convertible markka and non-convertible rouble). This approach included the creation of the legislative, institutional and procedural framework to match the Soviet way of conducting trade and managing payments, and accommodated these arrangements by partly isolating and partly integrating them with regard to the rest of the Finnish economy and foreign trade. By virtue of this, Finland could open its economy to its western partners without excessive negative intervention by the Soviet Union.

Finnish-Soviet clearing worked fairly well in the controlled economic environment of the 1950s and 1960s for which it had been created. Being not totally isolated from the western world, some exogenous factors, such as the floating of the US dollar in 1972 and the large and unexpected fluctuations in the price of oil in 1974 and 1979, the different size of the clearing partners, the gradual liberalization of the Finnish economy during the 1970s and particularly in the 1980s, combined with the developments in the Soviet Union during the last years of the 1980s, created a number of problems for the management of clearing.

Even with hindsight, it is difficult to tell whether Finnish-Soviet clearing a "good" or "bad" arrangement. This has not been the purpose of this study. To be able to do that, one would need to know the alternatives. In order to be fair in such assessments, one should not forget that decisions had to be made under uncertainty about future developments. Comparisons with other European clearing systems show that clearing systems, including Finnish-Soviet clearing, are historical products of the economic and political environment and are bound to disappear sooner or later once conditions change. The liberalization process in the Soviet Union and the liberalized economic environment in Finland contributed to the demise of Finnish-Soviet clearing. Once one of the preconditions for the international clearing payment system – namely the complete non-convertibility of the currencies of all the members – had vanished, clearing lost its attractiveness in the eyes of the exporters and importers and it became crowded out by a more dynamic and effective system of trade with convertible currencies.

The Finnish experience does not support the allegations that continuation of the clearing arrangement would slow down the introduction of free trade with convertible currencies. It did not significantly disturb the convertible currency trade of Finland with other countries. Had Finnish-Soviet clearing ended ten or fifteen years earlier, the hard currency trade would probably have been at a lower level than it was with clearing. Perhaps this solution would have led to sounder allocation of economic resources and to a non-discriminatory trade policy. On the other hand, once the Soviet economic system had collapsed, the continuation of clearing would hardly have been able to save Finnish-Soviet trade from collapse. What the Finnish-Soviet experience seems to suggest is that once multilateral hard currency trade and payments become dominant and the non-convertibility aspect loses its importance, clearing will be crowded out by the new, more flexible and vigorous regime, without much regard to political, administrative, and individual factors.

This lesson supports Rosati's view that clearing would not be a very good vehicle for promoting multilateral trade and convertibility between members that already have access to hard currencies. But clearing would still be a viable means of promoting trade or saving it from collapse if the partners are of roughly equal size and have non-convertible currencies, regulated foreign payments and capital movements, less developed banking and a shortage of hard currencies. In these circumstances clearing could be useful as a transitory arrangement and would work, provided that the partners' currencies are made commensurable through a third internationally quoted currency and without excessive financing of imbalances on the clearing account.

Another condition is that in the absence of local markets to determine prices of commodities and foreign exchange rates, world market prices should be used as reference prices, where possible. The prices should not be manipulated in order to bring clearing into balance or to acquire otherwise undeserved or one-sided benefits through the clearing system. Consistent and disciplined compliance with the agreed rules are important, particularly when there are no local markets yet to determine the exchange rates and prices to be applied by the trading partners.

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List of Abbreviations

BOF	Bank of Finland (the central bank of Finland)
BIS	Bank for International Settlements
CA	Current account
CEE(C)	Central East European (countries)
CEPU	Central European Payment Union
CHF	Swiss franc
CIS	Council of Independent States
CLFIM	Finnish clearing markka(a), (unit of account)
CLSUR	Clearing rouble, (unit of account)
CMEA	Council for Mutual Economic Assistance (also COMECON or SEV)
CPI	Consumer price index
CPSU	Communist Party of the Soviet Union
CSCE	Conference on Security and Cooperation in Europe
DEM	German mark
EBRD	European Bank for Reconstruction and Development
ECE	Economic Commission for Europe
ECU	European Currency Unit
EMU	European Monetary Union
EPU	European Payment Union
FIM	Finnish markka
FRF	French franc
FTO	Foreign trade organization
GBP	English pound
GCT	Gross clearing trade
GOB	Gosbank
GT	Gross trade
HELIBOR	Helsinki Interbank Offered Rate
HMMC	Helsinki Money Market Center Ltd
IBEC	International Bank for Economic Cooperation
IIB	International Investment Bank
IMEMO	Institut Mirovoi Ekonomiki i Mezhdunarodnykh Otnoshenii Rossiiskoi Akademii Nauk (Institute for World Economy and International Relations of the Russian Academy of Science)
IMF	International Monetary Fund
IPU	Interstate Payment Union
ISPM	Inter-State Payments Mechanism
JPY	Japanese yen
KOP	Kansallis-Osake-Pankki
LIBOR	London Interbank Offered Rate
ma	main account
MVES	Ministerstvo dlya Vneshneekonomitseshkii Svyazei (Ministry for Foreign Economic Relations)
OECD	Organization for Economic Cooperation and Development
OEEC	Organization for European Economic Cooperation
sa	Special account, sub-account
SIC	Swiss Interbank Clearing
SITC	Standard International Trade Classification
SU	Soviet Union
SUR	Soviet/Russian rouble

SWIFT	Society for Worldwide Interbank Financial Telecommunication
UA	Unit of account
UN	United Nations
US	United States
USD	United States dollar(s), USD 1 = FIM 5 used in conversions in this study unless otherwise indicated or follows from the context
VEB	Vnesheconombank (Bank dlya Vneshneekonomitseshkii Svyazei = Bank for Foreign Economic Relations)
VTB	Vneshtorgbank (Bank Vneshnei Torgovli = Foreign Trade Bank, predecessor of the VEB)

Technical Annex

to section 3.5 Currency management and the costs involved.

Illustrative example of the effect of a change in the exchange rate between the clearing rouble (=rouble) and Finnish markka on the clearing balance

The depreciation of the external value of the rouble was determined by the rouble currency basket applied by the Gosbank. The index for measuring a change in the external value of rouble from time t_0 to t_1 is obtained by computing the arithmetic mean of the ratio of quotations at dates t_0 and t_1 for each basket currency weighted by its respective percentage in the basket, or

$$\begin{aligned} \text{Ind} = \; & 0.42*USD_1/USD_0 + 0.19*DEM_1/DEM_0 + 0.1*CHF_1/CHF_0 \\ & + 0.1*FRF_1/FRF_0 + 0.1*GBP_1/GBP_0 + 0.09*JPY_1/JPY_0. \end{aligned}$$

The agreement on the Special Account was signed on 6 January 1987 = t_0. The index for whichever later date t_1 could now be computed knowing only the Gosbank's quotations for the six basket currencies on dates t_0 and t_1.

The funds deposited in the special account on 6 January 1987, represented CLSUR receivables of the Bank of Finland from the VEB. The repayments, therefore, represented payments from the Soviet Union to Finland (the contracted schedule of repayments and other terms are given in the section 2.2). However, at the cease of the clearing system on 31 Dec 1990, the outstanding balance on the special account was SUR 60 million. A major part, SUR 225 million, had been repaid in advance by that time, as shown in the table below (line a).

The value of the index number and the actual amount to be repaid, for instance on 14 August 1990, can be computed from the rouble quotations of the Gosbank for the rouble basket currencies on the dates of t_0 = 6 Jan 1987 and t_1 = 14 Aug 1990, as follows:

Rouble currency basket			Gosbank quotations				
Currency	Weight		14 Aug 1990		6 Jan 1987		
USD	0.42	*	57.57	/	67.00	=	0.36088
DEM	0.19	*	36.57	/	34.31	=	0.20251
CHF	0.10	*	43.07	/	40.99	=	0.10507
FRF	0.10	*	10.90	/	10.34	=	0.10541
GBP	0.10	*	107.63	/	98.15	=	0.10965
JPY	0.09	*	3.85	/	4.16	=	0.08329
						=	0.966891
Index number (Ind) with two decimals						=	96. 68 (see table, line b, column 5)
– unadjusted amount						=	CLSUR 50 000 000
– adjusted amount to be actually paid						=	0.9668 * 50 mill. = 48 340 000
– loss of SUR = 50.00 – 48.34						=	CLSUR 1.66 mill. (table, line d, column 5).

Due to the strengthening or revaluation of the official exchange rate of the rouble, the repayment was only 48.3 million roubles instead of 50 million roubles, and the loss in roubles to the Bank of Finland was 1.7 million roubles, or FIM 10.7 million (lines d and e, column 5).

In the Bank of Finland's accounting the rouble values had to be converted into Finnish markkaa. Had the SUR/FIM remained unchanged at 7.137, the FIM value of the loss caused by the strengthening of the rouble of CLSUR 1.66 million would have been FIM 11.847 million. However, the external value of the Finnish markka also strengthened and was 6.470 for one rouble on 14 Aug 1990. This resulted in 6.47 * CLSUR 1.66 mill. = 10.7 mill. FIM instead of FIM 11.8 million and produced a further loss resulting in a fall in the value in markkaa to 11.8–10.7 = FIM 1.1 million (line g, column 5).

Table: **Special account: illustrative computation of adjustments created by SUR/FIM exchange rate changes by the dates of repayment**

	1. 1989 13 Oct	2. 1989 21 Dec	3. 1990 9 Mar	4. 1990 4 Apr	5. 1990 14 Aug	6. Total
Repayments = RP, adjustment = adj.						
a. RP in mill CLSUR	50	50	25	50	50	225
b. SUR-index	97.07	96.90	96.74	96.71	96.68	
c. RP adjusted	48.5	48.4	24.1	48.3	48.3	218
d. SUR-adj. SUR mill.	–1.5	–1.5	–0.8	–1.5	–1.7	–7.0
e. SUR-adj. FIM mill.	–10.0	–10.5	–5.3	–11.02	–10.7	–47.5
f. FIM-index (1)	95.36	93.87	92.36	92.08	90.65	
g. FIM-adj. FIM mill.	–0.5	–0.7	–0.0	–0.8	–1.1	–3.1
h. = e. + g.	–10.5	–11.2	–5.3	–11.8	–11.8	–50.6

Explanations:

a. nominal repayments

b. index based on the rouble currency basket, computed as shown above.

c. actual repayments in SUR

d. loss in SUR to the Bank of Finland created by the revaluation of the rouble since the base date of 6 Jan 1987.

e. the loss in SUR converted into FIM.

f. SUR/FIM quotations of the Bank of Finland at the dates of repayment related to the SUR/FIM quotation on 6 Jan 1987.

g. Further loss to the Bank of Finland created by the revaluation of the markka after the base date of 6 Jan 1987.

h. Total loss caused to the Bank of Finland by the changes (revaluation) of the CLSUR and FIM. As can be seen, the total loss materialized through the 5 repayments amounted to almost FIM 50 million (more than USD 9 million).

In the Bank of Finland's internal accounting, the two different adjustments – the FIM value of the SUR adjustment and the FIM adjustment – were recorded on separate accounts. The latter adjustment was computed and recorded daily for the entire clearing balance and liquidated at the end of each accounting period (calendar year). The former adjustment was effected and liquidated at the occasion of each payment.

This same method was applied in the revised clearing of 1989, introducing the protection against rouble devaluation. The date of t_0 was in this case 1 January 1989. From the viewpoint of the computational, the clearing account was more tedious than the Special Account. In the case of the Special Account, only the regular semi-annual payments of interest and repayments had to be adjusted. In the clearing account of 1989 hundreds of incoming and outgoing payments a month had to be all adjusted as they were effected with the index changing once a week.

It was agreed that the balance on the clearing accounts would be automatically adjusted every time the index changed by 1 (for instance from 100 to 99) and the date set at t_0 again (the computation of the index was started from 1.00 again). The same procedure was followed whenever the sign of the balance changed, i.e. the claims turn to debt or vice versa. In this sense the clearing account differed from the Special Accounts, in which the formula was applied only to adjust the value of service payments (amortizations and interest payments) at the due date.

Furthermore, the formula was applied when converting clearing rouble payments into the liquidation account into US dollars. Finally the formula was applied when the special account was amortized by crediting the special account and debiting the main account (or "moved back to the main account" as explained in section 3.2 "Payments management"), because the dates of signature of the two agreements differed from each other and now the "special account roubles" had to be expressed in "main account roubles".

Statistical Annex

Balance of payments between Finland and the Soviet Union in 1961–1990, millions of FIM

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
Exports of goods, fob	409	632	593	498	725	683	913	1056	1165	1187	1067	1492	1718	2857	4097
Imports of goods, cif	483	526	625	792	740	840	909	1104	1089	1388	1645	1575	2069	4678	4710
Adjustment items	0	0	0	0	0	0	0	0	0	7	8	8	9	18	21
Trade account	–74	106	–32	–294	–15	–157	4	–48	76	–194	–570	–75	–342	–1803	–593
Service receipts	54	56	58	70	76	90	107	104	112	108	111	132	133	181	194
Service expenditure	8	9	18	21	36	39	39	48	44	42	49	56	78	112	157
Services account	46	47	40	49	40	51	68	56	68	66	62	76	55	69	36
Factor receipts	0	57	42	34	16	0	0	0	0	9	2	94	108	137	75
Factor expenditure	0	0	0	0	0	0	0	0	0	9	11	31	11	24	36
Factors account	0	57	42	34	16	0	0	0	0	0	–9	63	97	113	39
Currenct account	–28	210	50	–211	41	–106	72	8	144	–128	–517	64	–190	–1621	–517
Capital related to imports	60	66	107	61	–33	1	–31	31	–24	4	13	–3	–44	–40	209
Capital related to exports	0	0	0	0	42	–19	–23	0	0	0	0	0	0	0	0
Other capital	0	0	0	0	0	0	0	0	0	–10	–15	63	199	216	30
Long–term capital account	60	66	107	61	9	–18	–54	31	–24	–6	–2	60	155	176	238
Short–term capital account	63	–217	–170	62	43	105	38	–11	–100	69	306	149	275	867	990
Convertible currency income (–)	–40	–33	–35	–32	–32	–1	–19	–11	–64	0	0	0	0	0	–41
Convertible currency expenditure (+)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
Overall balance excl. reserve movements	55	26	–48	–120	61	–20	37	17	–44	–66	–213	274	240	–578	710
Foreign exch. rates change correction	0	0	0	0	0	0	0	0	0	0	–17	5	–3	4	–16
Change of tied reserves (ch. of cl–bal)	55	26	–48	–120	61	–20	37	17	–44	–66	–230	279	238	–573	694
Tied reserves (cl–balance) as of 31.12.	84	110	62	–58	3	–17	20	37	–7	–73	–302	–24	214	–360	334
– on the accounts with the BoF	84	110	62	–58	3	–17	20	37	–7	–73	–302	–24	214	–360	334
– on the acc. of commercial banks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Balance of payments between Finland and the Soviet Union in 1961–1990, millions of FIM (Cont.)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Exports of goods, fob	4954	6016	6276	5987	9302	14924	16805	18244	15397	18099	16774	13127	13958	14496	12888
Imports of goods, cif	5277	6050	6066	8632	12233	14378	15910	18389	17274	17153	11933	11938	11116	12152	10196
Adjustment items	24	27	25	30	45	59	59	860	1054	246	–19	–22	–6	2	44
Trade account	–299	–8	234	–2615	–2886	605	955	715	–823	1193	4822	1164	2836	2345	2735
Service receipts	308	343	709	592	1124	1015	1170	1269	1108	1311	1207	1343	1437	1425	1425
Service expenditure	163	201	250	293	406	548	618	639	712	641	689	630	714	608	652
Services account	145	142	459	299	718	466	552	630	397	547	518	714	723	817	773
Factor receipts	221	286	454	417	490	477	1470	1550	663	704	543	770	1019	802	780
Factor expenditure	35	32	35	50	117	237	247	206	287	238	239	222	280	283	276
Factors account	186	254	419	366	373	240	1223	1345	376	467	304	548	739	519	504
Currenct account	32	388	1112	–1950	–1795	1310	2730	2690	–49	2207	5644	2429	4298	3681	4012
Capital related to imports	146	61	–64	–29	–55	–30	–55	–74	–137	–28	38	–63	–53	–98	–30
Capital related to exports	0	–164	0	164	0	0	–2232	0	2197	0	2	–2005	–751	–1152	840
Other capital	–16	–70	–55	–19	295	–56	–82	–106	7	–42	–63	2	–37	–38	–42
Long–term capital account	130	–174	–119	116	240	–87	–2370	–180	2067	–69	–22	–2065	–840	–1287	768
Short–term capital account	–258	–238	–949	741	1488	1542	–1525	–3340	–2725	–1715	–1520	–1879	–3383	–1648	–2818
Convertible currency income (–)	–15	–63	–85	–112	–214	–307	–461	–862	–978	–716	–489	–926	–917	–3248	–3570
Convertible currency expenditure (+)	13	27	65	80	197	329	407	527	614	408	392	380	598	968	1195
Overall balance excl. reserve movements	–98	–60	24	–1126	–84	2788	–1219	–1166	–1071	114	4004	–2062	–243	–1533	–413
Foreign exch. rates change correction	1	73	14	–5	18	28	790	–8	–39	24	–35	–78	65	–3	22
Change of tied reserves (ch. of cl–bal)	–98	13	38	–1130	–67	2817	–429	–1173	–1110	138	3969	–2140	–178	–1536	–391
Tied reserves (cl–balance) as of 31.12.	236	250	287	–843	–910	1907	1478	305	–805	–667	3302	1162	973	–563	–954
– on the accounts with the BoF	236	250	287	–830	–894	1930	1502	359	–725						
– on the acc. of commercial banks	0	0	0	–13	–16	–23	–24	–54	–81						

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