

**SOCIO-ECONOMIC SCIENCES AND HUMANITIES****FP7-SSH-2010-1****RE-designing Financial ORganizations and Markets (REFORM)**

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**Name of the coordinating person:** Professor Maurizio Zollo  
**e-mail:** [maurizio.zollo@unibocconi.it](mailto:maurizio.zollo@unibocconi.it)  
**fax:** +39-02-5836-2530

**Participant list:**

Partner no.	Organization Full Name	Short Name	Country
1	Università Commerciale Luigi Bocconi	BOCCONI	IT
2	European Academy of Business In Society	EABIS	BE
3	Centre for European Policy Studies	CEPS	BE
4	Vlerick Leuven Gent Management School	VLERICK	BE
5	The Chancellor, Masters And Scholars Of The University Of Oxford	UOXFMQ	UK
6	Institut Europeen d' Administration des Affaires	INSEAD	FR
7	London School Of Economics And Political Science	LSE	UK
8	Universidad de Navarra	IESE	ES
9	Fundacion ESADE	ESADE	ES
10	University of Nottingham	UNOTT	UK
11	Copenhagen Business School	CBS	DK
12	Universiteit Nyenrode BV	NBU	NL
13	Szkola Glowna Handlowa w Warszawie	SGH	PL
14	Otto Friedrich Universitaet Bamberg	OFU	DE
15	Ketchum Pleon BV	PLEON	NL
16	IMD International	IMD	CH
17	Wirtschaftsuniversität Wien	WU	AT
18	Univerza v Ljubljani	UL	SI
19	Univerzita Komenskeho v Bratislave	UKB	SK
20	Organization for Ecomonic Cooperation and Development	OECD	FR

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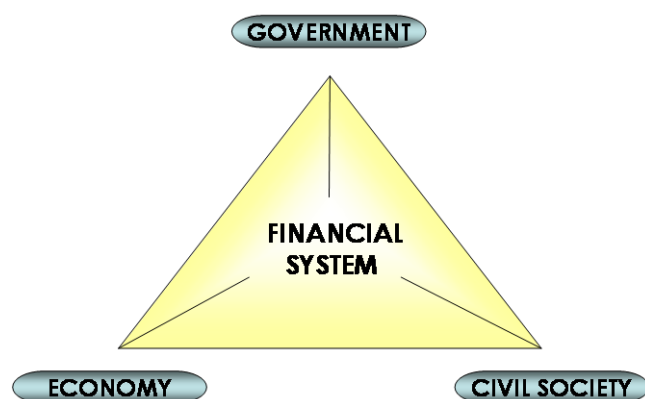
# 1 Scientific Quality

## 1.1 Concept and Objectives

### Background

We are at an historic time in the development of the financial system and its role in the social contract in Europe, and even globally. That system historically plays a central role in the social contract that links government, civil society, and the “real” economy. It is through the role of financial intermediaries that wealth is constantly shifted from those who wish to invest it and those who wish to borrow it for productive purposes. This position at the center of the financial flows in society is awarded to financial institutions on the basis of (a) both the needs of borrowers and investors, (b) the financial institutions’ trustworthiness and accountability to their customers, and (c) the ability of the arrangements to produce benefit for the greater society as a whole. In other words, banks and the other financial intermediaries were entrusted with the use of financial wealth owned by others to fulfil objectives that would be in the best interests of all parties concerned by the good functioning of the social contract.

### **The Social Contract and the Role of Finance**



In the recent past, both the premises at the basis of the social contract tying the financial system to other subsystems that make up society have eroded. On the one hand, communication and technological advancement pose serious systemic threats to the intermediary role that banks and other financial institutions have been playing for centuries, making it increasingly possible for investors and borrowers to connect to each other directly. On the other, the perceptions of trustworthiness of financial institutions have been steadily decreasing and hit a historical plunge with the financial crises in 2007 and 2008 and the consequent economic crisis that the world is still

suffering from. For instance, the global trustworthiness of banks declined from 56% in 2008 to 45% in 2009, and in the US it dropped from 69% to 36% in the same period!<sup>i</sup> The diffused mismanagement of financial and human resources in some of the most reputed financial institutions on the planet, connected to the rapid diffusion of financial innovation instruments, exposed the problem in its fullest scope and gravity. Apparently even the best financial actors in the world can not be trusted to deal with their own capital, let alone that of their clients, with basic levels of accountability, transparency and prudence.

Not only is the level of trust and reputation enjoyed by financial institution at all time lows, but the “social contract” that gives them the status and the connected economic rents, is increasingly put into question. Recent research on this issue at the University of Oxford<sup>ii</sup> has explored whether the ‘problem’ is OF the financial system, or BETWEEN finance (and the economic system), civil society (and the political institutions that represent them) and the natural environment, recognizing that the way the ‘problem’ is framed will predetermine the ‘solutions’ it might give rise to<sup>iii</sup>.

In their studies on the unfolding history of capitalism, Boltanski and Chiapello (2007)<sup>iv</sup> suggest that every now and then an opportunity for deep and broad reformulations arises. They suggest that we are currently entering such an opportunity, and the debate that has been raging since the explosion of the crises might be viewed as supportive evidence for their belief.

## The Challenge

The text of the COM Call describes the research challenge in clear and straightforward terms:

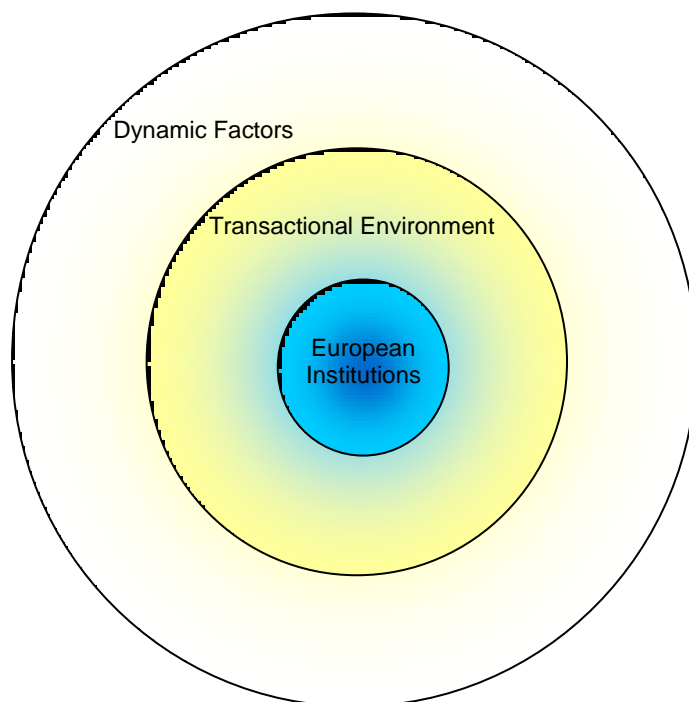
*... with the deepening of the financial and economic crisis from 2007-2008, these developments<sup>v</sup> have increasingly been questioned, in terms of their impact and effectiveness in serving economic, social and environmental objectives over the longer term. This challenge concerns both the existing role of finance in the economy and what should be its appropriate roles in relation to the public interest. The research would face the challenge of understanding the changing role of private finance (economic, social, political roles), its impact, how it might better serve economic, social and environmental objectives, and the outlook for the future.*

In this challenge, the roles which European public institutions might have in the future is a central focus for investigation. They include those directly involved in the financial system – central bankers, ministries of finance, financial regulators – and, as the Call suggests, also their interactions with a broader range of public institutional as well as private stakeholders involved in environmental and social policy. The challenge for public institutions can be envisioned as the need to engage with other stakeholders who have a large number and variety of exchanges. These include people in the traditionally-defined finance system – including banks, investment firms, insurance companies – and the Call also alludes to the relevance of other stakeholders including labour, consumers, social activists, and environmentalists.

However, both of these groups sit in a dynamic context with influential factors that the groups can influence, but not control. This includes climate change, demographics, global exchange rates, values, technology, and growth. These dynamic factors are what Emery and Trist (Emery and Trist 1965) refer to as the “causal texture of the environment” – or turbulence.

The Diagramme below – derived from Emery and Trist’s work on environmental causal textures – aims to depict this situation. It suggests that there are the following important aspects:

- 1) the structure of the public institutions, how they relate to each other and how they relate to the broader array of organizations;
- 2) the structure of other societal actors, how they relate and how they relate to each other; and
- 3) the turbulence of the broader contextual environment, how the factors within it interact, and their influence upon the other two layers.



From a risk management perspective, each layer has its own challenges.

## The REFORM Project Concept

This is an exciting challenge because it presents the need to aggressively advance methodologies and integrate them in innovative ways on an unusually large, sustained scale that combines high-calibre conventional research and action research that engages stakeholders in new ways. Project REFORM is designed to take on this challenge.

The objective of Project REFORM is to identify (a) the types of changes in the role of the financial system that should be pursued (and under what conditions) to better serve economic, social and environmental objectives, and

(b) how to achieve those changes. REFORM is designed to help the EU and financial system stakeholders explore both alternative logics connected to the financial sector reform, and to explore why and how this might occur. REFORM will link rigorous scholarly research about the workings of the financial system with effective stakeholder engagement to robustly explore of how different framings of the relations between finance, business, government and civil society will define different forms of the financial system of the future.

Such an ambitious and complex objective requires a multi- and cross-disciplinary social science perspective, the willingness to re-consider some generally accepted responses to old inquiries, and the courage to undertake bold and innovative scientific quests. To address this challenge innovatively, the core task is to integrate the following elements to produce a powerful whole:

1. **Investigating historic financial system dynamics.** There will be a comprehensive analysis of the reasons for the financial crisis in the context of global financial trends, policy, structures and developed-developing country dynamics.
2. **Re-thinking the purpose of the firm.** The project will question the fundamental assumptions in the neo-classic analysis of economic systems and of the role of the corporation (both productive and financial) in a context of rapidly shifting expectations on their behavior by their societal counterparts.
3. **Investigating cross-system and cross-level interdependences.** The evidence-based simulation modeling activity will model the interdependencies between the financial sector and the other segments of society with which it interacts. Importantly, this complex set of interdependencies will have to be studied within the institutional and cultural context in which the finance-society interactions take place. Modeling will also link the system perspective with the behavioral and change dynamics at deeper levels of analysis: the intra-sector and the intra-firm levels in particular. It is not possible to fully understand the system level dynamics (let alone the costs and benefits of system-level policy interventions) without an explicit consideration of the micro-foundations of such dynamics and of the cross-level interdependencies.
4. **Scenario-building.** The project will leverage multi-stakeholder dialogue and polling methodologies to develop and refine scenarios about possible roles of the finance sector from a “blank sheet” of paper (to the extent possible). Scenarios will be developed and evaluated on the basis of the estimated costs and benefits required to steer the system along a path of least resistance to their realization.
5. **Experimenting with change.** REFORM moves beyond forecasting and foresight exercises to develop clinical evidence of the impacts of the “new” paradigm generated by intra-firm change interventions towards higher sustainability levels in their operations.
6. **Engaging stakeholders.** We propose to break new ground for EU research initiatives in engaging stakeholders. We bring together action research, social media and traditional dissemination into a powerful strategy to “emerge” from stakeholder discussions plausible futures and ensure that the project knowledge is socially owned and embedded, in addition to being documented with traditional reports and papers.

### The Objectives of the Research

The text of the EU call is also very clear about five **domains** that should be explored to face the challenge outlined above:

1. *The evolving role of finance in the economy and society and how this can be explained in economic and political terms, including commonalities and differences in paths of economic and social development and financial development. The assessment of various financial and economic theories and models and their application in regulatory regimes and their impact on societies and politics over time. How issues of values, ethics, trust and transparency are dealt with in different societies in this context; their role in the genesis of the crisis and tackling it; the relevance of corporate social responsibility.*
2. *The costs and benefits (both economic and social) of restructuring in the real economy induced by the requirements of financial markets and the financial sector, the role of financial and other actors, as well as the development of new economic activities in this context.*
3. *Regulation and governance of finance in an international and historical perspective, and related public policy issues such as taxation, the structure and function of the financial sector, regulation of the “shadow” banking sector, government guarantees, the role of offshore tax havens in Europe and outside Europe, regulatory competition.*

4. *The impact on developing countries and the development of international treaties and institutions better adapted to the challenges.*
5. *Related specific challenges for the EU in a context of the crisis; challenges to EU cohesion, fiscal policy, governance of the Euro-zone. The possible need for coordinated initiatives for active economic and social policies and their impact on longer-term goals.*

To operationalize the domains for investigation, we propose the following research question:

**Domain 1** (Role of Finance):

- I. *How has the role of the financial sector in the development of economic and social systems evolved over time and across institutional and cultural contexts?*
- II. *What are the contributions and the limitations of received theories and modelling exercises in the identification of the interdependencies among the financial sector and the other sectors of the economy and society?*
- III. *What are the systemic factors at the basis of the development of the global financial and economic crisis in 2007-9, and in particular the role played by personal values, trust dynamics, ethical and responsibility issues?*

**Domain 2** (Impacts on the “Real Economy”):

- IV. *At the system level: what are the costs and the benefits of the evolution of the financial sector in terms of the consequent restructuring processes generated in non-financial economic sectors and society at large?*
- V. *At the organizational level: how do the various actors in the financial system co-evolve with those in the other social systems, and how should they co-evolve to serve the public interest?*
- VI. *At the activity level: how do the innovative activities in the financial sector influence the evolution of other economic and social actors and their ability to develop innovative and sustainable types of economic activities?*

**Domain 3** (International Regulation and Governance):

- VII. What regulatory and supervisory interventions on the functioning of the international financial sector are warranted to reduce the likelihood of similar crises in the future and to enhance the economic, social and environmental sustainability of the global economic system?
- VIII. What regulatory and supervisory interventions might be warranted from EU institutions’ perspective, in collaboration with national authorities, to ensure a balanced and sustainable development to member states?

**Domain 4** (Impact on International Development):

- IX. What are the specific economic, social and environmental problems of developing countries in the current global financial system, crisis and associated governance systems?
- X. What kind of system of international governance might better meet the economic, social and environmental needs of developing countries? What are the change strategies required to transform the system from the current one?

**Domain 5** (Implications for EU Policy):

- XI. What is the challenge posed by the crisis to EU policy strategy?
- XII. What are the specific policy challenges?
- XIII. What are the costs and the benefits of alternative policy intervention scenarios aimed at redressing the systematic factors at the basis of the economic and financial crisis?

XIV. What policy, regulatory and supervisory interventions might be warranted from the EU institutions' perspective, in collaboration with national authorities, to ensure a balanced and sustainable development to member states?



## 1.2 Progress Beyond the State-of-the-Art

### 1.2.1 Introduction

To illustrate how Project REFORM intends to progress beyond the current State-of-the-Art, we proceed in the following way. We take stock of (1) the key issues that have emerged from the financial crisis, (2) how they are being currently tackled (to the extent they are), and (3) what are some of fundamental conceptual limitations that might have caused and/or accelerated the crisis, and hence need to be reconsidered to ensure progress. This ensures progress which addresses the root cause rather than the symptoms.

We describe the cross-disciplinary, multi-level, and multi-method approach we have chosen to take to tackle the fundamental issues and distortions, both in the social science underlying the financial sector activities, and in the practical aspects of the activities themselves. We do so giving equal weight to the conceptual development process at the base of the research design (Sections from 1.2.2 to 1.2.6), and to the methodological advancements that are necessary to produce insights and guidance required from this project (Sections from 1.2.7 to 1.2.9). Finally, a conclusive section offers some reflections about the way in which Project REFORM aims to simultaneously pursue advancement beyond the State of the Art in both the content and the process of its research design.

### **Issues From the Financial Crisis**

The financial crisis and the subsequent consequences on the economic and social fabrics of societies have been at the centre of the academic, policy and managerial debates since their outset. The causes of the crisis in the global financial system can be summarized in the following (parsimonious) list:

1. Excessive funding made available to poor quality borrowers, due to political biases in favor of diffused home ownership and household consumption. This was supported by the power of corporatist lobbies in the financial sector interested in the artificial support of demand.
2. The emergence of large savers, especially in Asian countries (China, India, Middle-East) with strong preference for risk-free assets. This resulted in an excess demand for safe and liquid assets. It was not recognized that this development had created pressures on, and incentives for, the financial system to manufacture excessive amounts of highly rated papers. To do so, default risk had to be accumulated in the private sector of western economies, with dire effects on the stability of the financial system.
3. Failure of institutional governance and control of financial institutions' operating activities, especially connected to the development and commercialization of new products (CDS, CMO/CBOs, credit swaps).
4. Lack of political will to pursue universal regulation and supervision of non-banking financial institutions, of rating and auditing agencies, of off-balance sheet assets and activities, of off-shore activities in tax havens or less controlled contexts.
5. Weak political and social monitoring. Political power, public administrators, corporate clients, consumer rights advocates, specialized activists (e.g. Bank Watch, etc.) failed to "blow the whistle" in time or to blow it loudly enough.
6. Failure of corporate governance and control. Boards of directors failed in their duties to control internal practices, allowing "earthquake insurance" (against very low probability events, such as very high default rates in the US and UK) to be written without adequate reserves. They limited their role to bottom-line management and refrained from inquiring about the nature and the risks associated to the profits and products produced. Rating agencies, even those specialized in ethical assessments, failed to anticipate and to alert investors to the increasing amount of risk accumulated by financial institutions, especially the most reputed ones, due to a combination of incompetence, lack of transparency by their clients and conflicts of interests with their patrons.

7. Myopic and blind-sided managerial vision. Top managers failed to understand the implications of the new products for the long-term (economic) sustainability of their institution. They also failed to manage the asset portfolios of their institutions with adequate risk assessment processes.
8. Motivation practices. Compensation schemes have grown to unprecedented levels. Rather than enhancing the alignment between individual and organizational objectives, these practices created enormous incentives to act irresponsibly, and sometimes even in unethical ways.
9. Ethical and responsibility standards. The ethical and social implications of new product development, investment decisions and sales practices have been poorly assessed and integrated in operating processes, in strategic decision-making and in cultural traits. Within the global financial system there are imbalances and risk accumulation.

### Some of the Remedies Applied to Date:

1. **International bank regulation.** The Basel Committee has recently issued a white paper with some suggestions on reform of the current Basel Capital Accord, including:
  - a. the requirement of a maximum leverage ratio, in order to avoid the over-leverage that characterized many commercial and investment banks in the past few years;
  - b. more stringent capital requirements. In particular, the “Tier 1” ratio focuses almost exclusively on equity (capital and reserves). This new rule should avoid the abuse of hybrid instruments, as it often occurred in the past.
  - c. “dynamic provisioning”, that is the request to banks to set aside a capital buffer during economic expansion in order to use it in periods of recession. The dynamic provisioning – already experienced in Spain – should limit the pro-cyclicality of Basel II;
  - d. more stringent requirements on liquidity risk, based on a mix of several measures including capital charges, limits to liquidity imbalances between bank assets and liabilities, provision of adequate “contingency plans” to be used in the event of a liquidity shock.
2. **Managerial incentives.** Authorities and governments are now aware that compensation schemes based on short-term performance can distort managerial behaviour toward excessive risk-taking. Some central banks have already asked to supervise intermediaries to clearly declare the compensation scheme used for top managers and Directors to the general meeting of shareholders. Some of them have started a moral suasion program, with limited success so far, to limit the variable part of executives’ compensation or to link it to long-term performance. Goldman Sachs recently declared that bonuses will be paid only in shares with a very long lock-up period during which managers are not allowed to sell them on the market.
3. **Securitization is changing.** Many experts and bankers have claimed that the securitization market must be re-activated in order to re-open an important mechanism of liquidity provision to the economy. The Financial Stability Forum has suggested the set-up of a guarantee facility by governments on new cash securitization deals. Also, rating practices aimed at assessing the creditworthiness of structured bonds issued against securitised assets are being updated by large rating agencies, in an attempt to improve the risk assessment methodologies.
4. **Non-banks.** A general consensus exists that non-regulated financial institutions (the “shadow banking system”) are to a large extent responsible for the financial meltdown of 2007/8. Hedge funds and OTC markets have provided investors with an unprecedented amount of liquidity, put risk premia under pressure and suddenly dried up. Regulations to increase transparency for unregulated investment vehicles are being widely developed, and credit derivatives’ trading is supposed to shift towards centralised markets, where counterparty risk is guaranteed by the existence of a central clearing-house and an appropriate scheme of collateral margins.

5. **Rating agencies.** The potential conflict of interests in rating agencies, who assess credit risk on behalf of investors whilst being paid by issuers, has come under increasing scrutiny by political authorities and regulators worldwide.
6. **Corporate lending.** In the aftermath of the crisis, the paradigm shift from relationship banking to product-based lending (emphasizing product excellence rather than on relationship management and individual transaction profitability) has increasingly come under fire. Large banks are shifting back from scoring algorithms and collateral requirements to emphasize the quality of private information on the borrower;
7. **Mega-mergers and the “too big to fail problem”.** The financial crisis has shown all the dangers lying in the paradox of a banking system where banks can be larger than their supervising governments. This has spurred calls for stronger integration in the supervision of cross-border financial institutions, as well as for a different attitude towards bank mega-mergers. However, the fundamental problem of dealing with large international financial institutions is largely untackled.

### Conceptual Limitations:

As these initiatives show, the financial system is now moving to remedy at least some of the symptoms of the maladies that were exposed by the crisis. However, this leaves the more fundamental problems unresolved. These critical issues might be the root cause of the problem and might be at the basis of so many large deviations from the expected behaviour of actors in the system. The root cause might be conceptual limitations and potential flaws in the way we understand the functioning of organizations, industries and systems that might have gone un-noticed or taken for granted for decades. The most crucial ones include:

1. **The “Lemon” Problem in financial innovation.** Information asymmetry characterizes the interactions between the supplier and the buyer of any innovative product, but it is particularly acute in the financial sector. Buyers are in fact often at a significant disadvantage in their ability to assess the risk/return features of products, and are therefore subject to potential exploitation. On the other hand, suppliers of these innovative products face increasing levels of distrust, due to past exploitative behavior experienced by buyers and the difficulty they have to validate the “sellers” claims. In addition, the sellers cannot credibly guarantee the validity of their claims either, creating the well known “lemon market” problem, which significantly hinders both the efficiency of market exchange, as well as the effectiveness of the allocation of financial resources to the real economy and society at large. See Joseph Stiglitz’s Nobel Prize-winning work on the endemic condition of inefficiency of market exchange due to non-reducible information asymmetry.
2. **Superstitious learning.** With sophisticated investors, information asymmetry might play a weaker role. And yet, we saw huge losses and even bankruptcies by some of the most sophisticated investment and commercial banks. Could one imagine that these banks could not correctly price or assess the risks associated to the paper that they themselves were producing? To tackle this conundrum, one needs to reconsider the deeply rooted assumptions connected to rationality based solely on computational skills as antecedent of complex decision-making outcomes, and fully embrace the fact that departure from “rationality”. Overconfidence biases (superstitious learning) and imitative behavior (bandwagon effects) are in fact the norm, rather than the exception, and the best description of actual managerial behavior. The recent advancements in behavioral economics and behavioral finance do provide supportive evidence to this effect, but the implications of these findings still need to be fully articulated and translated into guidance for behavioral change on the part of managers and policy-makers.
3. **The creative destruction of market equilibrium.** The standard neo-classic economic models are notoriously ill-equipped to describe financial innovation dynamics, since they focus on equilibrium conditions for their solution which are, by definition, absent in models with endogenous innovation. Schumpeterian (evolutionary) economics has offered significant insights on this problem, which will be leveraged in the

research programme's conceptual development and modeling/simulation methodology (see below). This applies to both "problematic" examples of financial innovation (e.g. structured finance and asset-backed securities, credit derivatives, etc.) as well as to innovation considered "virtuous" from an economic and social sustainability standpoint (e.g. microfinance, internet banking, project finance with Equator Principles).

4. Homo economicus? The exponential growth in executive compensation witnessed in the financial sector (more than in any other), and the simultaneous governance failures witnessed at the corporate as well as the institutional levels can be partially explained by the narrow (and partially incorrect) conceptualization of human psychology upon which neo-classic economics and connected management theories are founded. Michael Jensen, the founding father of agency theory, recently conceded that the standard assumptions of human nature in economic modeling are at fault in assuming purely utilitarian reasoning with no role (except as "deviations from rationality") for emotional dynamics and ethical boundaries. The explosive success of behavioral and "neuro"-economics in the last decade bears testimony to this fundamental flaw. Reforming the financial sector to ensure sustainable societies demands a fundamental re-thinking and re-formulation of these assumptions on human nature and the antecedents to economic decision-making and behavior.
5. Managerial motivation. A direct consequence of the incorrect and narrow assumptions on human nature can be witnessed in the way incentive systems are designed. The assumptions are: (a) that those who are entrusted with institutional and customers' resources (high officers, investment bankers, asset managers, and traders) need to be "aligned" to the interest of the institution via a share in the organizational profit (only if positive), (b) that increasing levels of economic rewards do not influence the likelihood of unethical or irresponsible conduct, and (c) that there is no overcrowding effect between extrinsic motivation (money and power) and intrinsic (hedonic and normative processes). Unfortunately, the consequence of this narrow view of human nature was a spiraling cycle of increasing reward levels and increasing expectations on rewards fueled by peer comparisons and by high previous payments. The failure to consider the effects of social comparisons and of past payments on current motivational processes resulted in a rapid evolution of compensation levels uncorrelated with firm performance, and out of line even with other knowledge-intensive service sectors such as strategic consulting and legal counsel.
6. (Poor) Conceptual understanding of sustainability. We (as academics and practitioners) still do not have a full understanding of how a "responsible" financial institution should be organized and managed. Nor do we have systematic evidence of institutions fully integrating sustainability into their operations, their decision processes, and (in the end) in their employees' identity. The reality of the way key strategic decisions, as well as day-to-day lending, funding or investment decisions, are made leaves in fact little room for considerations related to their social and environmental impacts to play any role in the final outcomes. For example, the quality of social and environmental responsibility in corporate clients is rarely a factor in lending decisions (both in rejection and pricing). Ditto for the screening of investments and of the sources of funding. These criteria are also rarely seen as part of the management performance evaluation processes, let alone of the compensation/bonus assessment routines.
7. Another tragedy of commons. Even assuming that we can make good progress in our understanding of what a "responsible" financial institution should look like, the competitive dynamics in the financial sector might be an insurmountable barrier to the diffusion of these "virtuous" practices. As Elinor Ostrom (Ostrom 1990; Ostrom, Burger et al. 1999) showed in her Nobel Prize-winning work on cooperation towards the common good, "the tragedy of commons" might be a serious and widely diffused problem in social systems. This might very well apply also to the establishment of sustainability principles in the global financial sector. The incentives to free ride and exploit the compliant competitors (say, in paying unreasonable compensation and lowering control standards) might be too strong for the cooperative agreement to hold. The Principles for Responsible Investment and the so-called Equator Principles on project finance lending, perhaps the most influential examples of global sustainability standards achieved so far by the sector, cover only a small part of its assets

In the REFORM project, we propose a large-scale conceptual development effort capable of tackling the “issues” that emerged before and during the current crises, as well as the deeper theoretical challenges that underlie them. Reforming the financial sector to better realise economic, social and environmental sustainability requires a cross-disciplinary approach to not only fix the “broken pieces” of the system, but (more importantly) to take this opportunity to reconsider the way the system is supposed to function in an ideal world, and, finally, to produce concrete and actionable recommendations to move from the status quo towards that vision.

## 1.2.2 The Role of Finance

### ***The challenge:***

*The evolving role of finance in the economy and society and how this can be explained in economic and political terms, including commonalities and differences in path of economic and social development and financial development. The assessment of various financial and economic theories and models and their application in regulatory regimes and their impact on societies and politics over time. How issues of values, ethics, trust and transparency are dealt with in different societies in this context; their role in the genesis of the crisis and tackling it; the relevance of corporate social responsibility.*

Which can be reframed in the following Research Questions:

- I. How has the role of the financial sector in the development of economic and social systems evolved over time and across institutional and cultural contexts?***
- II. What are the contributions and the limitations of received theories and modelling exercises in the identification of the interdependencies among the financial sector and the other sectors of the economy and society?***
- III. What are the systemic factors at the basis of the development of the global financial and economic crisis in 2007-9, and in particular the role played by personal values, trust dynamics, ethical and responsibility issues?***

### **State of the Art.**

From a historical perspective, the origin of today's financial system can be traced back to the period of early capitalism in the 13th and 14th century, when a system of banking and insurance activity developed between traders in the different European regions and to connect with the Middle-East. During that period the Medici bank, the largest financial institution of the time, played an important role in the development of trade and economic activity from the south to the north of Europe, but that role extended also in the enhancement of social and cultural development. The Italian renaissance, perhaps the most important example of balanced economic, social and cultural growth in the history of western cultures, had the Florentine banks and their social networks at its very core (see John Padgett's lifetime work, and in particular Padgett, 2003<sup>vi</sup>).

Throughout the centuries, the overt social and political engagement of financial institutions has considerably declined, with only few examples remaining of formal requirements to support the development of the social communities in which financial institutions are active, such as the Community Reinvestment Act that still binds US retail banks, and the obligations that Islamic banks have to reinvest a (small) part of their earnings for social development purposes. Barring few exceptions, the role of today's financial systems is almost exclusively viewed in terms of its support to the development of economic activity.

### **Economic role:**

In modern economies, the fundamental role of the financial system consists in maximizing the efficiency in the allocation of funds from investors to borrowers, thereby reducing transaction costs associated with market

imperfections (Préfontaine and Thibeault, 1993; Sinkey, 2002; Saunders and Cornett, 2008). The financial sector thus links the different actors in the social system and (inter-)mediates monetary resources between them. The efficient allocation of financial resources is expected to result in better support for entrepreneurial initiatives and thus enhanced economic growth.

This role in support of the establishment and growth of the business enterprise, though, constitutes only part of the business model that characterizes the banking sector. Together with net interest income from the lending and deposit activities, and with net commissions from other intermediary services, financial institutions have increasingly relied upon income from trading, with their own capital, on financial markets. Whereas the first two are part of the service provision role of banks, allocating funds between sectors; the third value driver “trading activities” is justified primarily on ground of speculative motives. The rationale often brought to the debate to motivate this element of the business model, to enhance the efficiency of capital markets as value indicators, in terms of price and risk levels, can be questioned on the ground of being only remotely connected to the purpose and logic of the banking system.

Another important trend in the evolution of financial systems, however, is the “speciation” of business models, with a significant growth of new, more focused, actors specialized in only parts, or even a specific mix, of the activities that have traditionally characterized commercial banking and insurance services. Asset management and private banking, for example, have emerged as specialized versions of the deposit function of banks. Private equity, with the venture capital, growth capital and management buyout components, have instead provided important and valuable alternatives to regular bank loans for organizations looking for financial support to their expansion or transformation strategies. For the commission fee-based model, investment banks have emerged as particularly sophisticated players, capable of offering borrowers direct access to funding from financial markets and other related services (such as M&A and financial restructuring advisory services) of strategic relevance to companies. On the third dimension, the trading one, specialized operators, such as hedge funds and program trading firms, have emerged and rapidly expanded on the wave of an increasing amount of funds available for speculative activities and the possibility to trade without actually owning neither the capital nor the underlying assets.

The other important trend that has characterized the evolution of the financial sector, and of its role in the economic system, has been the development and diffusion of innovative financial instruments. This is due to a whole host of factors, such as the increasing applicability of novel theoretical advancements to financial management or investment decisions (e.g. CAPM, Blake & Scholes option pricing, etc.), the deregulation movement in most developed countries, and the diffusion of financial literacy in the commercial sector.

The combination of rapid development and diffusion of innovative products with the establishment of new business models and the desctructuration of the value chains in some of the historical business processes (see, for instance, what happened to the mortgage business, Jacobides and Winter, 2005) have created a business environment characterized by (a) high level of turbulence and uncertainty, and (b) high rates of expansion in size and earning in the most innovative niches.

This was coupled with human resources management practices inspired by the direct application of micro-economic theories, such as agency costs (Jensen and Meckling, 1976), transaction costs (Williamson, 1975 and 1985) and contract (Grossman and Hart, 1986) theory. Due to the common assumptions about human nature and the fundamental drivers of human behaviour in these theoretical approaches (e.g. “self-interest seeking with guile”, Williamson, 1975), the generally accepted approach to managerial motivation was the design of hugely powered incentive systems which were supposed to align the interest of the individuals with that of the corporation.

In summary, the role of the financial system as driver of economic growth has been fuelled by an increasing amount of supply of capital, only part of which, however, was allocated to fund entrepreneurial initiatives. The rest of the excess supply of investment capital was used for speculative trading purposes, which was enabled by the combination of financial innovation and highly powered incentive systems. It was, and it still is despite the hiatus

due to the crisis, a highly dynamic and profitable sector with extremely high opportunities for organizational and personal rent generation.

### **Social and environmental role**

With the role of today's financial system being focussed on supporting economic activity and generating profit, social objectives are hardly considered. The exploration of the linkages between the financial world and society has been very limited. Yet these linkages exist. The financial system directly affects individuals' access to financial services and therefore households' decisions, standard of living or housing.

From a sociological perspective, the relationship between financial markets and society appears to be twofold. On the one hand, financial markets make up a specific functional part in society and thus are embedded in specific social contexts. On the national level, this context encompasses specific modes of market regulation, production regimes, labor market structures and welfare state backgrounds. Various earlier researches have shown that designs of financial markets are inherently connected to specific institutional contexts, thereby creating nation-specific institutional packages, characterized by 'elective affinities' between the different types of institutions. Ebbinghaus (2000) for example has shown that the loosely coordinated mass production system of liberal economies, such as the United States, is closely interlinked with an uncoordinated capital market-based mode of financial governance. This mode allows a largely unhindered flow of capital into enterprise investments. In contrast, highly coordinated 'quality production systems', such as Germany, oftentimes go hand in hand with the reliance on long term 'patient capital' from national and international banks, more extensively based on long-term investments and historically grown trust relationships. Hence, financial markets are specifically formed by their nation-specific institutional context. In recent years, these nation-specific institutions increasingly become supplemented by supranational institutions and modes of regulation, e.g. that of the European Union, the OECD, etc. One of the major challenges in research will be to elaborate in detail how these nation-specific and supra-national forces interact and how they affect the evolution of financial markets and systems.

On the other hand, financial markets themselves have repercussions for society in as far as they significantly shape the development of the economic system in general, and labor markets in particular. The very rapid development of financial products and of international financial market connectedness over the last two decades contributed to the declining predictability of social and economic life across modern societies. The most recent financial crisis has produced a significant increase in insecurity levels perceived by individuals and households, which is influencing life course decisions at different stages of the life cycle. At the same time, the rise in labor market uncertainties has led employers to enhance the flexibility features in labor contracts and thus to shift labor market risks to their employees. As a consequence, employment insecurities and atypical work forms have risen in most modern societies, however, most strongly among the weaker labor market groups such as labor market entrants, the unqualified or women after a family break.

Even though regulation in Europe has recently proposed schemes to absorb part of these risks of systemic nature (for example, the De Larosière Report (2009) of the European Commission), the link between certain types of financial sector activities and the quality of life in social communities is still relatively poorly understood and, therefore, hardly subject to policy debate or interventions.

On the environmental objectives' front, the role of the financial sector activities in shaping the quality of the natural environment is even less clear. Prima face, the financial sector appears to be among those with a minimal role to play in the process to preserve and enhance the quality of the natural environment, compared to other polluting industries. However, the central role of the financial system at the core of the social contract allows its actors to potentially influence the environmentally relevant decisions and behaviours of firms, of households and of the other institutions to which they lend credit and from which they borrow funds. Therefore, despite the fact that their direct role is quite limited, their indirect role, mediated by all the counterparts that they engage with, is potentially huge. In fact, one might argue that, if both direct and indirect effects are considered, no other sector of economic activity has a potentially more virtuous (or devastating) effect on nature than finance. Depending on the

criteria that they apply to evaluate loan applications, establish loan and deposit interest rates, potentially even service fees, banks and financial institutions could be the most powerful tool for behavioural change towards sustainability objectives in all other societal sectors. Vice versa, refraining from these policies has the opposite effect of legitimizing and financially supporting the status quo, with the consequences on environmental damage (from climate change to health hazards) that we are all painfully aware of.

### Open Issues.

Based on the brief review of the state of the art and on the factors identified above (section 1.2.1) as drivers of both conceptual as well as managerial and policy challenges, we list below the most important issues that we aim to tackle as we explore the evolution of the role of finance across historical, institutional and cultural contexts. For what concerns the factors that might explain the financial crisis and the theoretical limitations that have been pointed to in the quest for reforming the financial system, we refer the reader to the discussion above in Section 1.2.1.

First of all, we need to understand the role that the explosion of trading volumes on financial markets have in the pursuit of economic and social development of communities and countries. Whereas trading activities do offer advantages to economic actors in terms of efficiency of the pricing levels as evaluation system, many observers offer a critical view on the fact that organizations with different institutional roles (such as retail banks and insurance companies) invest an increasing fraction of their senior employees' time, and their own financial resources, in the pursuit of this type of business model. They hold that this has essentially derailed the system from its primary function, posing significant hazards for its stability.

A second, and related, issue has to do with the role of financial innovation and its impact on the evolution of the system within the context of the social contract. We currently do not have a good answer to the question of whether and (more importantly) *what type of* financial innovation is in line with the role and purpose of finance in its societal context.

Third, the gap between the evolution of the distribution of activities in the financial sector vis-a-vis the expectations that civil society, and increasingly government authorities, have been developing on what the role of the sector "should" be. The general perception is that the magnitude of the gap between what "is" and what "should be", at least in the opinion of the financial sector's counterparts, the sector's role is widening. In particular, the perception about the relative importance of social and environmental sustainability, a marginal issue until recently, vs. economic growth has gained considerable strength especially with the explosion of the financial crisis.

Connected to the dynamics related to the expectations on the role of the financial sector are a whole host of issues related to the business models and governance structures of banks and financial institutions. The choices between universal banking and narrow banking, or between shareholder and stakeholder oriented logics (and identities) have been subject to long debates over the decades, but the discussion is currently front and central given the strength of the trend (and the social pressure) towards an increasing amount of regulation and control.

The issues on the table related to the expectations and perceptions on the role of finance, as well as those on the appropriate business and governance models boil down to very concrete choices about the type of activities in which financial institutions should/should not be engaged with, such as:

- The question on product responsibility, especially related to the evaluation and selection of consumers with particularly high levels of debt or low levels of income.
- The processes through which loans are evaluated and approved, and the extent to which the social and environmental impacts of the borrowing organizations are taken into account
- The relative weight of evaluation criteria connected to social and environmental outcomes connected to asset management and investment practices



- The question of the financial literacy of the (retail and SME) customers that the financial institution is dealing with, and the responsibility of the sector towards the reduction of the information asymmetry with its clients
- A connected question connected to access to financial products and services for households and SMEs in different regulatory environments

### **Progress Beyond the State-of-the-Art.**

#### **➤ *How has the role of the financial sector in the development of economic and social systems evolved over time and across institutional and cultural contexts?***

To answer this research question, WP1 will leverage a combination of historical analysis based on archival sources (WP6), clinical studies (WP7) and foresight methodologies such as focus groups and stakeholder engagement processes (WP8). The archival data collection, designed in conceptual terms by WP1 and carried out in collaboration with WP6, will offer the opportunity to construct a general picture of the evolution of the various sub-sectors of the financial system in terms of the strategic, structural and governance choices of the actors in the system. For example, we will be able to study the development and the performance of stakeholder-oriented banks and contrast them with more shareholder oriented banks competing in similar institutional and cultural contexts.

The clinical studies (see section 1.2.8 for a detailed description of the research design and sampling strategy) will provide more in-depth evidence about how 30 of the most important financial institutions in the world have evolved over time since their founding, how their role and the nature of their activities have changed over the decades, and how the institutional and cultural contexts in which they are involved influenced these evolutionary processes.

Finally, the issue about how the role of the financial system within the economic and societal context has evolved over time and across contexts will be examined through a series of focus groups and multi-stakeholder engagement events (WP8), which will allow us to determine and study the differences in perceptions across stakeholder groups (e.g. corporations vs. retail vs. public administration vs. regulators), across cultural background and across sectoral domains (e.g. commercial vs. investment banking, banking vs. insurance, etc.).

#### **➤ *What are the contributions and the limitations of received theories and modelling exercises in the identification of the interdependencies among the financial sector and the other sectors of the economy and society?***

To tackle this question, WP1 will first conduct an extensive review on the key contributions and limitations of theoretical approaches and models discussed in the received literature about how the financial sector interacts with its economic, social and natural environment. This will be done not only as a stock-taking exercise but also to support the development of the multi-level agent based simulation model in WP6. The model and the simulation will then be used to study the ability of different theoretical approaches to approximate the historical evolution of the financial sector (“history friendly modelling”), so that evidence-based comparisons among the various theoretical approaches will be possible.

The foresight methodologies in WP8 and the change experiments carried out in WP7 will then offer empirical evidence related to (a) the differences in perceptions and the nature of the interactions between representatives of diverse stakeholder groups active in the financial sector (WP8), and (b) the relative effectiveness, assessed in terms of predictive power of the pre-post changes in decisions and behaviours, connected to standard sets of change interventions carried out in the field with the objective of integrating social and environmental sustainability logics within financial institutions (WP7).

- ***What are the systemic factors at the basis of the development of the global financial and economic crisis in 2007-9, and in particular the role played by personal values, trust dynamics, ethical and responsibility issues?***

To tackle these questions, we will first leverage the multi-level agent-based simulation (WP6) to identify the factors at the systemic, sectorial, organizational and individual levels that can influence (a) the emergence of a financial and economic crisis, and (b) the likelihood of the individual organizations and the system overall to withstand those crises. In particular, WP1 will work with WP6 to explore the extent to which the characterization of the actors in terms of:

- high vs. low levels of moral development (Kohlberg, 1979; 1984)
- long-term (sustainable) decision-making horizon
- trusting and caring emotional attitudes
- self-centred vs. transcendent personal values (Schwartz, 1990; Schwartz and Blisky, 1990)

will be able to influence the same outcomes in terms of stability of the system (likelihood of a systemic shock) and in terms of resilience, its capacity to withstand, and recover after, the occurrence of the systemic shock.

The simulation outcomes will then be tested empirically in two ways with the help of the clinical studies carried out in WP7. First, we will test with cross-sectional data coming from interviews and surveys in the 30 organizations examined in year 2 and in year 4 of the study. The data will serve to assess the correlation between individual traits, as well as organizational processes and structures, and the responsible and sustainable nature of decision-making and behavioural outcomes, as well as of individual and collective performance. Second, the causal linkages between pre-post changes in personal characteristics connected to responsibility and sustainability (e.g. transcendent values, emotional attitudes, stages of moral development, etc.) consequent to the experimental interventions carried out in WP7, and the pre-post changes in individual and collective performance.

In other words, the experimental designs that we plan to carry out in WP7, will allow us to determine the extent to which changes in individual perceptions and psychological attributes (emotional, cognitive and identity based) can actually affect the nature of the decisions made by managers in financial institutions, and the quality of the performance outcomes in terms of the economic, social and environmental impacts of those decisions.

### 1.2.3 The Costs and Benefits of Finance in the Real Economy

***The challenge:***

*The costs and benefits (both economic and social) of restructuring in the real economy induced by the requirements of financial markets and the financial sector, the role of financial and other actors, as well as the development of new economic activities in this context.*

Connected Research Questions:

- ***At the system level: what are the costs and the benefits of the evolution of the financial sector in terms of the consequent restructuring processes generated in non-financial economic sectors and society at large?***
- ***At the organizational level: how do the various actors in the financial system co-evolve with those in the other social systems, and how should they co-evolve to serve the public interest?***
- ***At the activity level: how do the innovative activities in the financial sector influence the evolution of other economic and social actors and their ability to develop innovative and sustainable types of economic activities?***

**State of the Art.**

Ever since its inception, the financial sector has had a profound impact not only on the economic development, but also on the social fabric and the environmental quality in the communities it has served. This is due to both direct and indirect effects of its activities. The former type of linkages influence, due to their nature and purpose, the economic production and trade of firms, as well as on the savings and consumption patterns of households, and the organization of services of public interest (typically of a social nature) by governments and local administrations. The direct environmental impacts of financial institutions include, for instance, their consumption of energy and paper. The indirect effects, connected to the economic, social and environmental impacts of the constituencies (firms, households, public administrations) to which financial institutions decide to lend support, create a multiplier effect of difficult measurability, except for its purely monetary circulation aspects, but of intuitively enormous proportions. In fact, the financial sector is typically recognized as being the one, among all the segments of economic activity, with the largest impacts on the rest of society because of its role as supplier of financial resources, and therefore as selection mechanism for the growth and well-being of other sectors of the economy and of society.

Most of the scholarly attention has been devoted so far to deep investigation of the economic impacts of the financial sector, with little research and debate on the transmission mechanisms governing the relationship between changes in the financial sector and the achievement of social and environmental objectives.

### **Economic impact:**

- a) **Price and volumes of financial resources.** Interest rates and asset prices, by affecting costs and accessibility of financial resources, represent the key linkage between the financial sector to the rest of the economy. The main transmission mechanisms are the following:

The price levels in financial markets (e.g. equity levels, interest rates) influence firms' access to capital needed for their development projects. More stringent conditions to the access of capital (either via lending or via primary markets) tax the possibility of firms to launch novel activities or even to sustain their existing volume of business.

Prices also influence consumption and savings decisions through their income effects. Higher interest rates and stock returns create more spendable income for investors and households. Yet at the same time they lower the access to funds for the productive sectors.

Finally, prices influence public administrations' decisions on the expenditure choices, the levels of deficit and the type of debt they issue. Higher interest rates increase the tax that the current generations implicitly impose on the future generations through higher debt service.

- b) **Knowledge and expertise.** The financial system influences the establishment of new economic activities through the supply of specific financial and managerial competencies. Venture Capital (VC) funds do so at very early stages in the life-cycle of the enterprise; Private Equity (PE) funds can support, and often guide, the restructuring and re-launch of firms, exerting significant impact on the firms' ability to survive, adapt and grow. More recently, PE funds have developed specialized skills in identifying, nurturing and exploiting innovative capabilities and products, thereby potentially enhancing the capacity of economic systems to compete and thrive. Finally, specialized types of PE funds (including "vulture funds") focus on the re-circulation and allocation of productive assets from failing or poorly managed firms to more capable management teams and more effective organizations.

### **Social impact:**

- c) **Quality of life.** The financial sector's control on the allocation of financial resources in society gives to its actors a critical influence on the quality of life of individuals and families in the relevant communities. This

- occurs through their capacity to anticipate their future earnings for the purchase of durable and non-durable goods (e.g. housing, cars, consumer electronics, telecommunication devices, etc.).
- d) Access to finance. Throughout the whole of Europe number for issuance of retail credit has been increasing. The ratio of total credit to households as a percentage of GDP has been increasing for the past decade to above 55% for the EU-27, remaining rather stable during 2008. On the one side, this amount represents a strong contributor to economic activity and consumption. However, national statistics on non-performing loans and insolvency show that the numbers for over-indebted households have increased tremendously. This has a relevant social impact as insolvency risks generating exclusion from further credit.
  - e) Education and skills for employability. The development of the financial sector's activities supports individuals and families in the relevant communities to enhance their skill levels and develop human capital for the production and innovation work in direct ways (e.g. by providing student loans) as well as indirectly, through the development of financial and economic competence necessary to routinely interact with financial institutions. Also, the possibility to finance the purchase of information and communication technology products influences both the quality of life and the human capital endowments of individuals.
  - f) Health. Equally important for the societal development of communities, the quality of healthcare that individuals and families can afford is influenced by the availability of insurance products and personal loans with reasonable pricing and flexible conditions. This is, in theory, possible where financial markets are more efficient and innovation processes particularly dynamic. Of course, the reality might be quite far from theory, as the example of the US healthcare costs shows in unambiguous terms.

#### **Environmental impact:**

- g) **Investment/Lending criteria.** The most direct, and powerful, way in which the actors in the financial sector could impact in a positive way the natural environment lies in the integration of the environmental performance of companies and institutions in general among the criteria used to evaluate loan requests or investment alternatives. This could be done either as a filtering mechanism or as a set of parameters to add to the more standard assessment to determine (a) whether to lend or invest, and (b) at what rate and in what volume. The "Equator Principles" are a good example of an industry-level, global, initiative acting in this direction, focused on the integration of environmental impact measures in project financing lending decisions.
- h) Financial innovation. There are also interesting recent examples about the development of new financial products that aim to enhance the positive impact on the natural environment, such as the so-called "green bonds" issued by the World Bank to support initiatives that are designed to have a beneficial environmental impact in the developing world.
- i) New business development. In addition to the development of new financial products in established markets, the financial sector has been creating entirely new areas of activity, such as those connected to carbon emission trading and lending connected to natural disasters recovery.
- j) Carbon footprint. Finally, the sector is (albeit slowly) developing routines and capacity to assess the environmental impact of its own activities, including reducing energy consumption, recycling, carbon impact neutralization, etc.

#### **Open Issues.**

##### *Limitations on the study of the economic impact of the financial sector:*

The mainstream literature and the debate on the impact of the financial system on the real economy has thus far taken for granted that the role played by the system is the appropriate one (see WP1) and that the whole system functions in a balanced way with a sufficient level of trust and reasonable level of risk. Relaxing this assumption means to re-examine the costs and benefits of the financial system to serve the public interest in a novel light and without foregone conclusions. The nature and the magnitude of the causal linkages between the impacts of prices and volumes in financial activities and public interest in the economic, social and environmental objective might

actually vary considerably if the fundamental assumptions about what the financial system should be doing for society are changed, and depending on the direction of that change.

Unfortunately, the study of the impacts of the financial sector on society and on the natural environment is in its infancy stage. The standard treatment of the “real impacts” of financial activities assumes that the objective of the financial system’s activities is restricted to the economic growth and profitability of firms, without including the influence that the financing decisions have on the quality of life or natural environment of the communities in which they are active. Despite an increasing level of attention to these linkages, no relevant theoretical advancement has been made. Consequently, the major models used for policy development are currently agnostic about causal linkages between financial activities and the various dimensions of public interest.

These limitations in the current State of the Art require us to break down the “challenge” into research questions that can be addressed more directly by the project:

***At the system level: what are the costs and the benefits of the evolution of the financial sector in terms of the consequent restructuring processes generated in non-financial economic sectors and society at large?***

The first issue opened by this question has to do with the *measurement* of the costs and the benefits of evolutionary change in the financial sector. The measures relate to the consequences of these changes in terms of restructuring processes occurring in the real economy and in society.

For example, we do not currently know about the impact of the diffusion and trading of new financial instruments on the standard measures of economic performance at the country level, like GNP growth rate. Of particular interest is the question of whether the relationship between financial innovation and growth is linear and positive in nature. It is possible, in fact, that when financial development reaches a certain threshold level the positive relationship progressively weakens, either to approximate zero or even to turn negative.

Another open question relates to the impact of securitization (CBOs, CMOs etc.) and credit insurance instruments (CDS) on the quality of the capital allocation decisions taken by the actors in a specific economy. The intuition is that this type of innovative instruments might have unanticipated effects on the financial actors’ perception and assessment of risk. The consequences on the “real economy” are the disproportionate allocation of financial resources to certain sectors (e.g. construction and real estate) with the consequent creation of inflated asset bubbles, and the reduced access to capital for other sectors. This may result in artificially expanded volatility in financial markets (frequent booms and busts) with potentially damaging impacts on productive investment decisions, given the increasing levels of uncertainty and lower levels of confidence in the ability to predict the outcomes of investment decisions. Asset bubbles might also produce negative effects on the evolution of the purely social components of the overall system (the civil society); for instance, social cohesion and general societal well-being might suffer due to enhanced disparities and reduced predictability of the outcomes of individual decisions. In addition, the distorted allocation of financial resources to the disadvantage of productive sectors reduces the competitiveness of the economy and might also negatively influence the quality of the social fabric due to the distortions in critical decision-making processes such as home purchase, loan applications, savings choices, education and even marriage.

***At the organizational level: how do the various actors in the financial system co-evolve with those in the other social systems, and how should they co-evolve to serve the public interest?***

The analysis of the impacts of the financial sector on the real economy has been typically discussed at the macro level of analysis. Little is known, both theoretically and empirically, about the interdependencies between the financial and the other societal systems at the organizational level of analysis. For instance, the debates in the aftermath of the financial crisis point to significant failures in the internal management systems of financial institutions, and in particular:

- ✓ governance and control systems
- ✓ incentive systems and HR management processes

- ✓ risk management and resource allocation processes
- ✓ sales processes

However, systematic evidence about (a) the extent of these failures, beyond the most glaring and publicized cases of large financial institutions, and (b) the actual consequences of these failures for the way financial institutions interact with their counterparts, is largely missing.

For example, an indirect consequence of securitization processes is that it allows financial institutions to anticipate future profits. This has implications for the size of bonuses paid on the basis of short-term profits and could have encouraged excessive risk-taking, or poorer selection processes, by bank officers in charge of generating the loans that will be securitized. But the evidence in support of these causal linkages, despite their logical flow, is scarce. More importantly, we are missing evidence about the type of systems and processes that actually prevented these negative consequences to occur.

Another important open issue relates to the access to finance at retail level. Financial services and products, selling practices, lending standards as well as the regulatory environment have changed over time, but have not necessarily enhanced the situation of retail customers. Households' over-indebtedness, non-performing loans and consumer insolvency are becoming impelling issues in Europe. Even though strong efforts are being undertaken to integrate European retail markets for financial services, the scenarios in which indebted consumers find themselves when confronted with non-payment realities are very different across countries, resulting in varying levels of consumer protection. Different insolvency and consumer protection schemes are likely to have an impact on household borrowing behaviour, bank lending and the real economy as whole. It remains to be investigated what type of regulation is appropriate in order to set incentives right for lenders and borrowers to act responsibly, concerning access to finance as well as the usage of financial products.

In a dynamic system, then, the open issues become more realistic, interesting and, regrettably, unexplored. For example, what are the factors that influence the evolution of these governance, motivational, risk management and sales practices in the financial sector? Are they influenced, for example, by the development of financial innovation processes, such as securitization and credit default swaps? And to what extent has the evolution of these practices in the financial sector – such as incentive schemes based on extremely high bonus levels – influenced the evolution of similar practices in non-financial sectors?

Beyond the purely descriptive stand, the central challenge in Project REFORM lies in the development of alternative scenarios connected to the role and impacts of the financial system. In this more normative approach, a number of issues related to the way the system and its actors should evolve towards the preferred scenario are fully open. What type of changes in the organizational strategies, practices and cultural traits on both financial and non-financial institutions are necessary to realize the characteristics of that preferred scenario? How can the positive feedback loops in the interdependencies between financial and non-financial actors be leveraged to ignite virtuous cycles of co-evolutionary dynamics towards the fulfillment of public interest in the economic, social and environmental sustainability of the system overall?

***At the activity level: how do the innovative activities in the financial sector influence the evolution of other economic and social actors and their ability to develop innovative and sustainable types of economic activities?***

At an even deeper level of analysis, issues related to the evolutionary dynamics in innovation processes connected to financial instruments, and their interdependencies with innovation processes in non-financial organizations are completely open to scientific inquiry.

One fundamental question in this respect relates to the direction and purpose of innovative endeavors in the financial sector. An increasing, and now very large, share of innovative financial products is devoted to enhancing the sophistication of trading and dealing among financial institutions, rather than with the productive sector. It would be important not only to document the evolution of this phenomenon, but also to assess the possible causality linkages with the quality of the capital allocation decisions, and thus of performance in both financial institutions and the non-financial organizations that routinely interact with them.

**Progress Beyond the State-of-the-Art.**

To address the open issues summarized above, Project REFORM relies on a portfolio of clinical, foresight, forecasting and change experiment methodologies, which will be elucidated in their innovative aspects in the sections below.

***At the system level: what are the costs and the benefits of the evolution of the financial sector in terms of the consequent restructuring processes generated in non-financial economic sectors and society at large?***

The challenges related to the assessment of costs and benefits in the evolution of the financial sector – in terms of its impacts on the other components of the overall social system – will be tackled first with a system-level modeling and agent-based simulation of the input and output dynamics across financial, economic, government and civil society sub-systems (see Section 1.2.7). The simulation will be designed with a “history-friendly” approach, so that it can be first validated through its capacity to describe the actual evolution of the financial sector in the geographies of interest. Once the descriptive capacity of the simulation is deemed satisfactory, it will be used to assess the costs and benefits of the recent adaptations in the non-financial sectors consequent to the development of financial innovation products and the financial crisis. In a third step, increasingly refined versions of the simulation will be used to shed light on the expected consequences of different scenarios related to the role of the financial system. The scenarios themselves will be produced by the combination of the various foresight activities (see Section 1.2.9), and supported by the data collected in the clinical studies of 30 financial institutions (see Section 1.2.8). The clinical studies will also serve to study crucial data on the potential impacts of change interventions aimed at the integration of broader sustainability and responsibility principles, at least on an experimental basis. This will offer both a validation of the simulated effects, and estimates for the cost and benefits of eventual policy interventions focused on stimulating these types of organizational change.

In the end, Project REFORM will be able to produce policy recommendations as to the costs and benefits of alternative courses of action and interventions aimed at the realization of different scenarios on the role of the financial system.

The archival, clinical and perceptual data collected in the various types of methodologies utilized in project REFORM will cover different sub-sectors of the financial services industry and all the key regions in the global economy. We will thus be able to draw inferences on the relationship between the diffusion of different types of financial innovation products and the macro-economic and social performances of those national or regional communities.

For what concerns the impacts of financial innovation on the quality of the resource allocation decisions by firms and by individuals in the relevant communities, Project REFORM will collect empirical evidence on these decisions, and on their performance consequences, through the archival data collection effort within the forecasting methodology (Section 1.2.7), the clinical studies (Section 1.2.8) and the focus groups in the foresight methodology (Section 1.2.9).

***At the organizational level: how do the various actors in the financial system co-evolve with those in the other social systems, and how should they co-evolve to serve the public interest?***

The core methodological instrument to tackle questions related to the co-evolution of financial and non-financial organizations is the set of clinical studies, with the embedded change experiment designs (Section 1.2.8). For each of the 30 institutions, selected through a careful matched-pair design, project REFORM will in fact collect data from primary sources connected to the evolution of internal strategies, processes, systems and beliefs, as well as of performance outcomes. Crucially, it will also survey samples of the key stakeholders that each financial institution deals with, to identify the mechanisms and the features of the co-evolutionary processes through which the financial institutions influence, and are influenced by, change in non-financial institutions. Shedding light on the

nature of these dynamic interdependencies would be not only a contribution to the advancement of knowledge beyond the state of the art, but will also feed into the development of more refined models and simulations of the macro-level interdependencies among the financial, the economic, the political and the civil systems in society.

Moreover, the clinical work will identify the factors that explain the differences between the financial institutions that have embraced to a larger extent the broader notions of “public interest” (including the social and environmental objectives), vis-à-vis the others. This will produce important insights for the identification of the type of change initiatives that financial institutions might consider introducing (and that policy-makers as well as regulators could eventually consider supporting) to facilitate the evolutionary processes towards scenarios where actors in the financial sector aim to reach objectives of broader public interest.

***At the activity level: how do the innovative activities in the financial sector influence the evolution of other economic and social actors and their ability to develop innovative and sustainable types of economic activities?***

In addition to data and observations on the strategic, operating and cultural characteristics of financial institutions and of (some of) their societal counterparts, Project REFORM will aim to zoom in on the processes of development, dissemination and accumulation of financial innovation in these organizations.

This will allow the REFORM team to shed light on the implications of financial innovation on the innovation processes of non-financial actors. Of particular interest is the possibility to test the hypothesis that links superior innovation capabilities in the financial sector with the enhancement of innovative capabilities in the non-financial sector organizations. We expect that this hypothesis will be validated only under certain conditions:

1. That the financial innovation is designed to facilitate the operations of firms, rather than to enhance trading capacity or the efficiency of market transactions; and
2. That the financial institution aims to fulfill a broader set of objectives of public interest, going beyond the sole maximization of shareholder returns.

In summary, Project REFORM will be able to advance knowledge about the impacts of the financial sector on the “real economy” at different levels of analysis, by leveraging the synergies across a wide variety of research methodologies and from an innovative co-evolutionary perspective, which emphasize the interdependencies in the innovation as well as the strategic and operating processes across financial and non-financial actors.

## 1.2.4 International Governance and Regulation of the Financial Sector

### ***The challenge:***

*Regulation and governance of finance in an international and historical perspective, and related public policy issues such as taxation, the structure and functioning of the financial sector, regulation of the shadow banking sector, government guarantees, the role of offshore tax heavens in Europe and outside Europe, regulatory competition.*

### Connected Research Questions:

- ***What regulatory and supervisory interventions on the functioning of the international financial sector are warranted to reduce the likelihood of similar crises in the future and to enhance the economic, social and environmental sustainability of the global economic system?***
- ***What regulatory and supervisory interventions might be warranted from EU institutions’ perspective, in collaboration with national authorities, to ensure a balanced and sustainable development to member states?***

### **State of the Art**



Financial regulation has been the main field of action in terms of EU response (see WP5) to the crisis. All previous efforts have been concentrated in two directions: 1) fix the financial system after the meltdown of the crisis, and 2) re-design the financial architecture to avoid a repeat of the past. The experience of the last months provides evidence that the move towards even more integrated and complex financial markets has exposed the system to a growing risk of costly financial turmoil. The consequent concern for the health of the banking and financial industry has caused renewed attention to the regulation and supervisory (R&S) settings.

### Political economy of regulation

The large body of policy literature on banking regulation was inspired by the broader debate on the role of government in the economy. The two (best known) opposing camps in this field are the public interest and the private interest defenders, despite their agreement on the assumption of market failure. For the former, governments regulate banks to ensure a better functioning of banks for the benefit of the economy and society.<sup>vii</sup> For the latter, regulation is a product of an interaction between supply and demand to determine the shape and purpose it serves; it is thus the outcome of private interests who use the coercive power of the state to extract rents at the expense of other groups.<sup>viii</sup> The public interest view largely dominated the thinking on regulation during the 20<sup>th</sup> century, but it seems that this view is not consistent with the data, which gives better support to the private interest view.<sup>ix</sup> Between the public and private view extremes, Kane<sup>x</sup> (1977) suggested that these views help to frame the complex motivations underlying regulatory policies. He argues that officials are subject to pressures to respond to both public and private interests; the outcome of such an oscillation depends on incentives. Swings in the approaches to regulation reflect the interplay of industry and political forces and the occurrence of exogenous shocks (crisis for example). The proponents of one or the other approach to regulation will favour more or less the reliance on market discipline.

### Regulation and financial innovation

Before the crisis financial innovation was largely unregulated. After the crisis, regulators imposed short-selling bans in the hope to prevent allegedly spurious bad news from being rapidly impounded in stock prices. This move was in sharp contrast to the prevailing notion of short-selling bans as damage to liquidity.<sup>xi</sup>

The absence of minimum capital requirements on transactions such as credit derivatives swaps in cash and synthetic securitization made counterparty credit risk free of charge and thus easy to accumulate at a macro level, with disastrous implications on financial stability.<sup>xii</sup> Although having a role in transferring and spreading credit risk, the securitisation transactions and the use of credit derivatives weakened incentives structures to monitor borrowers.<sup>xiii</sup> This has also led to substantial alterations to the conventional lender– borrower relationship and thus has created new channels with new risks that were not taken into consideration by regulators.

### Financial supervision

Until, roughly fifteen years ago, the issue of the shape of the financial supervisory architecture was considered irrelevant and only banking systems were subject to robust and systematic supervision. Since mid 1990s, financial market development has resulted in the growing importance of insurance, securities and pension fund sectors. As a consequence supervision of non-bank financial intermediaries, as well as investor protection, have become highly relevant. Accordingly the financial supervision architecture and the role of the central bank in supervision have undergone radical transformation. However, today's financial crisis has proved most of these reforms insufficient and most countries are considering reforms of their financial supervisory architecture.

### Tax havens

Tax heavens and uncooperative offshore financial centres were largely attacked in the midst of crisis, making them somehow responsible of the aches of global financial markets. Their existence and survival have always been

controversial. Some argue that they anchor regulatory or tax arbitrage; others argue that they serve a global economy by absorbing rapidly financial innovations and by disciplining neighbouring governments through low tax regimes. Regardless of their role in a globalised economy, data show that over the last decade, they were harbour to unregulated Special Purpose Vehicles (SPV) and domicile to several hedge funds. These jurisdictions are subject to a complex and ambiguous set of international regulations ranging from transparency requirements, tax codes, double tax agreements, systematic exchange of information and rules on money laundering, imposed by international organisations (e.g. IMF, OECD, FATF, EU and large countries). These regulations and standards proved of limited success, however, in view of the scandals and events over the past decade.

## Open issues

- *What regulatory and supervisory interventions might be warranted from EU institutions' perspective, in collaboration with national authorities, to ensure a balanced and sustainable development to member states*

Which interests has financial regulation served over the past decade? What costs and benefits has it generated for different stakeholders (regulators, politicians, banks, lobbyists, end users) and for the economy and society? To what extent did financial regulations converge? Is competition between regulatory regimes preferable? Did the Lamfalussy framework serve to cut back traditional agency problems between regulators, politicians and other stakeholders? What impacts on convergence/cooperation/coordination? What links with international regulations?

Which are the main features of reshaping the supervisory architecture? What explains the increasing diversity of the institutional settings? So far, what are the effects of the changing face of banking and financial supervisory regimes on the quality of regulation and supervision? What is the relationship between monetary policy and supervision, i.e., how might / should central banks be involved in supervision?

Regulation of financial havens will be analysed to draw a comprehensive picture of risks posed by these jurisdictions to global financial markets and assess the regulatory responses (strengths and weaknesses) up to the eruption of the financial crisis. On the side of the political economy approach, the regulation profile of the financial havens – with respect to the international standards defined to prevent potentially harmful phenomena – depends on their specific structural features.

- *What regulatory and supervisory interventions on the functioning of the international financial sector are warranted to reduce the likelihood of similar crises in the future and to enhance the economic, social and environmental sustainability of the global economic system?*

What will regulation of new financial products and actors look like in the future?

What are the linkages between financial regulation and financial stability? Which institution(s) should take care of the financial stability? The crisis showed that spillover from financial instability can harm the whole system. How can financial stability be achieved? What kinds of interventions are needed to avoid a repeat of the past? Can a system free of crisis be envisaged?

Even though the unregulated part of the financial system was the point in the system from which the crisis started, banks have been severely hit by the crisis and large state bail-outs have been necessary to avoid the total collapse of the system. What was wrong with the existing bank regulation? How can we envisage a return to market discipline? What role, if any, for a European deposit insurance scheme?

## Progress Beyond the State of the Art

- *What regulatory and supervisory interventions on the functioning of the international financial sector are warranted to reduce the likelihood of similar crises in the future and to enhance the economic, social and environmental sustainability of the global economic system?*

The objective of this part is to offer innovative analyses of the relationship between central banks, financial regulation and supervision and how they shape the functioning of the international financial system.

The way REFORM is going to address these issues is by identifying the changes in the regulation and supervision approach necessary to the achievement of a sustainable global financial system. This is done by developing scenarios (WP8) and creating a complex simulation model (WP6).

The project will elaborate on the possible developments in financial regulation, macro-prudential supervision, systemic risk control and crisis management to provide an input to (WP8) the scenario building. The process will consist of filtering the most likely trends and factors and elaborating on the most plausible scenarios. The scenarios will then feed into the simulations.

Since the simulated model allows the identification and the interaction of different levels of investigation, namely system level, organizational level and individual level, alternative regulatory interventions can be assessed, not just to the extent that they affect the financial industry, but the economy, society and the global system as whole. This will crucially contribute to understand potential impacts, drivers of change and reasons behind past failure.

- *What regulatory and supervisory interventions might be warranted from EU institutions' perspective, in collaboration with national authorities, to ensure a balanced and sustainable development to member states*

To address this question the development of the scenario process will rely also on the combination of foresight activities and data collected in the clinical studies (WP7) of 30 financial institutions. The clinical studies will also serve to study crucial data on the potential impacts of change in regulatory interventions aimed at the integration of broader sustainability and responsibility principles, at least on an experimental basis. Regulators will interact with those institutions and will be interviewed and studied, to investigate how their thinking about the role of financial actors evolves (or does not evolve). Clinical Studies and Change Experiments will also provide input to shape possible regulatory interventions. This will provide valuable and unique insight into how different financial institutions (different sectors/different countries) are tackling the impact of their products, processes and operations on the economic, social and environmental needs. This will provide deeper insights to organizational and individual awareness, attitudes and behaviour towards the impact of their actions.

In the end, Project REFORM will be able to produce recommendations to move towards the kind of regulatory and supervisory system that can deliver a sustainable, accountable financial system.

### 1.2.5 The Impact of the Financial Sector on Developing Economies

#### ***The challenge:***

*To assess the impact of the current financial system, as defined previously, and economic crisis on developing countries and the impact and implications of potential changes in the financial system on the economic, social and environmental development needs in these countries.*

Which can be reframed in the following Research Questions:

- *What are the specific economic, social and environmental problems of developing countries in the current global financial system and associated governance systems?*
- *What kind of system of international governance might better meet the economic, social and environmental needs of developing countries? What are the change strategies required to transform the system from the current one?*

### **State of the Art**

- *What are the specific economic, social and environmental problems of developing countries in the current global financial system and associated governance systems?*

As the world economy is showing “green shoots” of recovery, low income and developing countries still are in recession with financial markets and global economic recovery yet to reach these countries. Moreover, the World Bank (2009) states that in developing countries, the inter-relationships between economy, society and environment are at their most poignant and critical. Failure to address the crisis-related challenges facing developing countries “jeopardizes years of progress in combating poverty and improving the foundations for economic growth.” (World Bank 2009, page 2) Economic downturns have significant impacts on human welfare and the environment, leading to reduced nutrition, reduced schooling, and greater environmental degradation. As the crisis spread from the financial crisis to the real economy in advanced economies, there was speculation that the limited integration into the financial system might insulate these developing economies from the worst effects of the crisis. However, as the crisis spread to the real economy, with a resulting fall in global demand and commodity prices, the developing countries were hit quite severely. Without concerted efforts to stimulate growth and economy (through financial markets for example), developing countries will lag behind for some time. Resources from abroad are required to return countries to the pre-crisis growth rates, on a poverty-reducing and environmentally beneficial trajectories, in line with the Millennium Development Goals (EU COM(2009) 160). Currently the financial system is not delivering this.

When referring to “developing countries” we are referring to a very diverse set of countries. First, one has the poorest or “bottom 40” least developed countries, mostly in Sub-Saharan Africa but including those in Asia such as Bangladesh or Cambodia, and a number of countries in Latin America. Most have been heavily indebted over time and persistent clients of the World Bank and/or IMF. The second group is the mid-range emerging market developing economies, but here also there is considerable diversity in terms of size and income levels. The third group overlaps with the second and sometimes the first, and consists of those countries in transition from a system of communist central planning. Again there is diversity in size and situation (China versus Cambodia, Romania or Kosovo versus the Baltic Republics) and some are now EU members.

The impacts of the financial crisis differ significantly between countries. Drivers of these impacts can be due to size and income levels, but institutional context also has a role to play. Therefore institutional dimensions of financial governance, labour markets, levels of internationalisation, financial openness, training systems, corporate governance, development of legal systems, effectiveness of law and the level of development of social provision of education, health and social protection shape the impact of the financial crisis upon the economic, social and environmental performance of the economies (Amable 2003). These institutional characteristics, plus the level of development and role of finance will also influence what changes are required in differing contexts.

In addition to institutional setting, the relative significance of channels of impact will need to be considered when assessing impacts and associated policy responses (World Bank, 2009). These impact channels range from commodity prices, trade levels, capital markets and FDI, remittances and migration, tourism, financing for SMEs. Therefore the changes to the financial system and the mechanisms for change will be dependent on these various characteristics and stages of development.

➤ *What kind of system of international governance might better meet the economic, social and environmental needs of developing countries?*

Jonung (2008) correctly states that there is no “commonly accepted theory of financial crisis” to provide a fail proof advice on the policy case for each developing country. However as Naudé (2009) states, that long-term policy approaches would need to include both domestic and international policy responses. But on both levels, there needs to be a co-ordination of response at national, regional and global levels. One long-term response relates to the above research question, developing and deepening the financial sector in developing countries, in an appropriate way, to provide greater access to credit and greater sectoral efficiency, which then drives growth of the real economy (Addison and Mavrotas, 2008). However, there is also a question of social and environmental needs of developing economies, and how to develop the financial sector to meet them. Therefore a subsequent and related question then is what is the role of the global financial system in developing financial systems that enable sustainable financial and socioeconomic growth?

In combination to domestic responses, it has been argued that a more inclusive system for the governance of the global financial system is required, to enable a more equitable and efficient financial system, and governance that addresses the failings of Bretton Woods II and the global imbalances (Dewatripoint, Freixas and Portes, 2009). Therefore following Dewatripoint et al’s argument, global imbalance partly caused the financial crisis at a global level, and hence the development of domestic markets in developing countries is equally as important as global governance and regulatory reform and should be dealt with in conjunction with each other.

### **Open Issues**

➤ *What are the specific economic, social and environmental problems of developing countries in the current global financial system and associated governance systems?*

- i) The emergence of a more market-based financial and monetary order at the global level, characterised by a high degree of capital mobility and cross-border, led to an uneven and volatile pattern of capital flows which often overwhelmed policy mechanisms in developing countries on the inward and outward route, and excluded the poorest and many mid-range countries.
- ii) During the reform process following crises, there was considerable pressure for convergence and higher standards of financial and monetary governance where institutional capacity was low and policies proposed by IFIs and advanced country partners were inappropriate to the level of development.
- iii) There is evidence that financial system openness is problematic in the absence of sound governance and institutional strength. It is not clear that the openness policies advocated were appropriate to much of the developed world. Financial repression was often ended either inappropriately (and its key role in successful real-world development ignored), and the difficulties of adapting to liberalisation underestimated, in terms of legal and institutional development and in terms of private and public sector governance capacity.
- iv) The policy space issue was also underestimated or ignored in terms of importance, and in contrast it was assumed that LDCs should deliberately constrain their own discretionary policy autonomy in favour of allowing market forces to predominate and discipline.
- v) The knowledge base of rating agencies in relation to LDCs was limited as often was the basis of internal ratings systems of foreign banks. Few LDC corporate entities were rated, ratings were expensive to obtain

and ill-informed and usually linked to country risk instead of the risk engendered by the specific corporate entity.

- vi) The framework of global financial and monetary governance was established by institutions in which the LDCs had either little or no representation and voice. The same applies to issues of conditionality in terms of crisis management and debt workout.
- vii) Some LDCs clearly paid a higher price than others, and the research must establish what the variables were that helped countries to avoid financial, debt, and monetary/exchange rate crises (variables such as elements of financial repression enhancing policy space, institutional development, inward/other capital controls, macroeconomic prudence, institutional characteristics).

➤ *What kind of system of international governance might better meet the economic, social and environmental needs of developing countries?*

- i) How might we better integrate the needs of the various sorts of LDCs and their interests/preferences into the current global regime? Should there be 'special' rules for developing countries? Should developed countries be allowed to get away with monumental imbalances while developing countries feel forced to 'self-insure'? To what extent should regional arrangements be encouraged?
- ii) Integrating the LDCs implies important changes to the governance of major international institutions and policy forums, starting with the G7 versus G20 issue and moving on to the IMF and World Bank, and the extent to which 'minority' clubs like the OECD should be able to set the trend without LDC representation. In short, should economic wealth and size be the principal criteria for representation and influence on key institutional aspects of global financial and monetary governance?
- iii) Should the issue of debt workout and proposals, such as the Sovereign Debt Workout Mechanism, be revisited or yet more elaborate forms of governance be proposed in this regard?
- iv) Should governments be the only mode of representation on key bodies at the international level (e.g. the IMF), given how poorly some governments represent the interests of citizens? What about real-economy constituencies, including labour? For the disadvantaged, how might their interests be represented?
- v) What sorts of voting systems might be appropriate for the reform of the international financial institutions?
- vi) How independent of the 'political' input of national parliaments and electorates should global governance be?
- vii) Reflecting general governance debates, what should the balance be between national, regional and international governance and regulation and self-regulation?

### **Progress Beyond the State-of-the Art**

- *What are the specific economic, social and environmental problems of developing countries in the current global financial system and associated governance systems? What have been the direct and indirect impacts of the current financial crisis on developing countries?*

The objective of this section of the work package is to offer an innovative analysis on the interaction and impact of the financial system (and the associated crisis) on the economies, societies and the natural environment in a range of developing countries. We will address these research questions relying on a combination of clinical, foresight, scenario building, simulation and experimental work.

A starting point is to address the question about the direct and indirect impacts of the current financial crisis on the economy, society and environment in developing countries. Using archival data collection, a system-level modeling and agent-based simulation of the input and output dynamics both towards developing countries and across financial, economic, government and civil society sub-systems (see Section 1.2.7). The simulation will be designed

and based on archival data to describe and capture the direct and indirect effects in developing countries. Once the descriptive capacity of the simulation is validated it will be used to assess the costs and benefits of the crisis and recent adaptations in the developing country context. This will enable REFORM to understand both the heterogeneity in level of impact, and the drivers for these impacts.

This will be supplemented with organizational level analysis which, through clinical studies (1.2.8), REFORM will collect data primary data from 30 companies in order to understand the evolution of internal strategies, processes, systems and beliefs, as well as of performance outcomes. This will lead to the development of more refined models and simulations of the macro-level interdependencies among the financial, the economic, the political and the civil systems in society, and the impacts and implications for developing countries. Understanding differences at organization level helps REFORM understand how organizational, as well as systems reform can lead to productive rather than destructive outcomes in the developing world. This also will enable the identification of potential change strategies towards the identified scenarios (see below)

- *What kind system of international governance might better meet the economic, social and environmental needs of developing countries and what are the change strategies required?*

Since the simulation model allows the identification of different levels of interaction, at the system, organizational and individual levels, alternative regulatory/governance interventions can be assessed, not just within the financial sector within the EU, but also the economy, society and environment in the developing world. By identifying the drivers of impact (discussed above), potential change paths and future scenarios can be developed.

Building scenarios involves developing a range of future states of the financial system. These scenarios involve different macro level policies, system interactions and individual behaviours. By changing governance systems, various different interactions occur on the other levels, with varying impacts on developing country economies, societies and environment. These scenarios will be developed through a number of different foresight activities (see 1.2.9) and supported by the clinical studies (1.2.8). The clinical studies are essential to understand triggers for behavioural, organizational and structural change, and therefore, the change strategies required at the macro, organizational and individual levels. The evolution of how financial actors view their role and responsibilities viz-a-viz developing countries is vitally important for any change scenario.

The combined results of the simulation, policy scenarios and clinical studies allows REFORM to understand impacts and implications of various policy interventions on economies, societies and environment in various types of developing countries.

## 1.2.6 EU Governance and Policy

### ***The challenge:***

*Related specific challenges for the EU in a context of the crisis; challenges to EU cohesion, fiscal policy, governance of the Euro-zone. The possible need for coordinated initiatives for active economic and social policies and their impact on longer-term goals*

Connected Research Questions:

- *What is the challenge posed by the crisis to EU policy strategy?*

- *What are the specific policy challenges?*
- *What are the costs and the benefits of alternative policy intervention scenarios aimed at redressing the systematic factors at the basis of the economic and financial crisis*
- *What policy interventions might be warranted from the EU institutions' perspective, in collaboration with national authorities, to ensure a balanced and sustainable development to member states?*

## State of the Art

Since the onset of the new millennium EU policy took a conceptual step forward in setting out a new 10-year action plan (the Lisbon strategy) based on “sustainable economic growth with more and better jobs, greater social cohesion, and respect for the environment”<sup>xxiv</sup>. The EU Sustainable Development Strategy (Gothenburg declaration, 2002) added explicitly the third, environmental dimension to the Lisbon Strategy of economic and social renewal. The two strategies have become complementary and in 2005 the European Commission re-affirmed the validity of those goals emphasizing the idea that “making growth and jobs the immediate target goes hand in hand with promoting social or environmental objectives”. Accordingly progress has been made on the front of EU cohesion policy and corporate social responsibility (CSR). The cohesion policy for 2007-13 stresses the importance of economic and social cohesion as well the objective of protecting and improving the quality of the environment. In 2008 for the first time, a chapter on CSR has been included in the annual competitiveness report published by the European Commission emphasizing the important role that CSR plays for social and economic development.

Notwithstanding this conceptual shift with respect to the previous decades, a gap emerges from the statement of the long-term goals and the actual implementation of new policies to achieve those goals. The financial sector certainly plays a fundamental role in the achievement of economic, social and environmental objectives but the linkages are missing in the strategy. The basic philosophy behind the Lisbon strategy was that the policy focus was necessary on the supply side of the economy and in particular on labour markets. The underlying assumption was that the financial sector performs well and supports growing demand. The European economy needed to improve its competitiveness to satisfy this demand and the instruments identified for this purpose were more flexible labour markets, active labour policies and investment in research and development. What was not considered was that developments in the financial sector could have deep effects on the demand and, in turn, important implications on supply and the functioning of the economy as whole. Housing bubbles and subsequent busts, in Spain, Ireland and in the Baltic countries, and the crowding out of resources from productive to purely financial investment (see WP2) were not contemplated as possible scenarios.

From this point of view, the financial crisis proved the fundamental hypothesis behind the Lisbon strategy to be limited, to the extent that finance was assumed to naturally work to support the achievement of the objectives stated in the agenda. In fact a new scenario emerged. The Lisbon process is now over and the EU-2020 will set out the strategy for the next decade. This is the right moment when the lessons from the financial crisis should be retained.

However, even if the economic and social costs of the crisis are becoming clear, the role of finance in facing the bigger challenge of serving sustainable growth has gained little space in EU debate. At EU level the entire debate on finance has been dominated by how to fix the financial system and go “back to market” as necessary conditions for competitiveness and growth. Achieving integration in financial markets has been one of the principal political aims of the EU, ever since the Treaty of Rome identified the freedom to provide services and free movement of capital as two of the four key defining characteristics of the union’s internal market. A key argument for the creation of the European Monetary Union (EMU) was the elimination of exchange rate risk, seen as a principal source of market segmentation. The 2000 Lisbon Summit gave fresh political momentum by identifying the creation of the single market as a key means for achieving a dynamic and globally competitive economy. However the picture has changed rapidly and deeply since then and the EU is called to address two more fundamental



questions: i) whether it is necessary to re-think finance in a way which is consistent with its long-term objectives, and ii) what is the role for EU policy in facing the challenges posed by a volatile and fast-changing world.

### **Economic challenges**

Besides the emergence of a fundamental new challenge to the EU policy strategy, in the aftermath of the crisis, several challenges to specific EU policy objectives emerged or re-emerged with particular strength, corroborated by the economic recession.

The crisis showed that in a globalised world, even idiosyncratic shocks (outside Europe) have systemic consequences for the Union. In this light, it seems natural to expect the EU, rather than national governments, to engage in redressing these systemic factors. Yet to date, the EU response to the global financial crisis has made it clear that fiscal matters are, and remain a national policy issue. As a consequence policy coordination is expected to play a larger role. However, it remains unclear how to make this option viable and effective.

The evidence that the troubled large financial institutions could be saved only by national governments' intervention has posed huge problems in terms of i) how to manage this kind of intervention, ii) how to go back to market practice, iii) the legitimacy of transforming private debt in public debt and iv) how to finance increasing public debt. A further level of complexity has arisen from the fact that while the functioning of the single market belongs to EU competences, bailout interventions remain part of national government initiatives.

The crisis and the recession have severely hit some of the new member states, like the Baltic countries, but not only them. Unemployment has reached historical high levels in Spain and financial turbulence in Greece is posing a huge threat to the stability and the governance of the euro-zone. This raises the question once again of whether the European central bank should deliver financial stability and risk the possible conflict with its role of supplying price stability (see linkages with WP3).

### **Social challenges**

The current recession has increased the diversity and divergence across member countries in terms of GDP. New member states, which were on a convergence path before the crisis, are now experiencing a fall in output that is much larger than in other countries. This poses the risk that common policies can become inadequate for their situation. This is not a new risk to EU cohesion, but what is new is that the roots of the problem lie in the financial system.

Reducing social conflict and inequalities, within national member states and within the EU, have always been one of the priorities of EU policy. As a result of the recession poverty is increasing in advanced countries and most governments are struggling to finance huge deficits, which will necessarily need to be reduced. Economic reforms with large social impact (e.g. pension reforms, pay cuts, etc.) are as inevitable as painful for European governments but avoiding them could engender decline and entrench division, and thus threaten further social harmony. The EU cohesion policy has been quite successful but it also has engendered competition and rivalry among countries (notably at the time of EU enlargements) to benefit from EU intervention. This phenomenon is likely to increase in the years to come.

### **Environmental challenges**

The EU has also pledged to contribute to the scale-up of international finance needed to support Carbon mitigation and adaptation in developing countries. In 2010-2012 the EU would take its fair share of the international public

finance to be agreed by developed countries, e.g. Euro 2.4 billion annually for 2010-2012 in the Copenhagen Accord. In 2013-2020 the Commission's estimate of the total net incremental costs of developing countries' actions, amounts to Euro 100 billion annually by 2020. This need is to be filled through a combination of their own efforts, the international carbon market, and international public finance. Among these potential sources the international carbon market could potentially deliver as much as Euro 38 billion per year in 2020 (EC 2009). The ability of the international carbon market to deliver this scale largely depends on i) the designs of the post-2012 international agreement aimed at setting countries' emission targets and mechanisms to help them reduce their compliance costs (e.g. international offset and credit schemes), and ii) the designs of the EU ETS in Phase 3, especially on auctioning rules to be elaborated on the basis of the amended ETS Directive.

### Open Issues.

#### ➤ *What is the challenge posed by the crisis to EU policy strategy?*

- i) How politics help shape EU-level policy to find a balance between an integrated, competitive and stable market which is at the same time socially desirable and ethically acceptable.
- ii) What is the role of finance in economic and social realm of the EU, both in historical perspective and in the light of the financial crisis? (see linkages with WP1)

#### ➤ *What are specific policy challenges?*

- i) The initiatives for enhancing integration have the ultimate aim of putting all EU intermediaries on equal footing in terms of cross-border competition. However, a borderless financial market cannot alone guarantee a fully competitive market. Traditionally anti-competitive practices and market infringements were considered the key obstacles for competition; after the crisis, market power and state-aid granted to institutions may be the new barriers to entry. What is the government's role in the financial sector after bail-out programs?
- ii) Although a competitive, profit-driven market creates incentives for minimization of costs, it does not necessarily lead to a stable system. Financial institutions have to be regulated and closely monitored; preventive measures, such as capital and solvency requirements, have been built up over years to address such concerns. However, the financial crisis has raised concern over the sufficiency of EU's regulatory and supervisory powers in dealing with various challenges, notably cross-border and systemic risks. A pan-EU regulator, the push for narrow banking models, a new framework for macro-prudential regulation, regulation of alternative investment vehicles, a closer monitoring of foreign sovereign wealth funds and increased cooperation with offshore centres are only some of the proposals that are on the agenda for the purpose of enhancing stability. (See linkages with WP3)
- iii) The crisis showed that only government interventions can save large financial institutions. Because of the lack of common EU fiscal policy, small member countries may be discriminated against by large financial institutions. How can the EU deal with it? What role, if any, for the IMF?
- iv) The situation in Greece is suggesting that a bail-out of a member of the euro-zone makes sense only if all stakeholders contribute. Saving Greece makes sense only if the Greek political body accepts that much more than a fiscal adjustment is required. Deep cuts in private sector wages and consumption are required before any outsider could even consider stepping forward. This shows a fundamental weakness of the Stability Pact: it concentrates only on the balance of one sector (the government) instead of the resource balance of the entire country, which is what really counts in turbulent times. Prevention of the kind of problems Greece is encountering today (and Portugal might encounter tomorrow) requires a real surveillance which does not neglect the balance of the private sector. What role for policy coordination?

- v) On the social and ethical front, the debate has centred on financial inclusion and better access to finance. Following the US subprime debacle that triggered the current crisis, one primary concern has been the increasing complexity of financial products, leaving consumers with more choices but potentially less informed decisions. The promotion of financial education of consumers is thus seen as a public responsibility. Consumer protection, transparency of products and pricing has also received attention in recent years.
- vi) Across Europe national governments are involved in supporting, often through subsidies over several years, green energy sources (e.g. solar panels). These are capital-intensive investments that would not take place without government support. Yet the existence of subsidy today does not guarantee that future governments will stick to the promise made by their predecessor. This risk makes investment in green energy sources sub-optimal even under the current promise of government support. How can this risk be reduced? Is there any room for European Investment Bank intervention? How can a government promise be made binding?
- vi) The EU emissions trading scheme (EU ETS), regarded as the flagship of the EU climate change policy<sup>xv</sup>, is a means to achieve environmental objectives in a cost-efficient manner. It is a cap-and-trade type of emissions trading. According to the European Commission, the EU private sector, i.e. electricity and industry that are covered by the ETS Directive, accounted for 75% of the demand in the international carbon market which triggered financial flows estimated at Euro 4.5 billion in 2008 (EC 2009). The EU has an open ambition to create a fully-integrated global carbon market through extension of a cap-and-trade scheme like the EU model to other OECD countries, and eventually advanced developing countries.

- *What policy interventions might be warranted from EU institutions' perspective, in collaboration with national authorities, to ensure a balanced and sustainable development to member states?*
- *What are the costs and the benefits of alternative policy intervention scenarios aimed at redressing the systematic factors at the basis of the economic and financial crisis*

What EU policy interventions can ensure economically, environmentally and socially sustainable development? And what are the cost and benefit of alternative policies?

### **Progress Beyond the State of the Art.**

- *What is the challenge posed by the crisis to EU policy strategy?*

The way REFORM is going to contribute to a shift in the policy logic necessary for the achievement of a financial system which is consistent with the long-term EU objectives is by developing scenarios (WP8) and its unique simulation model (WP6). The model, by encompassing not only the economic dimension but society at large and different organizational levels, serves the purpose of shifting the paradigm from current "isolated" thinking of the financial system to a unified view. The recent crisis has highlighted, through the strong interactions between society and finance, that the financial system must not be viewed in isolation but in a context where industry, society at large and environment interact.

The process of scenarios building includes the development of a range of future states of the financial system, with different macro-levels policies, different system-level interactions, and different organizational behaviours. Through this process stakeholders' perception (not only policy-makers) can be affected, their views challenged and their expectations changed.

- *What are specific policy challenges?*

Building scenarios and simulations will also help to address the specific policy challenges identified in the previous section. As said above, in the scenarios building different macro-levels policies will be developed. Each of the policies will interact with the rest of the system and have varying impacts on the economy, society and environment. These scenarios will then be run through the simulation model. The simulations for each of the scenarios will provide the basis to assess the impacts and implications for the EU, but also national states. This will contribute to understand potential impacts, drivers of change and barriers to change.

The scenarios themselves will be produced by the combination of the various foresight activities (see Section 1.2.9), and supported by the data collected in the clinical studies (WP7) of 30 financial institutions (see Section 1.2.8). The clinical studies will also serve to study crucial data on the potential impacts of change interventions aimed at the integration of broader sustainability and responsibility principles, at least on an experimental basis. In the process of studying in depth and across time (for 4 years) 30 financial institutions, policy-makers that interact with those institutions will be interviewed and studied, shedding new light on how they think and how their thinking about the role of financial actors evolves (or does not evolve). Clinical Studies and Change experiments will also provide input to shape possible interventions. This will provide valuable and unique insight into how different financial institutions (different sectors/different countries) are tackling the impact of their products, processes and operations on the economic, social and environmental needs. This will provide deeper insights to organizational and individual awareness, attitudes and behaviour towards the impact of their actions.

- *What policy interventions might be warranted from EU institutions' perspective, in collaboration with national authorities, to ensure a balanced and sustainable development to member states?*
- *What are the costs and the benefits of alternative policy intervention scenarios aimed at redressing the systematic factors at the basis of the economic and financial crisis*

The combined results of simulations, policy scenarios and clinical studies will offer both a validation of the simulated effects and estimates for the costs and benefits of eventual policy interventions. The simulation will offer a tool by which policy makers can generate outcomes following changes at different level ranging from the economic behaviour to policy interventions to changes in the external environment. This should allow to assess what EU policy interventions can ensure economically, environmentally and socially sustainable development and at which cost.

In the end, project REFORM will be able to produce policy recommendations, relevant to EU policy making, as to the costs and benefits of alternative courses of action and interventions aimed at the realization of different scenarios on the role of the financial system.

## 1.2.7 Modelling and Simulation

### ***The challenge:***

*Traditional econometric and financial system models have not provided a comprehensive perspective that integrates (1) social, environmental and economic concerns, (2) individual-through-societal levels of analysis, and (3) heterogeneous agents' behaviors, roles and relationships.*

Connected Research Questions:

- *What quantitative model will integrate the three dimensions above and generate simulations that will provide guidance for policy makers and other financial system actors to avoid crises such as that of 2007-09?*

As described in the previous sections, the recent crises of 2007 and 2008 have revealed that ripples from society propagate into the financial system (see, for example the subprime crisis) and, on the other hand, events in the financial system impact society. Recent opinions and literature on the financial system agree upon the fact that, to reach full awareness of these phenomena, it is necessary to shift the paradigm from current "isolated" thinking of the financial system and develop a comprehensive understanding of how it interacts with the economy (including other industries), the society and the environment. On the other side of the coin, many theoretical models of the Economy do not consider the financial system explicitly: it is hidden behind the efficiency assumption. However, the recent crises have definitely revealed that the efficiency assumption does not hold. Building an integrated model with a focus on the interactions between the financial system and the other systems is therefore essential.

It is therefore our purpose to build a quantitative model of the financial system that brings together its internal functions and organization and, most importantly, its interaction with the external systems. The simulation model is going to incorporate in a unitary frame the theoretical findings of the project as the investigation in its Work Packages progresses, thus ensuring internal coherence among the huge number of assumptions made, variables introduced, and parameter ranges considered. It will then generate the final output of the programme with the costs and benefits associated to different levels of interventions (different potential reforms) while taking into account responsibility and sustainability principles.

### **Methodological Design**

Given the strong focus on the heterogeneity of agents in financial and other systems and the importance of interaction between agents, an agent-based modeling (ABM) approach will be used to model potential reforms. ABM has been used in economics and management, sociology, political science, demography and environmental sciences (e.g., Tesfatsion & Judd, 2006<sup>xvi</sup>; Billari et al., 2006<sup>xvii</sup>; Myrskylä et al, 2009<sup>xviii</sup>). A 2009 article published in "Nature" argues with a clear title that "The economy needs agent-based modeling" (Farmer & Foley, 2009)<sup>xix</sup>.

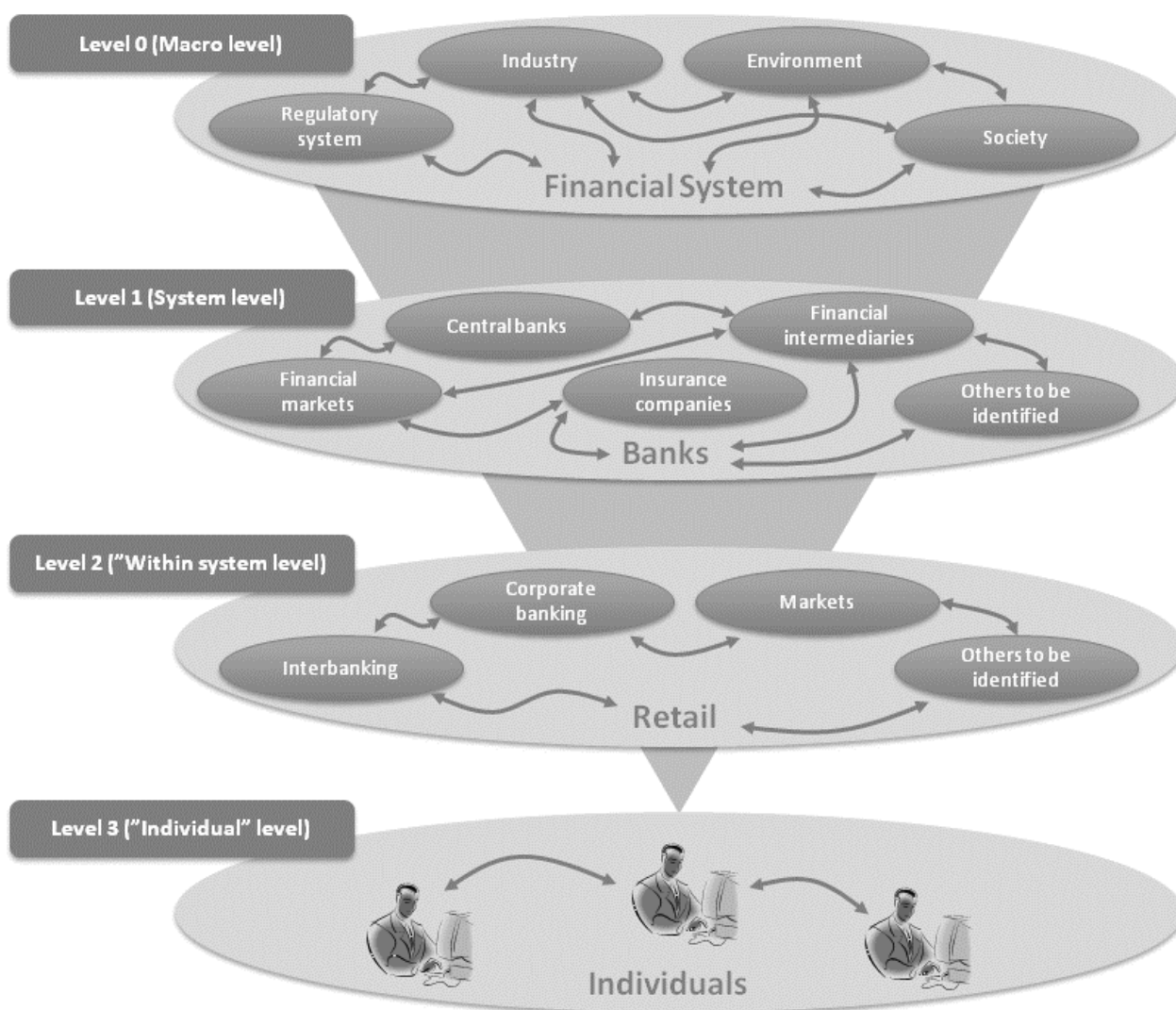
ABM is particularly appropriate for accomplishing the task of creating a modular but comprehensive model of the financial system for the following reasons. (1) ABM focuses upon the behavior of individuals, organizations and systems. It accounts for the rules according to which they act and interact. Thus, it is particularly well suited to the emphasis our project puts on potential reforms. (2) It has been demonstrated by many authors that ABM is capable of handling the wide variety of agents in the financial and other systems and their interactions. All restrictions on the types of agents (rational, irrational) and on their behavioural rules are removed. Agent heterogeneity becomes an integral part of the analysis. (3) ABM makes it possible to integrate diverse disciplinary perspectives. Jansenn and Ostrom (2006)<sup>xx</sup> use ABM "to study the governance of socio-ecological systems [Jansenn and Ostrom (2006); p. 1468]." As the authors state, "Although economics will be our starting point, we will include studies from other disciplines [Jansenn and Ostrom (2006); p. 1468.]" As another example of ABM's interdisciplinarity, we refer to the two-agent financial market model in LeBaron (2006)<sup>xxi</sup>. (4) ABM allows to structure the software architecture across the different levels of analysis (i.e., individual-societal). The key proposition is that the economic and financial systems are analyzed in a sequence of nested levels to build a detailed understanding of each level and their interactions. While the actual details and technical aspects of the model are a result of the project and of its 5-year investigation, Figure 2 presents an initial model simply to illustrate this as a conceptual starting point for investigation, with four levels:

- A "Macro" level (Level 0). This entails the over-arching social-economic-environmental system, with explicit evidence of the financial system;
- A "System" level (Level 1). The financial system is divided into its organization and structures. The way they interact and their behavioral rules determine their outputs and their overall performance and are a key aspect of the modelling.
- An "Organization" level (Level 2). The organizations making up the financial system are analyzed in terms of the different functions and products, often represented by "departments" within an organization.
- An "Individual" level (Level 3). Each of the "departmental" actions are the product of individuals' decisions and interactions.

As our understanding develops of both the intrinsic functioning and organizational structure of the financial system, the levels and systems in Figure 1 are subject to changes and refinements. Interactions are represented by lines and arrows in Figure 2. The arcs linking the systems, subsystems and agents entail, among others, their interaction rules. Therefore, they are a central subject of investigation and modeling.

This approach has the following advantages. (A) It allows us to create a modular and flexible approach to modeling. Flexibility concerns the definition and number of levels, as well as the systems and agents within each level. This modularity ensures a coherent structure. (B) It provides a basis for encoding the model in software subroutines. By the nested structure of Figure 1, one can define "procedures" corresponding to the various agents and systems involved at each level. A particular procedure, in turn, can require application of a given mathematical technique (such as system dynamics, multi-attribute optimization, quantitative forecasting tools).

As far as the model-building process is concerned, we will integrate ABM with network mapping analysis developed as a sub-section of this proposal. The approach will build on earlier work on mapping the global financial system from a social-environmental-economic perspective, led by a participant of this Work Package (Waddell, 2009<sup>xxii</sup>; Borgatti and Foster, 2003<sup>xxiii</sup>; Allee, 2008<sup>xxiv</sup>;). Use of the network mapping methodology produces a comprehensive understanding of the structures, relationships and roles providing a valuable input to the model-building. The link between network mapping and agent-based simulation is not known to have been done before.



**Figure 2:** Envisioned structure of simulation model. Systems are named for illustrative purposes only. The identification of the actual systems and agents is one of the outcomes of the research of this project .

As far as model robustness is concerned, the model corroboration process and the testing of numerical results, as well as the derivation of policy-making insights, shall be performed by employing the most recent local and global sensitivity analysis methods [Saltelli et al (2005)<sup>xxv</sup>]. In particular, a recently introduced method allows to quantify the strengths of interactions in computationally complex models (Borgonovo, 2010)<sup>xxvi</sup>.

### **Interdependencies and Synergies**

The model will evolve under the constant input from the results of the other Work Packages of this proposal. Results of the investigation of the thematic WPs (WP's from 1 to 5) will provide essential input. These will describe the financial system, its governance, regulation and control, the management incentive systems, the types of mathematical models, agent's behaviour, roles, and the relationships between agents. As new findings in these WPs are produced, they are fed into the simulation to build new blocks of the model. The analysis of these WPs shall also be one of the ingredients for determining what variables play an exogenous and an endogenous role in the simulation. Identifying the endogenous-exogenous variables will require also substantial interaction between WP6 and WP8, with WP8 providing the scenarios for running the simulations. Scenario variables are, by definition, exogenous to the simulation. Furthermore, there will be significant interaction between WP6 and WP7: one further advantage of utilizing an ABM framework is the possibility of inserting cognitive and psychological aspects of agents' behavior. Thus, the experiments performed in WP7 shall be incorporated in the simulation tool, to describe agents' behavior in as realistic as possible a fashion.

The above description concerns inputs from other WPs into WP6. However, this is only one direction of the interactions between WP6 and the other WP. As the modelling progresses, simulations are run and numerical experiments performed. The findings, then, provide feedback to the thematic WPs in defining research questions (WP1 to WP5) and to the methodological WPs in formulating scenarios (WP7) and designing experiments (WP8), respectively.

### **Progress beyond the state of the art**

The results of this WP are going to advance the state of the art in several directions. First, the model can constitute a milestone towards an integrated vision and approach to the financial system, which has not been addressed in its entirety before.

From the policy-making perspective, the simulation model aims to support decision-making and virtual experiments on the financial system. Thus, the model shall support insights to questions as: Is it too big to fail?; How would things change if traders in the financial market change their behavior? What if the system of incentives to managers changes? What if the EU implements a new regulatory policy? What if banks have to utilize a different set of risk measures? What if a shock in the housing market happens? Thus, the model is designed so that it results in a key decision-support tool with which policy-makers can assess the impact of different scenarios and alternative governance policies of the financial system.

From the methodological viewpoint, the integration of scenario analysis and change experiments into ABM constitutes is a first innovative line of research. The potentially powerful relationship between mapping technologies, network analysis and ABM pushes the frontiers of research in these fields. The utilization of modern sensitivity analysis methods in ABM constitutes a cross-fertilization of two research fields which is ripe for groundbreaking findings.

Finally, the simulation tool itself is a natural deliverable of the project. After five years of constant programming and updating (the modelling exercise envelops the activities of the Work Packages of the project), the model will become a simulation tool of considerable size. Therefore, we foresee installing the model in a dedicated infrastructure. The platform will be constructed to grant access to simulations to all those parts of the EU community (policy-makers, stakeholders, financial associations, central banks, universities) interested in studying the behavior of the financial system and running simulations. Thus, they will have at their disposal this unique tool.

Furthermore, the platform shall be carefully conceived for making input data available to the broader research community.

## 1.2.8 Clinical studies and Change Experiments

### Methodological Design.

To understand what is preventing the financial system from better serving economic, social and environmental objectives, and to define the changes that would be required to nudge the system in a more sustainable trajectory, the REFORM project will leverage the knowledge developed in the thematic work packages, and conduct a longitudinal series of in-depth clinical studies of corporate financial actors.

Financial corporations are complex organizations embedded in political, economic and social institutional environments (at both a national and international level). Understanding their decision-making processes, in terms of both constraints and opportunities, and exploring the organizational level initiatives being developed to make them more sustainable, is a critical step in the development of sound regulatory interventions. Sustainability can only progress through a delicate interchange between organizational level and system level learning process. Therefore in WP7, the REFORM project will focus on these corporate actors and explore how they are dealing with the sustainability challenge and regulatory environment.

We will identify the companies to study along two dimensions. On the first dimension we will distinguish financial institutions according to their activity, and we will separate 3 main sectors: Commercial Banking (Retail and Corporate), Insurance (and re-insurance), and Investment Banking/Asset Management (Institutional Investors, Asset Managers, Private Equity, Hedge funds, etc). We will also consider geographic and institutional variation and distinguish five regions: United Kingdom, Central and Northern Europe, Southern Europe, Eastern Europe, and the United States (given the key role that the American financial system plays in the world, it is critical to address it directly).

For each one of the cells of the design matrix described, we will choose one company perceived to be a “leader” in its ability to serve the economic, social and environmental objectives of the territory in which it operates, and one company perceived to be very much a “laggard” in its ability to serve these needs. These perceptions will be based on a triangulation between (a) the results of the work of the thematic work packages, (b) existing rankings of research companies such as SAM, Asset 4, Innovest, and (c) the input of all the research partners.

This matched-pair design will enable us to compare financial institutions that are very similar on many dimensions except the one we are interested in exploring further. This variance in sustainability performance obviously can be explained by idiosyncratic decisions that can hardly be the basis for solid generalization. In order to avoid this problem we will follow up each one of the cases, on a small number of dimensions, and track the implementation of specific policies and decisions. We will also specifically explore the role that different stakeholders play in the change process. In most of the sectors / regions, therefore, we will be able to compare at least two companies. In each sector we will be able to compare up to ten cases, and finally, across regions we will be able to compare a total of thirty cases. In the case of investment banking, due to the higher concentration of the sector in some regions we will focus primarily on the US, United Kingdom and Central and Northern Europe. Table 1 summarizes how the clinical studies will be selected across sectors and regions.

**Table 1 Clinical Studies Matrix**

Regions	Sectors			
	Commercial Banking	Insurance	Investment Banking	
United States	2	2	4	8
United Kingdom	2	2	2	6
Northern Europe	2	2	2	6



<b>Southern Europe</b>	2	2	2	6
<b>Eastern Europe</b>	2	2		4
	10	10	10	30

Note: All REFORM Partners will be involved in recruiting companies for the clinical studies. The following groups of institutions will be responsible for specific clinical studies (colour-coded in the matrix according to the following table)

IESE, Bocconi, ESADE
LSE, Oxford, Nottingham
Insead, CBS, WU
Bled, Bratislava
WP Coordinators (IESE, Bocconi)

### *Selection, recruitment, data collection and analysis*

Once identified the companies, the REFORM research partners, led by WP7 leader, will proceed to first recruit them, and then conduct the clinical studies, which will consist of the following steps:

1. Collect archival information on the case and prepare short case studies on each company
2. Identify a set of key indicators to be tracked over the course of the project (on the basis of the results of the thematic work packages and the case studies)
3. Conduct personal interviews with the management of the company
4. Conduct personal (and phone) interviews with most relevant stakeholders of the company (clients, employees, regulators, local and national governments, NGOs)
5. On the basis of the data collected, prepare case studies on the sustainability of different actors
6. Identify and analyze specific actions management is planning to implement in order to improve sustainability in each one of the cases
7. Track the evolution of these actions, their consequences, and changes in the key indicators.
8. Analyze and compare the key indicators before and after the interventions.
9. Integrate the results from the different cases, and prepare a final report.

Data collection will be based on archival data, personal interviews, telephone interviews, focus groups, ethnographic observation of work activity. Furthermore we will design and conduct on-line surveys to corroborate our findings. The analysis of these cases will start from a standard longitudinal within-case analysis, which will enable us to track the evolution of each one of the companies over four years, and will couple it with a between-case analysis in which the most relevant comparison will be the matched pair of institutions.

### *Change Experiments*

Finally, in a small number of cases the REFORM project will co-design the intervention together with the company participating in the study. In these cases, we will be able to better control the implementation process of the intervention and therefore study them as quasi-experiments. The nature of these experiments will depend on the willingness of the companies involved in designing these interventions. Nevertheless, we expect that we might be able, for instance, to design a gradual roll-out of novel form of retail or corporate banking, randomly assigning the intervention to similar regions of the same country. This randomization will help us to more carefully test whether these interventions do have an effect in driving more “sustainable” corporate behaviour. Similarly, it is likely that regulatory changes will create opportunities to follow naturally occurring experiments which will also strengthen our ability to compare institutional environments. Finally, training interventions might be used to support.

### *Expected results*

Clinical studies and change experiments will help us generate novel knowledge on the following questions:

1. What are the strategic, organizational, technological and institutional factors affecting financial institutions ability to serve societal needs?
2. What kinds of organizational change initiative can help financial institutions better understand and respond to these needs?
3. How should these changes be implemented?

This design does not pretend to provide statistical representativeness, but ensures that the patterns observed, if consistent, might not be purely explained by the idiosyncrasies of a single case study. Furthermore the experimental section will enable us to observe directly the mechanisms at work, rather than relying on a 10,000-foot view of reality which a large sample survey study would provide.

### **Interdependencies and Synergies.**

Clinical and qualitative research is often stigmatized for its lack of generalizability, given its necessary focus on a limited number of cases. In the REFORM project, the depth of the clinical studies will be coupled with the simulation work developed in Work Package 6, and the broad outreach of the focus groups and foresight exercise of Work Package 8. The simulations will make it possible to explore the boundary conditions of the theory developed, while the focus groups will provide a platform to receive feedback from relevant stakeholders, and test their generalizability.

To ensure this virtuous cycle:

1. WP7 will leverage the input from all five thematic work packages.
2. WP7 will provide data to all five thematic work packages to allow revision and elaboration of the research themes.
3. The first round of clinical data collection (year 2) will influence the refinements of the simulation (WP6), as well as of the scenarios (WP8).
4. The design of the experimental interventions made in the context of the clinical study (year 3) will be influenced by the first results of the simulations (WP6) and of the scenarios (WP8).
5. The results of the pre-post variation analysis in the WP8 clinical studies and experimental change will feed the final generation of the scenarios (WP8) and of the simulations (WP6).

### **Progress Beyond the State-of-the-Art.**

Qualitative and clinical studies have been successfully conducted in economic sociology, organization theory, and strategic management, and solid methodological guidelines have been developed (see for instance the National Science Foundation report on quality standards for qualitative research; Lamont and White, 2005). They help the researchers acquire a much more intimate knowledge of the field of study, and provide a better starting point to identify the mechanisms that explain the development of social processes. For instance, in the emerging field of social studies of finance, scholars have successfully employed ethnographic methods to study global currency markets (Knorr Cetina and Brueger, 2002), merger arbitrage (Beunza and Stark, 2004), options trading (Mackenzie and Millo, 2003; Mackenzie, 2006; Zaloom, 2006), carbon markets (Mackenzie, 2009), among other market processes. Despite these recent developments, this methodology is far from being mainstream in studies of the financial sector. Therefore from a methodological point of view, the REFORM project focus on clinical studies and change experiments is an important development in research on financial institutions and financial markets. Indeed, despite the critical role these organizations and markets play in our economy, there is a paucity of in-depth studies of how financial institutions and markets *really* operate. A noteworthy exception in finance might be the case study of Hermes, the large activist investor. This study suggests that the positive results of these investors are driven more by engagement than by stock picking (Becht et al, 2008).

It is commonly agreed that the carefully controlled experiments are the most rigorous method to test causal theories in social science. Unfortunately laboratory experiments can be used to test individual-level theories and constructs, but are hard (or impossible) to setup at the organizational level, where it is difficult to randomize the "treatment" to different organizations. On the other hand, it is possible to develop research design that approximates the characteristic of experiment (quasi-experiments). In some case the experimental condition are naturally occurring, in other cases the researcher plays an active role in designing the intervention. The REFORM project, on the basis of the findings from the clinical studies, and the work of other work packages, will design organizational-level change interventions that will make it possible to provide initial tests of the theories developed. This methodological approach will push the frontier of empirical work in the social sciences, and the REFORM project

will join the most recent trend in behavioural economics to take the experiments in the field (Karlan, Zinman and Floor, 2010), in economics to test theories with natural experiments and/or randomized trials (Banerjee et al, 2009; Duflo et al, 2009) and in sociology (Sampson, 2008).

Finally, since the clinical studies and the change intervention will not only focus on the internal organizational dynamics of the companies studied, but also directly address the relationship with the complex eco-system in which they are embedded, this design will help us shed light on the complex interdependence between organizational-level and system-level learning processes.

## 1.2.9 Scenario Development and Stakeholder Engagement

### ***The challenge:***

*Engaging stakeholders in a public good transformational change challenge requires identifying and supporting individuals within stakeholder groups of diverse cultures, power, perspectives and resources to play a key role in (1) presenting a group's range of perspectives, (2) ensuring the narrow self-interest of their group is considered, and (3) moving them beyond it to identify new plausible futures.*

Which can be reframed in the following Research Questions:

- ***How can scenario methodology be developed for situations of high decision-stakes and high system uncertainties?***
- ***How can appropriate and sufficiently numerous individuals be identified and meaningfully engaged in a multi-year scenario development and societal learning process?***

### **State of the Art.**

This Call raises questions of a collective action (Ostrom 2000), societal learning (Waddell 2005), and transformational nature (Nielsen 1993; Pruitt and Waddell 2005; Pruitt and Thomas 2007; Scharmer 2007). That is to say, it proposes investigating redirection of the financial system and change in its fundamental orientations and core relationships. In such a situation, a leading approach is to create a microcosm of the problem system, with all participants coming in on an equal footing as issue owners and decision makers. The processes then open the issue to creation of new ways of thinking and action; promote transformation of relationships with whole-system awareness and identity; and promote examining deep structures that sustain the system.

One methodology that has proven useful in such complex change situations is scenario development: processes that identify plausible futures. Scenarios are therefore not predictions, preferences, probabilities of models, nor projections of trends (Van der Heijden 2005; Wilkinson and Eidinow 2008; Van der Heijden, Ramirez et al. 2010). Plausibility is not unproblematic – those who do not construct it have less ease with it than those that are involved (Weick 2006). But plausibility does present advantages, not least allowing joint exploration of multiple futures.

Scenario methodologies have a 40 year history of development (Ramirez 2008) and their use has increased in the 21<sup>st</sup> century (Ramirez, Selsky et al. 2008). Various scenario methodology typologies have been developed (van Notten 2003; Börjesona, Höjera et al. 2006); one found particularly relevant and useful to this proposal defines three types in terms of increasingly high decision stakes and system uncertainties: problem-focused, actor-focused and reflexive interventionist/multi-agent-based (RIMA) scenarios (Wilkinson and Eidinow 2008). RIMA is described as “post-normal science”, appropriate when there are degrees of conflict in purpose, epistemological and ethical issues.

Scenario development is *an intervention* since it engages participants to think in new ways and be reflective; when it also involves an orientation towards taking action, and a goal of realizing impacts through the participation, it becomes an action research methodology (Reason and Bradbury 2000; Action Research Journal 2009). A result

of this will be deeper appreciation of each other's perspectives and the construction of common ground for possible collaborations.

Scharmer's concept of "emerging the future" (Scharmer 2007) is an appropriate description for scenario development: it is within the possibilities it brings that action is possible. The focus of the scenarios for the financial system is the plausible futures that arise, beyond the control of single actors, within which financial market and organizational change can be undertaken.

Scenario development commonly involves bringing together stakeholders (Freeman 1984; Andriof, Waddock et al. 2002; Friedman and Miles 2006) who possess greatly varied views, blind spots, unrecognized assumptions, diverse epistemologies, different uncertainties, incompatible convictions and values, and fragmented perspectives. Addressing the differences as assets constructively is helped by the fact that *all stakeholders are equally ignorant* about the long-term future, and about how that future might shape the short-term future.

The Call asks to investigate a *problem domain* (Trist 1983) or *issue system* with numerous actors – essentially all individuals and organizations are stakeholders in the financial system. In situations of such large scale, aggregation of stakeholder voices leads to concepts of inter-organization domains, underorganized systems, and need to address conflict and build visions at inter-organizational interfaces with strategies of collaboration and transition management. (Brown 1980; Brown 1983; Trist 1983; Gray 1989; Hemmati 2000; Dewulf, Termeer et al. 2009)

These processes of bringing together stakeholders to address issues occur for issues that range greatly in scale: for communities, organizations, countries, and industries. Such approaches have evolved on the global level to be described as state and multi-actor regimes (Ruggie 1982; Young 1999), earth governance (Biermann 2007), global public policy networks (Reinicke 1999; Reinicke and Deng 2000), issue networks (Rischard 2001), global governance organizations (Koppell Forthcoming), and Global Action Networks (GANs) (Waddell and Khagram 2007; Glasbergen Forthcoming; Glasbergen Forthcoming.). A variety of methods, including scenario development, are used by these global approaches.

There is recent work in the finance system in particular that has demonstrated the value of scenario development (WEF and Wyman). Researchers with this project have analyzed the system (Van der Heijden, Ramirez et al. 2010) and work by one of this WP partners investigated an question almost identical to the one of this Call but at a global level, examining stakeholder issues (Waddell, Khagram et al. 2009; Waddell 2010 Forthcoming) with action research strategies (Waddell and Allee Forthcoming). The latter focused in particular on using various mapping processes to support stakeholder definition and identification.

### **Open Issues.**

Recent work is considering how scenarios attend to plausibility (Ramirez, Lang et al. 2010; Wilkinson and Ramirez 2010 Forthcoming). Attending to plausibility in decision-making would put greater emphasis on conversation and interpretation (Sutcliffe and Weber 2003); on asking questions more than on seeking solutions (Grint 2005); and would attend less to 'solvable' problems and more to seemingly 'unsolvable' ones (Ravitz 2009).

Wilkinson and Edinow (Wilkinson and Edinow 2008) suggest that RIMA (described earlier) is an emerging new approach to scenarios that is particular appropriate in this situation, and proposes high level of stakeholder engagement. In contrast to being stakeholders in an *organization* where most research on questions of stakeholder engagement has been focused, this project involves stakeholders in an *issue system*. Since there is no single "owner" of an issue system and many stakeholders have only a very indirect relationship to system decision-making, the stakeholder engagement is much more complex for issues of legitimacy, power, and stakeholder identification. Among current high profile issue systems, perhaps only the climate change domain is more complex in terms of variables; the financial system is arguably more complex in terms of issues of power, since the financial interests are much more central.

The conceptualizing of a stakeholder and the process of their identification (Mitchell, B. R. Agle et al. 1997; Waddell, Khagram et al. 2009; Waddell 2010 Forthcoming) raise questions that need further development and can

make use of new mapping methodologies. A recent investigation into global finance suggested that one particular stakeholder challenge is to address the division between traditional system decision-makers (policy-makers, regulators and commercial finance) and all other stakeholders. (Waddell 2010 Forthcoming)

The RIMA approach is one that promises a high level of social learning. This should be supported by new opportunities with the burgeoning field of social media to develop relationships in an issue arena. (Wilkins 2009) They suggest a potentially unexplored scale of collective issue domain development strategies applying concepts of “ecology of learning” and “communities of practice” (Wenger and Snyder 2000; Wenger, McDermott et al. 2002; Snyder and Briggs 2003)

### **Progress Beyond the State-of-the-Art.**

This work package will provide qualitative investigations into how the financial system might be reformed to better serve economic, social and environmental objectives. The work package aims to explore how this would be perceived from diverse viewpoints, to develop more integrated perspectives by describing challenging and plausible futures in which such reforms could occur. There will be three sets of inter-linked activities:

1. **Scenario Development (SD):** producing iterations of two to three alternative future contexts of financial market and organizational reforms, with plausible, relevant and challenging stories for the users of REFORM research.
2. Stakeholder Engagement (SE): networking stakeholders in the financial system and enrolling them to co-develop scenarios and REFORM itself, in partnership with the REFORM researchers.
3. Iterative focused meetings (IFMs): small groups of both homogenous and mixed stakeholders will be convened to investigate issues and futures.

SD and SE will inform each other iteratively, aided by the IFMs. WP8 will feed into the WP7 change experiment design proposals, which will also affect its own work; and will contest and be contested by the modelling work in WP6, as is shown graphically. These relations will be systemic, not sequential. WP 8 in turn will ‘request’ and ‘consume’ inputs from the thematic work packages, WPs 1 to 5.

### **Scenario Development**

Scenarios will explore different contexts within which users might interpret “Redesigned Financial Organisations & Markets” when they utilise REFORM research. Within REFORM scenarios will be used as reflexive framing devices (Kaplan 2008) that can surface assumptions of phenomena by proposing plausible, challenging, relevant, different and even incompatible (Van der Heijden, Ramirez et al. 2010) comprehensions of these. The scenarios will be developed to challenge the views of stakeholders about what is considered impossible and possible, and to identify how unprecedented common action can open up new possibilities in the future. Long-term plausibility is thus in the service of exploring shorter-term actionable options.

There will be two methodological scenario workshops, two input ones and three production ones. This research will allow us to do six main things to move the field forward:

- i) document in longitudinal and ethnographic mode how scenario work operates as a scientific research method over a five year period;
- ii) **explicitly build in a design conceptual framework** to develop and document how plausibility is built into scenario work and scenario use, to better develop our understanding of how it works. This complements work undertaken jointly between INSIS and Arizona State University on plausibility.
- iii) **adapt and transform** the well established ‘actor-focused scenario’ approach (where the actors in question are REFORM research users and researchers) **articulating an iterative approximation to the RIMA scenario approach** – linking several stakeholders’ interests to each other with the help of scenarios, and in so doing;

- iv) establish whether scenarios can be used for **prospective sense-making** (Wright 2005), to complement the retrospective sense-making developed by Weick (Weick 1995);
- v) determine explicitly the challenges posed for scenario work in working across different scales (local/regional/national/continental/intercontinental/global), and to identify ways whereby these challenges might best be addressed;
- vi) determine the challenges posed for relating scenario work as a research method with other methods to investigate the future –in particular focus groups and modeling - and to determine how these challenges might best be addressed

### **(Iterative) Stakeholder Engagement and IFMs**

For REFORM, a stakeholder is *any individual or organization that can affect or is affected by the achievement of the financial system's objectives*. The mapping processes of WP 6 will support identification of stakeholders and development of a stakeholder engagement strategy. A database will be in on-going development that facilitates connection with system stakeholders and documents that project's relationship with them. A Stakeholder Council will be formed to:

- Together with the Research Partners, co-design the project's strategic development with respect to stakeholder engagement;
- Co-develop the scenarios in various iterations,
- Advise the Partners on their research strategy;
- Act as a "pilot group" for development of methods to apply with activities that engage more numerous members of the stakeholder groups; and
- Facilitate connection with others in their respective stakeholder groups.

Two Council meetings will focus upon mapping of the issue arena in collaboration with WP6, five will be associated with the in-put/scenario development, and one for final review.

The IFMs are composed of different interest groups (financial industry, policy-makers and regulators and activists) to ensure a balanced view of what could the financial system look like in the future to better server economic, social and environmental objectives.

The IFMs will be one-day meetings with stakeholders on a regional basis, to broaden stakeholder engagement and gather data from regional perspectives. There will be two rounds of meetings in five European regions – one focused upon information gathering and one focused upon refinement and validation of scenarios. There will also be five IFMs in other parts of the world to gather perspectives to reflect the global nature of the financial system.

In coordination with WP9 (Dissemination), this work package will develop a traditional and social media strategy to both engage the Stakeholder Council, IFM participants, and broaden engagement with other stakeholders in the issue arena.

This research package provides for advancing knowledge about stakeholder engagement with regards to addressing public issue challenges by:

- vii) Advancing web crawl, social network analysis and value network analysis (of WP6) as methodologies for identifying stakeholders and developing stakeholder strategies;
- viii) Documenting over a five-year period of the evolution of stakeholder relationships and the role of SD and IFMs to support their development to produce a case study of leading practice and lessons;
- ix) Explicitly developing a strategy to overcome situations characterized by traditional, well-organized and powerful stakeholders when other stakeholders need to be brought in; and
- x) Experimenting with a mixture of leading social media and traditional media to identify how they can be used to support an "ecology of learning", socially embedded knowledge development processes, and social relationships.

## 1.2.10 The Project Overall: Undertaking large and complex system change with research as the driving input

### ***The challenge:***

*Growing societal complexity, environmental pressures and globalization are producing challenges of unprecedented scale that require new methods to support societal change and cohesion.*

Connected Research Questions:

- ***How can the type of change be realized that is represented by the question of how to change the financial system to better serve economic, social and environmental objectives?***
- ***How can research processes support the needed scale of change and what configurations of research methods appear particularly potent in supporting the change?***
- ***How can knowledge development processes result in socially-embedded knowledge?***

### **State of the Art.**

The Work Packages are all-important components of REFORM, but the collective whole offers a unique opportunity to investigate issues of growing importance particularly for policy-makers: how to address large-system complex issues in a world widely described in terms of greatly increasing inter-dependencies and networking of societies. This includes analysis from broad social (Castells 2000) and other viewpoints, including a political/government (Reinicke 1998; Goldsmith and Eggers 2004; Slaughter 2004), business and business-and-society (Gulati 1998; Porter and Kramer 2006), civil society and movements (Keck and Sikkink 1993; Weyrauch 2007), production of public goods (Ostrom 1996) and terrorism (Arquilla and Ronfeldt 2001). Globalization, increased complexity, and reduced separations between the various parts of the financial system have all been raised as sources for the speed and scale of the financial crisis. (See this proposal.) This suggests increased scale of collective action (Ostrom 2000) challenges.

Both climate change and the financial crisis provide examples of complex issues that appear beyond the capacity of our current problem-solving approaches. Inadequacy in the climate change arena is suggested by the apparent lack of decisions associated with Copenhagen after decades of debate. In climate change the Intergovernmental Panel on Climate Change (IPCC) is the pre-eminent research body, with a role primarily of synthesizer and summarizer of research. In the case of the finance crisis there is no parallel research body although the Bank for International Settlements, the Financial Stability Board (Forum) and even the United Nations (not a traditional financial authority) through its Commission of Experts have attempted to assert research authority. Again, despite the emergence of the G20 and modest legislative changes such as ones on executive income, as the Wall Street Journal commented the result is remarkably little change. (Zuckerman 2010)

These are examples of large system changes that have been analyzed from a wide range of perspectives including economics, transition management, multi-actor collaboration and network governance. (DeCaluwe and Vermaak 2004; Dewulf, Termeer et al. 2009) Both Copenhagen and responses to the financial crisis are distinguished by a drive for global agreements created by governments, with only modest and clearly secondary roles for the broad array of stakeholders in development of the framework “solutions”. However, in response to the weaknesses of this strategy many have noted a new approach to global problem-solving that seems particularly relevant to this project. That approach is described as state and multi-actor regimes (Ruggie 1982; Young 1999), earth governance (Biermann 2007), global public policy networks (Reinicke 1999; Reinicke and Deng 2000), issue networks (Rischard 2001), global governance organizations (Koppell Forthcoming), and Global Action Networks (GANs)

(Waddell and Khagram 2007; Glasbergen Forthcoming.). The GAN designation for multi-stakeholder issue networks addressing deep change challenges will be used here, since the originator of the term is a member of this proposal consortium.

The opportunity provided by the EU call makes GANs a particularly appropriate reference category for a large-system change experiment. In contrast to traditional government-dependent change processes that can be likened to a constitutional rule-setting framework, GANs represent a social action-based common law strategy. (Young 1999) GANs address issues where, given the lack of global government, traditional state-mandated solutions are not effective. In fact, they are polycentric systems that reflect Ostrom's description of common-pool resources and the associated common-property regimes. (Ostrom 1990)

GANs are a post-Cold War phenomenon that includes the Forest Stewardship Council, the Global Compact, the Global Reporting Initiative, and Transparency International. They engage stakeholders to create conversations and experiments to address their issue, support development of the necessary new norms, knowledge and skills, and promote expansion and a "tipping point" to realize system-wide innovation.

One example that is relevant to this case – because of a finite life and mandate, and the role of science – is the World Commission on Dams (WCD). It was a multi-stakeholder process designed to create comprehensive guidelines for the building of large dams in response to environmental and social disasters associated with large dams funded by the World Bank. From its launch in April 1997 to the final report issued in November 2000, its activities included (1) holding hearings in the affected communities and (2) undertaking conventional research into the issues. Although the diverse Commissioners reached consensus in a final report, it did not translate into agreement among the broader stakeholders' community, and responsibility for next steps was delegated to the UNEP that proved incapable administratively or authoritatively to effect pursuit of the Commission's work. (World Commission on Dams 2000; Dubash, Dupar et al. 2001; Khagram 2004; Dingwerth 2005)

Of course in this project the scenarios will be determined through the process defined in WP8, and a GAN-like solution may or may not arise. However, this body of work dealing with large-scale collective action challenges has produced useful knowledge, such as the nature of the change processes, the importance of face-to-face meetings, and that stakeholder engagement is required to produce robust collective action responses. (Ostrom 2000; Dubash, Dupar et al. 2001; Scharmer 2007; Waddell 2007)

### **Open Issues.**

This EU Call provides for a project not unlike the early development stage responses to other large collective action challenges. For example, the Forest Stewardship Council began with research and stakeholder consultations. However, in this case, the EU as sponsor is distinguished by its public policy role and emphasis upon a much more science-driven approach. The relationship between science and policy-making is complex, but in general, "science" has meant physical and conventional object-subject science observation and after-the-fact learning. (Jasanoff and Wynne 1998; Jasanoff 2004)

The hypothesis of this project's design is that a disciplined and deliberative combination of conventional research, modeling, and action research (Reason and Bradbury 2000; Action Research Journal 2009) with a societal learning and change framework (Waddell 2005) provides a particularly promising approach for the complex, large-scale issues exemplified with this Call. Over-arching goals are to understand:

1. How can conventional research, modeling, action research and societal learning and change frameworks can be combined over the five-year project period to support robust responses to complex, large-scale issues more generally?
2. How can such a combination generate on-going actions to continue to address the issues inherent in the current financial system?

### **Progress Beyond the State of the Art.**



Work packages 1-5 and the case development aspect of Work package 7 are good examples of conventional research. They will generate data from historic experience and debate that will support deepening understanding of the issues. Work package 6 draws from quite different games, mapping and modeling research traditions that collective action theorists like Ostrom have found very useful; and the Work package 7 clinical/experimental activities and the scenario/stakeholder engagement work give this project an action research frame that is distinguished from conventional research by participation with stakeholders in the research issue arena, reflexivity, an orientation towards taking action, and a goal of realizing impacts through the participation. (Reason and Bradbury 2000; Action Research Journal 2009) This is promoting action research for a new scale of application, since it is associated with relatively small scale (Waddell and Allee Forthcoming)

The project activities and approach are also informed by theory associated with societal learning, which is something that occurs when a society enhances its ability to realize its objectives (Waddell 2005). The theory for its production in the context of a society that values democracy as a process involving political equality and popular control (IDEA Accessed 2010) as basic characteristics rests upon four elements:

- (1) The need to “make sense” of the change across the three organizational sectors of the state, the market and civil society (Williamson 1975; Ouchi 1980; Bruyn and Meehan 1986; Powell 1990; Najam 1996) and the proposition that those sectors are dominated by different logics, sense-making and learning frames (physical-market, emotional-civil society, mental-state) (Seagal and Horne 2000; Waddell 2005).
- (2) The need to work at various levels: individual, organizational, sectoral and societal as described in WP6.
- (3) The value of understanding change as being of three types: first-order/single-loop-learning/scaling-up of proven approaches, second order/double-loop-learning/reform to change rules within current frameworks, and third-order/triple-loop-learning/transformation where change involves envisioning new possibilities. (Argyris 1976; Bartunek and Moch 1987; Nielsen 1996; Waddell 2005).
- (4) The understanding that societal learning involves development of common-resource goods production (Ostrom 1996) requiring collective action and the development of new social norms (Ostrom 2000).

Explicitly designing an initiative informed by these elements and that integrates conventional research, modeling and action research offers rich possibilities for advancing understanding about how to realize societal learning and change to address complex societal challenges. In Scharmer’s words, it is about using these elements and their associated tools to help “the future emerge”. (Scharmer 2007)

Developing the societal learning and associated theoretical aspects will be supported by creating a discussion among the research partners about how their activities relate to the change research questions in order to develop a disciplined framework for collective inquiry. Moreover, as part of Work package 9 a learning history methodology (Kleiner and Roth 1996; Bradbury and Mainemelis 2001) will be applied as it addresses the change research questions to document the project, create iterative discussion, make learning explicit, and socially embed the learning throughout the broader stakeholder community as the project proceeds.

This means that project outputs will include new knowledge about large-system change and how it can be supported by a range of research approaches, a next-step strategic action strategy that reflects integration of these approaches, and recommendations on how to structure such projects in the future. The REFORM Consortium, perhaps immodestly, sees this as potentially a very valuable contribution to the EU.

### 1.3 S/T Methodology and Associated Work Plan

#### 1.3.1 Work Plan Strategy

To tackle the ambitious research agenda laid out in section 1.2 and fulfil the promised progress beyond the state of the art in both conceptual development and methodological work packages, REFORM has organized its activities according to the sequence of a classical research project:

1. Conceptual development and operationalization of key theoretical constructs
2. Empirical data collection, forecasting and foresight methodologies
3. Analysis of the data, implications for the relevant audiences and recommendations for action

Step 1 comprises the work of Work Packages 1 to 5, each of which is organized to tackle one of the research domains highlighted by the call from a conceptual development standpoint. The objective at this stage is to develop the theoretical understanding on the issues at hand and to guide the efforts of the methodological Work Packages 6 to 8 in carrying out the inquiry in terms of modelling and simulation efforts (WP6), clinical studies and change experiments (WP7) and foresight activities, including scenario development, stakeholder engagement, focus groups and public opinion polls (WP8).

In Step 2, the focus of the action is then on the methodological Work Packages, which carry out their specific research design, under the supervision and guidance of the colleagues involved in the “thematic” Work Packages. They carry out these efforts in at least two rounds of work, so that a longitudinal perspective on the issues at hand can be gained and leveraged in the future analysis.

Finally, in Step 3, the focal action steps return to the thematic Work Packages, which are here responsible for the development of the analyses on the basis of the data and the results generated by the methodological WPs. This will generate the main responses to the questions highlighted in the call for tender. However, at the same time, the

methodological Work Packages will develop new understanding on the study of the evolution of the financial system and of the challenges in the study of complex system change from an epistemological standpoint.

This way, the REFORM program proceeds in a logical, structured, fashion which allows for easier control and coordination of the various activities planned during the course of the 5 year work

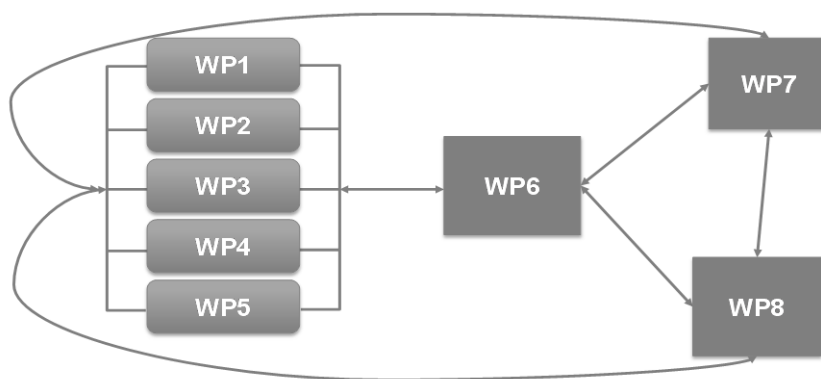
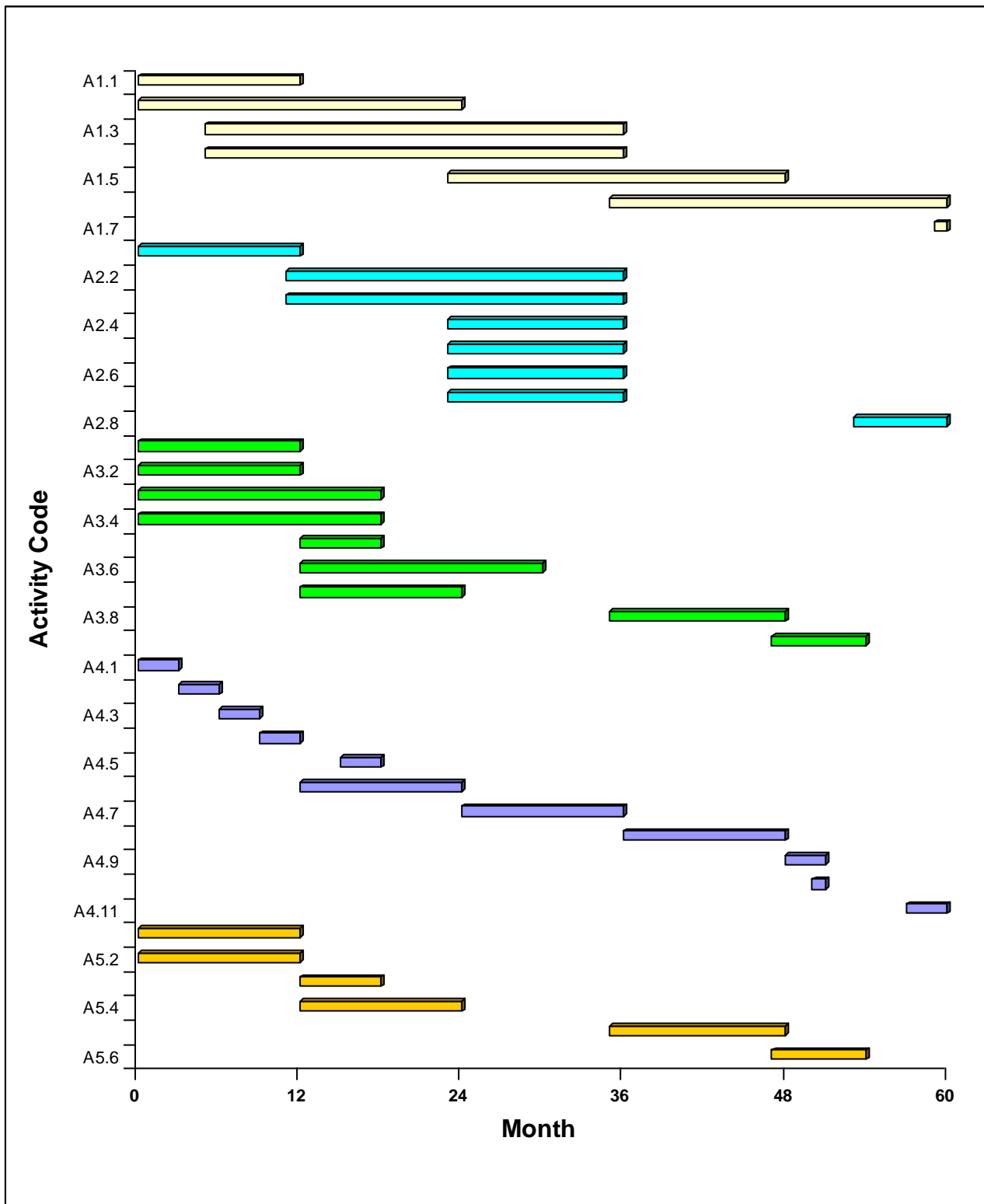


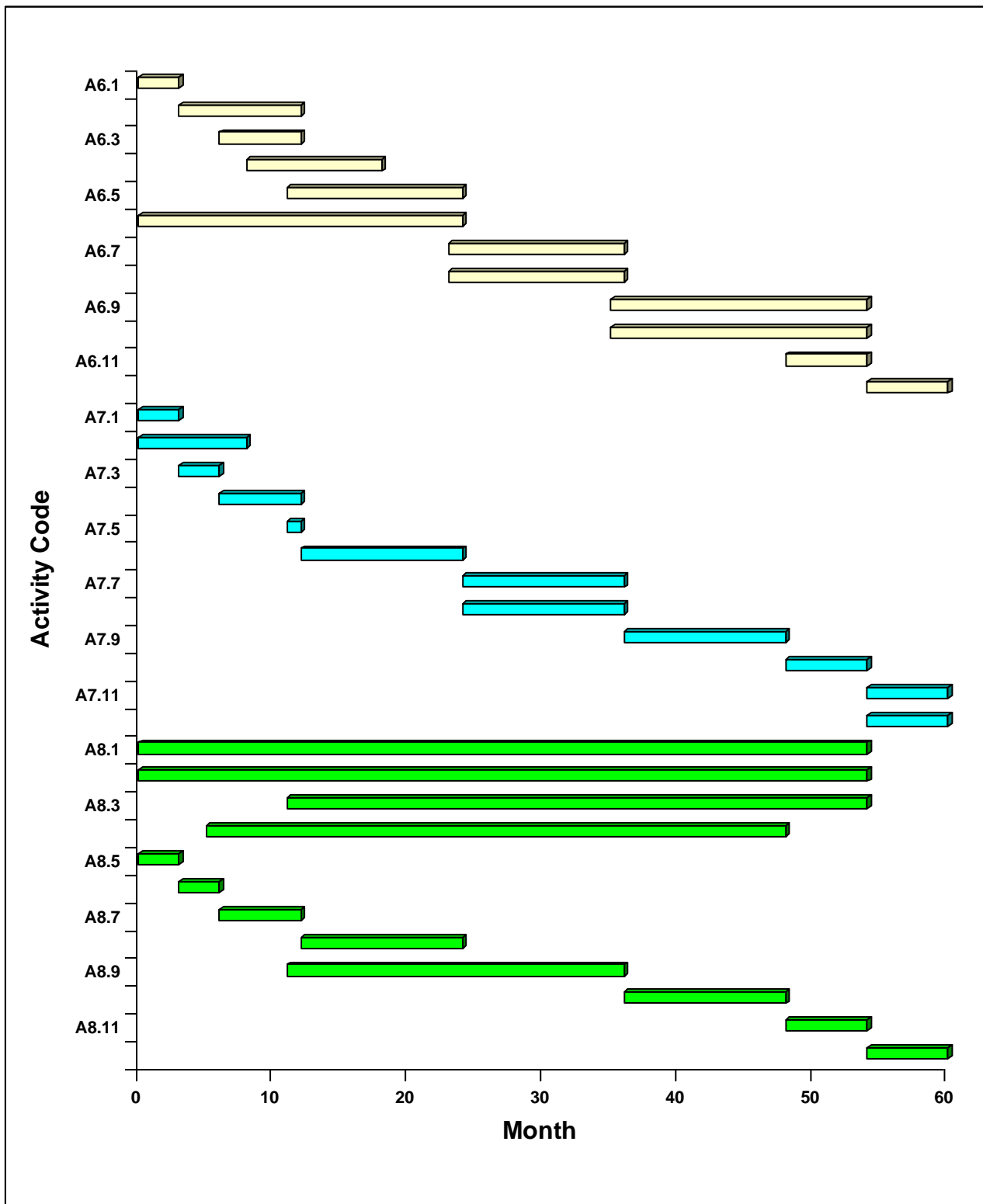
Figure 3: Interactions of the simulation with the other work packages of this proposal

program. It also facilitates the collaboration both within the same type of research teams (thematic and methodological), since the entire group’s attention will shift to the challenges characterizing the specific phase, as well as across the two types, since the interdependency between them is constructed in a sequential way, with all the teams engaged in a similar effort focusing on the “joint” delivery to the other “type” of teams.

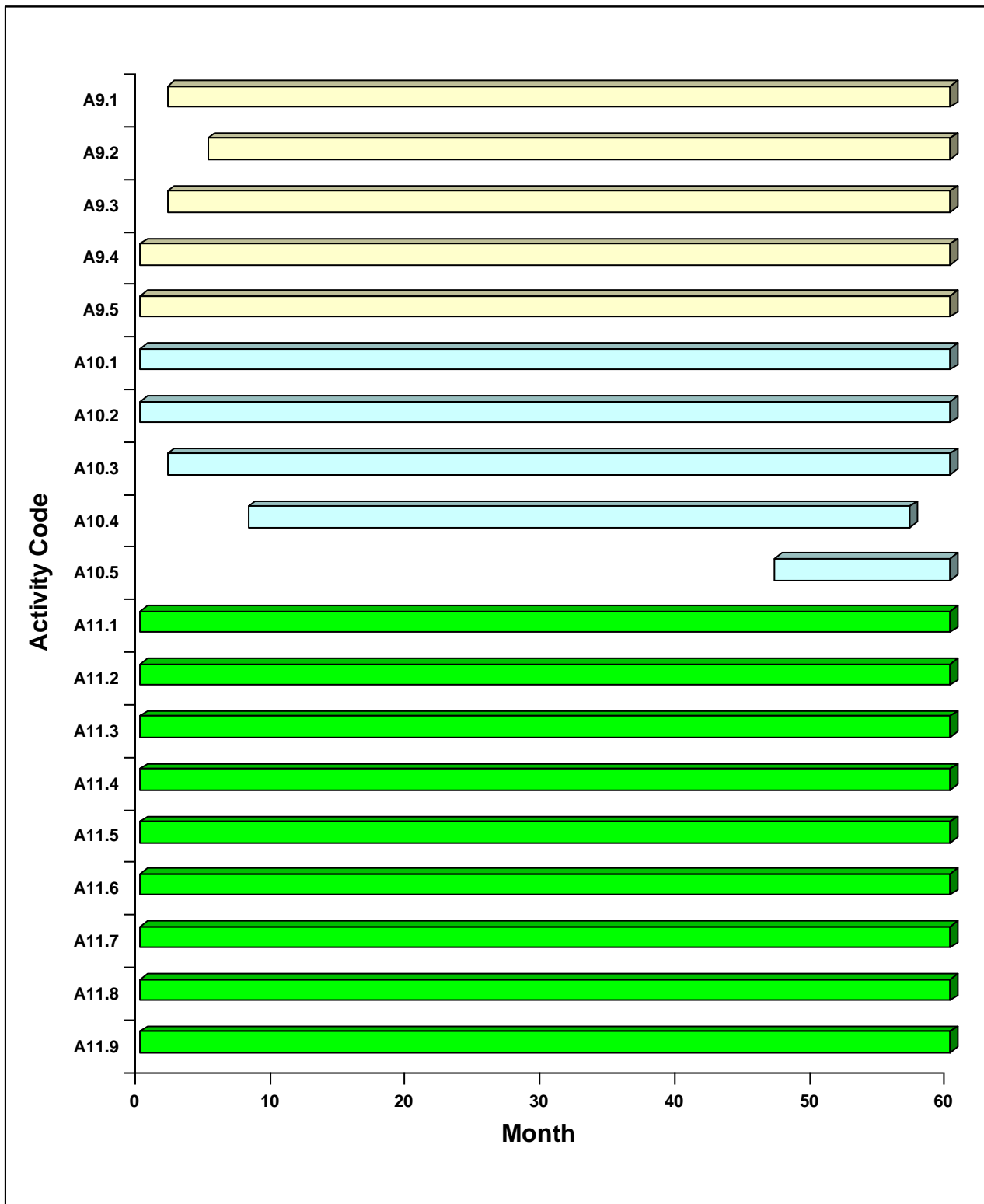
### 1.3.2 Gantt Charts



**Figure 1.** Timetable for the activities planned in each of the five thematic work packages. Please refer to Tables D for specific details of individual activities.



**Figure 2.** Timetable for the activities planned in each of the three methodological work packages. Please refer to Tables D for specific details of individual activities.



**Figure 3.** Timetable for the activities planned in the dissemination work package (WP9), the scientific coordination work package (WP10), and the project management work package (WP11). Please refer to Tables D for specific details of individual activities.

## 1.3.3 Table A: Work Package List

WP No	Work package title	Type of Activity	Lead partic no.	Lead partic. short name	Person-months	Start month	End month
1	Role of Finance	RTD	4	VLERICK	52.5	1	60
2	The Impacts on the Real Economy	RTD	3	CEPS	85.0	1	60
3	International Governance and Regulation	RTD	1	BOCCONI	44.5	1	54
4	The Impacts on Developing Countries	RTD	10	UNOTT	86.0	1	60
5	EU Governance and Policy	RTD	3	CEPS	59.0	1	54
6	Modelling and Simulation	RTD	1	BOCCONI	151.0	1	60
7	Clinical Studies and Change Experiments	RTD	8	IESE	223.0	1	60
8	Scenarios and Iterative Stakeholder Engagement	RTD	5	UOXFMQ	120.4	1	60
9	Dissemination	OTHER	15	PLEON	64.0	1	60
10	Scientific Management	RDT	2	BOCCONI	48.0	1	60
11	Management	MGT	2	EABIS	67.0	1	60
	<b>TOTAL</b>				<b>1000.4</b>		

## 1.3.3 Table B: Deliverables List

<b>Del. no.</b>	<b>Deliverable name</b>	<b>WP no.</b>	<b>Nature</b>	<b>Dissemination level</b>	<b>Delivery month</b>
D11.1	Consortium Agreement	WP11	O	CO	M00
D9.1	Project launch flyers for different stakeholder communities	WP9	O	PU	M01
D11.3	REFORM Governance and Process Handbook	WP11	R	PP	M01
D9.2	Project media kits, dissemination plans and tools (database)	WP9	O	PU	M01, M34
D8.2	Paper with WP6 on use of mapping technologies in identifying stakeholders and describing issue domains with WP7	WP8	R	RE	M018
D10.1	Preparation and maintenance of REFORM work plan	WP10	O	CO	M01-M60
D11.2	Monthly PMT meetings and progress reports to consortium partners	WP11	R	PP	M01-M60
D9.3	REFORM website design, including activation of moderated stakeholder blog	WP9	O	PU	M02-M60
D7.1	Positioning paper	WP7	R	PU	M03
D8.1	Positioning paper	WP8	R	PU	M03
D9.4	Promotional and presentation material for use at conferences	WP9	O	PU	M03-M06
D1.1	Comprehensive literature review and gap analysis in existing research	WP4	O	PU	M06
D9.6	“Webinar”-style presentation and discussion of latest findings	WP9	O	PU	M06, M09, M12, ..., M57, M60
D9.7	Quarterly newsletter	WP9	R	PU	M06, M09, M12, ..., M57, M60
D9.8	Regional Communications Workshops	WP9	O	RE	M09, M12, M15, M18
D9.9	Annual EU and Member State Policy Roundtables	WP9	O	RE	M09, M21, M33, M45, M57
D11.4	Annual progress reports submitted to the Strategic Advisory Board	WP11	O	RE	M09, M21, M33, M45, M57
D1.1	Conceptual input paper for WP6, WP7 and WP8 on key variables	WP1	O	RE	M12
D1.2	Conceptual input papers for WP6, WP7 and WP8 on key variables	WP4	O	RE	M12
D2.1	Comprehensive literature review and gap analysis in existing research on economic social, environmental impact of finance	WP2	R	PU	M12
D2.2	Conceptual input papers for WP6, WP7 and WP8 on key variables	WP2	O	PU	M12
D3.1	Comprehensive survey of development and consolidation of regulatory frameworks in Europe and the recent debate	WP3	R	PU	M12
D3.2	Working paper on the assessment of regulatory and supervisory responses to the crisis	WP3	R	PU	M12

D3.3	Conceptual input papers for WP6, WP7 and WP8 on key variables	WP3	O	PU	M12
D5.1	Comprehensive survey of EU financial services policy and recent debate	WP5	R	PU	M12
D5.2	Comprehensive survey of EU macroeconomic policies and recent debate	WP5	R	PU	M12
D5.3	Comprehensive survey of EU environmental policy and recent debate	WP5	R	PU	M12
D5.4	Working paper on the assessment of the EU policy response to the crisis	WP5	R	PU	M12
D5.5	Conceptual input papers for WP6, WP7 and WP8 on key variables	WP5	R	PU	M12
D6.1	Position Paper on Model Structure	WP6	R	PU	M12
D7.2	Clinical Studies Handbook	WP7	R	CO	M12
D8.4	Annual review on stakeholder engagement strategy	WP8	O	PU	M12, M24, M36, M48
D11.5	Annual management reports submitted to the EC, revised at Reviews	WP11	O	RE	M12, M24, M36, M48, M60
D1.2	Online database of archival data and literature	WP1	O	PU	M18
D2.3	Online database of archival data and literature	WP2	O	PU	M18
D2.4	Working paper on financial development and growth	WP2	R	PU	M18
D3.4	Working paper on tax heavens and uncooperative financial centres	WP3	R	PU	M18
D3.5	Working paper on political economy and financial regulation	WP3	R	PU	M18
D3.6	Online database of archival data and literature	WP3	O	PU	M18
D1.3	Online database of archival data and literature	WP4	O	PU	M18
D5.6	Online database of archival data and literature	WP5	R	PU	M18
D6.2	Network Analysis Result Report	WP6	R	PU	M18
D1.3	Working paper on the evolution of the financial system across institutional and cultural contexts	WP1	R	PU	M24
D3.7	Working paper on the analysis of policy regulatory failure and regulatory quality	WP3	R	PU	M24
D1.4	Working paper on the the Impact of the financial Crisis on Developing Countries	WP4	O	PU	M24
D6.3	Data Analysis and Simulation Report	WP6	R	PU	M24
D7.3	Clinical Studies Progress Report	WP7	R	CO	M24
D7.4	Change Experiment Design Report	WP7	R	PU	M26
D10.2	Provision of scientific report for Interim Policy Briefings and Executive Briefings	WP10	R	PU	M29
D9.10	Interim and Final Policy & Executive Briefings	WP9	O	PU	M29-M30, M59-60
D1.4	Interim Report on progress, emerging insight and latest findings	WP1	R	PU	M30
D2.5	Interim Report on progress, emerging insight and latest findings	WP2	R	PU	M30
D3.8	Interim Report on progress, emerging insight and latest findings	WP3	R	PU	M30



D1.5	Interim Report on progress, emerging insight and latest findings	WP4	R	PU	M30
D5.7	Interim Report on progress, emerging insight and latest findings	WP5	R	PU	M30
D11.6	Interim project report	WP11	R	PU	M34
D1.5	Working paper on the role of financial systems as engines of social development	WP1	R	PU	M36
D2.6	Working paper on cost and benefit analysis and 'sustainable financial system'-scenario identification	WP2	R	PU	M36
D3.9	Working paper on the possible scenarios for financial regulation, monetary policy and crisis management in Europe	WP3	R	PU	M36
D1.6	Working paper on the determinants of impact of financial crisis and financial systems on developing Countries	WP4	R	PU	M36
D7.5	Change Experiments Results Report	WP7	R	RE	M38
D2.10	Working paper on new perspectives for public administration finance	WP2	R	PU	M42
D2.7	Working paper on new perspectives for households finance	WP2	R	PU	M42
D2.8	Working paper on new perspectives SME finance	WP2	R	PU	M42
D2.9	Working paper on new perspectives for large enterprises finance	WP2	R	PU	M42
D1.6	Working paper on a road-map towards a responsible financial institutions within sustainable systems	WP1	R	PU	M48
D3.10	Working paper on cost and benefit analysis of alternative regulation and supervision interventions	WP3	R	PU	M48
D1.7	Working paper on the future of global governance of the financial system (institutions, frameworks) and the role of developing countries	WP4	R	PU	M48
D5.8	Working paper on cost and benefit analysis of alternative policy interventions	WP5	R	PU	M48
D6.4	Data Archival Open Access Facility	WP6	R	PU	M48
D10.3	Provision of scientific report for final Policy Briefings and Executive Briefings	WP10	R	PU	M59
D1.7	Final Report on the role of finance to serve economic, social and environmental sustainability objectives	WP1	R	PU	M60
D2.11	Final Report on economic, social and environmental impact of finance	WP3	R	PU	M60
D3.11	Final Report on regulatory and supervisory recommendations	WP3	R	PU	M60
D1.8	Final Report on the role of finance in the context of economic, social and environmental sustainability	WP4	R	PU	M60
D5.9	Final Report on policy recommendations	WP5	R	PU	M60
D6.5	Report on Data Analysis for the simulation model	WP6	R	PU	M60
D6.6	Final version of the Simulation software tool and manual	WP6	P	PU	M60
D6.7	Final Analysis Report	WP6	R	PU	M60

D7.6	Clinical Studies Final Report	WP7	R	PU	M60
D8.5	Paper on role of scenario development, polling and IFMs to develop stakeholder engagement.	WP8	R	PU	M60
D8.6	Paper on strategies to address stakeholder engagement situations characterized by powerful traditional insiders versus others.	WP8	R	PU	M60
D8.7	Paper on use of social media in large system change investigations, joint with WP9.	WP8	R	PU	M60
D9.11	Learning History Report	WP9	R	PU	M60
D9.12	Post-project dissemination plan	WP9	O	RE	M60
D10.4	Three working papers submitted to leading academic journals in core social science disciplines on results of the study	WP10	O	RE	M60
D10.5	Mainstream book on “Sustainable Finance”	WP10	O	PU	M60
D11.7	Final project report	WP11	R	PU	M60
D8.3	Stakeholder engagement process reports.	WP8	R	PU	M12, 24, 36, 48

## 1.3.3 Table C: List of Milestones

<b>Milestone number</b>	<b>Milestone name</b>	<b>WPs involved</b>	<b>Expected date</b>	<b>Means of verification</b>
M9.1	Launch of REFORM website	9	M02	Internal / External communications
M1.1	Definition of archival data collection parameters and key issues	4	M03	Updates posted on project website
M8.1	Criteria for selection of Stakeholder Councillors in consultation with Steering Committee (Vlerick)	8	M03	Approval from PMT
M8.3	Development of stakeholder data-base structure and protocol for project-wide use (Vlerick)	8	M03	Posted on open access site
M9.2	Identification and recruitment of Communications Board	9	M03	Approval from PMT
M8.4	Development and reviews of social media strategy with WP9	8	M03, M015, M027, M039, M051	2 page strategy outline
M8.2	Selection of Stakeholder Councillors in consultation with Steering Committee (Vlerick)	8	M04	Approval from PMT
M8.5	Definition and reviews of Stakeholder Engagement documentation strategy (Oxford)	8	M06, M018, M030, M042	1 page summary for consortium
M9.3	Communications Council meetings	9	M06, M09, M24, M32, M40, M48	Synopsis sent to consortium
M10.1	Annual Strategic Advisory Board meetings	10	M09, M21, M33, M45, M57	Media announcement
M9.5	Research Stakeholder Workshops at EABIS Annual Colloquium	9	M10, M22, M46, M58	Branded in Colloquium
M1.1	Transfer of conceptual development inputs to WP6-WP8	1	M12	Paper submitted to WP6-8
M3.1	Transfer of conceptual development inputs to WP6-WP8	3	M12	Paper submitted to WP6-8
M1.1	Transfer of conceptual development inputs to WP6-WP8	2	M12	Paper submitted to WP6-8
M1.2	Transfer of conceptual inputs to WP6-WP8	4	M12	Paper submitted to WP6-8
M5.1	Transfer of conceptual development inputs to WP6-WP8	5	M12	Paper submitted to WP6-8
M6.1	Simulation Model Structure Available	6	M12	Available at project website
M7.1	Completed recruitment and engagement of companies for the clinical studies	7	M12	D7.2
M10.2	Release of research work plan and data collection protocol	10	M12	Approval from Research Board
M1.3	Exchange of data and 'state of the art' analysis with WP1, W2, W3, WP5	4	M12, M24, M36, M48	WPLs report successful transfer
M6.2	Beta Version 1 of Simulation Model	6	M24	Launch through REFORM

	Available			website
M7.2	Disclose insights from first round of data collection	7	M24	Internal summary for partners
M9.6	Launch of Socially Responsible Investment online tool	9	M24	Media campaign - social networks
M9.7	Interim Conference at EABIS Colloquium	9	M34	Presentation of interim report
M3.2	Release of interim results based on archival database, simulation results, first round clinical studies and future scenarios from WP6-WP8	3	M36	Paper disseminated to EABIS network
M1.2	Release of interim results based on archival database, simulation results, first round clinical studies and future scenarios from WP6-WP8	1	M36	Paper disseminated to EABIS network
M1.2	Release of interim results based on archival database, simulation results, first round clinical studies and future scenarios from WP6-WP8	2	M36	Paper disseminated to EABIS network
M1.4	Receipt of first round of output data, simulation results, clinical studies and future scenarios from WP6-WP8	4	M36	Paper disseminated to EABIS network
M5.2	Release of interim results based on archival database, simulation results, first round clinical studies and future scenarios from WP6-WP8	5	M36	Paper disseminated to EABIS network
M10.3	Release of data analysis and reporting work plan	10	M36	Internal summary for partners
M7.3	Disclose insights from change experiments	7	M48	External online communication
M1.3	Release of final results from simulations, change experiments, and future scenarios from WP6-WP8	1	M54	Data transfer from WP6-8 to WP1-5
M3.3	Release of final results from simulations, change experiments, and future scenarios from WP6-WP8	4	M54	Data transfer from WP6-8 to WP1-5
M1.3	Release of final results from simulations, change experiments, and future scenarios from WP6-WP8	2	M54	Data transfer from WP6-8 to WP1-5
M1.5	Receipt of final results from simulations, change experiments, and future scenarios from WP6-WP8	4	M54	Data transfer from WP6-8 to WP1-5
M5.3	Release of final results from simulations, change experiments, and future scenarios from WP6-WP8	5	M54	Data transfer from WP6-8 to WP1-5
M6.3	Final version of Simulation Model available	6	M54	Available at project website
M9.8	Final Conference	9	M60	Plenary presentation of outputs
M9.9	Media launch of mainstream books (2) on Sustainable Finance	9	M60	Targeted flyer issued for Final Conference

M10.4	Submission of book manuscript	10	M60	Publishers contract signed
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## 1.3.3 Table D: Work Package 1 (Role of Finance)

<b>Work package number</b>	<b>1</b>	<b>Start date or starting event M1</b>						Month Mnn 52.5			
<b>Work package title</b>	Role of Finance										
<b>Activity Type</b>	RTD										
<b>Participant number</b>	1	2	3	4	5	6	7	8	9		
<b>Participant short name</b>	BOCCONI	EABIS	CEPS	VLERICK	UOXFMQ	INSEAD	LSE	IESE	ESAD	E	
<b>Person-months per participant:</b>	2		9.5	27	2.0	3.0					
<b>Participant number</b>	10	11	12	13	14	15	16	17	18	19	20
<b>Participant short name</b>	UNOTT	CBS	NBU	SGH	OFU	PLEON	IMD	WU	UL	UKB	OECD
<b>Person-months per participant:</b>		2.0	2.0				5				

**WP1 Overview, Objectives, and Dependencies***Brief overview*

WP1 focuses on the assessment of the evolving role of finance in the economy and society and how this role can be explained in economic, social and political terms, including commonalities and differences in path of economic and social development and financial development. It will take stock of all the relevant theoretical underpinnings and their applications under different institutional and regulatory assumptions, in order to evaluate cross-sectional and historical change. To do so, WP1 will also investigate how issues of values, ethics, trust and transparency have been dealt with in different societies across time, their role in the genesis of the crisis and in the current attempts to tackle its main issues.

*List of objectives:*

- Understand the evolving role of the financial sector with regard to its impact on the economic, social and environmental development of Europe.
- Identify the contributions and the limitations of received theories and modelling exercises in the identification of the interdependencies among the financial sector and the other sectors of the economy and society.
- Identify and understand the systemic factors at the basis of the development of the global financial and economic crisis in 2007 – 9, and in particular the role played by personal values, trust dynamics, ethical and responsibility issues.

*Dependencies with other work packages:*

- WP1 will provide archival data and ‘state of the art’ analysis on the evolution of financial systems across contexts to support parallel thematic work in WP2-WP5.
- WP1 will provide archival data, variables characteristic, causal linkages and dynamics analysis to WP6 to support the continual development of the simulation model.
- WP1 will help to define the focus of the clinical studies (WP7) and the content and scope of

scenario development and stakeholder group discussions, focus groups workshops and public opinion polls (WP8).

(d) WP1 will provide support for and monitor the data collection and production processes in WP6, WP7 and WP8.

(e) WP1 depends for its intermediate and final outputs from the outcomes and insights of the simulations (WP6), clinical studies and change experiments (WP7) and the foresight activities (WP8)

(f) WP1 will provide progress reports and inputs for scientific management (WP10)

(g) WP1 will provide materials for dissemination & communication (WP9) and reporting (WP11).

### **WP1 Description of Work**

The work package comprises the following activities:

#### **A1.1 Comprehensive literature review and gap analysis in existing research on the role of financial institutions [VLERICK, IMD, INSEAD, BOCCONI, CEPS] (M01-M12)**

Review the evolution of the major activities within the financial system over the last century. It also will identify the key variables that link the financial system to the economic, social and environment development of countries and regions. The results of this activity will feed the modelling and simulation in WP6, as well as the design and protocol development in WP7 and the background preparation for the scenario development in WP8.

#### **A1.2 The evolution of financial services sectors [VLERICK, UOXFMQ, CEPS, BOCCONI, IMD, NBU] (M01-24)**

Construct and compare the evolution of the financial services sectors in Europe and North America, with regards to their institutional and governance set-up, their geographic and their product scope.

#### **A1.3 Models and tools of finance [VLERICK, CEPS, BOCCONI, INSEAD, IMD, NBU, UNOTT] (M06-36)**

On the basis of archival data (first) and the first round results from the clinical studies (later), WP1 will study the evolution of the use of the major models and tools used in finance, and of how they link with management practices in the financial services industry.

#### **A1.4 The generation and diffusion of financial innovation [BOCCONI, VLERICK, NBU] (M06-36)**

On the basis of the same combination of archival and clinical data, WP1 will study the processes underlying the development and diffusion of innovative financial products, with particular emphasis on structured products and credit insurance. It will also explore the utilization of these products in portfolio management and risk management and will assess the role that this played in the financial and economic crises.

#### **A1.5 Responsible and sustainable finance [CBS, CEPS, NBU INSEAD, UOXFMQ, VLERICK] (M24-48)**

Based on the results of the first round of clinical studies, as well as the scenario development and other foresight methodologies supported by simulation results, this activity will seek to identify the factors that distinguish the firms that enact more responsible practices in terms of their social and environmental performance, and that can generate more sustainable outcomes over time (resilience).

**A1.6 The evolution towards responsible and sustainable finance [VLERICK BOCCONI, IMD, INSEAD] (M36-60)**

From the results of the change experiment studies and the simulation runs at the organizational and sector levels, WP1 will identify the factors responsible for the development of responsible and sustainable practices and cultures in financial institutions. It will also assess the relative effectiveness of several alternative approaches to obtain strategic, operating and cultural changes within the organizations and across the sector's networks of relationships.

**A1.7 Contribution to final analysis and reporting [All WP partners in collaboration with ALL program partners] (M60)**

Analysis of the final set of inputs from the methodological packages, develop conclusions on the characteristics of a sustainable financial system, and elaboration of set of recommendations on a road-map to its realization.

**WP1 Deliverables and Milestones**

**D1.1** Conceptual input paper for WP6, WP7 and WP8 on key variables, causal linkages and operationalization through archival and primary sources, as well as foresight methodologies (M12)

**D1.2** Online database of archival data and literature (M18)

**D1.3** Working paper on the evolution of the financial system across institutional and cultural contexts (M24)

**D1.4** Interim Report on progress, emerging insight and latest findings (M30)

**D1.5** Working paper on the role of financial systems as engines of social development (M36)

**D1.6** Working paper on a road-map towards a responsible financial institutions within sustainable systems, which will be the basis for the first book out of the project (joint with WP2 and WP10, M48)

**D1.7** Final Report on the role of finance to serve economic, social and environmental sustainability objectives (M60)

**M1.1** Transfer of conceptual development inputs to WP6-WP8 (M12)

**M1.2** Release of interim results based on archival database, simulation results, first round clinical studies and future scenarios from WP6-WP8 (M36)

**M1.3** Release of final results from simulations, change experiments, and future scenarios from WP6-WP8 (M54)



1.3.3 Table D: Work Package 2 (The Impacts on the Real Economy)

<b>Work package number</b>	2		<b>Start date or starting event M1</b>				Month Mnn 85				
<b>Work package title</b>	The Impacts on the Real Economy										
<b>Activity Type</b>	RTD										
<b>Participant number</b>	1	2	3	4	5	6	7	8	9		
<b>Participant short name</b>	BOCCONI	EABIS	CEPS	VLERICK	UOXFMQ	INSEAD	LSE	IESE	ESADE		
<b>Person-months per participant:</b>	6.0		27.0		2.0	3.0		5.0	4.0		
<b>Participant number</b>	10	11	12	13	14	15	16	17	18	19	20
<b>Participant short name</b>	UNOTT	CBS	NBU	SGH	OFU	PLEON	IMD	WU	UL	UKB	OECD
<b>Person-months per participant:</b>			3.0		23.0					12.0	

**WP2 Overview, Objectives, and Dependencies***Brief overview*

The conceptual framework of WP2 is described by the need to assess the costs and benefits on real economy induced by the changes in the finance. The development of the financial sector, in terms of institutions, actors and products, has affected the traditional transmission mechanisms through which finance affects the economy and new channels have emerged. WP2 aims at investigating those changes and at widening the significance of impact on real economy extending it to society and environment.

*List of objectives:*

- Take stock of the economic, social and environmental impact of finance identifying key variables, transmission mechanisms and causal linkages.
- Measure and assess costs and benefits of alternative scenarios about how changes in finance, at system, organizational and activity level, impact the economy and society as whole
- Identify how to move towards the sustainable financial system that is associated with the best (possible) scenario in terms of economic, social and environmental impact.

*Dependencies with other work packages:*

- WP1 will define the role of finance necessary to WP2 for the assessment of its impact on the real economy.
- WP3 will help understanding how regulatory and supervisory systems affect/determine the impact of finance on the real economy
- WP4 will interact with WP2 in the assessment of the impact of finance in developing countries
- WP2 will provide a crucial input to WP5 by identifying the possible financial system(s) the EU policy should aim at.
- WP2 will identify the key variables for impact measurement contributing to defining the scope of the archival data collection, thereby providing the initial input for WP6. The identification of key causal linkages, transmission mechanisms will support the continual development of the simulation model.
- WP2 depends for the cost and benefit analysis on clinical studies and change experiments (WP7) and the foresight activities (WP8). These inputs are crucial to understanding the kind of changes required to move towards a better financial system.
- WP2 will provide progress reports and inputs for scientific management (WP10)

(h) WP2 will provide materials for stakeholder and public dissemination (WP9) and reporting (WP11).

## WP2 Description of work

The work package comprises the following activities:

### **A2.1 Positioning paper [CEPS, OFU, IESE, UKB, ESADE] (M01-M12)**

Develop a position paper that takes stock of the economic, social and environmental impact of finance. The research will also highlight how recent changes in finance have resulted in changes in its impact. It also will identify the key variables to measure the impact of finance, the relevant transmission mechanisms and the operational linkages required by the scenario building process.

### **A2.2 Cost and benefit analysis [CEPS, BOCCONI, OFU, IESE, UKB, ESADE, INSEAD, NBU] (M12-36)**

Assess costs and benefits of changes in finance associated with different scenarios. The impact assessment requires accounting for possible trade-off in the achievement of the different objectives.

### **A2.3 Scenarios selection [CEPS, OFU, IESE, UOXFMQ] (M12-36)**

Select the scenarios embedding the best combination of economic, social and environmental outcomes taking into account the possible trade-offs emerging for different participants to system. Identify the sustainable financial system associated with such scenarios and consider the changes required to move towards that system.

### **A2.4 New financial system for households [CEPS, OFU, UKB] (M24-36)**

Identify the operational changes in households finance required to design a sustainable financial system as suggested by the scenario selection. Devote particular attention to the interaction between responsible lending/borrowing, issuance of consumer credit and consumer bankruptcy schemes.

### **A2.5 New financial system for SMEs [CEPS, OFU, UKB] (M24-36)**

Identify the operational changes in SMEs finance required to design a sustainable financial system as suggested by the scenario selection. Devote particular attention to the different sources of SMEs financing and their social and economic impact.

### **A2.6 New financial system for large and multinational enterprises [CEPS, IESE, NBU] (M24-36)**

Identify the operational changes in large enterprises finance required to design a sustainable financial system as suggested by the scenario selection

### **A2.7 New financial system for public administration [CEPS, UKB, INSEAD] (M24-36)**

Identify the operational changes in the public sector finance required to design a sustainable financial system as suggested by the scenario selection.

### **A2.8 Final report on the economic, social and environmental impact of finance [ALL] (M54-60)**

Produce and deliver the final report to the European Commission summarising change scenarios with implications and recommendations including change strategies to enable movement towards the scenarios.

## WP2 Deliverables and Milestones

**D2.1** Comprehensive literature review and gap analysis in existing research on economic social, environmental impact of finance (R, PU, Delivery month M12)

**D2.2** Conceptual input papers for WP6, WP7 and WP8 on key variables, causal linkages and operationalization through archival and primary sources, as well as foresight methodologies (M12)

**D2.3** Online database of archival data and literature (M18)

**D2.4** Working paper on financial development and growth (R, PU, Delivery month M18)

**D2.5** Interim Report on progress, emerging insight and latest findings (R, PU, Delivery month M30)

**D2.6** Working paper on cost and benefit analysis and 'sustainable financial system'-scenario identification (R, PU, Delivery month M36)

**D2.7** Working paper on new perspectives for households finance (R, PU, Delivery month M42)

<b>D2.8</b> Working paper on new perspectives SME finance (R, PU, Delivery month M42)
<b>D2.9</b> Working paper on new perspectives for large enterprises finance (R, PU, Delivery month M42)
<b>D2.10</b> Working paper on new perspectives for public administration finance (R, PU, Delivery month M42)
<b>D2.11</b> Final Report on economic, social and environmental impact of finance (R, PU, Delivery month M60)
<b>M1.1</b> Transfer of conceptual development inputs to WP6-WP8 (M12)
<b>M1.2</b> Release of interim results based on archival database, simulation results, first round clinical studies and future scenarios from WP6-WP8 (M36)
<b>M1.3</b> Release of final results from simulations, change experiments, and future scenarios from WP6-WP8 (M54)

### 1.3.3 Table D: Work Package 3 (International Governance and Regulation)

<b>Work package number</b>	3		<b>Start date or starting event M1</b>				Month Mnn 44.5				
<b>Work package title</b>	International Governance and Regulation										
<b>Activity Type</b>	RTD										
<b>Participant number</b>	1	2	3	4	5	6	7	8	9		
<b>Participant short name</b>	BOCCONI	EABIS	CEPS	VLERICK	UOXFMQ	INSEAD	LSE	IESE	ESADE		
<b>Person-months per participant:</b>	18.0		9.5		2.0	3.0	1.0	5.0			
<b>Participant number</b>	10	11	12	13	14	15	16	17	18	19	20
<b>Participant short name</b>	UNOTT	CBS	NBU	SGH	OFU	PLEON	IMD	WU	UL	UKB	OECD
<b>Person-months per participant:</b>		2.0	3.0								1.0

#### WP3 Overview, Objectives, and Dependencies

##### *Brief overview*

WP3 will propose an analysis of the role of regulation and governance of finance and suggest regulatory and supervisory interventions aimed at achieving a sustainable financial system. The research will be carried out in such a way that its output will be relevant to EU regulators and policy makers.

The conceptual framework of WP3 is described by the need for regulators and policy makers to account for the fast changes in the financial industry, how these changes have been induced by the existing regulation and contributed to the financial crisis and its consequences on the economy and society as whole. Beyond assessment of the EU response to the crisis in terms of regulation and supervision, the main contribution of this WP will consist in identifying interventions that can drive, or at least contribute to, changes towards a sustainable financial system.

##### *List of objectives:*

- Examine the development and consolidation of regulatory frameworks in Europe and assess the links with global developments with special attention to the regulation of tax heavens and financial crime;
- Assess the role of regulators and regulation in the financial crisis.
- Assess how the EU is reconsidering the features of the regulatory and supervisory architectures and identify the challenges to the EU approach posed by the crisis.
- Investigate how alternative regulatory and supervisory interventions affect the scenarios' development.
- Define the EU regulatory and supervisory road map towards a sustainable financial system.

*Dependencies with other work packages:*

- (a) WP3 will receive input from WP1 for the definition of the appropriate role of finance.
- (b) WP3 depends on WP2 for the identification of the sustainable financial system at which regulatory and supervisory interventions should aim.
- (c) WP3 is linked to WP4 to the extent financial regulation interventions in advanced countries impact access to finance and to capital in developing countries
- (d) WP3 depends on WP5 for the definition of the EU policy approach.
- (e) WP3 will provide input to WP6 in terms of data, policy and macro variables, causal linkages and dynamics analysis to support the continual development of the simulation model.
- (f) WP3 will provide support and monitor the data collection and production processes in WP6, WP7 and WP8.
- (g) WP3 depends for its final outputs from the outcomes and insights of the simulations (WP6), clinical studies and change experiments (WP7) and the foresight activities (WP8).
- (h) WP3 will provide progress reports and inputs for scientific management (WP10)
- (i) WP3 will provide materials for dissemination & communication (WP9) and reporting (WP11).

**WP3 Description of Work**

The work package comprises the following activities:

**A3.1 State of the art on EU policy developments [BOCCONI, CEPS, INSEAD] (M01-M12)**

Provide a complete survey of the EU financial regulatory framework. Investigate how this has been affected by the policy approach and its linkages with other EU (but also national if appropriate) policy spheres. Make comparison with international trends when relevant. Examine and assess the recent debate on regulatory convergence in Europe

**A3.2 Response to the crisis [BOCCONI, CEPS, OECD, NBU] (M01-M12)**

Study how the financial crisis has changed the direction of debate on financial regulation and supervision. Assess the responses to the crisis in terms of prudential regulation for banking, insurance and financial conglomerates in Europe.

**A3.3 Political economy of financial regulation [BOCCONI, CBS] (M01-M18)**

Examine the key regulatory developments since the inception of the Financial Services Action Plan (FSAP) in 1999 in relation to institutional changes, prudential business conduct, regulations and accounting standards, while confronting the public versus private interest views.

**A3.4 Governance and regulation of tax heavens [CEPS, IESE] (M01-M18)**

Analyze which policies and instruments could improve market disclosure to fight against financial crime particularly relating to corporate structure, SPV and other complex and opaque legal structures. This task will be mainly based on desk research and structured interviews with policy makers responsible of these jurisdictions.

**A3.5 Support and monitor data collection and production processes [CEPS] (M13-M18)**

Organize structured interviews with policy makers to allow an informed assessment of policies and instruments to fight financial crime.

**A3.6 Possible scenarios for financial regulation, monetary policy and crisis management in Europe [BOCCONI, UOXFMQ, NBU] (M13-M30)**

Define and assess the possible constellations of regulatory interventions and monetary policy in situation of crisis management.

**A3.7 EU regulation and supervision in the scenario building [BOCCONI, CEPS, NBU] (M13-M24)**

Define the set of regulatory interventions. Identify the key variables, the transmission mechanisms and the dynamics through which regulatory changes result in scenario changes. Analyze the

validation of possible scenarios by simulations and focus groups.

**A3.8 Costs and benefits of alternative interventions [BOCCONI, IESE] (M36-M48)**

Assess costs and the benefits of alternative regulatory intervention scenarios. Identify the set of actions leading towards a sustainable financial system. Frame them in the functioning of the international financial system

**A3.9 Final report on EU regulation and supervision [ALL] (M48-54)**

Produce and deliver the final report to the European Commission summarising regulatory and supervisory interventions required to enable movement towards sustainable finance

**Deliverables**

**D3.1** Comprehensive survey of development and consolidation of regulatory frameworks in Europe and the recent debate (R, PU, Delivery month M12)

**D3.2** Working paper on the assessment of regulatory and supervisory responses to the crisis (R, PU, Delivery month M12)

**D3.3** Conceptual input papers for WP6, WP7 and WP8 on key variables, causal linkages and operationalization through archival and primary sources, as well as foresight methodologies (M12)

**D3.4** Working paper on tax heavens and uncooperative financial centres (R, PU, Delivery month M18)

**D3.5** Working paper on political economy and financial regulation (R, PU, Delivery month M18)

**D3.6** Online database of archival data and literature (M18)

**D3.7** Working paper on the analysis of policy regulatory failure and regulatory quality (R, PU, Delivery month M24)

**D3.8** Interim Report on progress, emerging insight and latest findings (R, PU, Delivery month M30)

**D3.9** Working paper on the possible scenarios for financial regulation, monetary policy and crisis management in Europe (R, PU, Delivery month M36)

**D3.10** Working paper on cost and benefit analysis of alternative regulation and supervision interventions (R, PU, Delivery month M48)

**D3.11** Final Report on regulatory and supervisory recommendations (R, PU, Delivery month M60)

**M3.1** Transfer of conceptual development inputs to WP6-WP8 (M12)

**M3.2** Release of interim results based on archival database, simulation results, first round clinical studies and future scenarios from WP6-WP8 (M36)

**M3.3** Release of final results from simulations, change experiments, and future scenarios from WP6-WP8 (M54)

## 1.3.3 Table D: Work Package 4 (The Impacts on Developing Countries)

<b>Work package number</b>	<b>4</b>	<b>Start date or starting event M1</b>						Month Mm 86.0			
<b>Work package title</b>	The Impacts on Developing Countries										
<b>Activity Type</b>	RTD										
<b>Participant number</b>	1	2	3	4	5	6	7	8	9		
<b>Participant short name</b>	BOCCONI	EABIS	CEPS	VLERICK	UOXFMQ	INSEAD	LSE	IESE	ESADE		
<b>Person-months per participant:</b>	2.0		5.0		2	6.0				4.0	
<b>Participant number</b>	<b>10</b>	11	12	13	14	15	16	17	18	19	20
<b>Participant short name</b>	UNOTT	CBS	NBU	SGH	OFU	PLEON	IMD	WU	UL	UKB	OECD
<b>Person-months per participant:</b>	<b>18.0</b>			6.0	23.0				6.0	12.0	2

**WP4 Overview, Objectives, and Dependencies***Brief overview*

This work package sets out to assess the impact of the current financial system, as defined previously, on developing countries and the impact and implications of potential changes in the financial system on the economic, social and environmental development needs in these countries. The objectives of this work package are to address the following:

1. What are the specific economic, social and environmental problems of developing countries in the current global financial system and associated governance systems? What has been the direct and indirect impacts of the current financial crisis on developing countries?
2. What kind of system of international governance might better meet the economic, social and environmental needs of developing countries? What are the change strategies required to change the system from the current one?

*List of objectives:*

- Develop a deeper understanding of the impact of the current global financial crisis on developing countries, plus identification of drivers of impact and explanation for differences in impact.
- Define the key variables considered relevant to WP4. These will be variables capturing economic, social and environmental impact, macro-economic variables, institutional factors, including financial systems and impact channel variables.
- Develop initial version of the causal linkages. Subsequently this will be used to develop a conceptual framework to explain the inter-relationships between causal linkages and the dynamics of the relationship between of the impact of the global financial system on economic, social and environmental performance.
- Define the key questions relating to how to change international financial governance systems to better meet the economic, social and environmental needs of developing countries.
- Support and monitor data collection and production efforts in the methodological work packages. Analyze the results of the simulations, of the clinical studies and of the foresight activities (scenario

development, stakeholder engagement, focus groups, large scale survey polls).

*Dependencies with other work packages:*

- (a) WP4 will provide archival data and 'state of the art' analysis of the evolution of financial systems across contexts to support parallel thematic work in WP2-WP5
- (b) WP4 will provide archival data, variables, characteristics, causal linkages and dynamics analysis to WP6 to support the continual development of the simulation model.
- (c) WP4 will help to define the focus of the clinical studies (WP7) and the content and scope of scenario development, stakeholder group discussions, focus group workshops and public opinion polls (WP8).
- (d) WP4 will provide support for and monitor the data collection and production processes in WP6, WP7 and WP8.
- (e) WP4 depends for its intermediate and final outputs, outcomes and insights of the simulations (WP6), clinical studies and change experiments (WP7) and foresight activities (WP8)
- (f) WP4 will provide progress reports and inputs for scientific management (WP10).
- (g) WP4 will provide materials for dissemination and communication (WP9) and reporting (WP11).

**WP4 Description of Work**

The work package comprises the following activities:

**A4.1 Positioning paper [UNOTT, CEPS ,OECD, INSEAD] (M01-M03)**

Develop positioning paper on key issue identification of the impact of the current global financial system on the economic, social and environmental needs of developing countries. Within this there would be an explanation of overall impacts identified, plus identification of drivers of impact and explanation for differences in impact.

**A4.2 Scope archival data collection [UNOTT, CEPS ,OECD] (M04-M06)**

Identify variables (economic, social and environmental impact, macro-economic variables, institutional factors, including financial systems and impact channel variables, international governance structures) for which archival data collection (WP6) should begin.

**A4.3 Develop causal linkages [UNOTT, CEPS, OECD] (M07-M09)**

Develop initial version of causal linkages between relationship between of the impact of the global financial system on economic, social and environmental performance. Develop a conceptual framework to explain the inter-relationships *between* causal linkages and the dynamics of the relationships.

**A4.4 Scope clinical studies and group discourse [UNOTT,SGH, INSEAD, CEPS] (M10-M12)**

Develop list of key questions relating to changes international financial governance systems in order to better meet the economic, social and environmental needs of developing countries. This questions will be explored in clinical studies (WP8), stakeholder group discussions and focus groups (WP7).

**A4.5 Produce Interim report: The Impact of the Financial Crisis on Developing Countries [UNOTT,CEPS,OECD] (M16-18)**

A production of a public report summarising the positioning paper, state of the art and conceptual framework.

**A4.6 Support and monitor data collection and production processes [ALL] (M13-M24)**

Support and monitor data collection and production processes in WP6, WP7 and WP8.

**A4.7 Revise data collection and production processes [ALL] (M25-M36)**

Correct or add to data collection and production process, based on initial feedback from WP6, WP7 and WP8. Continue to support and monitor data collection and production processes in WP6, WP7 and WP8.

**A4.8 Data analysis [UNOTT,OECD, CEPS] (M37-M48)**

Begin the analysis of the data collected and produced by WP6, WP7 and WP8 to shed light on the questions and issues relevant for the work package. Request additional data collection or production, based on the

preliminary results of the analysis.

**A4.9 Syndication of analysis and recommendations [ALL] (M49-M51)**

Produce final round of analysis, implications and recommendations to syndicate with the group and the Stewardship Council.

**A4.10 Production of Summary of Scenarios and Policy Response Report [UNOTT, OECD, CEPS](M51)**

Production of a report summarising the results from the Scenario analysis, Stakeholder Council, clinical studies and the resulting policy recommendations. This report will be used in A.11 and A.12.

**A4.11 Final report and recommendations [ALL] (M58-M60)**

Produce and deliver the final report to the European Commission summarising change scenarios with implications and recommendations. Also included would be change strategies to enable movement towards the scenarios.

**WP4 Deliverables and Milestones**

**D1.1** Comprehensive literature review and gap analysis in existing research (M06)

**D1.2** Conceptual input papers for WP6, WP7 and WP8 on key variables, causal linkages and operationalization through archival and primary sources, as well as foresight methodologies (M12)

**D1.3** Online database of archival data and literature (M18)

**D1.4** Working paper on the the Impact of the financial Crisis on Developing Countries evolution of the financial system across institutional and cultural contexts (M24)

**D1.5** Interim Report on progress, emerging insight and latest findings (M30)

**D1.6** Working paper on the determinants of impact of financial crisis and financial systems on developing Countries (M36)

**D1.7** Working paper on the future of global governance of the financial system (institutions, frameworks) and the role of developing countries (M48)

**D1.8** Final Report on the role of finance in the context of economic, social and environmental sustainability (M60)

**M1.1** Definition of archival data collection parameters and key issues (M03)

**M1.2** Transfer of conceptual inputs to WP6-WP8 (M12)

**M1.3** Exchange of data and 'state of the art' analysis with WP1, W2, W3, WP5 (M12, M24, M36, M48)

**M1.4** Receipt of first round of output data, simulation results, clinical studies and future scenarios from WP6-WP8 (M36)

**M1.5** Receipt of final results from simulations, change experiments, and future scenarios from WP6-WP8 (M54)



## 1.3.3 Table D: Work Package 5 (EU Governance and Policy)

<b>Work package number</b>	5		<b>Start date or starting event M1</b>				Month Mnn 59.0				
<b>Work package title</b>	EU Governance and Policy										
<b>Activity Type</b>	RTD										
<b>Participant number</b>	1	2	3	4	5	6	7	8	9		
<b>Participant short name</b>	BOCCONI	EABIS	CEPS	VLERICK	UOXFMQ	INSEAD	LSE	IESE	ESADE		
<b>Person-months per participant:</b>	2.0		27.0		2.0		1.0	5.0			
<b>Participant number</b>	10	11	12	13	14	15	16	17	18	19	20
<b>Participant short name</b>	UNOTT	CBS	NBU	SGH	OFU	PLEON	IMD	WU	UL	UKB	OECD
<b>Person-months per participant:</b>				6.0				3.0	9.0		4.0

**WP5 Objectives***Brief overview*

WP5 will propose an analysis of the EU policy challenges and suggest policy actions aiming at a sustainable financial system. The research will be carried out in such a way that its output will be relevant to EU policy making and address the needs of policy makers and practitioners, especially to those working in (or in relation to) the EU.

The conceptual framework of WP5 is described by the need for the EU policy to account for the fast changes in the financial industry and their impact on the rest of the economy. As well as the role of the EU policy, within Europe and globally, in affecting changes in the financial system towards sustainable development. The main contribution of this WP will consist in identifying EU policy interventions that can drive, or at least contribute to, changes towards a sustainable financial system.

*List of objectives:*

- Identify the current EU policy approach on economic, social and environmental matters.
- Assess policy responses to the financial crisis in the EU and in the individual Member States. Their impacts on the overall philosophy of the European Union future policy and the role of EU as global actor
- Identify the challenges to the EU policy approach and the specific challenges brought about by the crisis.
- Define the key linkages between the policy challenges and the re-design of the financial system
- Investigate how alternative EU policies affect the scenarios' development.
- Define the EU policy road map towards a sustainable financial system

*Dependencies with other work packages:*

- WP5 will receive input from all thematic WP1-4 in order to identify the policy challenges.
- WP5 heavily depends on WP2 for the identification of the sustainable financial system to which EU policy should aim at.
- WP5 depends on WP3 for the identification of the regulatory and supervisory system in which alternative policies are simulated. At same time, regulatory and supervisory interventions are conditional on the EU policy approach.
- WP5 will provide input to WP6 in terms of data, policy and macro variables, causal linkages and dynamics analysis to support the continual development of the simulation model.
- WP5 will provide support and monitor the data collection and production processes in WP6, WP7 and

WP8.

- (f) WP5 depends for its final outputs from the outcomes and insights of the simulations (WP6), clinical studies and change experiments (WP7) and the foresight activities (WP8).
- (g) WP5 will provide progress reports and inputs for scientific management (WP10)
- (h) WP5 will provide materials for dissemination & communication (WP9) and reporting (WP11).

### **WP5 Description of work**

The work package comprises the following activities:

#### **A5.1 State of the art on EU policy developments [CEPS, UL, IESE] (M01-M12)**

Provide a complete survey of policy developments in financial markets and their linkages with other EU (but also national if appropriate) policy spheres before and after the crisis. Make comparison with international trends when relevant. Examine and assess the recent debates on financial integration, diversity, competition, regulation, social cohesion, fiscal policy and Stability & Growth Pact and climate change. The analysis will be mainly based on desk research and on information coming from policy makers in Brussels (See A5.3)

#### **A5.2 Assess the policy responses post crisis [CEPS, OECD, UL, SGH] (M01-M12)**

Assess how the financial crisis has changed the direction of policy debate in financial services in Europe. Policy responses like State interventions and bail outs marked a change in policy perception in Europe and elsewhere. This task will make an evaluation (at EU and Member States level) of these responses and investigate whether they are appropriate to preserve a stable and cohesive internal market for financial services.

#### **A5.3 Support and monitor data collection and production processes [CEPS] (M13-M18)**

Organize structured interviews with policy makers in Brussels and in individual member states to allow an informed assessment of policy response to the crisis.

#### **A5.4 EU Policy in the scenario building [CEPS, OECD, UOXFMQ, LSE] (M13-M24)**

Define the set of policy interventions. Identify the key variables, the transmission mechanisms and the dynamics through which policy changes result in scenario changes. Analyze the validation of possible scenarios by simulations and focus groups.

#### **A5.5 Costs and benefits of alternative policy interventions [CEPS, IESE, SGH, WU, BOCCONI] (M36-48)**

Assess costs and the benefits of alternative policy intervention scenarios. Identify the set of policy actions leading towards a sustainable financial system. Frame them in the context of the systematic factors at the basis of the economic and financial crisis.

#### **A5.6 Final report on EU policy actions in order to achieve sustainable finance [ALL] (M48-54)**

Produce and deliver the final report to the European Commission summarising policy actions required to enable movement towards sustainable finance.

### **WP5 Deliverables and Milestones**

- D5.1** Comprehensive survey of EU financial services policy and recent debate (R, PU, Delivery month M12)
- D5.2** Comprehensive survey of EU macroeconomic policies and recent debate (R, PU, Delivery month M12)
- D5.3** Comprehensive survey of EU environmental policy and recent debate (R, PU, Delivery month M12)
- D5.4** Working paper on the assessment of the EU policy response to the crisis (R, PU, Delivery month M12)
- D5.5** Conceptual input papers for WP6, WP7 and WP8 on key variables, causal linkages and operationalization through archival and primary sources, as well as foresight methodologies (R, PU, Delivery month M12)
- D5.6** Online database of archival data and literature (R, PU, Delivery month M18)
- D5.7** Interim Report on progress, emerging insight and latest findings (R, PU, Delivery month M30)
- D5.8** Working paper on cost and benefit analysis of alternative policy interventions (R, PU, Delivery month M30)

M48) <b>D5.9</b> Final Report on policy recommendations (R, PU, Delivery month M60)  <b>M5.1</b> Transfer of conceptual development inputs to WP6-WP8 (M12) <b>M5.2</b> Release of interim results based on archival database, simulation results, first round clinical studies and future scenarios from WP6-WP8 (M36) <b>M5.3</b> Release of final results from simulations, change experiments, and future scenarios from WP6-WP8 (M54)
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1.3.3 Table D: Work Package 6 (Modelling and Simulation)

<b>Work package number</b>	<b>6</b>	<b>Start date or starting event M1</b>						Month Mnn 151.0			
<b>Work package title</b>	Modelling and Simulation										
<b>Activity Type</b>	RTD										
<b>Participant number</b>	<b>1</b>	2	3	4	5	6	7	8	9		
<b>Participant short name</b>	<b>BOCCONI</b>	EABIS	CEPS	VLERICK	UOXFMQ	INSEAD	LSE	IESE	ESADE		
<b>Person-months per participant:</b>	<b>71.0</b>			5.0	7.0	4.0					
<b>Participant number</b>	10	11	12	13	14	15	16	17	18	19	20
<b>Participant short name</b>	UNOTT	CBS	NBU	SGH	OFU	PLEON	IMD	WU	UL	UKB	OECD
<b>Person-months per participant:</b>				32.0	31.0						1.0

**\*WP6 Objectives, Objectives, and Dependencies***Brief overview*

Primary responsables in this WP are the DONDENA and ELEUSI research centers of Bocconi University. The two research centers, directed by F. Billari and E. Borgonovo, respectively, will merge Dondena's expertise in data analysis and simulation of complex social dynamics, and ELEUSI expertise in simulation of complex systems and quantitative methods for model building and sensitivity analysis.

The conceptual framework of this WP is described in Section 1.2.7 of this proposal. WP6 activities entail the quantitative support to the project. Its activities are twofold: the first is to produce the simulation tool described in Section 1.2.7. The second is to provide archival for the data collection performed in the thematic Work Packages. This second task is a natural consequence of the input that this WP will receive from the others. The philosophy underlying the description of the activities of this WP is that they will be constantly performed during the project one the one hand incorporating insights of the other Work Packages and, on the other hand, providing the WP's with simulation results. Additional tasks of this WP are to make the model

available in an open-access infrastructure to all other members of the EU (regulators, banking agencies, other universities) willing to utilize the simulator. Towards this goal, the software will be contained in a dedicated physical infrastructure (hardware, most likely a dedicated server) or virtual (a web-based application). Also, the database of the project shall be made open-access (of course, in full compliance with EU privacy regulation.)

*List of objectives:*

- Create a dedicated software tool for simulating the impact (cost and benefit analysis) of regulatory policies on the financial system
- Absorb and embed thematic inputs and synchronize data collection, modelling, and simulation activities with the other methodological work packages
- Provide simulation insights to other WP's;

*Dependencies with other work packages:*

- (i) WP6 depends on input from all five thematic work packages.
- (j) WP6 provides data to all five thematic work packages to allow revision and elaboration of the research themes.
- (k) As well as feeding the development of the simulation, the archival data collection of WP6 (year 1) provides input for the scenarios (WP8) and the clinical studies (WP7).
- (l) The modeling work done to prepare for the simulation, will also feed the discussions related to scenario building (WP7) and the development of the protocols in the clinical studies (interviews, surveys).
- (m) The results of the different runs in the simulations (years 2 and 3) will influence the development of generation of scenarios in WP7.

## **WP6 Description of work**

### **A6.1 Infrastructure and communication channels [BOCCONI, INSEAD, UOXFMQ, VLERICK, SGH] (M01-M03)**

Set up the relevant infrastructures and interact with thematic Work Packages on how the methodological issues in the work package will be tackled, in coordination and collaboration with the other work packages.

### **A6.2 Thematic integration and methodological coordination [BOCCONI, INSEAD, UOXFMQ, VLERICK, SGH] (M04-M12)**

Engage with thematic and methodological work packages to integrate their input and coordinate with the other methodological work packages to obtain crucial insights for the simulation.

### **A.6.3 Simulation development: creation of main software infrastructure [BOCCONI, INSEAD, UOXFMQ, VLERICK, SGH] (M07-M12)**

Simultaneously with the previous activity, there is the start of the design of the simulation tool and the modelling activity;

### **A6.4 Network Analysis [VLERICK, BOCCONI] (M09-M18)**

Perform network analysis for determining interactions and roles in the financial system.

### **A.6.5: Simulation development: software enrichment and numerical experiments I [BOCCONI, INSEAD, UOXFMQ, VLERICK, SGH] (M12-M24)**

Further modelling and additional programming to enrich the simulation software with results of other WPs. Feedback to other WPs from simulation experiments is provided.

### **A.6.6: Data Analysis and Archival I [SGH, BOCCONI] M01-M24**

Data analysis and archival is performed based on the data collected in the project from months 1-24.

### **A.6.7: Simulation development: software enrichment and numerical experiments II [BOCCONI, INSEAD, UOXFMQ, VLERICK, SGH] (M25-M36)**

Continues A6.5 with further programming activity to enrich the simulation software with results of other WPs. Also, further feedback from simulation experiments to the other WP's is performed.

### **A.6.8: Data Analysis and Archival II ] [SGH, BOCCONI] (M25-M36)**

Continues A6.6. Data analysis and archival is performed based on the data collected in the project from months 1-36.

**A.6.9: Simulation development: software enrichment and numerical experiments III coordination [BOCCONI, INSEAD, UOXFMQ, VLERICK, SGH] (M37-M54)**

Continues A6.7 with further versions of the model and further programming activity to enrich the simulation software with results of other WPs and provide insights to other Work Packages with simulation experiments.

**A.6.10: Data Analysis and Archival III [SGH, BOCCONI] (M37-M54)**

Continues A6.8. Data analysis and archival is performed based on the data collected in the project from months 1-54.

**A6.11 Final Analysis coordination [BOCCONI, INSEAD, UOXFMQ, VLERICK, SGH] (M49-M54)**

Integrate results from WP7 and WP8 to produce the final cost and benefit analysis of change interventions, including experimental evidence on pre-post intervention variations from WP8. Help thematic work packages develop their final analyses and reports.

**A6.12 Reporting and dissemination coordination [BOCCONI, INSEAD, UOXFMQ, VLERICK, SGH] (M55-M60)**

Prepare final report on the methodological advancements produced by this work package, and present it to relevant audiences.

**WP6 Deliverables and Milestones**

**D6.1**, Position Paper on Model Structure (R,PU, Delivery Month M12 Bocconi Responsible)

**D6.2**, Network Analysis Result Report ,(R,PU, Delivery Month M18 Vlerick Responsible)

**D6.3**, Data Analysis and Simulation Report (R, PU, Delivery Month 24, Bocconi and SGH responsible)

**D6.4**, Data Archival Open Access Facility (P, PU, Delivery month M48: SGH and Bocconi Responsibles)

**D6.5**, Report on Data Analysis for the simulation model (R,PU, Delivery Month M60; SGH responsible)

**D6.6**, Final version of the Simulation software tool and manual (P,PU, Delivery Month M60; Bocconi Responsible)

**D6.7**, Final Analysis Report (R,PU, Delivery Month M60; Bocconi Responsible)

**Milestones**

M6.1,Simulation Model Structure Available, M12

M6.2,Beta Version 1 of Simulation Model Available, M24

M6.3,Final version of Simulation Model available,M54

## 1.3.3 Table D: Work Package 7 (Clinical Studies and Change Experiments)

<b>Work package number</b>	7	<b>Start date or starting event M1</b>						Month Mnn 223.0			
<b>Work package title</b>	Clinical Studies and Change Experiments										
<b>Activity Type</b>	RTD										
<b>Participant number</b>	1	2	3	4	5	6	7	8	9		
<b>Participant short name</b>	BOCCONI	EABIS	CEPS	VLERICK	UOXFMQ	INSEAD	LSE	IESE	ESADE		
<b>Person-months per participant:</b>	38.0				3.0	13.5	15.0	47.5	10.0		
<b>Participant number</b>	10	11	12	13	14	15	16	17	18	19	20
<b>Participant short name</b>	UNOTT	CBS	NBU	SGH	OFU	PLEON	IMD	WU	UL	UKB	OECD
<b>Person-months per participant:</b>	5.0	8.0					12.0	8.0	15.0	48.0	

**WP7 Overview, Objectives, and Dependencies***Brief overview*

- Design and conduct 30 clinical studies in 3 segments of the financial sectors and 5 regions
- Through the analysis of the clinical studies, identify the strategic, organizational, technological and institutional factors affecting financial institutions ability to serve societal needs
- Identify the organizational change initiative that can help financial institutions better serve these needs and how these changes should be implemented
- Design change interventions with some of the organizations participating in the study and oversee their implementation.

*List of objectives:*

- Establish infrastructure and communication channels with other work packages
- Absorb and embed thematic inputs in the final design of the clinical studies and change experiments
- Synchronize research design, data collection, and analysis protocols with the other methodological work packages
- Conduct 30 clinical studies
- Design change experiments, recruit companies and assist them in implementing changes

*Dependencies with other work packages:*

- WP7 depends on input from all five thematic work packages.
- WP7 provides data to all five thematic work packages to allow revision and elaboration of the research themes.
- The first round of clinical data collection (year 2) will influence the refinements of the simulation (WP6), as well as of the scenarios (WP8).
- The design of the experimental interventions made in the context of the clinical study (year 3) will be influenced by the first results of the simulations (WP6) and of the scenarios (WP8).

- (e) The results of the pre-post variation analysis in the WP8 clinical studies and experimental change will feed the final generation of the scenarios (WP8) and of the simulations (WP6)

### **WP7 Description of work**

The work package comprises the following activities:

#### **A7.1 Infrastructure and communication channels [IESE, BOCCONI] (M01-M03)**

Set up the relevant infrastructures and develop a position paper on how the methodological issues in the work package will be tackled, in coordination and collaboration with the other work packages.

#### **A7.2. Engagement of financial institutions (ALL partner, M01-M08)**

#### **A7.2 Thematic integration [IESE, BOCCONI] (M04-M06)**

Engage with thematic work packages to absorb their inputs and embed them in the design of the work package.

#### **A7.3 Methodological coordination [IESE, BOCCONI] (M07-M12)**

Engage with thematic work packages to integrate their input and coordinate with the other methodological work packages on content and timing of data collection and research design. Define the best practices for the data collection and analysis in the clinical studies, and collect them in the Clinical studies handbook. Define, together with all the partners, the list of cases, and identify the research partners that will maintain contacts with each case.

#### **A7.4 Training Workshop with research partners [IESE, LSE, BOCCONI](M12)**

Concurrently with the second project meeting we will organize a training workshop to ensure consistency in the fieldwork, and the highest level of quality, the WP will lead a workshop for the research partners involved in data collection. This training will be based on the clinical studies handbook (D7.2).

#### **A7.5 Initial round data collection [IESE, BOCCONI, LSE, UOXFMQ, INSEAD, ESADE, UNOTT, CBS, IMD, WU, UL] (M13-M24)**

First round of data collection in clinical studies. Design, interview protocols, and survey questions will be built on the basis of the outcome of the thematic WP and the preliminary work in WP6. Develop a preliminary analysis of the clinical studies, resulting in a preliminary report (D7.3)

#### **A7.6 Data Exchange and preliminary analysis[IESE, BOCCONI] (M25-M36)**

Disseminate the preliminary report and discuss the result with other project m first results of pre-intervention clinical studies to thematic and methodological work packages. Receive results of simulations from WP6 and updated scenarios from WP8.

#### **A7.7 Design and Execute Change Experiments [IESE, BOCCONI, LSE] (M20-M36)**

Design the change intervention on the basis of the preliminary results of the clinical studies, simulation (WP6) and scenarios (WP8). These interventions will need to be developed together with the financial institutions participating in the project, and they will be conducted together with them.

#### **A7.8 Second round data collection [IESE, BOCCONI, LSE, UOXFMQ, INSEAD, ESADE, UNOTT, CBS, IMD, WU, UL] (M37-M48)**

Second round of data collection on the clinical studies. Produce analysis of pre-post intervention variations (Q3/Q4) for all work packages. Absorb final round of scenarios and focus group results from WP8 and integrate final simulation rounds from WP6 to make sense and align interpretations of field data.

#### **A7.9 Final Analysis and preparation of final report[IESE, BOCCONI] (M20-M25)**

Integrate results from clinical studies with the results from the change interventions. Integrate results from WP6 and WP8 to produce the final report on the results of change interventions at firm level. Help thematic work packages develop their analysis and final reports.

#### **A7.10 Organization of a workshop with the financial institutions who participated in the change experiments [IESE, LSE, BOCCONI] (M55-M60)**

#### **A7.11 Final Reporting [IESE, BOCCONI, LSE, UOXFMQ, INSEAD, ESADE, UNOTT, CBS, IMD, WU, UL] (M55-M60)**

**WP7 Deliverables and Milestones****D7.1 Positioning paper (R, PU, M03)**

This document will define the methodological logic we will follow, explaining its rationale and detailing how the WP will coordinate the work of other WP.

**D7.2 Clinical Studies Handbook (R, CO, M12)**

This document, developed on the basis of the feedback received on the position paper, will define the practices to follow in the data collection and case analysis phase. The document will provide interviewing standards, leading questions, samples of interview protocols, recording and data storage standards, and initial coding scheme. This document will be introduced during one of the project meetings, and will represent the basis for a methodological training for all the participants.

**D7.3 Clinical Studies Progress Report (R, CO, Delivery month M24)**

This document will provide an update on the status of data collection and analysis in the clinical studies. This report will help the work package leader and the project leader verify the status of the project, and take quick corrective actions to ensure the completion of the studies. Furthermore this report will be an input to simulation work of WP 6, and the focus group and stakeholder engagement of WP 8.

**D7.4. Change Experiment Design Report (M26)****D7.5 Change Experiments Results Report (M38)****D7.6 Clinical Studies Final Report (R, PU, Delivery Month, M60)**

The final report will consist of all the clinical cases conducted, the results of the analysis (within-case and between-cases comparisons), and the key learning points

**M7.1 Completed recruitment and engagement of companies for the clinical studies (D7.2, M12)****M7.2 Disclose insights from first round of data collection (D7.3, M24)****M7.3 Disclose insights from change experiments (M48)**



## 1.3.3 Table D: Work Package 8 (Scenario Development and Stakeholder Engagement)

<b>Work package number</b>	<b>8</b>	<b>Start date or starting event M1</b>					Month Mnn 120.4				
<b>Work package title</b>	Scenario Development and Iterative Stakeholder Engagement										
<b>Activity Type</b>	RTD										
<b>Participant number</b>	1	2	3	4	5	6	7	8	9		
<b>Participant short name</b>	BOCCONI	EABIS	CEPS	VLERICK	UOXFMQ	INSEAD	LSE	IESE	ESADE		
<b>Person-months per participant:</b>		2.0	5.0	22.0	34.4	6.5		4.0	5.0		
<b>Participant number</b>	10	11	12	13	14	15	16	17	18	19	20
<b>Participant short name</b>	UNOTT	CBS	NBU	SGH	OFU	PLEON	IMD	WU	UL	UKB	OECD
<b>Person-months per participant:</b>	3.0	2.0			21.0	2.5		2.0		10.0	1.0

**WP8 Overview, Objectives, and Dependencies***Brief Overview:*

There will be four sets of inter-linked activities:

1. Scenario Development (SD): producing iterations of several alternative future contexts for the financial system
2. Stakeholder Engagement (SE): networking stakeholders in the financial system to co-develop scenarios and REFORM itself, in partnership with the REFORM researchers.
3. Iterative focused groups (IFG's): small groups of both homogenous and mixed stakeholders will be convened to investigate issues and futures.
4. Public Opinion Polls (POPs): individuals in the public (households, financial sector professionals, corporate managers, regulators, local and government officials, civil society associations representatives) will be surveyed on a range of issues related to their views on the current financial system, on the optimal role and impacts, and on the expected evolution in the medium-long term.

*List of objectives:*

- Develop challenging and relevant stories that integrate and communicate research findings and possibilities on alternative possible contexts for financial market, organisational and policy reforms.
- Establish infrastructure and communication channels with other work packages.
- Create a platform of stakeholder relationships that support discussion throughout regions and the various stakeholder communities.
- Absorb and embed thematic inputs
- Synchronize data collection, modelling, and simulation activities with the other methodological work packages.
- Use the research to further develop and extend existing methodologies.

*Dependencies with other work packages:*

- (a) WP8 depends on input from all five thematic work packages.
- (b) Will also depend on input from the results of the simulations (WP6)

- (c) WP8 provides integrated data to all five thematic work packages to allow revision and elaboration of the research themes.
- (d) WP8 depends upon the mapping in WP6 to help identify stakeholders to engage.
- (e) The early development of scenarios (year 1), the results of the public opinion polls (POPs) and the first results of the focus groups (year 2) in WP8 will influence the development of the simulation (WP6), and the protocols for the clinical studies as well as the change experiments (WP7).
- (f) The further generations of the scenarios and the additional rounds of data from public opinion polls and focus groups (years 3 and 4) will influence the refinement of the modelling and simulations (WP6), and will feed the analysis and recommendations by all the thematic WPs.
- (g) WP8 depends upon WP9 for robust dissemination and communications platforms with stakeholders.

### WP8 Description of Work

This WP comprises the following activities:

**A8.1 Scenario development** [UOXFMQ, VLERICK, CEPS to design and partially execute, Bamberg, EABIS, WU, GLED, Nyenrode, CBS, INSEAD, IMD, ESADE, Vienna, Cominius to execute] (M01-M54)

The scenario development work includes the following tasks:

- Interview users and stakeholders
- Document and confirm intended purposes and uses.
- Interact with thematic work package to ensure that their work is usable for scenario development.
- Interact with focus-group –type workshops to understand how stakeholder groups, geographic/cultural regions, individuals and families relate to financial markets and services, how policy makers interact with financial industry representatives and other activities in the industry using these insights for scenario development.
- Design and prepare workshops.
- Scenario development.
- Reflective analyses of scenario processes and innovations.

**A8.2 Stakeholder engagement** [VLERICK, CEPS to design and partially execute, Bamberg, EABIS, WU, GLED, Nyenrode, CBS, INSEAD, IMD, ESADE, Vienna, Cominius to execute] (M01-M54)

The stakeholder engagement work includes the following tasks:

- Developing and maintaining a stakeholder database.
- Leading development and support of the stakeholder council nine council meetings that will include development of stakeholder mapping and scenarios.
- Supporting identification of stakeholders to engage in IFMs.
- Maintaining connections with stakeholders about the project activities.
- Supporting Scenario Development (included in first section, as well as workshops, on ‘scenarios’ above).
- Methodological/theory issue support.

The work package also includes the following activities:

**A8.3 Iterative Focus Groups** [CEPS, OECD, Bamberg, EABIS, WU, GLED, Nyenrode, CBS, INSEAD, IMD, ESADE, Vienna, Cominius] (M12-54)

IFGs are one-day events organized to elicit group work among homogeneous, as well as heterogeneous stakeholder groups in a diverse set of institutional and cultural contexts. There will be two rounds of meetings in five European regions – one focused upon information gathering for the purpose of scenario development, and one focused upon refinement and validation of scenarios. There will also be five IFGs in other parts of the world to gather perspectives to reflect the global nature of the financial system.

**A8.4 Public Opinion Polls** [CEPS],(M06-48)

WP8 will design and execute, with the help of professional agencies, a series of public opinion polls to collect systematic and repeated input from the wider population, as well as from professionals connected to the activities in the financial system. The polls will be repeated on year 1, 2, 3 and 4, and will inquire about:

- Their view on the current role and impacts of the financial system;
- Their vision about what the financial system should be designed to accomplish;
- Their expectations about how the financial system will evolve in the medium-long term.

The sample will be maintained as stable as possible throughout the years, and will be constructed to represent (a) the general population of European, US and developing countries' citizens, and (b) specific cluster of professionals in the following areas:

- Financial services actors
- Corporate managers
- Regulators, public administrators and policy-makers

#### **A8.5 Infrastructure and communication channels [UOXFMQ, VLERICK, CEPS] (M01-M03)**

Set up the relevant infrastructures and develop a position paper on how the methodological issues in the work package will be tackled, in coordination and collaboration with the other work packages.

#### **A8.6 Thematic integration [UOXFMQ, VLERICK, CEPS] (M04-M06)**

Engage with thematic work packages to absorb their inputs and embed them in design of the work package.

#### **A8.7 Methodological coordination [UOXFMQ, VLERICK, CEPS] (M07-M12)**

Engage with thematic and other methodological work packages to integrate their input and coordinate with the other methodological work packages on content and timing of data collection and production design.

#### **A8.8 Initial round data collection [UOXFMQ, VLERICK, CEPS] (M13-M24)**

Absorb inputs from all thematic work packages, and archival data from WP6. Produce first results of focus groups and stakeholder dialogue.

#### **A8.9 Data Exchange [UOXFMQ, VLERICK, CEPS] (M12-M36)**

Provide results of IMFs, polling and scenario building to thematic and methodological work packages. Receive updated simulations from WP6 and results of pre-intervention clinical studies from WP7.

#### **A8.10 Final round data collection [UOXFMQ, VLERICK, CEPS] (M37-M48)**

Produce final generations of scenarios and focus group data for all other work packages. Absorb final round of simulations from PW6. Integrate initial output from WP7 change experiments.

#### **A8.11 Analysis [UOXFMQ, VLERICK, CEPS] (M49-M54)**

Integrate results from WP6 and WP7 to produce the final versions of the scenarios with implications and recommendations. Help thematic work packages develop their final analyses and reports.

#### **A8.12 Reporting and dissemination [UOXFMQ, VLERICK, CEPS] (M55-M60)**

Prepare final report on the methodological advancements produced by this work package, and present it to relevant audiences.

### **WP8 Deliverables and Milestones**

#### **D8.1** Positioning paper (Oxford, Vlerick, CEPS, M03)

This document will define the methodological logic we will follow, explaining its rationale and detailing how the WP will coordinate the work of other WP.

**D8.2** Paper with WP6 on use of mapping technologies in identifying stakeholders and describing issue domains with WP7 (Vlerick, Bocconi, M018).

**D8.3** Scenario development reports (Oxford, M12, M24, M36, M48).

**D8.4** Stakeholder engagement process reports (Vlerick, M12, M24, M36, M48).

**D8.5** Iterative focus meetings reports (CEPS, M12, M24, M36, M48).

**D8.6** Public opinion polls analysis reports (CEPS, M12, M24, M36, M48).

**D8.7** Paper on role of scenario development, polling and IFMs to develop stakeholder engagement. (Oxford,

Vlerick, CEPS, M060).

**D8.8** Paper on strategies to address stakeholder engagement situations characterized by powerful traditional insiders versus others (Vlerick, M060).

**D8.9** Paper on use of social media in large system change investigations, joint with WP9 (Vlerick, M060).

**M8.1** Development of stakeholder data-base structure and protocol for project-wide use (Vlerick, M03).

**M8.2** Selection of Stakeholder Councillors in consultation with Steering Committee (Vlerick, M04).

**M8.3** Release of first round scenarios, with inputs from scenario building meetings, stakeholder engagement events, IFMs and POPs (M24).

**M8.4** Release of second round scenarios, with inputs from scenario building meetings, stakeholder engagement events, IFMs and POPs (M48).

## 1.3.3 Table D: Work Package 9 (Dissemination)

<b>Work package number</b>	<b>9</b>	<b>Start date or starting event M1</b>								Month Mnn 64.0	
<b>Work package title</b>	Dissemination										
<b>Activity Type</b>	OTHER										
<b>Participant number</b>	1	2	3	4	5	6	7	8	9		
<b>Participant short name</b>	BOCCONI	EABIS	CEPS	VLERICK	UOXFMQ	INSEAD	LSE	IESE	ESADE		
<b>Person-months per participant:</b>		26.0		5.0				2.0			
<b>Participant number</b>	10	11	12	13	14	15	16	17	18	19	20
<b>Participant short name</b>	UNOTT	CBS	NBU	SGH	OFU	PLEON	IMD	WU	UL	UKB	OECD
<b>Person-months per participant:</b>						31.0					

**WP9 Overview, Objectives and Dependencies***Brief Overview:*

Under the auspices of this Work Package, Ketchum Pleon will lead the REFORM dissemination activities across six main categories of activity: **Online Platforms, Conferences & Workshops, Briefings & Recommendations, Publications, Stakeholder & Media Communications, and Learning History**. The work plan will incorporate traditional and innovative elements to ensure that the project results are presented to the widest possible audience in Europe (primarily) and beyond. More comprehensive details of the dissemination strategy and plan are presented in Section 3.2 of this proposal.

The key audience groups have been identified as:

1. **Research / Science**
2. **Policy / Regulation**
3. **Finance**
4. **Enterprise and Other Stakeholder Organisations**
5. **Citizens / Consumer**

*List of objectives:*

- Develop a professional website integrating latest social networking media to open REFORM to stakeholder interest and debate
- Establish Communications Board with appropriate external media directors to build outreach capacity
- Define REFORM's virtual and physical identity (branding, marketing, mainstream positioning)
- Produce high quality communications for delivery to specific key audiences
- Ensure coherent public release of REFORM tools and methodologies, research results and insights, business and stakeholder implications and policy recommendations across all 27 EU Member States

*Dependencies with other work packages:*

- (a) WP9 depends on output from all thematic and methodological work packages.
- (b) WP9 depends on close collaboration with WP8 in particular to optimize REFORM's stakeholder engagement activities
- (c) WP9 depends on WP10 and WP11 to support in project coordination and delivery

**WP9 Description of Work**

The work package comprises the following activities:

**A9.1 Online Platforms [PLEON, EABIS, IESE] (M03-M60)**

- Design and implementation of the official REFORM website:
  - interactive features that facilitate (virtual) stakeholder dialogues and knowledge exchange;
  - dedicated section for policy makers
  - maintenance and content updates
- “Webinar”-style virtual debates
- Deployment of Social Networking Media (e.g., Facebook, Twitter, MySpace) to increase public awareness and mobilize interested stakeholders
- Development of a “Socially Responsible Investment” online indicator that allows consumers and organisations to understand the value financial markets give to corporate sustainability

**A9.2 Conferences & Workshops [EABIS, PLEON, BOCCONI, CEPS] (M6-M60)**

Multiple conferences and events are planned to disseminate results and insights from the individual REFORM work packages, including:

- *Ad hoc* presentation of REFORM project at major non-academic conferences
- Promotional materials for event distribution
- Annual EU Policy Roundtables (5) to discuss progress and issues with interested EU policy makers and administrators (Commission, Parliament, high-level groups of Member States, etc)
- Research Stakeholder Workshops (4) at the EABIS Colloquium in 2011, 2012, 2014 and 2015 (M10, 22, 46, 58)
- Interim Conference at the EABIS Colloquium in 2013
- Regional Communications Workshops (4) to leverage wider dissemination of project results and implications at the Member State level
- Organise Final Conference to discuss findings and policy implications with policy-makers, companies, academia and other financial system stakeholders

**A9.3 Briefings & Recommendations [EABIS, PLEON, CEPS] (M29-30, M59-60)**

- Produce and publish Interim and Final Policy Briefings for key EU / Member State policy bodies, regulators and NGOs
- Produce and publish Interim and Final Executive Briefings for decision-makers, managers, analysts and investors in the financial sector and real economy, as well as interested stakeholder groups

**A9.4 Reports & Publications [PLEON, EABIS, VLERICK, UOXFQM] (M01-M60)**

- Upon project launch, an executive summary (“flyer”) for international stakeholder communities
- Two mainstream books on dimensions of “Sustainable Finance” for policy-makers / regulators and managers / executives / investors
- Design and publish Paper / Report on the “Learning History” of REFORM: reflections on dissemination and stakeholder engagement plus lessons for large-scale collaborative research

**A9.5 Stakeholder & Media Communications [PLEON, EABIS] (M01-M60)**

- Project-specific media kit profiling objectives, key research questions/results, partner profiles and institutional contacts
- Quarterly newsletter
- Compilation of a new database of EU and international media contacts, including a list to wire services

such as Business Wire, PR NewsWire and Associated Press (M03)

- Ongoing media engagement through tools such as press releases, media alerts, print editorials or editorial board briefings.
- Establishment of a Communications Board featuring media / communications directors from major EU-based associations active in dimensions of the financial system
- Design of a post-project dissemination plan – to be refined in consultation with REFORM partners and other stakeholder organisations (Board and others).

#### **A9.6 Learning History [VLERICK, UOXFMQ, EABIS] (M01-M60)**

- Mapping and recording of stakeholder dialogue, engagement and all event content over course of REFORM history
- Analysis of data, transcripts, feedback to refine concept paper on social learning, embedded knowledge and action research as a key driver of systems change.

#### **WP9 Deliverables**

**D9.1** Project launch flyers for different stakeholder communities (M01)

**D9.2** Project media kits, dissemination plans and tools (database) (M01, M34)

**D9.3** REFORM website design, including activation of moderated stakeholder blog (M02-M60)

**D9.4** Promotional and presentation material for use at conferences (M03-M06)

**D9.6** “Webinar”-style presentation and discussion of latest findings (M06, M09, M12, ..., M57, M60)

**D9.7** Quarterly newsletter (M06, M09, M12, ..., M57, M60)

**D9.8** Regional Communications Workshops (M09, M12, M15, M18)

**D9.9** Annual EU and Member State Policy Roundtables (M09, M21, M33, M45, M57)

**D9.10** Interim and Final Policy & Executive Briefings (M29-M30, M59-60)

**D9.11** Learning History Report (M60)

**D9.12** Post-project dissemination plan (M60)

**M9.1** Launch of REFORM website (M02)

**M9.2** Identification and recruitment of Communications Board (M03)

**M9.3** Communications Council meetings (M06, M09, M24, M32, M40, M48)

**M9.5** Research Stakeholder Workshops at EABIS Annual Colloquium (M10, M22, M46, M58)

**M9.6** Launch of Socially Responsible Investment online tool (M24)

**M9.7** Interim Conference at EABIS Colloquium (M34)

**M9.8** Final Conference (M60)

**M9.9** Media launch of mainstream books (2) on Sustainable Finance (M60)

1.3.3 Table D: Work Package 10 (Scientific Management)

<b>Work package number</b>	<b>10</b>	<b>Start date or starting event M1</b>						Month Mnn 48.0	
<b>Work package title</b>									
<b>Activity Type</b>	RTD								
<b>Participant number</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>		
<b>Participant short name</b>	<b>BOCCONI</b>	EABIS	CEPS	VLERICK	UOXFMQ	INSEAD	LSE		
<b>Person-months per participant:</b>	<b>20.0</b>	10.0	4.0	5.0	2.0				
<b>Participant number</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
<b>Participant short name</b>	IESE	ESADE	UNOTT	CBS	NBU	SGH	OFU	PLE ON	
<b>Person-months per participant:</b>	3.0		2.0					2.0	

**WP10 Overview, Objectives and Dependencies**

The overarching purpose of WP10 is to deliver to the EC and stakeholders research outputs of the highest possible quality, relevance and usefulness. With the dependencies on WP1-8 for Scientific Management self-evident, the objectives of this Work Package are the following:

- To ensure coherence and monitor progress across thematic and methodological WPs
- To convene and coordinate all meetings of the Scientific Board (SB)
- To convene and coordinate all meetings of the Strategic Advisory Board (AB)
- To support the design of research work plans, guidelines and protocols for the project Milestones
- To synthesize the scientific contributions and inputs for annual reporting to the Commission and the Strategic Advisory Board
- To synthesize the scientific contributions and inputs for Policy and Executive Briefings
- To ensure the quality and mainstream positioning of scientific and stakeholder publications

**WP10 Description of Work**

REFORM proposes a first level of research coordination in the form of a Scientific Management Committee (SMC). The purpose of such an intermediate group is to guarantee a regular monitoring mechanism that tracks progress against the objectives of the proposal – in particular knowledge transfer and interconnectivity between all Work Packages. The SMC will be led by Bocconi University and completed by a representative of each thematic WPs (VLERICK, BOCCONI, UNOTT, CEPS), and of the methodological WPs



(BOCCONI, IESE, UOXFMQ) and the Project Coordinator (EABIS). *NOTE – All work and attribution of person months dealing with the lead of single work packages is covered within WPs 1-8.*

The activities of this Work Package include:

#### **A10.1 Coordination of the Scientific Work Plan [BOCCONI, CEPS, VLERICK, EABIS] (M01-M60)**

The overall REFORM work plan will be based on the outline of the project in this proposal. It will develop a more detailed and integrated framework of meetings, reports and publications within the formulated WP tasks, deliverables and milestones. The Committee will review and update the work plan on a monthly basis to enable early detection of deviations, barriers to progress and cross-synthesis between WPs, in order to facilitate prompt resolution and/or definition of issues that require input from the SB.

#### **A10.2 Coordination of the Scientific Board [BOCCONI, EABIS] (M01-60)**

The Scientific Board (SB) of REFORM primarily involves all Work Package leaders, including the Project and Dissemination Coordinators. The Board will convene four times per year (with a minimum of one meeting being held via teleconference or an online conference platform). One of these four meetings will take place systematically at the EABIS Annual Colloquium, to which all Consortium partners will be invited as a means to nurture shared ownership, open and transparent dialogue on progress against objectives, and clarity on roles for the coming twelve months.

Bocconi University will assume the responsibility for convening and organising three quarterly meetings of the SB – if applicable with another host institution from the Consortium. EABIS will convene the fourth as an integral part of its Colloquium preparations. These roles involve the following tasks:

- Communication to Board and Consortium members
- Drafting and consolidation of agenda proposals
- Preparation and circulation of supporting documents
- Preparation and circulation of meeting minutes and agreed actions
- Any related financial management (budgets, reimbursement.etc).

#### **A10.3 Coordination of Scientific Reporting [BOCCONI, CEPS, VLERICK, UNOTT, IESE, UOXFMQ] (M03-M60)**

All RTD WP Leaders will ensure timely production of research guidelines and protocols to all the consortium partners, the aggregation and review of inputs from individual WP leaders to support EABIS' submission of annual management and progress reports to the European Commission. A more concise replica of this activity will take place to contribute to annual reports to the AB. The partners will also deliver an integrated summary of progress, results and new insights across WPs to support the Interim and Final Policy and Executive Briefings.

#### **A10.4 Coordination of the Strategic Advisory Board [EABIS] (M09-M57)**

Building on its high level multi-stakeholder network and Brussels location, EABIS will manage the preparations for the annual meetings of the AB, including the organisation of rooms, catering, transport, accommodation and reimbursement of costs. Involved tasks are identical to those outlined in A10.2.

#### **A10.5 Coordination of Mainstream Publications [BOCCONI, EABIS] (M48-M60)**

Bocconi and EABIS will coordinate approaches to top scientific journals and negotiations with international publishers to facilitate the publication of the results of the program in the form of research papers, policy briefs, practitioners articles and a "Sustainable Finance" book. In doing so, they will leverage existing strategic relationships (with Wiley & Sons, Emerald Insight, Palgrave MacMillan, Sage, Oxford and Cambridge University Presses, and others) as well as involvement in editorial boards of recognised mainstream journals.

**WP10 Deliverables and Milestones**

**D10.1** Preparation and maintenance of REFORM work plan (M01-M60)

**D10.2** Provision of scientific report for Interim Policy Briefings and Executive Briefings (M29)

**D10.3** Provision of scientific report for final Policy Briefings and Executive Briefings (M59)

**D10.4** Three working papers submitted to leading academic journals in core social science disciplines on results of the study (M60)

**D10.5** Mainstream book on “Sustainable Finance” (M60)

**M10.1** Annual Strategic Advisory Board meetings (M09, M21, M33, M45, M57)

**M10.2** Release of research work plan and data collection protocol (M12)

**M10.3** Release of data analysis and reporting work plan (M36)

**M10.4** Submission of book manuscript (M60)

## 1.3.3 Table D: Work Package 11 (Management)

<b>Work package number</b>	11	<b>Start date or starting event M1</b>						Month Mnn 67.0			
<b>Work package title</b>	Management										
<b>Activity Type</b>	OTHER										
<b>Participant number</b>	1	2	3	4	5	6	7	8	9		
<b>Participant short name</b>	BOCCONI	EABIS	CEPS	VLERICK	UOXFMQ	INSEAD	LSE	IESE	ESADE		
<b>Person-months per participant:</b>	5.0	60.0		1.0							
<b>Participant number</b>	10	11	12	13	14	15	16	17	18	19	20
<b>Participant short name</b>	UNOTT	CBS	NBU	SGH	OFU	PLEON	IMD	WU	UL	UKB	OECD
<b>Person-months per participant:</b>								1.0			

**WP11 Overview and Objectives***Brief Overview:*

This Work Packages will ensure the efficient, accountable and transparent management of all aspects of the REFORM Project, in order to guarantee the highest quality of deliverables as well as reporting to the Commission and other key stakeholders.

*List of objectives:*

- Deliver the highest quality of financial, legal and technical coordination
- Maintain open and regular communication with Commission Services and REFORM partners
- Ensure alignment of Work Package progress against project objectives and reporting time lines
- Manage internal knowledge sharing and project archiving
- Implement transparent, inclusive governance, conflict resolution and risk mitigation frameworks

*Dependencies with other work packages:*

- WP11 depends on all other WPs for timely inputs to annual reporting to European Commission and Strategic Advisory board (scientific content, communications milestones, management, finances, etc)
- WP11 depends on all other WPs to identify and communicate any management or governance issues that might cause changes to the proposed delivery of the REFORM project
- All other WPs depend on WP11 to provide clear, efficient management of all logistical and practical aspects of REFORM

**WP11 Description of work**

The work package comprises the following activities:

**A11.1 Administrative Co-ordination [EABIS] (M01-M60)**

- Transparent, efficient handling of contractual documents and proper communication with the EC (consortium agreement, EC contract).
- Monitoring to ensure that REFORM Consortium members abide by the EC contract parameters (punctuality of deliverables, etc.).
- General logistics: documentation & archiving, distribution of reports, etc., logistics for travelling and project management meetings.

**A11.2 Financial Management [EABIS] (M01-M60)**

- Establishment and maintenance of financial records.
- Coordination and scrutiny of annual cost claims submitted by all project partners.
- Annual financial reports and internal brief semi-annual reports.
- Follow-up of EC payments, distribution of partner shares and monitoring of payments.
- Coordination of partner auditing process

**A11.3 Technical Co-ordination [EABIS] (M01-M60)**

- Monitoring of process and time lines to ensure that technical objectives are addressed.

**A11.4 Intellectual Property [EABIS] (M01-M60)**

- Identification and examination of IPR issues, seeking professional legal advice where appropriate
- Establishment of a Consortium Agreement that specifies the obligations on the consortium to protect the intellectual property that it generates and that identifies the intellectual property that can and will be formally reassigned to named partners.

**A11.5 Decision-Making and Risk Management [EABIS] (M01-M60)**

- Design and implementation of internal governance protocol and process (general communication, decision-making frameworks, conflict resolution, partner code of conduct, etc).
- Implementation of systematic review process to generate progress reports to partners and the EC

**A11.6 Internal Co-ordination [EABIS, PLEON] (M01-M60)**

- Creation of restricted-access project intranet (or similar content management system) for consortium partners to facilitate knowledge-sharing, progress assessment, communication and document archiving.

**A11.7 Performance Measures [EABIS, BOCCONI, CEPS, PLEON] (M01-M60)**

- Monitoring of progress within individual WPs and deliverables / milestones / impact measure.
- Reassessment of tasks and their adequacy to achieve goals of WPs and adaptation of work plan.

**A11.8 Quality Management [EABIS] (M01-M60)****A11.9 Organisation of Project Management Meetings [EABIS, BOCCONI, CEPS, PLEON] (M01-M60)**

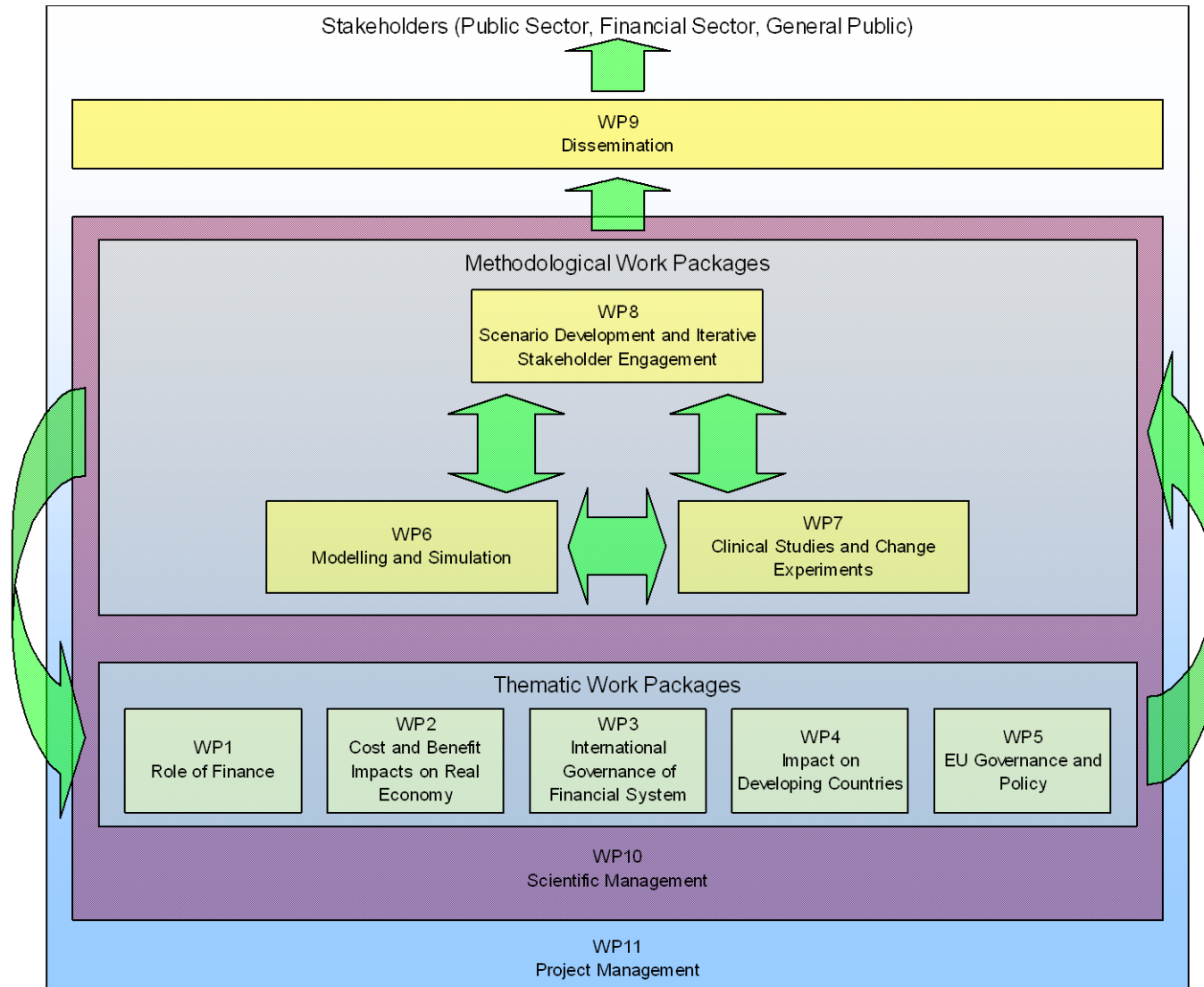
- Coordination of monthly Project Management Team meetings, supported by weekly interim communications, to review operational issues in WP and administrative implementation.

**WP11 Deliverables and Milestones****D11.1** Consortium Agreement (M00)**D11.2** Monthly PMT meetings and progress reports to consortium partners (M01-M60)**D11.3** REFORM Governance and Process Handbook (M01)**D11.4** Annual progress reports submitted to the Strategic Advisory Board (M09, M21, M33, M45, M57)**D11.5** Annual management reports submitted to the EC, revised at Reviews (M12, M24, M36, M48, M60)**D11.6** Interim project report (M34)**D11.7** Final project report (M60)

1.3.3 Table E: Summary of Staff Effort

Partic. no.	Partic. short name	WP 1	WP 2	WP 3	WP 4	WP 5	WP 6	WP 7	WP 8	WP 9	WP 10	WP 11	Total person months
1	BOCCONI	2.0	6.0	18.0	2.0	2.0	71.0	38.0	0.0	0.0	20.0	5.0	164.0
2	EABIS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	26.0	10.0	60.0	98.0
3	CEPS	9.5	27.0	9.5	5.0	27.0	0.0	0.0	5.0	0.0	4.0	0.0	87.0
4	VLERICK	27.0	0.0	0.0	0.0	0.0	5.0	0.0	22.0	5.0	5.0	1.0	65.0
5	UOXFMQ	2.0	2.0	2.0	2.0	2.0	7.0	3.0	34.4	0.0	2.0	0.0	56.4
6	INSEAD	3.0	3.0	3.0	6.0	0.0	4.0	13.5	6.5	0.0	0.0	0.0	39.0
7	LSE	0.0	0.0	1.0	0.0	1.0	0.0	15.0	0.0	0.0	0.0	0.0	17.0
8	IESE	0.0	5.0	5.0	0.0	5.0	0.0	47.5	4.0	2.0	3.0	0.0	71.5
9	ESADE	0.0	4.0	0.0	4.0	0.0	0.0	10.0	5.0	0.0	0.0	0.0	23.0
10	UNOTT	0.0	0.0	0.0	18.0	0.0	0.0	5.0	3.0	0.0	2.0	0.0	28.0
11	CBS	2.0	0.0	2.0	0.0	0.0	0.0	8.0	2.0	0.0	0.0	0.0	14.0
12	NBU	2.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0
13	SGH	0.0	0.0	0.0	6.0	6.0	32.0	0.0	0.0	0.0	0.0	0.0	44.0
14	OFU	0.0	23.0	0.0	23.0	0.0	31.0	0.0	21.0	0.0	0.0	0.0	98.0
15	PLEON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	31.0	2.0	0.0	35.5
16	IMD	5.0	0.0	0.0	0.0	0.0	0.0	12.0	0.0	0.0	0.0	0.0	17.0
17	WU	0.0	0.0	0.0	0.0	3.0	0.0	8.0	2.0	0.0	0.0	1.0	14.0
18	UL	0.0	0.0	0.0	6.0	9.0	0.0	15.0	0.0	0.0	0.0	0.0	30.0
19	UKB	0.0	12.0	0.0	12.0	0.0	0.0	48.0	10.0	0.0	0.0	0.0	82.0
20	OEDC	0.0	0.0	1.0	2.0	4.0	1.0	0.0	1.0	0.0	0.0	0.0	9.0
Total		52.5	85.0	44.5	86.0	59.0	151.0	223.0	120.4	64.0	48.0	67.0	1,000.4

1.3.4 Pert Diagram



**Figure 4.** High-level representation of work package dependencies and work flow. For a more detailed analysis of dependencies for each work package, please refer to the Objectives subsection of each Section 1.3.3 Table D.



### 1.3.5 Risks and Risk Mitigation

The REFORM Consortium acknowledges the possibility of, and is prepared for risks that arise in the implementation of complex research projects, whether related to the scientific and/or technical parameters and objectives of the work to be done. As far as is possible, the operational risk dimension of REFORM is addressed through the Project Management Structure, which reflects an overall strategy towards quality control, clear and efficient management of financial and administrative tasks, and mitigation of risk through robust governance, decision-making and communications frameworks.

More specifically, REFORM incorporates:

- A clear assignment of management / coordination and scientific responsibilities (see Sections 1.3.3 and 2), allowing institutional focus on primary areas of activity
- A Project Management Team with considerable experience of working on EU projects and in partnership with each other, supported by the geographic proximity of most of its members
- A group of experienced, highly competent staff delivering day-to-day administration
- An intensive programme of progress review and internal communications, supported by teleconferences and physical meetings
- A Consortium of 20 institutions who have long-standing professional relationships in collaborative research (through EABIS, CEPS or other platforms)
- A scientific team whose members are highly respected within their given fields, experienced in the theoretical and methodological approaches embedded in the proposal, and familiar with the demands and parameters of policy research.
- An outstanding level of professional expertise to address the challenges of translating research outputs to underpin pan-European dissemination and stakeholder engagement

It is important, nonetheless, to set out a clear overview of specific risks identified across the individual Work Packages, including management and coordination. NOTE – given the near-identical method and approach being applied across the thematic WPs (1-5), associated risks are considered as applicable to all, and will be mapped accordingly. All risks listed in the table below, accompanied by an evaluation of their perceived severity and a corresponding risk mitigation plan:

<b>WP</b>	<b>Description of risk</b>	<b>Risk level</b>	<b>Risk mitigation plan</b>
1-5	Interdependency of WPs in Year 1 to inform conceptual inputs to WP6	Low	- Senior faculty oversight of archival research being conducted in each WP - High level of access to relevant data - Active Scientific Board monitoring
1-5	Reliance on analysis and insights from WP6-8 to produce final outputs	Moderate	- XXX - YYY - ZZZ
6	Reliance on WP1-5 to produce robust data and conceptual inputs for simulation model	Low	- See first entry above for WP1-5
6	Lack of clarity and/or coherence between linkages identified between different levels of modelling	Moderate	- XXX - YYY - ZZZ
6	Forecasting capabilities of final simulation model, due to unique nature of proposed method	Moderate	- XXX - YYY - ZZZ



7	Recruitment and retention of financial actors for the duration of the project – concerns being resource constraints and inability to participate, and uncertainty over medium-term market and external conditions (possibility of failure / M&A / nationalisation).	Significant	<ul style="list-style-type: none"> <li>- Each partner to establish a comprehensive list of regional alternatives with similar characteristics</li> <li>- Diversification in eligible sub-categories of financial actors (beyond banks)</li> <li>- Engagement of Advisory Board to secure high-level executive commitment</li> <li>- Potential to leverage existing corporate networks of REFORM partners</li> <li>- Build strong working relations with national / European financial associations to support extra outreach</li> </ul>
7	Visibility of impacts of later change experiments in the study time-frame. Impacts of some of the interventions on the policy variables might take more than the post-intervention period to materialize.	Low	<ul style="list-style-type: none"> <li>- Maintain archival data collection process even after the end of the study with partners' contributions or external funding</li> <li>- Utilize a mix of short- and long-term indicators, with a good correlation among each other. Results based on the analysis of variation in ST indicator is a solid lead indicator for LT results.</li> </ul>
7	Quality control and standardization: ensuring homogeneity in data collection and analysis during clinical case studies	Moderate	<ul style="list-style-type: none"> <li>- Specific provisions to be defined by the Scientific Board in Year 1, leading to development of data collection and data analysis guidelines / manuals</li> <li>- Core methodology is familiar to all partners involved</li> <li>- Close monitoring of data collection outcomes based on analysis of interview transcripts and intermediate case reports based on archival data.</li> </ul>
8	Quality of output from Public Opinion Polls and Iterative Focus Groups contributing to WP6 and WP7	Low	<ul style="list-style-type: none"> <li>- Depth of experience and well-tested methodology employed by WPL and partners</li> <li>- Poll structure kept as stable as possible over time, and constructed to cover regional and professional / financial actor diversity</li> </ul>
9	Overall Dissemination Management risk	Low	<ul style="list-style-type: none"> <li>- Level of professional expertise and resources available for Coordinator to mobilize</li> <li>- A Ketchum Pleon coordinator will spend time every week in the EABIS Brussels office to support overall management delivery</li> <li>- Significant presence in Consortium of multi-stakeholder network organisations and existing links to finance, business, policy, science and civil society</li> </ul>

9	Lack of depth in insights generated through consultations on tailoring messages and formats by region / audience	Moderate	<ul style="list-style-type: none"> <li>- Special attention given to preparation of Communication Board meetings – context setting, clear parameters, advance reading, preliminary questions</li> <li>- Careful screening of participants to invite based on regional connectivity, scale and diversity of communications activities, familiarity with financial system issues</li> </ul>
10	Overall Scientific Management risk	Low	<ul style="list-style-type: none"> <li>- Establishment of Research Management Committee to monitor integration between thematic and methodological Work Packages</li> <li>- Frequent reviews and progress updates within Research Board</li> <li>- Partner involvement of research groups reduces reliance on key individuals</li> <li>- Coordinator has successfully managed FP6 project RESPONSE, with EABIS support, as well as other large EU-funded grant initiatives</li> <li>- Other WPLs have established track records of policy-focused, innovative, collaborative research</li> </ul>
11	Overall Project Management risk	Low	<ul style="list-style-type: none"> <li>- EABIS has established track record of excellence in financial and technical management of collaborative, consortium research</li> <li>- EABIS, CEPS and Ketchum Pleon are permanently or frequently represented in Brussels</li> <li>- Bocconi is a founding partner of EABIS and has long-standing governance and research partnership with the central office</li> <li>- Most Consortium partners are members of the EABIS network, with vested interest in avoiding reputational damage in case of delivery problems (!)</li> <li>- All partners have extensive experience in large, EU-funded, projects</li> </ul>

## 2 Implementation

### 2.1 Management Structure and Procedures

The central objectives of REFORM's management are: sound and transparent financial management; open and frequent dialogue with the Commission Services and appropriate officers; continual monitoring of scientific quality and progress; coordination of the different project activities, integration of the knowledge and insights generated across the Consortium, and implementation of quality control mechanisms by issuing appropriate project standards. REFORM project management will cover financial, administrative, scientific, and knowledge and innovation aspects, and intercultural for management.

The REFORM Management Structure reflects the scale and scope of the Commission's Call and the proposed work to be done. The Consortium recognizes the high volume of administrative work associated with the implementation of Large-Scale Integrated Projects. With due consideration for this, EABIS will provide a fully equipped Project Management Office, including the necessary up-to-date communication and information infrastructures. Fully qualified internal staff will support the delivery of all financial, legal and technical requirements, while a full-time project manager will coordinate week-to-week administration. In parallel Bocconi will allocate 30 personnel months to ensure highest quality scientific management.

REFORM will be anchored by a **Project Management Team (PMT)** of four institutional partners: EABIS, Bocconi University, CEPS and Ketchum Pleon BV. The REFORM PMT will convene on a monthly basis to review upcoming project actions, milestones, deliverables and management-related issues. EABIS will serve as the PMT lead and as sole interlocutor with the Commission on all contractual and reporting matters.

This structure has been chosen for four main reasons:

1. To diversify the ownership of key responsibilities based on professional expertise;
2. To mitigate against reliance on key individuals by having institutional representation;
3. To leverage the 4 partners' complementary strengths, familiarity with each other's work and capabilities, and experience in across all areas of coordination;
4. To build on geographic proximity (EABIS, CEPS, Pleon coordinators are in Brussels), which in turn will facilitate efficient management and coordination.

In parallel, and to reflect the importance of quality scientific oversight, Bocconi will coordinate a dedicated **Research Management Team (RMT)** with representatives of the Thematic Work Packages (WP1-5) and Methodological Work Packages (WP6-8). The RMT will take primary responsibility for monitoring and reviewing scientific work in progress, in particular the transfer and integration of activities and outputs between the two areas. It will convene monthly and report directly into the Research Board every quarter.

The main areas of leadership will be divided along the following lines:

- **Management Coordination (MC).** EABIS will provide REFORM with all of the management and coordination services (legal, technical, financial, governance, online content, knowledge archiving, etc) necessary to ensure project implementation, timely submission of formal reports and deliverables.
- **Scientific Coordination (SC).** This area will be led by Bocconi University through the Research Management Committee (RMC) and larger Research Board (RB). With 7 research centres involved in

REFORM, Bocconi will monitor and coordinate the research delivery, interdisciplinary rigour and content alignment across all Work Packages.

- **Policy Coordination (PC).** As one of the world's most respected think tanks in this area, CEPS will lead the process of drawing together policy insights from the individual WPs of REFORM and shaping key messages for policy bodies at EU, national and regional levels.
- **Dissemination Coordination (DC).** Ketchum Pleon will lead the dissemination activities of REFORM, leveraging its expertise in the delivery of large-scale, multi-dimensional communication strategies and pan-European network of media & stakeholder contacts.

The REFORM project management framework will be supported by three other important pillars that reflect core coordination activities (see Section 2.1.3 for more details):

The **Research Board (RB)** is comprised of all Work Package Leaders and will be chaired by Bocconi University on a quarterly basis. It is the chief decision-making body of REFORM on all matters relating to content, governance, budgetary matters and deliverables.

The **Strategic Advisory Board (AB)** is composed of a number of highly qualified individuals who each year will provide a range of expert perspectives on REFORM's work and implications for the global financial system, global governance and challenges for the EU (political, regulatory, corporate, academic and civil society).

The **Communications Board (CB)** involves a number of communications and media directors from stakeholder organisations to support the tailoring of REFORM outputs to regional contexts (messages, channels, formats, intermediaries).

### 2.1.1 Responsibilities and Tasks in Project Management

Roles and tasks have been specifically delineated and attributed among the four institutions which make up the PMT. Dissemination activities are described in greater detail in Section 3.2. The following overview provides more clarity on these management responsibilities:

#### **The role of EABIS focuses on Project Coordination and includes:**

- Overall co-ordination of the project
- Drawing up and maintenance of the Consortium Agreement
- Continuous contact with the European Commission
- Management of annual and final reporting and audit activities
- Financial and legal consortium management and budget control
- Management of conflict resolution
- Maintenance and content management of the project intranet
- Convening and preparation of annual Strategic Advisory Board meetings (under WP10)

#### **The role of Bocconi University focuses on Scientific Coordination and includes:**

- Coordination of the Research Management Team (RMT) to ensure integration and synthesis of relevant data and deliverables (across Work Packages 1-8) in line with project objectives
- Convening and preparation of Research Board (RB) meetings
- Synthesis of research inputs across WPs for annual reporting to the Commission and AB
- Synthesis of research inputs for Interim & Final Policy / Executive Briefings
- Editorial coordination for academic and mainstream publications

**The role of CEPS focuses on Policy Coordination and includes:**

- Convening and preparation of annual Policy Roundtable meetings
- Collation and synthesis of policy insights across WPs for annual reports to the Commission
- Synthesis of policy-specific input for annual report to the Strategic Advisory Board
- Lead editor of Interim and Final Policy Briefings

**The role of Ketchum Pleon BV focuses on Dissemination Coordination and includes:**

- Design and production of REFORM promotional materials (logo, banners, flyers, etc.)
- Design and maintenance of REFORM project website
- Delivery of all media-related materials and outreach activities (PR, kits, editorials, etc.)
- Promotional activities linked to publications
- Implementation and management of overall Dissemination Strategy
- Convening and preparation of the Communications Board meetings
- Design and delivery of Regional Communications Workshops
- Preparation and organization of Final Conference

## 2.1.2 Individuals Involved in the Project Management Team

EABIS' MC activities will be guided by **Prof. Dr. Gilbert Lenssen**, and **Simon Pickard**, Director General, who between them have led the network's coordination activities in FP6 (CSR Platform) and FP7 (IMPACT) complex research projects. They also deliver EABIS' engagement with high level EU and international initiatives (e.g. EU CSR Multi-stakeholder Forum, UN Global Compact).

The academic lead of the SC framework is **Prof. Maurizio Zollo**, Bocconi Dean's Chaired Professor in Strategy and Corporate Responsibility and Director of the CROMA Research Centre. During his previous appointment at INSEAD, he led the acclaimed FP6 RESPONSE project ("Understanding Societal Expectations on Corporate Responsibility"). See Section 1.3.3 for other colleagues' profiles.

The policy dimension of REFORM will be coordinated by CEPS under the leadership of **Dr. Daniel Gros**, Director, **Prof. Dr. Paul De Grauwe**, Senior Associate Fellow, **Dr. Rym Ayadi**, Senior Research Fellow, and **Dr. Cinzia Alcidi**, Research Fellow. They bring invaluable depth of financial and economic policy insight, both in the European context and at the global level.

Ketchum Pleon BV's role as DC will be managed by **Tim de Boer**, CEO Netherlands, **Dr. Joachim Klewes**, Senior Partner and Associate Professor at the Freie Universität Berlin, and **Sheila van Putten**, Senior Consultant. The Pleon team manages major assignments in the fields of corporate change and crisis strategy, action research, as well as stakeholder engagement strategy.

## 2.1.3 Responsibilities and Tasks of Boards

The **Research Board** (RB) consists of all Work Package Leaders, and is primarily responsible for ensuring the delivery of scientific work in the REFORM proposal. It will formally meet four times per year (physically or virtually). Each year one of these meetings will take place at the EABIS Colloquium, with all REFORM Consortium partners invited to attend. The Board will serve as the forum for making decisions that concern significant changes in the project plan, technical objectives and project management. Governance parameters will be fully defined ahead of REFORM's launch.

The **Strategic Advisory Board** (AB) will be responsible for providing the REFORM Consortium with unbiased, multi-stakeholder guidance on high-level issues facing the project and best courses of action, general feedback on

progress as well as diverse perspectives on the implications of results at the global and EU levels. The AB will be consulted at least once a year and in any situation where its advice might be necessary. At the time of submission, named individuals who have provided written confirmation, or have been formally invited, to join the AB include:

- **Antonio Borges** – Chairman of the Hedge Fund Standards Board, founding member of the European Corporate Governance Forum, former Vice Chairman of Goldman Sachs International, former Dean of INSEAD, former Vice Governor of Banco de Portugal
- **Viscount Etienne Davignon** – Vice Chair of GDF Suez, Chair of EABIS, former Vice President of the European Commission, former CEO of Société Générale de Belgique
- **Marc Epstein** is Distinguished Research Professor of Management at Jones Graduate School of Management at Rice University in Houston, acclaimed authority and leading thinker on the measurement / management of the social and environmental impacts of business activity.
- **Robert Johnson** – Director of the Economic Policy Initiative at the Roosevelt Institute, Member of the U. N. Commission of Experts on Finance and International Monetary Reform, former Managing Director at Soros Fund Management and Bankers Trust Company, former Chief Economist of the U.S. Senate Banking Committee.
- **Alice Rivlin** - A former U.S. Cabinet official, first director of the Congressional Budget Office and currently on the board of directors of the New York Stock Exchange. In 1983, she won a MacArthur Foundation "genius" award. She served as the vice-chair of the Federal Reserve from 1996 to 1999 and is currently co-chair of the Debt Reduction Task Force, sponsored by the Bipartisan Policy Center in Washington,
- **Roman Slowinski** – Professor of Intelligent Decision Support Systems at Poznan University of Technology, EURO Gold Medal laureate (1991), recipient of the Foundation for Polish Science 2005 Annual Prize, Editor of the European Journal of Operational Research.
- **Joseph Stiglitz** – Professor of Economics at Columbia University, Chair of the Brooks World Poverty Institute, recipient of the Nobel Prize in Economic Sciences (2001) and the John Bates Clark Medal (1979), former Senior VP and Chief Economist of the World Bank.
- **Guido Tabellini** - Professor of Economics at Bocconi University since 1994, where he has been Rector since November of 2008. Before returning to Europe, he taught at Stanford and UCLA. He is a foreign honorary member of the American Academy of Arts and Sciences, a fellow of the Econometric Society, a fellow of the Canadian Institute for Advanced Research, he received the Yrjo Jahnsson award by the European Economic Association, and he has been President of the European Economic Association.
- **Xavier Vives** – Member of the European Commission’s Economic Advisory Group on Competition Policy, leading international scholar in banking and financial economics, Co-Editor of the Journal of Economics and Management Strategy
- **Ngaire Woods** – Professor of International Political Economy at University of Oxford, Chair of High Level Group of Developing Country Finance Officials in the Global Financial Governance Initiative, former External Evaluator of the IMF, former WEF Davos Faculty
- **Luigi Zingales** studies the theory of the firm, the relation between organization and financing, and the going-public decision. In addition to holding his position at Chicago Booth, Zingales is currently a faculty research fellow for the National Bureau of Economic Research, a research fellow for the Center for Economic Policy Research, and a fellow of the European Governance Institute. He is also the director of the American Finance Associations and an editorialist for *Il Sole 24 Ore*, the Italian correspondent of the *Financial Times*. Zingales also serves on the Committee on Capital Markets Regulation, which has been examining the legislative, regulatory, and legal issues affecting how public companies function.

The **Communications Board (CB)** will provide practical support to the dissemination activities led by Ketchum Pleon BV. Its members will primarily be media and communications directors from international organisations with a strategic interest in the role of the financial system. Invited participants would be necessarily diverse (e.g. European Federation of Financial Analysts, European Consumers Organisation, Greenpeace) The main role of the CB will be to advise on appropriate message tailoring and formats for different regional audiences in the EU, to support outreach through their own networks, and to identify additional intermediary bodies.

## 2.1.4 Responsibilities and Involvement of Work Package Leaders

Each Work Package Leader (WPL) will oversee the status of deliverables, milestones and financial aspects of their respective work packages and report key achievements and/or emerging issues to the RMT on a monthly basis. WPLs are also responsible for providing draft inputs on achievements and emerging findings to support annual reporting to the European Commission. WPLs will convene on a quarterly basis as members of the Research Board (RB), contributing updates on knowledge integration and identifying potential / real barriers to progress.

## 2.1.5 Responsibilities and Involvement of Consortium Members

The organisation of the scientific work is that of a shared responsibility among all partners, but with a clear assignment of lead responsibilities and tasks that are described in detail in the work plan for each WP. Each Consortium member will be responsible for their tasks in the work plan and to perform their tasks according to the overall research design and the methodology specified for the WP. They are responsible to provide all necessary information about their work, institution and budget in due time to meet the reporting requirements by the Commission. Also they are expected to present their results in project meetings and contribute to the deliverables foreseen for dissemination. Independent from their own presentations they are invited to all project meetings.

In case of a conflict or perceived risk each partner is invited to address this to the Project Coordinator who will seek a consensus involving the affected parties, i.e. the respective Work Package Leader. If this fails the matter will be dealt with by the Research Board.

Transparent and continuous communication will ensure that Consortium partners will be kept fully informed about any development during the project. Electronic communication tools, including video conferencing and email, will provide the primary means for immediate communication and contact. The restricted area of the project website will host a private forum for exchange of information regarding the project, as well as a structured document repository. The public area of the project website will include information about the different partner institutions, project details, related publications, conferences and recent highlights.

## 2.1.6 Decision-Making Procedures

Financial, strategic, and risk management decisions will be handled by the PMT in consultation with the RB and Consortium partners. The Consortium Agreement will describe the provisions and related decision making procedures for the following:

- Technical provisions (resources made available, modification procedures, etc)
- Rules for dissemination and use (confidentiality, ownership of results, legal protection of results, pre-existing knowledge of partners, etc.)
- Organisational provisions (Board meetings, cooperation supervision, etc.)
- Financial provisions (financing plan, modification procedures, mutual payments, etc.)
- Legal provisions

Each partner is responsible to report immediately to its respective WPL and the Project Coordinator any risk situations that may conflict with the project objectives or their successful completion. Any issue will be managed in accordance with the guidelines of the EC contract.

## 2.1.7 Conflict Resolution

The complexity of the project is not perceived to pose a major threat, in part because of the strong bonds that already exist within the consortium due to past collaboration between many of the partners and institutional

membership of EABIS. Nonetheless, there is a need for a mechanism for conflict resolution. The Consortium will strive to reach consensus for any decisions relating to the execution of the EC contract. Consensus shall normally be reached during Research Board meetings. If a matter requires urgent attention, EABIS will convene conference calls or bilateral meetings. In case of any dispute within the Consortium, the Project Coordinator will seek to settle the dispute in the light of the fulfilment of any obligations according to the EC contract, the rights and duties according to this agreement, the overall aims of the project and in pursuit of a solution acceptable for all members of the Consortium. The details on procedure and rules for conflict resolution will be made a part of the Consortium Agreement. Final decisions rest with the Research Board.



## 2.2 Individual Participants

**1 Università Commerciale Luigi Bocconi (BOCCONI).** Bocconi University is the leading Italian university in the fields of management and economics. Founded in 1902, it has grown to become the largest center of management education in Europe, with over 30,000 participants per year to its programs, including students and executives. Thanks to its thought leadership in economics and decision sciences, Bocconi University has recently been the recipient of several prestigious grants from the European Research Council under the "Ideas" program for both junior and senior scholars. Founded in 1971 by Bocconi University, SDA Bocconi School of Management is an internationally recognized management school, ranked by the Financial Times among the Top Ten suppliers of executive education in Europe and amount the top 20 on a worldwide basis.

**Main tasks:** Bocconi University will coordinate the REFORM project. It is involved in all the Work Packages and will lead WP3 on Regulation and international governance of the financial sector, as well as WP6 on Data analysis, simulation and forecasting. In addition, it will take on responsibilities for several activities related to the dissemination of the results of the research (WP9).

**Experience relevant to tasks:** Bocconi University is one of the leading centers in Europe for the production of cutting edge research in (monetary, political and industrial) economics, banking (regulation and management), decision sciences, demography, environmental science and management. Mario Monti, President and Chairman of the Board, was EU Commissioner for *Internal Market, Financial Services and Financial Integration, Customs, and Taxation* and subsequently responsible for *Competition* between 1994 and 2003, whereas Guido Tabellini, Bocconi Rector and Senior Scholar ERC Grant recipient, is considered one of the leading expert in political economy. The finance and management departments developed significant expertise in research and teaching in areas related to the role of business in society, including CSR, sustainable development, environmental management and economics, corporate governance, social entrepreneurship and economic development. Moreover, Bocconi University is positioned as a global center of excellence in research on economic policy and macroeconomics, as well as a leading center of knowledge and education in public policy and management. Finally, Bocconi's communication department includes specialized PR staff, an in-house publishing house and organizes over 400 events every year, from small workshops up to major conventions with more than 1,000 delegates.

### **Academic Director for REFORM Project:**

**Maurizio Zollo** (male) is the Bocconi Dean's chaired Professor in Strategy and Corporate Responsibility. He joined Bocconi University in 2007 after 10 years with the strategy department of INSEAD and is director of the Center for Research in Organization and Management (CROMA). His research focuses on corporate strategy issues related to learning, growth and sustainability, with a particular focus on the financial services sector. He serves on the Executive Committee of both the European Academy of Management (EURAM) and the European Academy of Business In Society (EABIS), and is the editor of the *European Management Review*, the official journal of EURAM. He is the co-chairman of the Strategic Management Society's 2010 annual conference and the president of the Knowledge and Innovation group. At INSEAD, he has been the scientific coordinator of FP6 Project RESPONSE, which pioneered a cognitive and experimental approach to the study of CSR. He holds a Ph.D. degree in management from the Wharton School of the University of Pennsylvania, and a laurea degree in monetary economics from Bocconi. Before starting his academic career, he had extensive experience in investment banking and strategic consulting with Merrill Lynch and McKinsey & Co.

**Bocconi University will participate, and coordinate the REFORM project through seven of its Research Centers specialized in one or more of the areas of expertise required by the program design:** the "**Paolo Baffi**" Center on Central Banking and Financial Regulation; the Centre for Applied Research in Finance (**CAREFIN**); the Center for Research in Organization and Management (**CROMA**); The "**Carlo F. Dondena**" Centre for Research on Social Dynamics (**DONDENA**); the Centre for Research on Analysis and Systematic Use of Information (**ELEUSI**); the Innocenzo Gasparini Institute for Economic Research (**IGIER**); the Centro europeo per gli studi sulla Protezione aziendale (**SPACE**).

### 1.1 Center for Research in Organization and Management (CROMA)

**CROMA** was established in 2008 by 15 internationally recognized scholars from the Management Department and has been selected as a Center of Strategic Interest of Bocconi University. The areas of expertise and interest of CROMA span across several divisions of the Academy of Management as well as areas of marketing and operations research, such as: competitive and corporate strategy; organization theory and design; international management; entrepreneurship; strategic marketing and consumer behavior; operations and innovation management. The distinguishing feature of CROMA is the focusing of its research efforts on a small number of very large, inter-disciplinary, programs dedicated to the study of complex and foundational management issues and carried out in collaboration with leading international experts.

**Main tasks:** CROMA will coordinate the entire project and will be directly involved in the conceptual development of WP1 and WP2, as well as in the design and execution of the clinical studies and change experiments (WP7).

**Experience relevant to tasks:** CROMA's fellows are experts in strategic management; CSR; organizational change and learning; reputation; industry evolution and system dynamics (see the center's website for more information about events and publications [www.croma.unibocconi.it](http://www.croma.unibocconi.it) )

#### **Key Persons to be involved in the project:**

**Maurizio Zollo** (male) is Director of the Center and Bocconi Dean's Chaired Professor in Strategy and Corporate Responsibility and academic director of the REFORM project (see point 2.2.1 for his profile)

**Anna Grandori** (female) is President of CROMA, Full Professor of Organization Theory and Director of the Institute of Organization and Information Systems. Former Director of the PhD program in Business Administration and Management, she served as co-editor of *Organization Studies*, editor in chief of the *Journal of Management and Governance* and is a member of the editorial boards in other international and national journals. She has directed a variety of international research programs; and has served on the executive committee of EGOS (European Group for Organization Studies). Her research areas are: organization and governance theory; business networks; decision and negotiation processes.

**Rob Grant** (male) CROMA steering committee member and **the ENI** Chaired Professor of Strategic Management. Previous faculty positions: Georgetown University, London Business School, City University, California Polytechnic, UCLA, University of British Columbia, and University of St. Andrews. Senior editor of Long Range Planning, member of editorial boards of Strategic Management Journal and Strategy & Leadership. His research areas are: Managing knowledge and organizational capabilities; Strategic planning; Corporate strategy; Organization design.

**Violina Rindova** (female) CROMA international fellow, associate professor at the management dept of University of Texas Austin, PhD at the Stern School of Business, New York University, 1999. Her research areas are: corporate reputation; entrepreneurship; organizational change; strategy.

**Fabrizio Perretti** (male) is CROMA steering committee member, degree in Business Administration from Bocconi and PhD in Economics from Università degli Studi di Torino. He served at J.F.K. School of Government (Harvard University), Anderson School of Management (UCLA) and Sloan School of Management (MIT). His research areas are: Business Strategy; Internationalization Strategies and Sociology of Organizations.

**Davide Ravasi** (male) CROMA fellow and Associate Professor of Business Administration. His main research areas are: corporate identity, image and reputation; processes of symbolic value creation; entrepreneurship and innovation.

**Marta Maras** (female) assistant professor at Bocconi University. Her research areas are: business strategy; decision science; social and cognitive psychology, social responsibility.

## 1.2 “Paolo Baffi” Centre on Central Banking and Financial Regulation

Founded in 1984 by Mario Monti, the Centre research areas are central banking and financial regulation and supervision. It undertakes theoretical and applied interdisciplinary research and dissemination of knowledge about monetary economics and financial regulation on a national and international scale. The Centre aims to work in such a way as to significantly develop links between research work and the real issues that affect those operating in the monetary, financial and currency markets, as well as the public authorities. The work of the Centre emphasizes development in the institutional structure and in the monetary and financial policies.

**Main tasks:** The Center will lead WP3 on international regulation governance.

**Experience relevant to tasks:** the Centre produces research works proposed by its different scholars - affiliates, fellows and junior researchers - in the 2 main research fields: monetary policy and financial regulation and supervision. On 2008 the Centre launched its Research Paper Series on SSRN. The Research Paper Series aims to disseminate original theoretical research with relevance to central banking and financial regulation. So far 64 research papers have been published. The Centre organizes conferences and workshop in order to disseminate the outcome of its research activities. The Centre promotes also meetings which allows to collect the views of policy-makers, professionals and academics on the main issues concerning central banking and financial regulation and supervision. Its main international conference *Finlawmetrics* - after 4 annual editions - has established itself as a unique forum for analysis and discussion of the most relevant issues related to the evolution of economics and law in the fields of monetary policy and financial regulation and supervision. The initiative is promoted jointly with the Center on Central Banks and Financial Institutions (New York University) and with the European Banking Centre (Tilburg University).

### Key Persons to be involved in the project:

**Donato Masciandaro**, Director of the Centre. He is Full Professor of Economics, Chair in Economics of Financial Regulation. He is Head of the Department of Economics. He is member of the Council of the SUERF. Former consultant at the United Nations and the Inter American Development Bank, actually he is invited as Visiting at the IMF Institute.

**Tommaso Monacelli**, Vice Director of the Centre (Economics). He is Associate Professor at the Department of Economics. He was Assistant Professor of Economics at Boston College. He is Research Fellow of the Centre for Economic Policy Research (CEPR). He was Visiting Professor at the Central European University (Budapest) and Research Scholar at the European Central Bank.

**Marco Ventoruzzo**, Vice Director of the Centre (Law), Full Professor at the Pennsylvania State University - Dickinson School of Law and Associate Professor of Corporate Law at Bocconi University. He is Research Associate of the European Corporate Governance Institute (ECGI). At Bocconi he is also Director of the Ph.D. in Business Law. He has been Visiting Professor at several law schools and universities, among which: Fudan University, Shanghai, China; Hamburg Law School; Esade Law School, Barcelona; National Law School of India, Bangalore; LSU Law School, Baton Rouge, Los Angeles.

**Franco Bruni** is Full Professor of International Monetary Economics. Vice-President and Director of *ISPI*, Milan's Institute for International Political Studies. Member of the European Shadow Financial Regulatory Committee. He was former President of the SUERF.

**Marco Onado** is Full Professor of Economics of Financial Intermediaries. Visiting Professor at the North Wales University College and Brown University. Italian Stock Exchange Commissioner 93-98.

**Angelo Porta**, President of the Centre. He is full Professor of Monetary Economics at Bocconi and of Monetary Theory and Institutions at Università della Svizzera Italiana at Lugano.

**Luca Sala**: He is Associated Professor at the Department of Economics, “Paolo Baffi” and IGIER fellow. He was Visiting at Tel Aviv University, New York University, Università Nova de Lisboa and University of Oslo.

**Antonella Trigari**. She is Associated Professor at the Department of Economics. She is Research Fellow of the Centre and of the IGIER She is Associate Editor of the Journal of Monetary Economics.

### 1.3 Centre for Applied Research in Finance (CAREFIN)

**CAREFIN** is a research centre with a strong commitment to delivering rigorous material that is both well-grounded in financial research and highly geared towards real-life applications. Leveraging ongoing dialog with the financial industry, professional associations, regulators and policy makers, the Centre uses advanced analytical tools to investigate the opportunities and threats posed by new financial products, markets and brokerage models.

**Main tasks:** Carefin will take care of research tasks pertaining to: banks and other financial institutions (asset managers, insurers, pension funds); changes in risk-management schemes, also in the light of the evolution in the relevant capital adequacy regulation; innovative financial intermediation channels (e.g., private equity, project management); new financial products; rating agencies.

**Experience relevant to tasks:** a few examples of research delivered by CAREFIN: books by international publishers (e.g. Springer-Verlag, RiskBooks, Academic Press), dedicated to ground-breaking studies on issues like venture capital in Europe, structured finance techniques and products, strategy and organization of corporate banking; a list of Italian books in cooperation with Italian Bankers' Association, covering a number of cutting-edge topics, like "Supervisory Review under Basel 2", "Securitization, CDOs and covered bonds", "Hedge funds' performance evaluation", "Cost management and human resources in banks" and more; a series of conferences hosting high-profile speakers from large international banks and financial institutions, leading universities and supervising authorities; contributions by CAREFIN researchers to highly-rated scientific journals (e.g. Journal of Banking & Finance, European Financial Management, Applied Financial Economics, the European Journal of Finance etc.); a working paper series with 80 titles, covering all areas of applied finance.

#### **Key Persons to be involved in the project:**

**Andrea Resti** (male) is Director of the Center, professor of Financial Markets and Institutions at Bocconi and has been active in the financial sector for 18 years. His main research areas are credit risk management and regulation, with a special focus on the Basel Accord, risk measurement for managed portfolios and quantitative measures of bank efficiency (including post-merger efficiency increases). He is also one the Editors-in-Chief of the International Journal of Banking Accounting and Finance.

**Stefano Gatti** (male) is Director of the B.Sc of Economics and Finance at Bocconi, where he's also Director of the International Teachers' Programme. His main area of research is corporate finance and investment banking, in which he has published including recent publications in European Financial Management, Journal of Financial Services Research and the Journal of Applied Corporate Finance.

**Stefano Caselli** (male) is Full Professor at Department of Finance; Director of the Executive Education Custom Programs Division for Banks and Financial Institutions and Academic Director of the Executive Master in Corporate Finance and Banking of SDA Bocconi. His research areas are: Private equity & venture capital; corporate banking; corporate finance; credit management; finance of small and medium-sized businesses and family businesses; leasing and structured finance.

**Giuliano Iannotta** (male) is a member of the Department of Finance at Università Bocconi and of the Banking and Insurance Department at SDA Bocconi. He teaches Investment Banking in the M.Sc. of Finance and Fixed Income in the Master of Quantitative Finance and Risk Management. He has been a visiting scholar at the University of Florida and at the Federal Reserve Board. His research areas are: information content of security prices and government regulation of the financial sector.

**Marco Navone** (male) is Assistant Professor in finance at Bocconi University. He has been visiting professor at the Red McCombs School of Management, University of Texas at Austin. His research areas are: competition in the mutual fund industry and specifically on the factors that affect pricing decisions for fund management services.

**Andrea Sironi** (male) is Professor of Banking and Finance at Bocconi University, where he also holds the position of Dean for International Affairs. He has held visiting positions at the Research and Statistics Department of the Federal Reserve Board of Governors, and at the Salomon Brothers Center (Stern School of Business, NYU). He is a member of the Fitch Ratings Academic Advisory Board and has previously been a financial analyst at The Chase Manhattan Bank in London. Professor Sironi research interests include bank risk management & capital management, and international banking supervision & capital regulation. He has published many papers and books on these subjects.

#### 1.4 The "Carlo F. Dondena" Centre for Research on Social Dynamics (DONDENA)

**DONDENA** is an international, interdisciplinary centre for social science research of relevance to individuals, businesses, institutions and economies. At its core is a focus on social dynamics and populations in their economic, organizational and policy contexts. Dondena's work builds on theories derived from cognitive science, demography, economics, epidemiology, history, psychology and sociology. Its researchers make use of large-scale quantitative data and adopt innovative analytical methods to understand and evaluate complex relationships and changes over time.

**Main tasks:** the center, together with ELEUSI research center, will coordinate the agent base modeling and will be responsible of the data analysis in WP6.

**Experience relevant to tasks:** researchers involved in the Centre include demographers, economists, experts in law, political scientists, social psychologists and statisticians. The core specialties of the center are on demography and the life course; policy modelling, health and well-being; economic and social dynamics in long-term and comparative perspective; behaviour, cognition, decision. To see all the current project involving DONDENA research center please see: [http://portale.unibocconi.it/wps/wcm/connect/Centro\\_Dondena/Home/Projects/](http://portale.unibocconi.it/wps/wcm/connect/Centro_Dondena/Home/Projects/)

#### **Key Persons to be involved in the project:**

**Francesco Billari** (male) is Director of the Center and full professor of Demography at Bocconi University. He is Distinguished International Research Scholar, Population Studies Center and Department of Sociology, University of Pennsylvania (on sabbatical leave from Università Bocconi) and fellow of IGIER. He is Editor-in-Chief, *Advances in Life Course Research* (Elsevier) and Secretary-General and Treasurer, European Association for Population Studies (EAPS). He has also served as Director of M.Sc. Program in Economics and Social Sciences (DES-LS), Università Bocconi and his research interests and specialties are in: demography and economic sociology.

**Arnstein Aassve** (male) is deputy director of the Center and Associate professor at the Institute of Quantitative Methods, Bocconi University. He received his undergraduate degree in Law, Economics and Computer Science at Molde College in 1992, before attending postgraduate studies at University of Bristol in 1993. He received his MSc in Economics in 1995 and his PhD in Economics in 2000, after having worked on poverty issues in the US. Since receiving his PhD he has worked as a lecturer in Economics at University of Bristol and University of Leicester. From 2000 to 2002 Aassve worked at the Max Planck Institute for Demographic Research in Rostock with Professor Billari. In 2004 he received two research grants, the first from the ESRC to study poverty and fertility in developing countries and the second, from the Joseph Rowntree Foundation, to analyze youth poverty using European longitudinal data sets. His research areas are: Economic demography; Poverty and Deprivation; Comparative Social Policy; Micro-Econometrics; Event History Modelling; Simulations.

**Rodolfo Baggio** (male) expert fellow at the Department of Institutional Analysis and Public Management, Bocconi University. He is also coordinator of the Information and Communication Technologies area at the *Master in Economics and Tourism* and Professor at Milano Bicocca University – Faculty of Psychology (Courses: Communication Technologies and Interface Design). He has carried out consulting activities in the field of information technologies, organization, and planning for private and public tourism organizations and has managed several international research projects. His research interests have centered on the analysis of the social and technological network structures underlying the tourism activities and on the application of complexity theory and network analysis methods to the study of tourism destinations.

### 1.5 Centre Research on Analysis and Systematic Use of Information (ELEUSI)

The **ELEUSI** research centre promotes, coordinates and conducts interdisciplinary research on quantitative methods to support decision making. The research comprises both the development and study of new methods and the application of existing tools depending on the nature of the problem under scrutiny. The ELEUSI research center scientific committee is guided by renowned international experts in the respective fields, among which Prof. Roman Slowinski, who is in the Advisory Board of this project.

([http://portale.unibocconi.it/wps/wcm/connect/Centro\\_ELEUSI/Home/People/Steering+Committee/](http://portale.unibocconi.it/wps/wcm/connect/Centro_ELEUSI/Home/People/Steering+Committee/))

**Main tasks:** Coordinate WP6, and, together with the Dondena Research Center, build the modeling and simulation software, taking part to both its conceptual development, programming, and its sensitivity and robustness analysis.

**Experience relevant to tasks:** The research center has an extensive expertise in modeling and sensitivity analysis. The following recent research projects are particularly close to this call from the methodological viewpoint. The first one, funded by Fitch. Ratings, concerns the study of new sensitivity analysis methods for analyzing default risk. The second one, sponsored by FIDIA Farmaceutici, foresees the development of an agent-based simulation model for assessing the efficacy of workforce incentives. A third one, concerns the development of an agent-based simulation model for the evolution of staminal cells in cancer research.

#### Key Persons to be involved in the project:

**Emanuele Borgonovo** (male): is Director of the Center. Associate professor at the Department of Decision Sciences, Bocconi University. He has won several national and international research awards. He holds a Ph.D. from MIT and has specialized at Harvard University. His research interests concern the modeling of complex systems, risk analysis and sensitivity analysis. He is in the editorial board of *Reliability Engineering and System Safety* and *International Journal of Mathematics in Operational Research*. He has extensively published in well-reputed internationally refereed journals.

**Lorenzo Peccati** (male): Full Professor of Financial Mathematics. Vice-Rector for Research and Development of Human Resources. He is a member, of among others, of the American Mathematical Society, and EURO - Working Group on Financial Modelling (of which he is currently vice-president). He is co-editor of the *European Journal of Operational Research*. He is on the Editorial Board of the International Journal of Production Economics.

**Marco Bonetti** (male): Associate Professor in the Department of Decision Sciences at Università Bocconi. He has been Adjunct Assistant Professor in Statistics (2004-05), of the Harvard School of Public Health (Boston, U.S.A.). He is director of the DES Graduate Program of Bocconi University. He has an extensive track record of publications.

**Francesca Beccacece** (female): Associate Professor of Financial Mathematics and Coordinator of the Master in Quantitative Finance and Risk Management at Bocconi. Her research interest concern financial markets models, asset pricing, term structure models, Decision theory and decision making in Finance, models and applications of default risk.

**Alessandra Cillo** (female): is Assistant Professor at Bocconi in the Department of Decision Sciences. She obtained her Ph.D. in Management – Decision Sciences at INSEAD and gained teaching experience at the MBA and executive level at IESE Business School, where she served as Assistant Professor. Her research areas are: analytical and experimental work in decision making under risk; risk measures and risk value models.

**1.6 Innocenzo Gasparini Institute for Economic Research (IGIER)**

**IGIER** is Part of the Institute of Economics and operates jointly with the US-based NBER, National Bureau of Economic Research, and the UK-based CEPR, Centre for Economic Policy Research. It provides a dynamic and international research environment in which residential Fellows and Affiliates conduct both applied and theoretical research in several areas of economics and publish in top journals. In 2000, IGIER was awarded the Centre of Excellence status by the Italian Ministry of University and Research.

**Main tasks:** will provide thought leadership and expertise in the macroeconomic modeling and analysis of the impact of the financial system, and will be involved primarily in WP2, WP5 and WP6.

**Experience relevant to tasks:** IGIER Fellows include Fellows of the Econometric Society, past presidents of the European Economic Association, editors and members of the editorial boards of leading journals in Economics, recipients of competitive grants and winners of prestigious awards and fellowships (i.e. Y. Jahnsson award by the European Economic Association or the Alfred P. Sloan Fellowship). Some IGIER Fellows are also consultants for international organizations (i.e. IMF, the World Bank, the European Commission and the European Central Bank) and regular columnists in national and foreign newspapers.

**Key Persons to be involved in the project:**

**Carlo Favero** (male) is Director of the Center. Degree in Economics and Social Sciences from Università Bocconi; MSc in Economics from the London School of Economics; DPhil in Economics from the University of Oxford. He is Full Professor of Economics; Director of the Finance PhD and Fellow of CEPR, "International Macroeconomics" programme. His research areas are: macroeconomics and Finance; monetary policy; central banks behavior and econometric analysis of monetary policy.

**Tito Michele Boeri** (male) PhD in economics at New York University he served as senior economist at the Organisation for Economic Co-operation and Development (1987-1996) and as consultant to the European Commission, International Monetary Fund, the ILO, the World Bank and the Italian Government. He is research fellow at CEPR and IZA. His field of research is: labour economics, redistributive policies and political economics. His papers have been published on the American Economic Review, the Journal of Economic Perspectives, Economic Policy, the European Economic Review, the Journal of Labour Economics, and the NBER Macroeconomics Annual. He published books with Oxford University Press, MIT Press and Princeton University Press.

**Roberto Perotti** (male) is full professor of Economics; he holds a degree in Economics from Università Bocconi and a PhD in Economics from MIT. Research associate, National Bureau of Economic Research (NBER) and Research fellow, Center for Economic Policy Research (CEPR). His research areas are: Macroeconomics and Political Economy.

**Francesco Giavazzi** (male) Degree in electronic engineering from the Politecnico di Milano. PhD in Economics, MIT. Research Associate of the National Bureau of Economic Research (NBER) and fellow of the CEPR. He was Vice-Rector of Research-Assessment-Human Resources Development (2000-2002), Co-editor of the *European Economic Review* (1991-1999) and Visiting professor, MIT, 1999/2000. His research areas are: International monetary economics, in particular issues related to European monetary integration; Public debt sustainability and fiscal stabilization; Monetary policy and financial institutions.

**Vincenzo Galasso** (male) is Associate professor of Economics at Bocconi University. He holds a degree in Economics from Università Bocconi and a PhD in Economics from the University of California - Los Angeles (UCLA). He is a research affiliate of CEPR - Centre for Economic Policy Research and Associate editor of the *European Journal of Political Economy*. Previously he was an assistant professor at the Universidad Carlos III de Madrid. His research areas are: Political Economics; Macroeconomics; Public economics and Pension schemes.

### 1.7 Centro europeo per gli studi sulla Protezione aziendale (SPACE)

**SPACE** was established in 1990. Always directed by Professor Sergio Pivato, Full Professor of Management, the Centre has been focused on corporate social responsibility (CSR), sustainability and business ethics from the very beginning and, through its research activities, it has achieved a recognized and leading position in the national and international arena.

**Main tasks:** **SPACE** will provide the research team with knowledge and competences related to the following issues: corporate financial and non-financial performance; corporate social performance; corporate social responsibility, business ethics and corporate sustainability; corporate governance; environmental management.

#### **Experience relevant to tasks:**

Perrini F., Castaldo S., Misani N., Tencati A., [2009], “The Impact of Corporate Social Responsibility Associations on Trust in Organic Products Marketed by Mainstream Retailers: A Study of Italian Consumers”, *Business Strategy and the Environment*, DOI 10.1002/bse.660, <http://www3.interscience.wiley.com/cgi-bin/fulltext/122523571/PDFSTART>.

Tencati A., Zsolnai L., [2009], “The Collaborative Enterprise”, *Journal of Business Ethics*, 85(3), pp. 367-376.

Pogutz S., Russo A., Migliavacca P. (Eds.), [2009], *Innovation, Markets and Sustainable Energy. The Challenge of Hydrogen and Fuel Cells*. Edward Elgar Publishing, Cheltenham, UK.

Perrini F., Pogutz S., Tencati A., [2006], *Developing Corporate Social Responsibility. A European Perspective* - Preface by David Vogel (Haas, University of California, Berkeley) -, Edward Elgar Publishing, Cheltenham, UK.

#### **Key Persons to be involved in the project:**

**Francesco Perrini** is professor of Management and CSR at the Institute of Strategy, Department of Management, Università Bocconi, Milan, Italy. He is also SIF chair of Social Entrepreneurship and senior professor of Corporate Finance at the Corporate and Real Estate Finance Department, SDA Bocconi School of Management. He is director of Bocconi CSR Unit, Department of Management, Università Bocconi, and coordinator of CSR Activities Group at SDA Bocconi. Francesco Perrini’s research areas comprise management of corporate development processes, from strategy implementation (acquisitions and strategic alliances) to financial strategies and valuation; small- and medium- sized enterprises; and social issues in management: corporate governance, corporate social responsibility, sustainability, social entrepreneurship, social innovation, and socially responsible investing.

**Stefano Pogutz** is assistant professor of Management and Innovation at the Institute of Technology and Innovation Management, Department of Management, Università Bocconi, Milan. He is director of Bocconi’s first level Master program on “Energy and Environmental Economics and Management.” Stefano Pogutz is a Senior Researcher at SPACE Bocconi. Since 2009 he has been Chair of the Business and the Environment Interfaculty Group of the CEMS-MIM (Community of European Management Schools Master in International Management) Programme. His research interests are sustainability and innovation, renewable energy, environmental management, and corporate social responsibility.

**Antonio Tencati** is Assistant Professor of Management and CSR at Università Bocconi. He is Senior Researcher at SPACE and a member of the CSR Unit, Department of Management. He is also a member of the Business Ethics Faculty Group of the CEMS-MIM (Community of European Management Schools Master in International Management) Programme. His research areas are: business management, management of sustainability and CSR, environmental management, innovation and operations management. His recent articles have been published in *Journal of Business Ethics*, *Business Strategy and the Environment*, *Business Ethics: A European Review*, and *Corporate Governance: The International Journal of Business in Society*.



## 2 European Academy of Business in Society (EABIS)

EABIS is an independent, not for profit membership organization with more than 100 members. It is a unique international alliance of 68 leading business schools and universities, 25 global companies, and 10 business networks connecting to over 3500 firms and commercial organizations. Its core mission is to promote the integration of CSR issues into the mainstream of business practice, theory and education.

**Main tasks:** EABIS will contribute its expertise and extensive network and connections to lead the Dissemination (WP9) and Management (WP10).

**Experience relevant to tasks:** through its coordination of the CSR Platform Project (2004-2008), EABIS has significant in-depth experience of managing and administering European projects, especially consortium partnerships and all aspects of reporting and financial management. EABIS is also responsible for the management of a €2.5 million programme on CSR research, education and training issues, supported by its Corporate Founding Partners. In this context, EABIS has a long history of working closely with EU policy bodies, global business, leading research institutions and key stakeholders to define research agendas and thought leadership in Europe. EABIS is frequently asked to inform high profile EU-level debates and platforms on issues in CSR research and business priorities. It is a member of the EU Multi-stakeholder Forum on CSR Steering Group, and has also worked with DG RTD, ENTR and EMPL on awareness-raising events and learning initiatives in recent years. EABIS has considerable experience in organising pan-European workshops, symposia, conferences and colloquia with business schools and companies gathering senior business, academic figures, policy makers and civil society representatives. Since 2003 it has, in partnership with European business schools, corporate members and policy makers, organised over 50 events and conferences across Europe ranging from 50-350 participants.

### Key Persons to be involved in the project:

**Gilbert Lenssen** is President of EABIS and Professor of Management at Leiden University. He was Professor of International Management at the College of Europe and Visiting Fellow Templeton College, University of Oxford. He is on the Board of the European Foundation for Management Development (EFMD) and a member of the editorial board of Corporate Governance, The International Journal of Business in Society, and The Journal for Strategy and Management. Former Global Vice President of BP Solar International (London/Madrid) 1995-1999. During this time he built the global solar business and in particular the Sustainable Development Solutions strategy for the business in Africa and Asia. Former Executive in Marketing, Planning and Human Resource Management, Corporate Affairs and Corporate Communications for British Petroleum (BP) in USA, Germany, UK, Spain 1975-1995. Doctorate Social Sciences University of Antwerp, Belgium 1996, PhD programme (Management) University of Hamburg 1992-1995, Faculty of Economics and Business (Magna cum laude). MBA at Case Western Reserve University, Cleveland (USA) and MA Political Sciences and Philosophy.

**Simon Pickard** is Director General of EABIS, and leads the Coordination Office headquartered in Brussels. Simon joined EABIS in March 2006, following the completion of his MBA at HEC School of Management in Paris. Beyond operational management, Simon became project director for the final 18 months of the CSR Platform Project and is EABIS' main representative in high level EU consultation events and initiatives (e.g. CSR Multi-stakeholder Forum Steering Committee). Prior to his studies in France, his professional background was in the international education sector, first in management then an executive capacity.

- Green Book Report, "The European Platform for Excellence in CSR Research" (aka "CSR Plat-form") Project, October 2008
- Corporate Governance Journal Special Issue, "Corporate responsibility and sustainability", Emerald Insight Publishing, September 2009
- Executive Briefing, "Understanding and responding to Social Demands on Corporate Responsibility" (aka RESPONSE) Project, October 2007.

**3 Centre for European Policy Studies (CEPS)** in the nexus between academia, business and public sector, CEPS performs a unique role as an independent analyst and critic of European policy. Its core business is the conduct of policy research on European affairs and the broad dissemination of findings through a regular flow of publications, events and electronic commentary. Since its founding in 1983, CEPS has acquired a reputation for integrity and excellence in research. In 2009, for the third year in a row, it has been ranked among the world's top ten think tanks (outside the US). CEPS' staff counts 45 in house researchers and associates organised in 8 units. Such organisation is aimed at ensuring a high degree of specialisation without losing interdisciplinary focus. The units involved in this project are the following: Economic Policy, Financial Markets & Institutions and Climate Change. All units have extensive experience in carrying out studies, surveys, impact assessments for the public and private sector, produce much cited statistical data packages, research reports and organised task forces on topical policy issues.

**3.1 The CEPS Economic Policy Unit** analyses macroeconomic trends in Europe and abroad, the European banking system and the use of fiscal and monetary policy. Its contributions have provided accurate and insightful analysis on policy issues raised at the beginning of the crisis. Research is carried out in-house, but also in collaboration with other institutes and networks, such as ENEPRI ([www.enepri.org](http://www.enepri.org)).

**Main tasks:** leading partner of WP2 and WP5, contributor to WP1.

**Experience relevant to tasks:**

Ongoing research at the Economic Policy Unit, presented on a regular basis at international conferences throughout the year, examines key issues such as the impact of the crisis on the real economy and coordination of government policy during the crisis. The unit's Macroeconomic Policy Group (MPG) is one of the leading independent watchdogs of the European Central Bank. Composed of Europe's most authoritative economists under the leadership of Daniel Gros, the MPG publishes an annual assessment of the state of the European economy.

**Key Persons to be involved in the project:**

**Daniel Gros** (male), Director of CEPS, holds a Ph.D. from the University of Chicago. He has held past positions at the IMF and the European Commission, and served as advisor to the European Parliament, several governments and central banks. His main areas of expertise are the European Monetary Union, Macroeconomic policy, Economics of transition to a market economy, Political economy of the Wider Europe, Public finance, Banking and financial markets.

**Paul De Grauwe** (male), Senior Associate Fellow at CEPS, holds a Ph.D. from Johns Hopkins University. He has worked for the IMF, the Board of Governors of the Federal Reserve and the Bank of Japan. He is a member of the Group of Economic Policy Analysis, advisor to President Barroso and director of the research network of CESifo. His expertise lies in European monetary integration, international monetary and financial relations and open-economy macroeconomics.

**Cinzia Alcidi** (female), Research Fellow at CEPS, holds a Ph.D. in International Economics from the Graduate Institute of International and Development Studies of Geneva (CH). Before joining CEPS she taught undergraduate courses of International Economics in Italy and worked at the International Labour Office. Her expertise lies in international macro finance and EU macro policy.

**Key publications:**

- Alcidi C. And D. Gros (2010) "The impact of the crisis on the real economy" Forthcoming in *Intereconomics*
- De Grauwe P. (2008) "There is more to central banking than inflation targeting", in Felton & Reinhart (eds.), *The First Global Financial Crisis of the 21<sup>st</sup> Century*, CEPR & VoxEU.
- Gros D., Mayer T. and Ubide A. (2007). "A World out of Balance?" Special Report of the CEPS Macroeconomic Policy Group, CEPS editions.

**3.2** The CEPS **Financial Markets & Institutions Unit** includes the Financial Institutions and Prudential Policy Unit (FIPP), the European Credit Research Institute (ECRI) and the European Capital Markets Institute (ECMI). It aims at analyzing European financial market integration and has been active in exploring the causes, the consequences and the remedies of the financial crisis since 2007. The unit produces yearly, widely cited statistical packages on lending to households and capital markets in Europe.

**Main tasks:** leading partner of WP2 and WP5, co-leading partner of WP3 and WP8 and contributor to WP1 and WP4.

**Experience relevant to tasks:**

The Financial Markets & Policy Unit has gathered knowledge on financial regulation, financial institutions, capital and retail markets throughout many years. The unit has been involved with several longer-term projects as the analysis of institutional diversity in the banking sector, the creation of a cross-country household survey, the construction of indicators for household financial vulnerability and the definition for consumer over-indebtedness. In 2008/09, the unit finalised three major task force reports on topical issues: European Financial Oversight, Basel Implementation, and UCITS and Asset Management under MiFID.

**Key Persons to be involved in the project:**

**Rym Ayadi** (female), CEPS Senior Research Fellow and Head of Research of the Financial Institutions, Prudential Policy and Tax Unit, holds a Ph.D. in Economics from University Paris Dauphine. She is director of the EU-funded project MEDPRO, Co-Director of the Mediterranean Co-development Platform and member of the Commission's expert group FINUSE on financial services policies. She is advisor to central banks in Egypt and Tunisia and to the European Parliament. Previously, she lectured industrial economics, innovation policy and risk management in France and in the UK.

**Karel Lannoo** (male) CEO of CEPS, director of the European Capital Markets Institute (ECMI) and the European Credit Research Institute (ECRI). He has published books and numerous articles on financial regulation and supervision and participated in several studies for national and international bodies (EU institutions, OECD, ADB, World Bank).

**Emrah Arbak** (male), Researcher at CEPS, holds a PhD in Economics from State University of New York at Albany (US). He is specializing in banking regulations, taxation, and corporate governance.

**Marc Rothmund** (male) is Research Fellow at ECRI. Having worked on international research projects Marc has gained working experience in the areas of credit reporting, credit statistics, payment systems and over-indebtedness

**Maria Gerhardt** (female) is a Research Assistant at ECRI. Having gained working experience in microfinance and at BNP Paribas Asset Management before starting at CEPS, her research interests include retail banking, microfinance, credit reporting and consumer bankruptcy.

**Key publications:**

- Ayadi, R. (2009) "Investigating diversity in the European banking sector: The role and performance of savings banks in Europe", CEPS editions.
- Lannoo K. and J.-P. Casey (2009) "The MiFID Revolution", Cambridge University Press.
- ECRI Statistical Package 2009 "Lending to Households in Europe (1995-2008) "

- 3.3** The CEPS **Climate Change Unit** priority activities are the EU emission trading schemes and the future of the international climate change regime. Since 2000, CEPS has been a core partner of a major research project funded by Economic and Social Research Institute (ESRI) of the Cabinet Office, Government of Japan. CEPS hosts the focal point of the RINGOs network, the official constituency of Research and Independent Organisations to the UNFCCC and is co-organiser of the European Climate Platform, an initiative bringing together climate negotiators and policy-makers with researchers.

**Main tasks:** leading partner of WP5

**Experience relevant to tasks:**

The unit's current research focuses on the design of EU climate change policies to ensure progressive engagement of the EU's main international partners. In the past, it has analysed the financing of mitigation of and adaptation to climate change, discussing the need to shift investment patterns and identify possible instruments to assist this process. In 2007/08, the unit published important task force reports on testing global sectoral industry approaches to address climate change, the G8+5 climate change process and accelerating structural change and technology diffusion on a global scale.

**Key Persons to be involved in the project:**

**Noriko Fujiwara** (female), Head of Climate Change Unit and Research Fellow at CEPS, holds a Ph.D. in International Relations from University of Sussex (UK). At CEPS she has undertaken research on EU climate policy (e.g. EU emissions trading scheme) and international negotiations for climate change (e.g. post-2012 discussions on finance, flexible mechanisms, sectoral approaches). She has been specialised in global environmental change since 1992. She previously worked for the Japan Federation of Economic Organisations in charge of environmental policy.

**Key publications:**

- Fujiwara N., A Georgiev and C. Egenhofer (2008) "Financing Mitigation and Adaptation: Where should the funds come from and how should they be delivered?" European Climate Platform Report.

**4 VLERICK LEUVEN GENT MANAGEMENT SCHOOL (VLERICK)** founded in 1953, is the leading business school in Belgium and one of the top business schools in Europe. The School benefits from the knowledge of the two largest Belgian universities, Ghent University and the Katholieke Universiteit Leuven. Close connections with the international corporate world lead to practice-based research in cooperation with numerous companies and organisations. VLERICK holds the three accreditations: EQUIS, AMBA and AACSB.

**Main tasks:** main tasks performed by VLERICK within the REFORM project include project leadership for WP 1 (the evolving role of the financial system) and contribution to other WPs.

**Experience relevant to tasks:** VLERICK has developed a unique position in the field of financial services management and is also very active in the domain of ‘Business in Society’. Vlerick previous EU involvement includes the ‘CSR Platform Project (2004–2008), Business Case for Diversity (2008) and Valuing non-financial performance: Corporate Responsibility, Market Valuation and Measuring the Financial and Non-Financial Performance of the Firm with EABIS, Bocconi and Cranfield (2009). Moreover, Vlerick has other working experiences in EU projects, like in VICO (Financing Entrepreneurial Ventures in Europe: Impact on innovation, employment growth, and competitiveness) and an ECFIN-project on “The changing structure of EU leading firms” (2009).

**Key Persons to be involved in the project:**

**Céline Louche**, PhD, is professor at VLERICK in the area of CSR, socially responsible investment and sustainable banking. She is member of the Management and Academic Board of EABIS, the scientific committee of the International Network for Research on Organisations and Sustainable Development, and the SRI advisory committee of Dexia Asset Management.

**Leo Sleuwaegen**, PhD, is professor of Managerial Economics, Strategy and Innovation at VLERICK and Catholic University of Louvain. As expert-consultant he has worked for the European Commission, World Bank, OECD, United Nations, the Belgian and Flemish government and major international companies.

**André Thibeault**, PhD, is professor of finance and risk management at VLERICK. He specializes in corporate finance, international capital markets and the management of financial institutions. He especially focuses on securitisation, credit risk management and the development of simulations in the field of insurance and financial conglomerates.

**Lutgart Van den Berghe**, PhD, is professor at VLERICK and Ghent University (domain of corporate governance) and serves as non-executive director in a number of companies. Her research focuses on corporate governance, institutional investors and financial conglomerates. She also functions as Executive Director of Guberna, the Belgian Governance Institute. She is a member of the ad hoc working group ‘Financial Crisis and Corporate Governance’ organized by the European Commission. She is a Member of the Belgian Commission for Corporate Governance. At EcoDA (European Confederation of Directors’ Association), she is a Member of the Management and chairwoman of its policy committee.

**Steve Waddell**, PhD is research fellow at VLERICK who specializes in societal learning and change, large (issue) system and network development, and associated methodologies such as value network analysis. He recently completed a major project titled the Global Finance Initiative.

**Key publications:**

- Ridders F. Thibeault A. 2009. A structural form default prediction model for SMEs. Evidence from the Dutch market. *Multinational Finance Journal*. 13 (1/2) : 229 -264.
- Van den Berghe L.A.A. Louche C. 2005. The link between corporate governance and corporate social responsibility in insurance. *The Geneva Papers on Risk and Insurance*. 30 (3) : 425 -442.
- Waddell, S. (2005). *Societal Learning and Change: How Governments, Business and Civil Society are Creating Solutions to Complex Multi-Stakeholder Problems*. Sheffield, UK, Greenleaf Publishing.

## 5 The Chancellor, Masters and Scholars of the University of Oxford (UOXFMQ)

The University of Oxford is globally renowned for the quality and diversity of its research. The University's position as a centre of academic excellence is consolidated by its ongoing development of inter-disciplinary research centres and groups.

Institute for Science, Innovation and Society (InSIS) ([www.insis.ox.ac.uk](http://www.insis.ox.ac.uk))

The University of Oxford Institute for Science, Innovation and Society (InSIS) ([www.insis.ox.ac.uk](http://www.insis.ox.ac.uk)) at researches social and technological innovation and is in Oxford's Saïd Business School and is part of the James Martin 21st Century School [www.21school.ox.ac.uk](http://www.21school.ox.ac.uk).

**Main tasks:** main tasks performed by UOXF.MQ within the REFORM project include leadership of Work Package 8 and research on scenarios work and its relations to other methods.

**Experience relevant to tasks:** InSIS 'futures' has a distinct 'Oxford approach' to study futures practices - in particular scenarios, see for example [www.oxfordfuturesforum.org.uk](http://www.oxfordfuturesforum.org.uk).

### Key Persons to be involved in the project:

**Rafael Ramirez** (InSIS, the James Martin 21st Century School & Green Templeton College) James Martin Senior Research Fellow in Futures. 30 years' experience with scenarios and search conferences. Co-chairman, World Economic Forum Global Agenda Council on Strategic Foresight.

**Angela Wilkinson** (InSIS) Director, Scenarios Planning and Futures Research, InSIS. Over 20 years' futures experience. Formerly: ten years with Global Scenario team, Shell International.

**Felix Reed-Tsochas** (InSIS & CABDyN Complexity Centre). Co-Director of CABDyN ([www.cabdyn.ox.ac.uk](http://www.cabdyn.ox.ac.uk)) and James Martin Lecturer in Complex Systems. He leads an interdisciplinary research group on the dynamic and functional properties of complex social networks.

**Javier Lezaun** (InSIS & LSE). James Martin Lecturer in Science and Technology Governance, InSIS and Research Associate at the Centre for Analysis of Risk and Regulation, LSE. Co-directs the Governance, Accountability and Innovation group (GAIIn) at InSIS [www.sbs.ox.ac.uk/centres/insis/research/Pages/gain.aspx](http://www.sbs.ox.ac.uk/centres/insis/research/Pages/gain.aspx).

### Key publications:

- Dopson, S., Earl, M, and Snow, P. (eds). (2008) "Forty Years of Scenarios: Retrospect and Prospects" in Mapping the Management Journey: Five Decades of Management Studies, Oxford University Press.
- Ramirez, R., Selsky, J. & van der Heijden, K (eds): Business Planning in Turbulent Times: New Methods for Applying Scenarios. London: Earthscan. 2008
- (2010 forthcoming; w/& van der Heijden, K ,Selsky, J., & Wilkinson, A.) "Turbulence, business planning and the unfolding financial crisis" in Business Planning in Turbulent Times: New Methods for Applying Scenarios. Ramirez, R., Selsky, J. & van der Heijden, K (eds): 2010, second edition - Earthscan, London.
- (c.f.: A. Wilkinson & R. Ramirez: "Canaries in the Mind: Exploring how the financial crisis impacts 21st century future mindfulness" Journal of Futures Studies, 2010 forthcoming). .
- Lezaun, J., Millo, Y., (2006) "Regulatory Experiments: Genetically Modified Crops and Financial Derivatives on Trial", Science and Public Policy 33(3): 179-190
- N. Johnson, F. Reed-Tsochas and J. Smart, Coping with Complexity: Understanding and Managing Complex Agent-Based Dynamic Networks, World Scientific 2010 (forthcoming).

**6 Institut Européen d'Administration des Affaires (INSEAD).** As one of the world's leading and largest graduate business schools, INSEAD brings together people, cultures and ideas from around the world to change lives and transform organisations. The unique global perspective and multicultural diversity of INSEAD are reflected in all aspects of its research and teaching. Currently, at the school's three comprehensive and fully connected campuses in Asia (Singapore) Europe (France), and the Middle East (Abu Dhabi), 145 renowned faculty members from 36 countries inspire more than 900 MBA participants, 59 Executive MBAs, 59 PhD candidates and over 9,000 executives. On all campuses and at the research centre in the Israel, faculty conduct leading edge research projects with the support of 16 Centres of Excellence. The *INSEAD Social Innovation Centre (ISIC)* is an inclusive platform for cross-disciplinary research and engagement in the area of social innovation. ISIC will be the Centre leading this project.

**Main tasks:** contributor to WP1, WP2, WP3, WP4, WP6, WP7 and WP8.

**Experience relevant to tasks:** INSEAD has extensive experience in research projects co-funded by the European Commission: it has recently coordinated 4 projects (3 STREPs and 1 eTen project) and it has participated in numerous other projects as a partner.

**Key Persons to be involved in the project:**

**Luk N. Van Wassenhove** is Professor of Operations Management & the Henry Ford Chaired Professor of Manufacturing at INSEAD. He is the academic director of INSEAD Social Innovation Centre. His research and teaching are concerned with humanitarian logistics, closed-loop supply chains, operational excellence, supply chain management, quality, continual improvement and learning. He is senior editor for Manufacturing and Service Operations Management and departmental editor for Production and Operations Management and received the EURO Gold Medal for outstanding academic achievement.

**Douglas Webber** is Professor of Political Science at INSEAD. He has published numerous articles on German, European and Asian politics in journals in Britain, Germany and the US. He works mainly on European Union politics, the Franco-German relationship, and comparative regional political integration.

**Horacio Falcão** is an Affiliate Professor of Decision Sciences with INSEAD where he has been teaching both Negotiation and International Management at the MBA, EMBA and Executive Education programs. His research concentrates on the fields of international arbitration, mediation and negotiation.

**Claudia Zeisberger** is an Affiliate Professor of Decision Sciences at INSEAD and Academic Co-Director of its Global Private Equity Initiative (GPEI), which works hand in hand with the PE industry to facilitate the exchange of ideas and best practices amongst Limited Partners (LPs).

**Marc Le Menestrel** he is Associate Professor of Business at University Pompeu Fabra, Barcelona, and Visiting Professor of Ethics at INSEAD. His core expertise is in decision making, in particular the role of values in business decisions.

**Pushan Dutt** is an Associate Professor of Economics and Political Science at INSEAD. His research includes: (i) examining the links between institutions and policies (developmental focus) and (ii) the role played by international trade in accelerating the wage gap between skilled and unskilled workers.

**Ilian Mihov** is Professor of Economics and the Novartis Chaired Professor of Management and Environment. His research is primarily in the fields of monetary and fiscal policies, economic growth and political economy.

**Ludo Van der Heyden** is Professor of Technology and Operations Management & the Solvay Chaired Professor of Technological Innovation. His research focuses on, among others, Fair Process Leadership, Business Model, Family Business, and Communication.

**Gordon Redding** is Senior Professor of Asian Business and Comparative Management at INSEAD. His main work is the study of alternative systems of capitalism, seen as complex adaptive societal systems embedded in distinct cultures, and shaped by distinct institutions.

**7 London School Of Economics And Political Science (LSE).** The LSE is a specialist university with an international intake and a global reach. Its research and teaching span the full breadth of the social sciences, from economics, politics and law to sociology, anthropology, accounting and finance. The LSE's position as world-leading research university was confirmed through its outstanding success in the 2008 UK Research Assessment Exercise. The School had the highest percentage of world leading research of any university in the UK. The Employment Relations and Organisational Behaviour Group is one of the foremost centres in the world for the study of employment relations and human resource management.

**Main tasks:** main tasks performed by LSE within the REFORM project include involvement in WP7.

**Experience relevant to tasks:** the LSE team has extensive experience in qualitative research, fieldwork and ethnographic inquiry.

**Key Persons to be involved in the project:**

**Dr. Daniel Beunza** (male) will lead the research at the LSE. Beunza is Lecturer at the Employment Relations and Organizational Behaviour group at the Management, and holds a PhD in Management from New York University. For the past decade, Beunza has co-founded and contributed to the discipline of the Social Studies of Finance. His 2004 publication "Tools of the Trade: The Socio-Technology of Arbitrage in a Wall Street Trading Room" has received awards from the American Sociological Association and The Institute of Management. His research has examined derivatives traders, securities analysts, the New York Stock Exchange and (more recently) the area of socially responsible investment. His research has been funded by the Social Science Research Council, the Russell Sage Foundation and the Spanish Ministry of Education.



**8 Universidad de Navarra (IESE).** The Instituto de Estudios Superiores de Empresa (IESE Business School) at the University of Navarra, is a postgraduate institution ranked among the best in Europe and the world according to the main international publications (Financial Times, Business Week, The Economist). Founded in 1958 as the graduate business department of the Universidad de Navarra, IESE currently receives approximately 3,000 highly selected students on an annual basis. Besides the MBA, Global Executive MBA, and Executive MBA programs, the school has a select PhD in Management program where faculty contributes to the research training of future management scholars.

**Main tasks:** main tasks performed by IESE within the REFORM project include involvement in all the Work Packages and will lead WP7 on Clinical Studies and Change Experiments.

**Experience relevant to tasks:** IESE's faculty members come from over 25 countries with doctorates from the top world universities, and are a reference point for the various aspects of the Spanish, European, and world-wide economy. IESE holds numerous national Spanish Ministry for Science and Innovation grants as well as various EC projects financed within the 5th, 6th and 7th Framework Programme and the Competitiveness and Innovation programme. Prof. Xavier Vives, Director of Public-Private Sector Research Center of IESE who will participate in the Advisory Board of the REFORM project holds the prestigious ERC Advanced Grant.

**Key Persons to be involved in the project:**

**Fabrizio Ferraro** (male) will lead the research team at IESE. He is an Associate Professor for the Strategic Management Department and holds a Ph.D. in Management from Stanford University. His research focuses on two related questions: (1) how social sciences (especially economics) affect the design of market institutions and management practices, and (2) the emergence of novel institutions, such as Sustainability Reporting and Socially Responsible Investing. His work has been published in the *Academy of Management Review* (2006 Best Paper Award), *Academy of Management Journal*, *Organization Science*, and other top management journal.

**Joan Fontrodona Felip** (male) is Associate Professor and Chairman of business ethics and academic director of the IESE Center for Business in Society. He holds a Ph.D. in Philosophy and an MBA in Management and is visiting scholar/fellow of The Center for Business Ethics, Harvard Business School and Universidad Francisco Marroquín (Guatemala), the Chairman of the Spanish branch of the European Business Ethics Network and member of the executive committee of the Association of Spanish Entities adhering to the ASEPAM.

**Christian Seelos** (male) is the Director of the IESE Platform for Strategy and Sustainability and a Senior Lecturer in the Strategic Management Department at IESE Business School. He teaches MBA and executive courses in International Business, Global Strategic Management, Social Entrepreneurship and Strategy and Sustainability. Prof. Seelos researches emerging topics at the interface between organizational strategy and global sustainability.

**Carles Vergara-Alert** (male) Assistant Professor of Finance at IESE Business School, holds a Ph.D. in Finance, a Master in Financial Engineering (MFE), and a M.S. in Business from the University of California Berkeley (Haas School of Business) as well as a B.A. and a M.S. in Civil Engineering (UPC). His work experience includes positions in various companies of the Allianz Group and the European Investment Bank. The area of his research includes asset pricing, risk management and real estate.

**Jan Simon** (male) is a Lecturer in the department of Financial Management at IESE Business School. He wrote a PhD thesis on the Embeddedness of Hedge Funds, applying quantitative and qualitative methodologies. Jan presently researches the impact of embeddedness on market risk. Previous to his academic career, Jan worked for over a decade at various investment banks such as Merrill Lynch, Goldman Sachs and Salomon Smith.

## 9 Fundació ESADE (ESADE)

Ramon Llull University (URL) is a non-profit making federated private entity with VAT G-59069740 and constituted by the Law 12/1991 of 10th May, 1991 of the Government of Catalonia. One of the main characteristics of URL is that it is structured under the principle of a federative agreement between the University, formal holder and responsible of the centres that form it, and the different entities (<http://www.url.edu/en/cont/url/institutions.php>) that assume the management of each centre with their own human and technological resources. Consequently, and due to this federative principle, manages the centres that integrate it through institutions that preserve its own juridical personality, heritage and responsibility. More specifically, the project REFORM will be performed by the Corporate Social Responsibility Research Group of the centre ESADE with VAT G- 59716761.

**ESADE BS**, at 50 years of existence, is one of the world's most prestigious academic institutions for education and research in the areas of management and law. With campuses in , and , the institution's main objective is to train individuals to be highly competent professionals, fully conscious of their social responsibility. To do this, ESADE fosters a strong commitment to intellectual rigor, critical thinking and academic excellence. In 2006, ESADE created the Institute for Social Innovation to expand its research on corporate social responsibility, social entrepreneurship, non-profit management and stakeholder engagement. This Institute has also established strong links with the business, economic and social sectors in and has become a forum for reflection and dialogue.

**Main tasks:** ESADE's involvement will focus on WP2, WP4, WP7 and WP8, covering the study of the geographical areas of Spain and Latin America.

**Experience relevant to tasks:** ESADE's involvement in the areas is mainly channeled through our annual report on SRI. The Observatorio de is an annual publication released by the Institute for Social Innovation. It reflects developments and trends in SRI around the world, with special emphasis on the Spanish financial market. In this regard, the objective of the Observatory is to provide society and investors, who seek social responsibility and sustainability, with an information tool to understand the role of SRI as a leading promoter of CSR. In the same lines, ESADE is a member as well of the EUROpean Sustainable Investment Forum ([www.eurosif.org](http://www.eurosif.org)).

### **Key Persons to be involved in the project:**

**David Murillo** (male) is senior researcher at the Institute for Social Innovation of ESADE BS and visiting professor at the Copenhagen Business School. He holds a PhD in sociology and a degree in Business Administration and Humanities. He currently teaches Corporate Social Responsibility, Sociology and Business Ethics at the BBA and MBA levels and publishes in several international journals.

**Daniel Arenas** (male) is associate professor of the Social Science Department of URL-ESADE and Head of Research of the Institute for Social Innovation, ESADE. His main area of expertise deployed in the Reform program will focus on stakeholder engagement with financial institutions. He is the current director of the Observatory of SRI published by the center.

**10 THE UNIVERSITY OF NOTTINGHAM (UNOTT).**

At the University of Nottingham, the Nottingham University Business School (NUBS) is a leading centre for management education within one of the most successful UK universities. The results of the Research Assessment Exercise 2008 confirmed NUBS status as one of the leading Business Schools in the UK: 70% of submitted outputs were classed as either "world leading" (4\*) or "internationally excellent" (3\*), ranking it 6th. It has an international reputation for its CSR research and was ranked 2nd globally for its research in the field by the Aspen Institute, 2007.

The International Centre for Corporate Social Responsibility (ICCSR) is part of NUBS. ICCSR's approach to research is collaborative and multi-disciplinary. ICCSR members work with other NUBS colleagues, visiting scholars, PhD students and external research partners. The results of research are regularly published in reports, the ICCSR 'Research Paper Series, academic journals and books. The ICCSR is a frequent contributor to major international conferences, hosting an annual research symposium and regular international conferences.

**Main tasks:** : main tasks performed by ICCSR within the REFORM project include the leadership of Work Package 4 (Dr. Wendy Chapple) and contributions to Work Packages 7, 8 and 10.

**Experience relevant to tasks:** Previous experience includes participation in a number of research projects, e.g. in the areas of corporate community investment (with the Charities Aid Foundation); socially responsible investment (with FTSE4Good); CSR education (with EABIS). Recent publications include: Crane, A.; Matten, D.; Moon, J. (2008) *Corporations and Citizenship*, Cambridge University Press; Matten, D; Moon, J (2008) "'Implicit" and "Explicit" CSR: A Conceptual Framework For A Comparative Understanding Of Corporate Social Responsibility", *Academy of Management Review*.

**Key Persons to be involved in the project:**

**Wendy Chapple** (female) is Associate Professor of Industrial Economics. She brings experience of research in productivity and efficiency measurement, CSR and socially responsible investment (SRI), international comparative CSR (with particular interest in Asia) and Ethical Finance. She also has expertise in corporate social performance measurement. She received the Aspen Institute 'European Faculty Pioneers Rising Star Award', 2008. Dr Christian Herzig (male) was previously Research Associate at the Centre for Sustainability Management, University of Luneberg. He brings research experience in sustainability accounting and reporting. Other ICCSR personnel whose expertise can be drawn upon are Professor Jeremy Moon, Director of ICCSR (Explicit/Implicit CSR, comparative CSR) Dr Jean-Pascal Gond (comparative CSR, socially responsible investment) Dr Judy Muthuri (community investment, developing countries).

**Key publications:**

- J.; Chapple, W.; Moon, J. (2008), "An Integrated Approach to Implementing Community Participation' in Corporate Community Involvement ", *Journal of Business Ethics*.
- Chapple, W.; Moon, J. (2005), "Corporate Social Responsibility (CSR) in Asia: A Seven Country Study of CSR Website Reporting", *Business and Society*.

## 10.1 THE UNIVERSITY OF NOTTINGHAM Organizational Behaviour, Human Resource Management and Information Systems Division.

The Organizational Behaviour, Human Resource Management and Information Systems Division is part of NUBS. The division is a leading centre of international scholarship, with members presenting their research at academic conferences across the globe. A number of colleagues are members of the editorial boards of the leading journals in the field, including 'Human Relations', 'Journal of Management Studies', and 'Organization Studies'. Members of the division are also active within academic networks such as the Academy of Management, the European Group for Organisation Studies, the International Federation of Information Systems and the Royal Statistical Society.

**Main tasks:** main tasks performed by the Organizational Behaviour, Human Resource Management and Information Systems Division within the REFORM project include contributing to Work Packages 4, 7, 8 and 10.

**Experience relevant to tasks:** The division's contribution to REFORM will come from Anna Soulsby, a member of the Organizational Behaviour, HRM and Information Systems Division. Since the 1990s she has conducted research on organizational and managerial change in transforming societies. She has been a frequent visiting lecturer, adviser and external examiner on undergraduate and post-graduate business and management programmes at Bulgarian, Czech and Polish universities. She is recognized as an authority on organizational change in transforming and developing societies. She is the co-author (with E. Clark) of 'Organizational Change in Post-Communist Europe' (1999, Routledge, London). The results of her research have been published in international journals (e.g. 'Organization Studies', 'International Journal of Human Resource Management', 'International Studies in Management and Organization') and presented at leading major conferences. In 2007, she co-edited a special issue of 'Human Relations': "Organization theory and the Post-Socialist Transformation". She is currently a member of the editorial board of the 'Journal for Eastern European Management Studies'. In 2009 she was appointed by the Secretary of State for Business, Innovation and Skills to serve as a member of the Export Guarantee Advisory Council (EGAC). The Council is a statutory body that advises the Secretary of State on the work of the UK's Export Credits Guarantee Department (ECGD). EGAC provides the ECGD with advice on policies and practices to enable it to comply with its objectives and monitor its adherence to its business principles including the promotion of CSR, sustainable economic development in emerging markets, and good corporate governance.

### **Key Persons to be involved in the project:**

**Anna Soulsby** (female) is an Associate Professor of Organizational Behaviour at Nottingham University Business School. She is a member of the Organizational Behaviour/HRM/ Information Systems Division of NUBS.

### **Key publications:**

- Clark, E.; Soulsby, A. (2007), "Understanding Top Management and Organizational Change Through Demographic and Processual Analysis", *Journal of Management Studies*.
- Clark, E.; Soulsby, A. (1998), "Organization-Community Embeddedness: The Social Impact of Enterprise Restructuring in the Post-Communist Czech Republic", *Human Relations*.

**11 COPENHAGEN BUSINESS SCHOOL (CBS)** is one of the three largest business schools in Northern Europe. CBS gives very high priority to cross-disciplinary and problem-oriented approaches. Thus, sociology, psychology, anthropology, politology, law, philosophy and intercultural understanding are important areas in CBS' academic profile. CBS has the full administrative backbone to handle EU projects and a long experience as both partner and Coordinator of EU projects. The financial management of the CBS project participation will be administered by a central EU administrative unit at CBS (CUEU). The CUEU is dedicated to the financial administration of EU projects and the staff at CUEU has more than 20 years of experience administering EU projects.

**Main tasks:** main tasks performed by CBS within the REFORM project include ...

**Experience relevant to tasks:** CBS has set up a multidisciplinary research team with experiences within the field of finance, policy studies, corporate governance, and corporate social responsibility (see below). Moreover, the CBS researchers have previous experiences from working on EU projects, including "Enhancing connectivity between research and policy-making in sustainable consumption (CORPUS)", "Identification and prevention of dietary- and lifestyle-induced health effects in children and infants (IDEFICS)", "Understanding and Responding to Societal Demands on Corporate Responsibility (RESPONSE)", and "Activities promoting and developing the Business Case for Diversity (VC/2007/179)".

**Key Persons to be involved in the project:**

**Esben R.G.Pedersen** (Male) is Associate Professor in Corporate Social Responsibility (CSR) at Intercultural Communication and Management (ICM). His main research interest is CSR, non-financial performance measurement, and process optimisation. For more information, see: [www.cbs.dk/staff/erp](http://www.cbs.dk/staff/erp).

**Ken L. Bechmann** (Male) is Professor at the Department of Finance (He is currently visiting professor at HEC). His research interest is incentive based compensation, dividend policy, stock splits and stock dividends, mutual funds, and announcement effects on the Danish stock market. For more information, see: [www.cbs.dk/staff/kbechmann](http://www.cbs.dk/staff/kbechmann).

**Lucia A. Reisch** (Female) is professor at CBS with a chair for "Intercultural Consumer Research and European Consumer Policy" at Intercultural Communication and Management (ICM). Her work covers areas such as intercultural consumer behaviour, consumer policy (EU, national), and sustainable consumption and production. For more information, see: [www.cbs.dk/staff/lr](http://www.cbs.dk/staff/lr).

**Steen Vallentin** (Male) is Associate Professor at Department of Management, Politics and Philosophy. His main research interests are CSR, sociological system theory, corporate governance, ethical investment, and value-based management. For more information, see: [www.cbs.dk/staff/steen\\_vallentin](http://www.cbs.dk/staff/steen_vallentin).

**Key Publications:**

- Bechmann, K. L. & J. Rangvid (2007), "Rating mutual funds: Construction and information content of an investor-cost based rating of Danish mutual funds", *Journal of Empirical Finance*, 14: 662-693.
- Pedersen, E.R. (2009), "Modeling CSR: How Managers Understand the Responsibilities of Business towards Society", *Journal of Business Ethics*.
- Pedersen, E.R & Neergaard, P. (2009), "What Matters to Managers? - The Whats, Whys, and Hows of Corporate Social Responsibility in a Multinational Corporation", *Management Decision*, 47 (8): 1261-1280.
- Reisch, L.A. & Karsten, J. (2008), "Consumer protection laws and sustainability: A European view". *German Policy Review*, 4(1), 45-66.
- Vallentin, S. (2009), "Private Management and Public Opinion: Corporate Social Responsiveness Revisited", *Business & Society*, 48(1), 60-87.

**12 Nyenrode Business Universiteit (NBU)**

NBU consists of two schools: the Business School and the School of Accountancy & Controlling. Nyenrode is the only private university in the Netherlands. Founded in 1982, the year Nyenrode received official university status, the program has worked itself up the international rankings. It nowadays appeals to an international community of students, attracting candidates from over 20 countries each year and making the Nyenrode network more multicultural than ever before. The university offers graduate level programs in the fields of general management, accountancy and controlling. In 2004, the MBA strengthened its ties with the Kellogg School of Management, one of the leading business schools in the world. Nyenrode holds the three accreditations: EQUIS, AMBA and NVAO.

Nyenrode Business Universiteit will participate in the REFORM project through Nyenrode Center for Finance (NCF) as one of its Research Centers specialized in one or more of the areas of expertise required by the program design.

**Main tasks:** Nyenrode Business Universiteit will be involved in WP1, lead by the Vlerick Leuven Gent Management School. The main task of NBU is to study the role of securitization and its derived products in the unfolding of the financial crisis and the economic crisis is necessary to understand the role of regulation with regards to product innovation.

**Experience relevant to tasks:** Nyenrode Center for Finance is a one of the few leading centers worldwide that produces cutting edge research in the area of structured finance and in particular on structured products. Over the last two years with faculty from Yale International Center for Finance, NCF has published, and has been involved in, several research projects on structured products. Also, the NCF participates in several ongoing projects on securitization with the Vlerick Leuven Gent School of Management. In addition, the finance department developed expertise in both research and teaching in areas related to structured finance.

**Key Persons to be involved in the project:**

**Professor Dennis Vink** (male) is Chairman of the Nyenrode Center for Finance. Professor Vink has worked directly with major corporations, such as ABN AMRO, Standard & Poor's (USA) and NIBC. His main research interests are in understanding structured products, credit ratings, and on how structural features of securitized products are changing. His working papers have been published by Yale International Center for Finance, two of which were coauthored by Frank J. Fabozzi.

**Key publications:**

- Vink, Dennis, Frank Fabozzi, 2009. "Non-US asset backed securities: spread determinants and over-reliance of credit ratings". Yale ICF Working Paper No. 09-13. Top 10 SSRN Downloaded Papers for Journal of European Finance.
- Vink, Dennis, André Thibault, 2008. "ABS, MBS and CDO pricing comparisons: an empirical analysis". The Journal of Structured Finance 2, 27-45.

**13 Szkoła Główna Handlowa w Warszawie (SGH).** Founded in 1906, SGH is the oldest university of economics and management in Poland. It is a leading business school in the CEE countries, running many advanced research projects esp. in macroeconomics, monetary policy, international economic relations, banking, finance, quantitative methods in economics, demography, social statistics, and economic development. SGH cooperates with over 100 universities and research institutions in Europe and worldwide. At SGH, the Institute of Statistics and Demography (ISD) will participate in the REFORM project, although scholars from other departments will be involved as well. Research at ISD is focused on demography and applied statistics and include: population projections, modelling population dynamics incl. microsimulation and multi-agent models, socioeconomic context of demographic change incl. ageing and its social and economic consequences and labour market developments, microeconomic approach to family and household changes. Another area of research is analysis of household living conditions and poverty and inequality measurement. Research interests of the ISD are also focused on multi-level modelling, methodology of surveys, data mining, application of quantitative methods in monetary policy.

**Main tasks:** include participation in the Work Package 6 as well as in WPs 4 and 5.

**Experience relevant to tasks:** research at SGH includes cross-country comparative studies on banking and financial sector, supervising financial sector, modelling of dynamics of different markets. Many SGH scholars are outstanding experts in reforming Polish economy and restructuring financial and banking system as well as experts in economies in transition. ISD currently is a member of the "Reconciling Work and Welfare" NoE, partner in two FP7 projects and coordinator of two large national projects.

**Key Persons to be involved in the project:**

**Janina JOZWIAK** (female) is Director of the ISD, former Rector of SGH, Honorary President of the European Association for Population Studies. Active in many international and national professional academic organizations and bodies. Her recent research covers socioeconomic context of demographic change and its economic consequences. She published also in modelling of population dynamics. Currently she is a leader of two projects: Generation and Gender Survey in Poland and Foresight "Higher education for competitive Mazovia region 2030".

**Tomasz SZAPIRO** (male) is Head of Division of Decision Analysis and Support at SGH. Former Dean of Graduate School SGH. Adjunct Professor of International Business Studies at Carlson School of Management, University of Minnesota. Visiting Professor, Carleton University and University of Ottawa. Expert for international organizations (UNIDO, EC). His research focuses on decision analysis in economics and management, and multi-agent based modelling of economic processes.

**Malgorzata IWANICZ-DROZDOWSKA** (female), specialized in Banking and Financial Services, is head of Financial Services Markets Research Centre at the Banking Dpt. SGH. Her recent research focuses on safety of financial services markets, quality of banking regulations, impact of changes in regulations (mostly Basel II, changes in deposit insurance funding and level of guarantees).

**Aleksander SULEJEWICZ** (male) is professor of Economics at the Dpt. of Economics II, SGH, Adjunct Professor, Carlson School of Management, University of Minnesota. Consultant UNIDO (Africa, Asia). His main domains of research interests are: international development theory, cost benefit analysis (methodologies of project evaluation), transaction costs in Eastern European economies, economics as social science, higher education management/economics.

**Ryszard RAPACKI** (male) is Head of Dpt. of Economics II, SGH, Adjunct Professor, Carlson School of Management, Univ. of Minnesota, Senior Fellow, Center for Studies on European Integration (ZEI), Bonn. Lecturer, National School of Public Administration, Visiting Professor at universities in USA, Europe, Latin America. Expert UNIDO, UNDP, OECD in public finance, privatization, investment project feasibility, adviser to enterprises and governments in Europe, Africa, Latin America. His research

interests cover transformation of economies of CEE countries, economic growth, public finance, privatization, technology transfer, problems of economic underdevelopment.



**14 Otto Friedrich Universitaet Bamberg (OFU)** is a German University known for its focus on the Humanities. Social Sciences, Economics and Business Administration constitute the second largest focus of study and research, and especially the Social Science department is internationally acclaimed for its empirical work. The Chair of Sociology I, led by Prof. Dr. Hans-Peter Blossfeld, specializes in the fields of educational research, longitudinal life course and labour market research, the analysis of the social consequences of globalization and transnationalization and family sociology.

**Main tasks:** OFU will act as a project partner in WP2 (Cost and Benefit Impacts on Real Economy). The group's work will focus on the social and economic effects of the financial market for individuals in modern Europe throughout different phases of their life course. It will explore how individual actors cope with increasing uncertainties, steered by fluctuations in financial markets. Key questions include: Do financial crises create new social and economic inequalities? Who are the winners and losers of the financial crises? By using the results of nation-specific longitudinal event history models, the Bamberg group analyzes how these changes are defined and interpreted by individuals at different ages and how individuals in different societies and institutional contexts react to the consequences of the financial crises when they are making pivotal life course decisions. Taken together, the Bamberg group thus will analyze the social outcomes of the developments on financial markets and thereby make a significant contribution in explaining the social and institutional embeddedness of macro market developments.

**Experience relevant to tasks:** the Bamberg group has led various large-scale international projects that have empirically studied the repercussions of social and economic globalization and transnationalization, filtered by nation-specific institutional settings, on individual employment and family biographies. Within the GLOBALIFE project, 1999 -2006, the group coordinated a network of 71 scientists from 17 OECD countries investigating the consequences of globalization on various pivotal life course transitions in different modern societies. Since 2006, the Chair has coordinated the ESF Social Science Networking Programme TransEurope where scientists from 7 European countries comparatively reconstruct the impacts of transnationalization on patterns of life course inequality.

**Key Persons to be involved in the project:**

**Hans-Peter Blossfeld** (male) is the Director of the Institute of Longitudinal Studies in Education (INBIL) at the University of Bamberg and Principal Investigator of the National Educational Panel Study (NEPS). Since 2001 he has held the Chair of Sociology I at Bamberg University and since 2003 he has been the Director of the State Institute for Family Research at Bamberg University.

**Sandra Buchholz** (female) is Assistant Professor at Bamberg University. Before, she served as a Research Scientist in the international comparative projects 'GLOBALIFE: Life Courses in the Globalization Process' (2003-05) and '*flex*CAREER: Flexibility forms on the labor market – a cross-national comparison of the development of social inequality' (2005-07).

**Dirk Hofäcker** (male) is both a researcher at the Institute for Family Research at Bamberg University (ifb) and Coordinator of the Research Network 'TransEurope - Transnationalisation and Changing Life Course Inequality in Europe', funded by the European Science Foundation.

**Kathrin Kolb** (female) took part in the GLOBALIFE project, the DFG-project 'Flexibility Forms at Labor Market Entry and in the Early Career' (*flex*CAREER), as well as in the BiKS project at the University of Bamberg. Since September 2007 she is engaged in the project to 'Household Wealth Inequality in International Comparison' as a research scientist.

**Key publications:** Blossfeld et al. (eds.) (2005): *Globalization, Uncertainty, and Youth in Society*, Routledge; Blossfeld, Mills & Bernardi (eds.) (2006): *Globalization, Uncertainty and Men's Careers*, Edward Elgar; Blossfeld & Hofmeister (2006) (eds.): *Globalization, Uncertainty and Women's*, Edward Elgar; Blossfeld, Buchholz & Hofäcker (eds.) (2006): *Globalization, Uncertainty, and Late Careers in Society*, Routledge.

**15 Ketchum Pleon (PLEON)**

Ketchum Pleon is a communications consultancy with a strong focus on Europe. A complete range of communication services is provided by our consultancy. Virtually every communications discipline is represented in our consultancy, where you will find marketing specialists, PR specialists, communications specialists, subject experts in finance, public affairs specialists, as well as copywriters and designers. We create and implement communication strategies for private and public sector organisations.

**Main tasks:** main tasks performed by Ketchum Pleon within the project include the design and delivery of a framework of actions and knowledge sharing platforms to support comprehensive and appropriately targeted dissemination activities (external) towards all relevant stakeholders.

**Experience relevant to tasks:**

For the Directorate General for Employment, Social Affairs and Equal Opportunities, Ketchum Pleon fulfils dissemination activities for a range of projects, i.e.:

- “For Diversity. Against Discrimination” (2008 – 2011)
- European Health Insurance Card (09/2008 – 06/2009)
- Social Protection Social Inclusion (03/2008 – 12/2009)
- Gender Pay Gap (09/2008 – 12/2010)

Key dissemination tasks involve: stakeholder engagement, event communication on national, regional and local level, development of campaign concept, pan-European media database set-up, organising Round Table (on social exclusion and poverty), media monitoring, preparation of press material, and organisation of national press briefings.

**Key Persons to be involved in the project:**

**Tim de Boer** (male) is CEO of Ketchum Pleon. Tim’s main area of expertise lies in strategic marketing and communications - integrating insights from the fields of commerce, politics and organisational development. In 1999 he founded a European marketing consultancy that merged with the current Ketchum Pleon organisation. Currently Tim leads the Ketchum Pleon organisation in the Netherlands. Besides his management role he advises international clients in the commercial and public sector on marketing strategies and integrated communication programmes. Prior to joining Ketchum Pleon Tim was Marketing Director with KPN Telecom where he was responsible for marketing strategy and product of the Internet division. He also worked for NATO headquarters in Brussels where he managed IT projects. Tim de Boer holds degrees in Computer Science and Marketing.

**Sheila van Putten** (female) is Communications Consultant at Ketchum Pleon Netherlands. Her work experience at Ketchum Pleon include marketing communications, media relations, and strategic communications planning for i.e., NCTb (Dutch governmental organisation on anti-terrorism), Het Financieele Dagblad (Dutch daily newspaper specialized in finance & economics). She holds a Master of Arts degree in Communication Science and a Master of Science degree in Economics from the University of Amsterdam.

16 **IMD International** (IMD). The International Institute for Management Development (IMD) is a foundation duly organized and validly existing under the laws of Switzerland with its registered office at Chemin de Bellerive 23, 1007 Lausanne, Switzerland. IMD statutory purpose is the creation, management and administration of an autonomous institute aimed at delivering executive education in public and private programs at an international level, as well as conducting research and other activities related to the delivery of executive education.

**Main tasks:** research articles on the future of financial markets, the role of financial markets in value creation and the impact of financial regulation on incentives and performance of economic agents.

**Experience relevant to tasks:** See publication record in this area below.

**Key Persons to be involved in the project:**

**Professor Arturo Bris** (male) is Professor of Finance at IMD. He graduated in Law and Economics from Universidad Autónoma de Madrid, and received an MSc from CEMFI (Foundation of the Bank of Spain). He holds a PhD in Management from INSEAD. Prior to joining IMD, Professor Bris was the Robert B & Candice J. Haas Associate Professor of Corporate Finance at the Yale School of Management. A Research Associate of the European Corporate Governance Institute, and a member of the Yale International Institute for Corporate Governance, he has worked extensively on issues of Corporate Governance, Financial Regulation, and International Valuation. His research and consulting activities focus on the international aspects of financial regulation, and in particular on the effects of bankruptcy, short sales, insider trading, and merger laws. He has also researched and lectured on the effects of the Euro on the corporate sector, and on the valuation impact of corporate governance changes. Professor Arturo Bris ranks among the top one hundred most-read social scientists in the world.

**Professor Nuno Fernandes** (male) is Professor of Finance at IMD. Prior to joining IMD, he was Associate Professor at the Catholic University of Portugal, where he was Director of the Master in Finance, a CFA program partner. He has also worked as a risk expert in a major bank, and as a research economist and pricing specialist in telecoms regulation. He is a specialist on international financial markets and corporate governance, combining expertise in Sovereign Wealth Funds, risks of global projects and companies, executive compensation, cross-listings in foreign markets, competitiveness of stock exchanges and emerging market investments. His works have earned distinguished awards, including the AEFIN prize for the best doctoral dissertation. In 2008 he received the Lamfalussy Fellowship, from the European Central Bank. This fellowship is attributed to the top world researchers in finance below 36 years. He has also recently received a grant from the FDIC, the US Regulator for financial institutions, to study the links between the sub-prime crisis and the governance and transparency standards of financial institutions.

**Key publications:**

- The Euro and Corporate Valuations, *Review of Financial Studies* 2009 22(8):3171-3209 (joint with Yrjö Koskinen and Mattias Nilsson).
- Adopting Better Corporate Governance: Evidence from Cross-Border Mergers, *Journal of Corporate Finance*, 2008.
- The Value of Investor Protection: Evidence from Cross-Border Mergers, *Review of Financial Studies*, 2008.
- Escape from New York: The Market Impact of SEC Rule 12h-6 on Foreign Private Issuers, with Ugur Lel (U.S. Federal Reserve Board) and Darius Miller (Southern Methodist University), *Journal of Financial Economics*, forthcoming.
- Market Liberalization at the Firm Level: Spillovers from ADRs and implications for local markets, *Journal of International Money and Finance*, Forthcoming.
- Insider Trading Laws and Stock Price Informativeness with Miguel Ferreira, *Review of Financial Studies*, 2009, Volume 22, Pages 1845-1887.

**17   Wirtschaftsuniversität Wien (WU)**

With about 25,000 students the Vienna University of Economics and Business is the EU's largest educational institution for business and economics, business law, and social sciences. The practical relevance of WU's programs, resulting from WU's close cooperation with the business world, is only one of the reasons why the Financial Times has ranked WU among Europe's Top 50 Business Schools. The Research Institute for Managing Sustainability (RIMAS) at the WU conducts research and policy consulting projects covering inter-disciplinary issues such as Sustainable Development Strategies and Indicators, Sustainable Consumption and Production, Good Governance and Corporate Sustainability.

**Main tasks:** WU will be involved in WP5 building on its vast experience with EU policies and governance issues; will conduct two clinical case studies in WP7 located in Germany, Austria and/or Switzerland; will be involved in WP8 in the stakeholder engagement.

**Experience relevant to tasks:** RIMAS has successfully conducted projects for six DGs, Eurostat, the EU Committee of Regions, UNDP, several national and regional authorities. RIMAS worked for Eurostat in preparing the Monitoring Report on Sustainable Development 2009, conducted several European surveys and comparative studies on the implementation of sustainable development strategies, and supports the European Sustainable Development Network (ESDN) since 2005 by scientific input. On behalf of the Austrian Ministry for Research we conducted a study on "building blocks of a crisis-proof market economy" identifying recent research needs to improve the global financial system and to lead to sustainable market economy.

**Key Persons to be involved in the project:**

**Andre Martinuzzi** (Dr.) is director of RIMAS, associate professor at WU, has a postdoctoral lecture qualification (*venia docendi*) in Environmental Management and Sustainable Development Policy. He coordinated projects in FP5 and FP6 and is currently work package leader in two FP7 projects. On behalf of DG Research and Eurostat he designed and implemented internet-based monitoring systems for sustainable development. His research areas are sustainable development policies, evaluation and knowledge brokerage.

**Michael Meyer** is Full Professor at the Department of Management, head of the Group for Nonprofit Management, chair of the Research Institute for NPOs and academic director of the WU Professional MBA Program (Social Management). He was national coordinator of the CINEFOGO Network of Excellence (Civil Society and New Forms of Governance) from 2005 to 2009. His current research focuses on Third Sector and Civil Society, Discourse and Organisational Analysis, and Managerialism.

**Gerald Berger** (male) has a special focus on environmental policy with more than 8 years of experience in EU-projects. He is currently coordinating the ESDN, a knowledge exchange initiative covering all European Member States focused on the implementation of national sustainable development strategies. He is in close contact with numerous policy makers all over Europe and personally involved in several policy processes (e.g. the renewal of the EU SD strategy, Lisbon 2020).

**Markus Hametner**, MSc, studied Ecology and Environmental Management, worked four years in the European Sustainable Development Network Office. Since 2008 he is responsible for the coordination of the Eurostat Monitoring Report on Sustainable Development.

**Michal Sedlacko** (PhD) studied Economics and Environmental Policy, conducted projects for UNDP; designed and developed e-Learning platforms and moderated e-Learning Courses.

**Key Publications:** Steurer, R. & Berger, G. (2010): The vertical integration of Lisbon and sustainable development strategies across the EU, or how different governance architectures shape the European coherence of policy documents; in: *Natural Resources Forum*; Martinuzzi, A.; Sedlacko, M. (ed.) (2010): „Governance by Evaluating Sustainable Development: Actors, Institutions and Instruments”, *Environmental Governance and Policy*, Special Issue.

**18 Univerza v Ljubljani (UL).**

The University of Ljubljana (UL) is an institution with a very rich tradition, established in 1919. With its more than 56,000 undergraduate and postgraduate students; total of 22 faculties, 3 academies of art and 1 university college employ approx. 3500 teaching and research staff, and nearly 900 technical and administrative staff. Numerous research projects, coordinated or participated by University of Ljubljana, follow the latest world discoveries and trends.

The Faculty of Economics at the University of Ljubljana (FELU) is the University's largest faculty. FELU employs 157 teaching and research staff, and 90 administration staff. FELU has recently been re-awarded the global EQUIS quality accreditation, which assures high international standards of quality. With this prestigious accreditation FELU joined the group of top 100 business schools around the world with the same premise: high academic achievements in teaching and research activities. FELU is the second EQUIS accredited school in the Central and Eastern Europe and serves as benchmark for other schools especially from Balkan area.

**Main tasks:** main tasks performed by UL within the REFORM project include: provision of two to four financial institutions for a clinical study. Execution of the interviews with stakeholders, archival data gathering and other data collection. Analysis and writing up of the results of the clinical studies. Dissemination of the results in form of published papers, reports and presentations to relevant audiences.

**Experience relevant to tasks:** Previous experience relevant to tasks includes two FP6 projects, four FP7 projects and six TEMPUS projects.

**Key Persons to be involved in the project:**

**Assistant Professor Segeja Slapničar**, Ph.D (female). She received her Ph.D. from the University of Ljubljana. During her studies, she was a visiting researcher at the London School of Economics and the University of Bristol. She has published in the areas of accounting and managerial performance evaluation. She is a Board member of the Slovenian Agency for Audit Supervision, president of the Slovenian Settlement committee for the majority and minority shareholders disputes at firm's re-organizations and a member of the Audit committee of the largest Slovenian bank NLB and Telekom.

**Assistant Professor Igor Masten**, Ph.D (male). After completing his PhD studies at the European university institute, Florence, where he was also a Jean Monnet Fellow in 2008/09. He has published in the areas of macroeconomic modelling, forecasting, DSGE modelling and the analysis of financial markets. These are also the areas of his current research activities. As advisor he had served in the Council for economic development of the Slovenian government.

**Dr Aleš Berk Skok** is Assistant professor of finance at the University of Ljubljana, Faculty of Economics. He completed his PhD at the Vienna Graduate School of Finance/CCEFM in 2007. During his PhD studies he was an active member of financial analyst/portfolio management team at the Institut fuer strategische Kapitalmarktforschung in Vienna. He is currently a member of the management board of the asset management company MP Invest Inc. and a member of the supervisory board of Slovenian export and development bank.

Ales publishes his academic work in the field of investments and corporate finance and is also an active member of various working parties for preparing legislative changes in areas connected to financial markets and institutions.

**19 Univerzita Komenského v Bratislave (UKB).**

Bratislava's Comenius University is the oldest (founded in 1919), biggest and the highest-rated Slovak university. The Faculty of Management, established in 1991 (after Velvet revolution), is the leading management and business administration school in Slovakia. It is accredited according to the Slovak Higher Education Law for all levels of the University education: bachelor, master and PhD. It has been twice ranked as excellent by the Eduniversal Agency, nationally strong and/or with continental links. (<http://www.eduniversal.com/business-school-ranking/country/slovakia/193>). The E-Europe Research & Development Centre is part of the Faculty of Management; it has been primarily focused on projects funded by the EU from the area of IST and/or ICT –within previous FP6 and the current FP7 regarding the EU's original Lisbon and later i2010 strategies on information society with the target years 2010 and/or 2013. At present 4 IST projects run and 3 are completed (see more <http://erdc.fm.uniba.sk/>).

**Main tasks:** main tasks performed by UKB within the REFORM project focus on contribution to the following areas: WP1, WP2, WP3, WP4, WP7, WP8.

**Experience relevant to tasks:** UKB has set up multidisciplinary research team with experience in the field of finance, banking regulation and management, strategic management and organizational behavior. Key members of the team have already lead or participated in research activities related to the proposed tasks. From regional point of view (language skills and professional experiences) they are able to cover CEE region and do comparative and conceptual studies of the research topics.

**Key Persons to be involved in the project:**

**Jozef Komorník** (male) – is professor in the area of Management focusing on: corporate finance, advance corporate finance, international finance, quantitative methods for economics and finance. He is Vice-dean for international relations and former Dean of the Faculty. His extensive research activities are done in cooperation with former and present PhD Doctoral students working in German industries (e.g. Dr. G. Broschinski from Deutsche Bank) and Slovak branches of international banks.

**Jozef Papula**, PhD (male) – is professor in the area of Management focusing on: strategic management, strategic planning, strategic controlling and value based management. He is Dean of the Faculty of management and head of Department of Strategy and has 5 years experiences working in the top management of the leading engineering company in Slovakia (1994-1998). He is successful supervisor of numerous PhD. doctoral students from various countries from the EU. He is the chairman of the Science Council of the Faculty of Management.

**Anna Pilkova** (female) is Associate Professor in Management focusing on Finance, Banking Regulation and Management. She is member of the Science Council of the Bratislava's University of Economics and the Faculty of Management of the Comenius University. She has also 15 years experiences working in the top management of the leading Slovak Bank being primarily responsible for the risk management and finance (till September 2009). She had also participated in the activities of the Slovak Banking Association at the Committee for Banking Regulation for more than 6 years.

**Jan Rudy** (male) is Professor of Organizational Behaviour and Human Resource Management. He is current MBA program director at Comenius University in Bratislava, Faculty of Management, ex-dean of the Faculty, former Board of Directors member in the Slovak Post, a.s. He has outstanding experience in the field of assessment of training needs, training policy and strategy, training organization, training methodology, training the trainers etc.

**Ludomir Šlahor** (male) is Associate Professor in Management focusing on Financial Management, Banking and Finance and Investment Analysis. In addition to his long-term experiences as University teacher and researcher he has also extensive work experiences acting in Switzerland (Swiss Volksbank, Sandoz, AG, Credit Swiss Group) and Slovakia as governor of the Export Import Bank of Slovak Republic.

**20 Organization for Economic Cooperation and Development (OECD)** brings together the governments of countries committed to democracy and the market economy from around the world to support sustainable economic growth, boost employment, raise living standards, maintain financial stability, assist other countries' economic development, contribute to growth in world trade. It is the guardian of leading international corporate responsibility instruments on corporate governance, anti-corruption and money laundering, fiscal transparency and tax evasion and social responsibility.

Within the context of the COM Call, OECD is uniquely qualified to advise on the 'state of the art' and future research priorities across the five core dimensions outlined. Its established track record of independent research and policy analysis encompasses highly relevant areas including: Global Development Outlook, Financial Market Trends and Policies, Monetary and Financial Issues, Regulatory Reform (inc. Economic Issues) and Sustainable Development..

More broadly, OECD has undertaken a number of thought leadership initiatives against the backdrop of the current financial and economic crisis. Based on the collective understanding between governments that fundamental action would be required to return stability, transparency and accountability to financial markets, the OECD Council led a series of global consultations in the second half of 2009 to explore potential regulatory solutions and policy mixes to reform oversight of the financial system and its key actors.

**Main tasks:**

This OECD contribution will particularly concern the data collection through the availability of their experience and databases and the analysis phase and the dissemination stage by communicating the study findings to OECD delegations.

**Experience relevant to tasks:**

OECD values, norms and expertise embedded with these ESG tools are shared with more than 100 other countries and economies, from Brazil, China, and Russia to the least developed countries in Africa.

**Key Persons to be involved in the project:**

**Marie-France Houde** (female) is a senior economist at the OECD Investment Division and is manager of the OECD work on corporate responsibility and the OECD Guidelines for Multinational Enterprises. She will coordinate and provide input to the project in cooperation with senior economists at the OECD Economics and Environment Directorates.

**Key publications:**

- Policy Framework for Effective and Efficient Financial Regulation: OECD Recommendations and Principles, December 2009
- The Financial Crisis: Reform and Exit Strategies, OECD Report, October 2009
- Financing Climate Change
- Regulatory Impact Analysis: A Tool for Policy Coherence, OECD Report, September 2009
- Corporate Governance and the Financial Crisis: Key Findings and Main Messages, OECD Corporate Governance Steering Group Report, June 2009

## 2.3 Consortium as a Whole

The European Commission's call for a multi-dimensional study of "Changing the role of the financial system to better address economic, social and environmental objectives" has laid down a sizeable challenge to the SESH research community. The scale, scope and complexity of the questions being asked – and areas identified for further knowledge development and insight – require an exceptional level of interdisciplinarity, stakeholder engagement in research design and delivery, and understanding of complex system interdependencies. These aspects have in recent years been notably absent in "traditional" ERA research on business in society issues – a systemic weakness highlighted in EABIS' CSR Platform Green Book Report (Roome, N. & Pickard, S. 2008).

As a direct consequence, the REFORM proposal has brought together 21 leading institutions and network organizations who share a commitment to pushing back the boundaries in European research and contributing actively to the pursuit of socioeconomic and environmental sustainability. The partners in REFORM will build on their established methodological know-how, practical experience, networks and existing data to deliver an innovative and scientifically advanced response to the Call. Its Consortium features a large number of leading European researchers from across the social sciences. Equally, it includes a number of institutions which have established track records in the delivery of EU-funded research projects. These two dimensions are further elaborated in the sections that follow.

### 2.3.1 Institutional Experience and Capabilities

A particularly strong feature of the REFORM Consortium is the level of relevant experience and the strength of professional working relationships within the group. As mentioned earlier, 13 of the Consortium partners are active members of the EABIS network. The remaining seven are also long-standing collaborators and institutional colleagues. As such, the proposal is grounded in robust partnerships and a high existing level of trust.

The coordination leads (management, research, policy, dissemination) bring a wide and complementary array of expertise and experience to the table (also see Section 2.1). Among the members of the PMT:

#### **European Academy of Business in Society (EABIS)**

- Has had extensive management roles in recent EU-funded projects and consortia (CSR Platform, Business Case for Diversity, IMPACT)
- Has coordinated since 2003 a multi-polar, -national and -disciplinary research programme involving global companies, academic institutions and stakeholder organisations
- Has co-facilitated (with CSR Europe) the acclaimed "Measuring Non-Financial Performance" EU Alliance Laboratory, whose work is at the centre of DG ENTR consultations on future European transparency and reporting standards ([www.investorvalue.org](http://www.investorvalue.org))



- Has been recognised by the EU as an international thought leader around business in society issues, and is a Steering Committee Member of the EU Multi-Stakeholder Forum on CSR

**Bocconi University (BOCCONI)**

- Has engaged University President Mario Monti, former Commissioner for Internal Markets and Competition to provide expert input and guidance on research issues and questions
- Has a strong international reputation in management and economics research and is considered a European leader in interdisciplinary SESH research – viz. 7 research centres involved in REFORM.
- Has received a number of prestigious “Ideas” grants from the European Research Council for scientific innovation in management, finance and economics.
- Has successfully coordinated the RESPONSE project under FP6, with accompanying praise from DG ENTR and RTD Commissioners.

**Centre for European Policy Studies (CEPS)**

- Has coordinated or contributed to many EU-funded research and policy initiatives since 1983
- Has a high quality international research team of more than 30 people drawn from eighteen different countries.
- Has existing high-level research programmes in the domains of Financial Markets & Institutions, Regulatory Policy, Economic & Social Welfare Policies, Politics & EU Institutions, and Energy & Climate Change
- Has formed nine major research networks with other leading institutes within and beyond Europe

**Ketchum Pleon BV**

- Has fulfilled dissemination activities for a range of EU projects in recent years (e.g. with DG EMPL: “For Diversity. Against Discrimination”, European Health Insurance Card, “Social Protection, Social Inclusion”).
- Has international expertise in strategic planning and delivery of a complete range of communication services, i.e., corporate communications, change management, stakeholder engagement, public affairs, event organization, crisis and issue management, marketing communication, and interactive (social) media.
- Has deep experience of integrating complex and varied insights (political, social, environmental, business, and organizational) into strategic communications for key audiences and clients.
- Has a wide-ranging network of European clients specifically within the financial sector, which will continually provide REFORM partners with latest insights, perspectives and developments in the finance industry.

The consortium as a whole delivers the competencies in the different domains that are required, including economics, finance, management, political science, sociology, demography, psychology, law, ethics, environmental studies, decision science, and epistemology. In particular, the following areas of expertise are covered by consortium partners:

	BOCCONI	EABIS	CEPS	VLERICK	UOXFMQ	INSEAD	LSE	IESE	ESADE	UNOTT	CBS	NBU	SGH	OBU	PLEON	IMD	WU	UL	UKB	OECD
<b>Economics and social sciences</b>																				
Macro-economics and monetary economics	X	X			X							X				X	X		X	
Institutional and political economics	X	X			X	X				X		X				X	X		X	
Banking regulation and supervision	X	X	X		X										X				X	X
Political science	X				X					X		X				X				
Demography and economic sociology	X					X	X					X	X							
Decision science, social and cognitive psychology	X				X	X				X								X		
Environmental science	X			X	X											X				
Organizational History	X					X				X										
Org. and inst. transformation in post-socialist societies										X		X	X					X		
Micro Economics	X				X					X		X				X	X			
<b>Finance</b>																				
Financial and non-financial accounting	X	X									X					X	X			
Corporate and banking law	X	X	X																X	
Corporate finance, asset/liability management	X		X	X						X	X				X				X	
Financial markets, derivatives pricing, new products	X		X	X						X	X				X					
Risk and management of risk	X		X	X							X	X						X	X	
Banking management	X		X	X											X				X	
Retail banking	X	X		X											X				X	
Ethical Finance	X					X				X										
<b>Management</b>																				
Strategic management	X		X	X			X		X	X					X	X			X	
Corporate governance	X	X	X	X					X	X					X					
Corporate social responsibility and business ethics	X		X	X		X	X	X	X	X										X
Environmental management	X			X	X					X	X									
System and organizational change	X				X	X							X			X			X	
Operations and IT systems management					X															
Marketing and sales of financial products	X				X														X	
Human resources management in financial sector	X					X			X											
Organizational theory and behaviour	X					X			X				X							
<b>Research Methodologies:</b>																				
Econometrics and statistics	X				X					X	X	X			X	X	X		X	
Survey and focus group methodologies	X											X	X			X			X	
Action learning methodologies				X	X									X		X			X	
System and network analysis	X			X	X	X	X					X	X			X				
Simulations (agent-based, systems dynamics)	X		X	X	X							X							X	
Foresight, scenario development			X	X										X					X	
Qualitative research methods, longitudinal case studies	X			X	X		X	X								X			X	

Behind the institutional brands, the REFORM Consortium includes some of the leading scholars in Europe in different parts of the social sciences:

### 2.3.3 Geographic Coverage and International Dimensions

The REFORM Consortium is highly complementary in that it combines partners from across Europe (see section 1.3.3 for further details), giving a particular focus to New Member States by integrating three leading institutions from recently acceded countries into the project. Switzerland notwithstanding, Consortium members stem from 12

EU countries: Austria, Belgium, Denmark, France, Germany, Italy, Netherlands, Poland, Slovakia, Slovenia, Spain and the United Kingdom. In WP7, they will be given significant roles in conducting clinical studies and change experiments that build on existing country-specific relations with different actors in the financial system. This is expected to enrich the quality of insight and data for EU and regional policy-makers, in particular.

In their research networks, initiatives and approach, many of the partners nevertheless cover a much wider European area than the single Member State they originate from. Five organisations – CEPS, EABIS, CSR Europe, OECD, Ketchum Pleon – have truly pan-European presence (and in several aspects global coverage) through their strategic or operational alliances and the scope of activity of their own organisation's members. By extension, academic partners have an increasing foothold outside of the EU which can be leveraged for additional knowledge exchange and scientific perspectives (e.g., UNOTT in China, INSEAD in Singapore and Abu Dhabi).

### 2.3.4 Sub-contracting

In order to meet the requirements of the Article II.4.4 of ECGA an additional 4000€ is allocated to BOCCONI, 3000€ to EABIS, 5000€ to CEPS, 6600€ to VLERICK, 2706€ UOXFMQ, 1982€ is allocated to UNOTT, 3000€ to IESE, and 4000€ to PLEON to produce certificates on the financial statements. Hence Article II.7.2 of the Financial Guidelines (Tasks which can be subcontracted and conditions) is respected. In more detail:

- For WP6, 20.000€ is allocated to BOCCONI to fund the development of software related to the simulation model.
- For WP7, 30.000€ is allocated to BOCCONI to subcontract/fund (...) and 50.000 € to IESE to subcontract professional transcription and translation services for in-company clinical studies.
- For WP8, 180.00€ is allocated to CEPS for surveys and 6000€ to EABIS for
- For WP9, 115.000€ is allocated to PLEON to subcontract hosting, catering, logistics, and technical support for conferences to external partners and 40.000€ to IESE to subcontract the technical development of the SRI online valuation tool
- For WP11, 14.000€ is allocated to EABIS to subcontract technical developments and software licensing for intranet/content management.

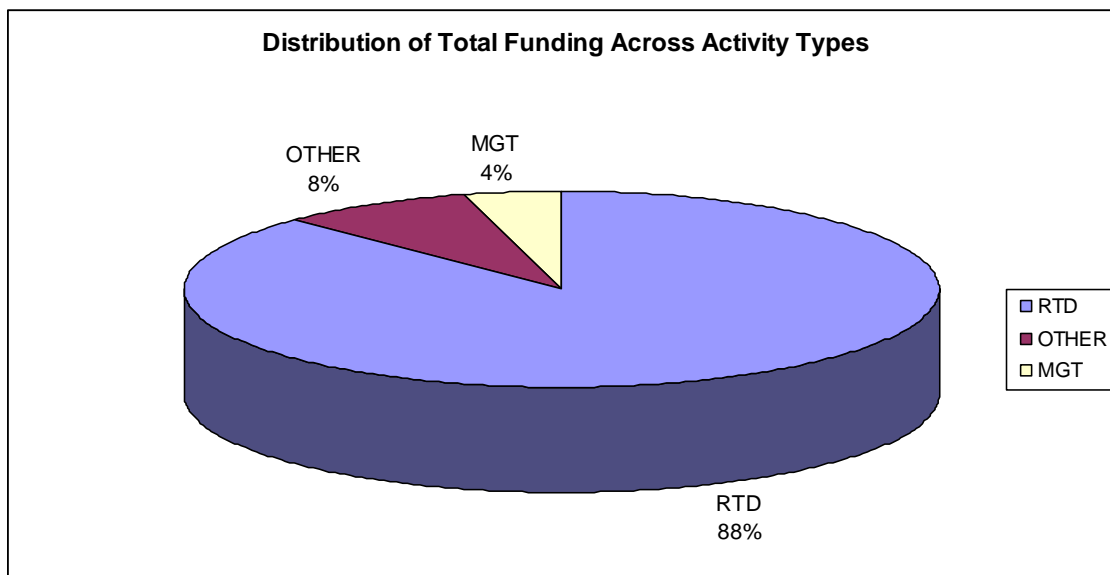
## 2.4 Resources to be Committed

The budget for the project was discussed and elaborated jointly by all partners and reflects the distribution and responsibilities of each of them in the framework of this project.

### • Total Funding Distribution

The total budget for the project is €10,268,649. The requested EC contribution is €7,999,296. The REFORM partners will cover an amount equivalent to 22.1% of the European Commission, namely €2,269,353. This amount is predominantly covered by in-kind PM contributions from senior faculty in mentoring and personal development. REFORM will engage a high number of young and early-stage researchers to support lead faculty. Given the duration of the project (5 years), this implies an exceptional learning opportunity. We estimate that 30 senior faculty, with an average PM cost of €15K, will dedicate 1 PM per year of the project. This results in a estimated total of €2,250,000.

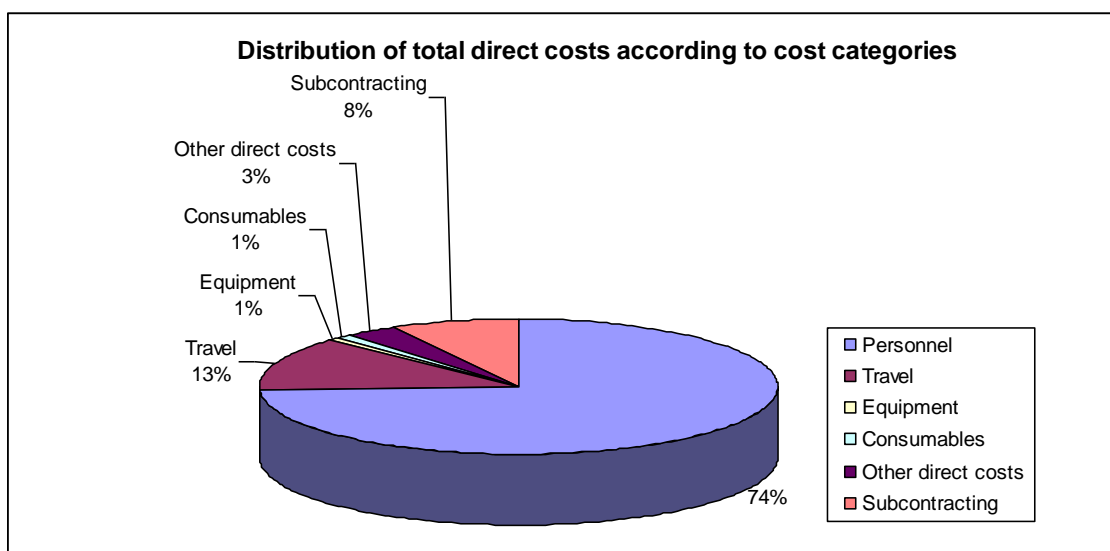
The distribution of total funding across activity types is shown in the following figure:



The distribution of the total contribution shows that by far the most significant proportion (88%) is invested in research activities. Dissemination and management activities represent 8% and 4%, respectively.

- Distribution of total direct costs according to cost categories**

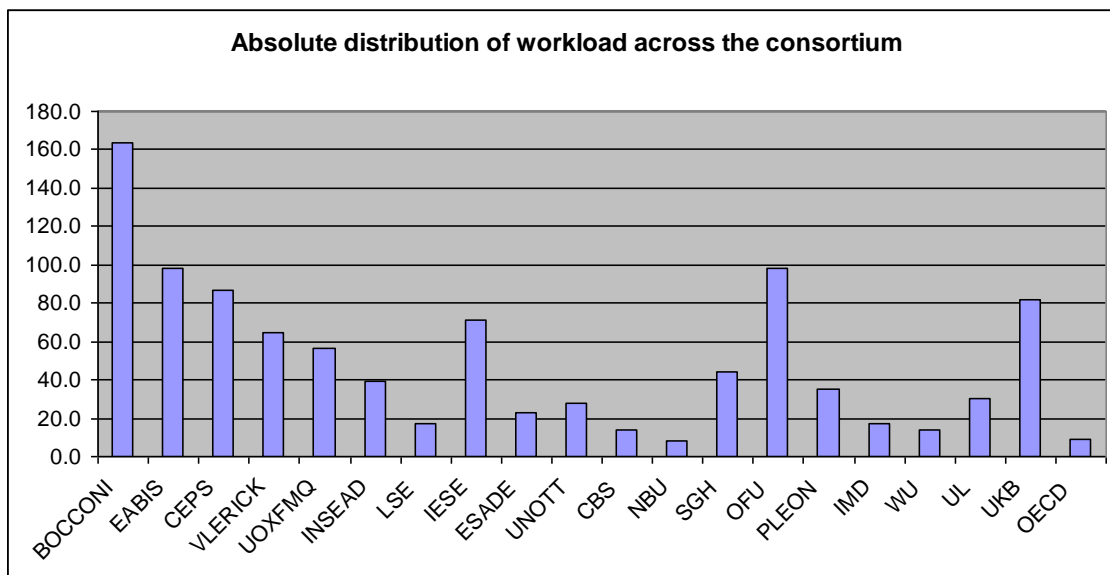
The distribution of total direct costs according to cost categories is shown in the following figure:



The distribution of the requested contribution shows that by far the most significant proportion (74%) is invested in personnel. At 13%, travel represents the next highest cost category. This relatively high allocation to travel is specifically in support of specialist data collection activities performed by consortium partners. The subcontracting costs, representing 7% of the RTD budget, are used primarily for non-specialist data collection activities, such as polling, and for specialist technical services, such as software development. More detailed information is reported in Section 2.3.1.

- Distribution of workload among partners**

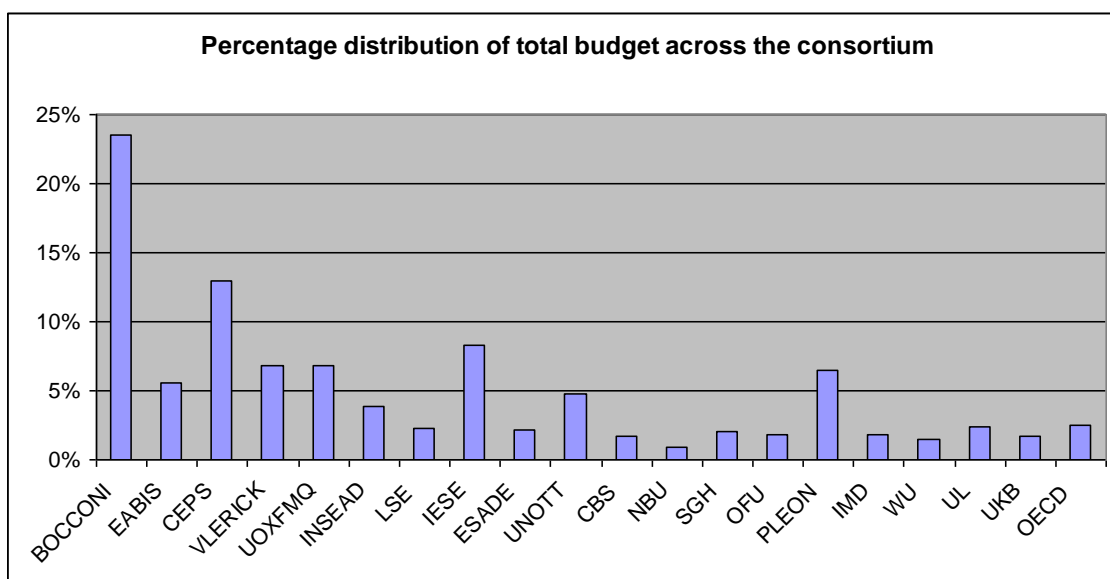
The distribution of workload in person months across the consortium is shown in the following figure:



As would be expected, the highest person month allocations generally correspond to those organizations that are leading work packages and/or centrally involved in a coordination role. In this instance, BOCCONI, EABIS, CEPS, VLERICK, UOXFMQ, IESE, and PLEON come into that category. It is clear from the graph that OFU and UKB have a notably high person month allocation despite not leading work packages. This is explained by their time-consuming involvement in WP7 data collection and experiments throughout the CEE region. At the other end of the scale, the lower PM allocations are attributed to OECD and NBU. The former has a narrow but vital role, contributing their latest global thought leadership on new policy frameworks for the financial system. NBU has a low PM figure due to faculty cutbacks in the current crisis, and a reduced availability of personnel since the original EOI. Nonetheless, NBU has the scientific expertise and time to support work packages 1-3, hence their continued presence in the Consortium.

- **The percentage distribution of total funding among partners**

The percentage distribution of total funding across the consortium is shown in the following figure:



Again, as would be expected, the highest funding allocations generally correspond to those organizations that are leading work packages. The more even distribution of funds across partners not leading work packages can be attributed to differentials in staff costs across the member states. The exception in this case is PLEON which is allocated 7% of the budget against 35 PM (0.3% of project total). This reflects a large budget provision for anticipated costs surrounding the Final Conference (participant travel and accommodation x

200, logistics, catering and venue), 4 Regional Communications Workshops across the EU, as well as website development costs and publication design and printing.

## 3 Impact

### 3.1 Expected Impacts Listed in the Work Programme

As expressed in Sections 1.1 and 1.2, the REFORM Project outlines an ambitious approach to a complex and challenging subject that has major ramifications (and potential) for the European Union. Below is a concise summary of the ways in which the proposal aligns with and responds directly to the SESH 2010 Work Programme requirements:

#### **Interdisciplinary Knowledge**

In Section 2.3.1 we provide an overview of the different areas of scholarship and expertise directly committed to the Consortium. Profiles range across the entire social science spectrum, with (for understandable reason) particular strength in depth in economics, econometrics, finance, political science, management and strategy, and corporate responsibility. Within those central disciplines, there are myriad other sub-domains represented – not least because almost all partners have mobilized **groups of scholars** across their institution to engage in REFORM, as opposed to individuals.

The recent crisis underlined how narrow a perspective economics and finance scholars have taken in the past 20-30 years – driven by figures, and obsessed with theoretical constructs. REFORM promises to advance the knowledge boundaries of interdisciplinary research into the financial system in a number of ways. On a basic level, some of its first deliverables will be comprehensive social science literature reviews and large-scale archival databases to inform policy-makers and interested stakeholders, thereby casting a wider net to find thought leadership.

This proposal goes much further, looking rather at the “social contract” of finance. This means that every aspect of research – qualitative or quantitative, thematic or methodological – will conduct its work in the context of the relationship that finance has with government, business and civil society. In doing so, it explicitly considers the policy, economic, social and environmental implications of financial activity through every lens of study applied – and thereby taking a far more integrated view than has been seen in the discipline to date.

**Engaging stakeholders.** We propose to break new ground for EU research initiatives in engaging stakeholders. We bring together action research, social media and traditional dissemination into a powerful strategy to “emerge” from stakeholder discussions plausible futures and ensure that the project knowledge is socially owned and embedded, in addition to being documented with traditional reports and papers

REFORM is distinguished not only by the level of innovation and ambition in its scientific framework, but also by the depth, variety, and extent of its stakeholder engagement that is designed for strategic impact. The project aims for an impact that might best be summarized as “societal learning”: that is to say that the overarching goal is to enhance the capacity of the European Union as a society to develop a financial system to better serve economic, social and environmental objectives (for short, an “integrated financial system”).

This impact will be generated by a flow of activities described in Diagram XX by key participants. A large number of people from stakeholder groups will be engaged as co-participants directly in this project’s activities; in addition, as explained further in dissemination, the stakeholder groups will be supported to broaden access to the project activities and outcomes and make societal learning a reality.

This diagram emphasizes that impacts will vary by stakeholder group:

- 1) **Researchers and Science:** The network ties of researchers and universities in this consortium will provide robust vehicles for project outcomes such as presentations, writings (articles and books), new methodologies, databases and conceptual frameworks as well as models. These will have the impact of new capacity of the academic community to contribute to developing an integrated financial system. This includes the capacity to:
  - a. Analyze the financial system from an integrated, multi-disciplinary perspective;
  - b. Undertake inter-disciplinary projects at multiple levels of analysis; and
  - c. Assist interventions designed to develop an integrated financial system.
- 2) **Policy-makers/regulators and policy/regulation:** The Call resulted in part from the desire to build capacity of policy-makers and regulators to respond effectively to new, increasingly complex challenges by encouraging and integrated financial system. This project will build the capacity to realize this goal by:
  - a. Deepening understanding of how policy historically led to the financial crisis;
  - b. Identifying policy options to realize an integrated financial system;
  - c. Providing an integrative model for simulation of policy options; and
  - d. Realizing a new model from this project's experience for the role of research in supporting large system change.
- 3) **Financiers and the finance industry:** Those who have led commercial finance have not had the persuasive frameworks or the analytical tools to support the products and strategies that reflect an integrative financial system. This project aims to build their capacity for this by:
  - a. Deepening understanding of which of their choices contributed to the financial crisis;
  - b. Building a vision through the scenario development of how they can be successful in an integrative financial system;
  - c. Providing a modelling tool that integrates risk from a whole-systems perspective that can support their decision-making;
  - d. Strengthening ties with other stakeholder groups and understanding of their perspectives.
- 4) **Entrepreneurs and real economy enterprise:** The financial crisis has had a huge impact upon business. Business people support change, but change that they understand and will work for them. This project will build their capacity to be active participants in this change by:
  - a. Building a vision through the scenario development of how they can be successful in an integrative financial system; and
  - b. Developing their understanding of their role in creating an integrated financial system and their commitment to playing their role.
- 5) **Environmentalists and the environment:** Traditionally environmentalists have been outsiders of the financial system, although its choices and priorities have a large impact upon the environment. This project will build their capacity to contribute to development of an integrated financial system by:
  - a. Building their knowledge about finance and ability to define operationable change;
  - b. Developing their understanding of their role in creating an integrated financial system and their commitment to playing their role; and
  - c. Strengthening ties with other stakeholder groups and understanding of their perspectives.
- 6) **Social activists and justice:** Labour and social development activists see the financial system as a growing source of economic inequality and with inadequate concern for community impact. This project will build their capacity to contribute to development of an integrated financial system by:
  - a. Building their knowledge about finance and ability to define operationable change;



- b. Developing their understanding of their role in creating an integrated financial system and their commitment to playing their role; and
  - c. Strengthening ties with other stakeholder groups and understanding of their perspectives.
- 7) **Citizens/consumers and social cohesion/economic choice:** Citizens and consumers are concerned that they have insufficient influence on the financial system to ensure that it is responsive to their concerns and needs. This project will build their capacity to contribute to development of an integrated financial system by:
- a. Building their knowledge about finance and ability to define operationable change;
  - b. Developing their understanding of their role in creating an integrated financial system and their commitment to playing their role; and
  - c. Strengthening ties with other stakeholder groups and understanding of their perspectives.
- 8) **International stakeholders and global finance:** This project will be Euro-centric, but will engage international stakeholders mainly through the focus groups. Some international public policy finance institutions will have a more active role. The goals are to:
- a. Build their capacity to inter-act with emerging project ideas and visions; and
  - b. Build the capacity of other project participants to appreciate their concerns and perspectives.

This aggregate capacity-building impact is more than just the sum of the parts, The project strategy as a whole is to generate socially-embedded knowledge. This means that a large number of research and financial system stakeholders will (1) *learn important new knowledge* that will change the way they think about the financial system, and (2) *develop new social ties* that provide for on-going development of new ideas, strategies, structures, and processes with regards to the financial system.

### 3.1.1 Alignment with National and International Research Activities

Any credible effort to understand and address the factors that have so profoundly impacted financial systems in Europe has to accommodate the broader global context. While REFORM partners are all member state countries, the consortium has made some considerable effort to ensure a global outlook. The representation of global interests is ensured by the diversity of the fora established by WP8 (Scenarios and Iterative Stakeholder Engagement). Further, a close co-operation with the United States is considered sufficiently important to justify an exchange programme that involves a junior member of staff at a partner organization and a counterpart at Columbia University. The member of staff seconded to Columbia will be responsible for undertaking field studies across the United States. Their counterpart will contribute knowledge to the research undertaken in the five thematic work packages. To complement the exchange programme, Joe Stiglitz (recipient of the 2001 Nobel Memorial Prize in Economic Sciences and the 1979 John Bates Clark Medal, is elected to the REFORM Advisory Board. These actions to engage with the United States anticipate future efforts to obtain funds for EU/US collaborations that are complementary to the objectives of REFORM.

## 3.2 Dissemination and/or exploitation of project results, and management of intellectual property

### Dissemination and/or exploitation of project results, and management of intellectual property

The scale and ambitions of REFORM demand a highly professional approach to dissemination activities over the life cycle of the project – coordinating the volume of WP outputs and delivering tailored messages to a complex set of stakeholders. For precisely these reasons, Ketchum Pleon – a corporate partner of EABIS and one of the world's

leading communications agencies – will lead this vital area of activity in close cooperation with the Project Management Team and other consortium partners.

Under the leadership of Ketchum Pleon, REFORM will deliver an innovative, multi-faceted dissemination strategy and work plan. These are both shaped by a belief that any response to the Commission's Call must go beyond a *status quo* of traditional knowledge outputs, audiences and modes of delivery. Equally it is not enough to measure "success" by the volume of material and messages sent alone. To address this, REFORM proposes important new approaches – such as the Communications Council, Regional Communications Workshops, and the "learning history" – which will drive more efficient dialogue with and outreach to interested communities.

This more 'personal' level of connection is seen as a high-impact dimension of REFORM. Changing the role of the financial system implies a fundamental shift in mindsets and awareness among key actors – financial, political, scientific and societal. It also implies that research – if it is to inform and drive these change processes – must be communicated more effectively and accessibly than in the past. The dissemination strategy will therefore harness some of the latest thinking and media around social networking, change agency and communities of practice to better leverage the rigorous, cutting-edge scientific findings from WP1-8. In doing so, it will generate new recommendations for more effective translation and sharing of knowledge within large-scale networks and complex systems.

Additional emphasis will be placed on face-to-face presentation and review of findings and results to different levels of policy and regulatory bodies across Europe, the business and financial sectors, and citizens and communities. In this way, REFORM will reach beyond the academic domain to engage with all those groups whose voices and perspectives need to be heard in the context of systemic change.

### 3.2.1 Key Audiences

The products, services and wider activities of actors in the financial system affect the lives of almost every European citizen. This consideration is a key driver for REFORM's dissemination strategy. It is designed with the requisite flexibility to engage a range of audiences to respond to and benefit from the outputs of the project. Six general groups have been identified as primary participants and end users:

**Research / Science** – Where messages focusing on thematic insights from WP1-5 and empirical findings from WP6-8 will be addressed. This interdisciplinary global community will involve university and business school researchers from across the social sciences and humanities as well as think-tanks and independent research institutes.

**Policy / Regulation** – Where messages focusing on REFORM's contribution to the wider political and legal interests of the EU, Member States will be addressed. This community will include Directors and Policy Officers in different Commission DGs, MEPs, Member State representatives, High Level Groups, national Ministries, regional and local authorities. Being closely linked to the policy-making arena NGOs and IGOs are also seen as members of this audience group.

**Finance** – Where messages focusing on the wider implications for financial system practice and reform will be addressed. This community will reflect the diversity of actors involved in the financial system, including but not limited to: commercial banking, pension funds, insurance, private equity, accounting, auditing and reporting, European and National Central Banks, and international financial standards bodies. It will also link closely with WP6 where the modelling research will deliver new insights about the structure and relationships between financial organizations and their main stakeholders, including the wider investor community.

**Enterprise and other Stakeholder Groups** – Where messages focusing on the interface between the financial system and the real economy will be addressed. The Call's focus upon "social-environmental-economic" demands that particular attention is paid to companies and those organisations which form their value chain. The dissemination plan establishes an important bridge with WP8's Stakeholder Engagement activities to identify and engage the latter, including labour, environmental, and social issue activists, suppliers, service providers, MNCs and SMEs.

**Citizens / Consumers** – Where messages focusing on practical insights for the individual citizen (including investors) will be addressed. This audience will require that research findings are tailored to reflect different levels of awareness and understanding. Both the international media and REFORM Communications Council have important roles to play in helping to identify the right vehicles and formats to engage this audience. The survey in WP8 will also serve as an effective channel to engage with citizens.

### 3.2.2 Objectives

REFORM will embrace a culture of outreach to and knowledge sharing with scholars, practitioners, policy-makers, stakeholder and local communities and citizens. The project aims to match the ambitious scope of the Call by establishing a platform and framework for complex system change. Through rigorous science, proactive and diverse stakeholder dialogue, and creative use of social media and “viral marketing”, it will provide a unique model for collaborative design, review, assimilation and use of new research.

On a first level, REFORM will emphasize the publication and release of high quality data and findings to the global research community. These will integrate comprehensive reviews of existing research (WP1-5) with emerging insights from modelling, scenario-building and clinical studies (WP6-8). More specifically, these findings will be positioned to engage the mainstream social science communities, not limited to finance. This combination is seen as critical to advancing future interdisciplinarity and the frontiers of European and international knowledge across the various dimensions of the Call.

Second, WP9 will prioritize the translation and communication of key research outputs to policy bodies (including NGOs and IGOs) at European, national and more local levels. Drawing on partners’ experience in this area, REFORM will generate a wide range of practical and accessible insights, briefings, analysis and learning tools. These will play an invaluable role in enhancing knowledge, dialogue and action going forward.

Third, REFORM devotes an entire Work Package (WP8) to stakeholder engagement, scenario-building and futures analysis. Its work will be advised and enhanced by the **Stewardship Council** (see Section 1.3.3). The dissemination strategy and plan will support this dimension of the project through a number of **regional communications workshops**, facilitated by CSR Europe. These will draw significantly on key actors in the financial system and regional policy-makers, but will also ensure the involvement of unions, labour, NGOs, and citizens.

Fourth, the dissemination strategy of REFORM will integrate a dimension that focuses on “societal learning”. The overall goals of REFORM are: (a) to produce knowledge; (b) to ensure that knowledge is socially embedded and relevant; (c) to develop and sustain the necessary social linkages for the knowledge to result in action; and (d) to prepare the ground for implementation (e.g., new regulatory mixes, change processes within the financial sector, new forms of stakeholder dialogue).

### 3.2.3 Specific Activities for Dissemination and Communication

Dissemination actions and outputs can be grouped under six distinct categories: **1. Online Platforms & Social Media Communication Tools; 2. Conferences & Workshops; 3. Briefings & Recommendations; 4. Publications; 5. Media Coverage & Engagement; and 6. Learning History.** The various deliverables that feature under each one – also see Section 1.3.3 – will ensure that key results and findings from REFORM reach a worldwide community of policy-makers, (social) scientists, practitioners, and stakeholder communities.

#### 1. ONLINE PLATFORMS & SOCIAL MEDIA COMMUNICATION TOOLS

A dedicated website for the project will be one of the first initiatives launched in REFORM. This dynamic portal will allow for the continual publication of project reports, presentation of progress and announcements of early

research results. Special attention will be paid to the relevance and quality of content for policy-makers (in a stand-alone section). The information it hosts will be fully available for public access and use. The site will profile REFORM's objectives, key research questions and milestones, existing and future deliverables, consortium partners and institutions, and key contacts.

Based on interactive technology currently available, the REFORM website will also host virtual discussion and knowledge exchange tools, including blogs, wikis and video. The added value of such platforms is to connect interested but geographically dispersed stakeholders in an evolving debate on the project as a whole. Participants will be actively encouraged to share their own research, best practice case studies and learning instruments to better inform the work being carried out. This approach allows for much more in-depth creation and sharing of knowledge that enhances the development of new understanding and vastly expands the engagement. This will be a critical element in the engagement of stakeholders and the work of WP8.

REFORM will produce a quarterly electronic newsletter, each one to be supported by a "Webinar"-style consultation. This type of online forum will feature a virtual presentation from one or more WP leaders on progress to date, and enable interested stakeholders to address more specific questions or their own professional challenges. WP leaders will also be responsible for active contribution to virtual platforms and forums on their research.

As part of the dissemination strategy to **engage individuals** (investors, citizens, consumers) IESE will lead in the development of an innovative online tool that translates market price changes of stocks in line with "social values" as expressed by people in their act of buying or selling a company. This prototype will prepare a long-term foundation for a portfolio management tool that makes it possible for investors to build their own stock portfolio starting from personal values. The post-REFORM ambition will be to secure the involvement of a major player in the financial data industry (Bloomberg, Reuter, Riskmetrics) to support scale-up and massive data contributions.

WP6 will also contribute an important online platform to the dissemination activities. This involves the creation of a simulation model for the financial system, in both its internal engine and in its interactions with other systems (Industry, Regulators, Civil Society, the Natural Environment) surrounding it. The model is designed so that it results in a key decision-support tool with which policy-makers can assess the impact of different scenarios and alternative governance policies of the financial system. The model will be made available in an open-access infrastructure to all other members of the EU (regulators, banking agencies, other universities) willing to utilize the simulator for obtaining insights on the behaviour of the financial system under different rules and agents' behaviour.

After five years of constant programming and updating (it will encompass in one envelop the activities of the project), the model will become a simulation tool of considerable size. Therefore, we foresee installing the model in a dedicated infrastructure through the REFORM website. The infrastructure will be constructed to grant open access to people who wish to run simulations. At the same time, the database containing the results of the 5 year data collection and analysis of the project shall be made open-access (of course, in full respect and consideration of privacy issues.)

The REFORM project will integrate as far as possible its own platform and relevant outcomes into existing relevant online platforms to assure sustainable outreach. Examples include: [www.icconnecteu.org](http://www.icconnecteu.org); [www.ssrn.com](http://www.ssrn.com); the European Commission's CORDIS project databases and OpenAccess pilot sites; the EABIS-EFMD Business in Society Gateway; and other international partners.

## 2. CONFERENCES & WORKSHOPS

Beyond the stakeholder events embedded in Work Package 8, REFORM's dissemination strategy will understandably seek to maximize exposure for project findings – or the overall project where more applicable – at high profile conferences, seminars and workshops. EABIS, CEPS and CSR Europe in particular have a long history and deep experience of presenting research at non-scientific conferences, including major EU summits and platforms.

The dissemination deliverables (see Section 1.1.5) specify a number of key events at which the REFORM team will present progress and solicit feedback on latest insights. The partners in WP9 will subsequently transfer and translate knowledge, actions and output from these into relevant archives and communications.

### **Annual Social Sciences Fora**

REFORM will enable its partners to maintain their excellent track records in presenting research to national and international audiences of expert peers. In line with the goal of reaching and influencing mainstream disciplines, particular attention will be paid to visibility at world-leading social science gatherings, such as the US and European Academies of Management Conferences (AoM / EURAM). Senior scholars from the Consortium hold executive committee positions in one or both of the Academies, thereby providing greater access to the conference agendas.

**Annual EABIS Colloquia from 2011 to 2015.** The EABIS Colloquium is among the largest business-academic-stakeholder conferences in the world to examine the changing role of business in society. Regularly attended by well over 300 senior representatives, decision makers and thought leaders, it explores knowledge gaps and new priorities for research, education, practice and policy.

### **Annual Roundtables with EU Policy Makers**

Yearly meetings in Brussels dedicated to policy-makers and administrators in the Commission, Parliament and Council, as well as representatives of the Member States, whose work is directly focused on or indirectly linked to the financial system. These roundtables will combine presentation of results and progress, along with open debate on key issues as relate to European policy, enterprise and research. A secondary benefit will be to increase the profile of REFORM with key constituents in EU policy, with the potential to inform internal training and awareness-raising programmes.

### **Financial System Conferences**

The REFORM Consortium will leverage its existing strategic partnerships to profile its work at high-visibility and –quality events that address issues related to the future of the financial system. These are expected to include: International Finance Conference (IFC), World Economic Forum (WEF), Financial Management Association (FMA), European Finance Association (EFA), United Nations Global Compact (UNGC), Global Reporting Initiative (GRI), World Congress of Accountants (WCA), and others.

### **Communications Regional Road Show**

Leveraging its unique experience of facilitating the European Alliance for CSR Laboratories, CSR Europe will design and deliver four stakeholder events with a particular emphasis on engaging regional and local policy and business organisations. Each event will be held in a different region of Europe to ensure pan-EU coverage. Aside from reviewing project-specific insights, these one-day workshops will engage interested parties as supporting communication partners. The direct benefit will be a clearer understanding of the most appropriate communication channels, vehicles and partners to reach the widest possible audience in given Member States. This interaction will take place as a supplement to the scenario-building and modelling work in WP7 and WP8.

### **Interim and Final Conferences**

REFORM proposes to stage both an Interim and Final Conference at European level. (It is anticipated that the interim event will be smaller in size and aligned with an existing REFORM partner event to reduce logistics and costs.) These will be staged to present and discuss project findings and policy implications. Special efforts will be made to invite EU and national administrators and leaders from the financial sector.

## **3. BRIEFINGS & RECOMMENDATIONS**

REFORM will deliver three interim and one final Policy Briefing as well as an identical number of Executive Briefings. The interim documents will serve as concise summaries of progress to date and highlight emerging implications for decision-makers in the European policy domain, financial system, real economy and interested stakeholder groups. Each annual draft will be formally reviewed by the **Stakeholder Council** before it is presented for public consideration. Beyond the Policy and Executive Briefings, each individual Work Package will generate a stand-alone report in Year 5 that summarizes the major insights and findings generated by their work, and implications for specific areas of policy action and reflection.

The final briefings will provide the integrated analysis, conclusions and recommendations from the entire project, with specific messages tailored for the key audiences as identified in Section 3.2.1. The dissemination plan will place additional emphasis on transversal communication to the European Commission. Given the theme of the Call, research findings will be consistently shared with key figures in the Directorates General for Research, Enterprise, Employment, Internal Markets, Environment, Economic and Financial Affairs, and Competitiveness.

#### 4. PUBLICATIONS

The scale and scope of work proposed within REFORM will result in many opportunities for partners to publish in scientific journals and periodicals, not just on their individual WP endeavours but around the project as a whole. However, the overarching goal is for the project's outputs to reach and have a direct influence on the mainstream of social science research. Within that context, REFORM will publish a minimum of three refereed (Special) Issue Journals that focus on core social science disciplines: i.e., Economics, Management, Sociology, Law, Political Science, Environmental Science.

By the end of REFORM, the Consortium will also publish a mainstream book on “*Sustainable Finance*”, targeted at managers in the financial sector, associated organisations and stakeholders (including educators) who seek a better understanding of how environmental, social and economic concerns will shape the future of finance.

#### 5. MEDIA COVERAGE/ENGAGEMENT

Leveraging its industry-leading expertise and professional networks, Ketchum Pleon will provide extensive media references and bring its international experience with large-scale communication projects into play. An initial analysis of the European and international media landscape will be conducted to map, both on- and offline, the key agencies to engage around REFORM and the theme of financial system change. A multi-dimensional approach will be then implemented to drive awareness-raising and engagement of institutions and individuals. Conventional tools will be deployed in some areas, e.g. press releases targeted at trade publications, general media and other interested stakeholder communities; media alerts on events, webinars and teleconferences; print and online editorials. In other areas, online activities will take priority and focus on contributing knowledge to social forums and blogs, as well as convening virtual debates and consultations.

A project flyer will be produced to signal the launch of the project in the first month. Subsequently, a project-specific communications plan and media kit will be developed in parallel with the website launch, profiling REFORM's objectives, key research questions and milestones, partner profiles and institutional contacts, among others. A second version of the plan and the kit will be developed and released shortly after the mid-point of the project to reflect latest developments, upcoming milestones, stakeholder inputs and new technological platforms.

EABIS, CSR Europe and CEPS will systematically incorporate project updates into their own network communications, which reach thousands of individuals within global business, think tanks and of course international research institutions and communities. There will be a direct engagement with the external relations offices of each Consortium partner to promote REFORM news to alumni networks, associations, local media and relevant stakeholders. All Consortium partners will also make use of their extensive international networks for dissemination into the applied sciences, sustainability consultancy and research arenas.

#### 6. LEARNING HISTORY

Fifth, REFORM proposes a genuine innovation surrounding the implementation of the project itself. In our view, past EU-funded SESH projects have rarely featured in-depth analysis of the learning and insights derived from implementation itself – in other words, a measurement of the knowledge generation process and how its outputs are used. Throughout its duration, under the leadership of Oxford and Vlerick, REFORM will dedicate a resource to record the key success factors and barriers to progress – both internal and external – and prepare recommendations for the optimal societal engagement methods that best ensure uptake of research in public domains.

### 3.2.4 Relevant Experience and Outreach capacities of the consortium in Dissemination and Exploitation of Project Results

All partners will engage in the dissemination and exploitation of the results building on their networks and experience. The exceptional outreach in dissemination to be expected by the REFORM consortium stems from the different backgrounds of its members. The great national variety, different disciplines, academic and applied sciences, competitiveness, social cohesion, gender, environment and climate change expertise and access to the respective networks and ties with policy makers will enable the consortium to address diverse audiences in an effective way.

Another key feature of this strategy is to build on EABIS' and Ketchum Pleon's management and coordination expertise in dissemination activities. Since 2004 EABIS has been prominently involved in the dissemination of business in society-related research outputs in various contexts. Under the European Union's 6th Research Framework Programme (FP6), it led the only Coordination Action project funded by the Commission – popularly titled “CSR Platform” – which required the coordinated international dissemination of project findings, work package reports and scientific analysis generated by a consortium of 13 partners. It also played a central role in tailoring the scientific results of the RESPONSE Project for corporate, policy and external audiences, a FP6 funded STREP project on CSR.

EABIS has considerable experience in organising pan-European workshops, symposia, conferences and colloquia with business schools and companies gathering senior business, academic figures, policy makers and civil society **representatives**. Since 2003 it has, in partnership with European business schools and corporate members, organised over 45 events and conferences across Europe ranging from 50-350 participants.

Additional text needed on 28/1 for CSR Europe, CEPS, Oxford, Vlerick

### 3.2.5 Management of Knowledge, Data and Intellectual Property Rights (IPR)

The basic rule of the project is that deliverables and experiences, intervention materials, publications, etc. will be made available for the public and disseminated through the REFORM website and other appropriate channels, while authors will be stated in all project publications. The partners will sign a Consortium Agreement that will state if there will be any exceptions from the basic rule. The final agreement will be drafted after successful contract negotiations.

It is not anticipated that the REFORM project will give rise to any patent issues. All Knowledge Management and Intellectual Property Right issues will be governed by the provisions of the Consortium Agreement, and all issues will be fully compliant with the EU Model Contract. As to additional written material, copyright will be issued in accordance with established international research practice:

- Papers, articles and books written solely by a single individual will be his or her intellectual property.
- Co-authored publications will have copyrights assigned to the co-authors.
- All input to common data bases are accessible and exploitable to every participant in the project.
- Publications published by the consortium on the web site will be free of charge. - Printed material may be issued with handling fees.
- Publications published by private publishers will follow the clauses provided in the contract.
- Data bought by the consortium will be shared.

The terms and conditions for public access to these data will be outlined in more specific detail in the Consortium Agreement.

All Consortium partners agree to respect IPR issues and the specific characteristics of FP7 IPR rules that ensure proper protection of Intellectual Property generated within the Consortium and in the scope of project activities.

[Confidentiality / Balance the trade-off /]

1. Broader array of objectives beyond inflation and growth
2. Grounding micro-foundations into the model





## 4 Ethical Issues

<b>Research on Human Embryo/ Foetus</b>		<b>YES</b>	<b>Page</b>
*	Does the proposed research involve human Embryos?		
*	Does the proposed research involve human Foetal Tissues/ Cells?		
*	Does the proposed research involve human Embryonic Stem Cells (hESCs)?		
*	Does the proposed research on human Embryonic Stem Cells involve cells in culture?		
*	Does the proposed research on Human Embryonic Stem Cells involve the derivation of cells from Embryos?		
	I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL	X	

<b>Research on Humans</b>		<b>YES</b>	<b>Page</b>
*	Does the proposed research involve children?		
*	Does the proposed research involve patients?		
*	Does the proposed research involve persons not able to give consent?		
*	Does the proposed research involve adult healthy volunteers?		
	Does the proposed research involve Human genetic material?		
	Does the proposed research involve Human biological samples?		
	Does the proposed research involve Human data collection?		
	I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL	X	

<b>Privacy</b>		<b>YES</b>	<b>Page</b>
	Does the proposed research involve processing of genetic information or personal data (e.g. health, sexual lifestyle, ethnicity, political opinion, religious or philosophical conviction)?		
	Does the proposed research involve tracking the location or observation of people?		
	I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL	X	

<b>Research on Animals</b>		<b>YES</b>	<b>Page</b>
	Does the proposed research involve research on animals?		
	Are those animals transgenic small laboratory animals?		
	Are those animals transgenic farm animals?		
*	Are those animals non-human primates?		
	Are those animals cloned farm animals?		
	I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL	X	

<b>Research Involving Developing Countries</b>		<b>YES</b>	<b>Page</b>
	Does the proposed research involve the use of local resources (genetic, animal, plant, etc)?		
	Is the proposed research of benefit to local communities (e.g. capacity building, access to healthcare, education, etc)?		
	I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL	X	

<b>Dual Use</b>		<b>YES</b>	<b>Page</b>
	Research having direct military use		
	Research having the potential for terrorist abuse		
	I CONFIRM THAT NONE OF THE ABOVE ISSUES APPLY TO MY PROPOSAL	X	

## 5 Consideration of Gender Aspects

The REFORM consortium is aware of the regulations by the European Union on this issue and completely shares the principle of equality between women and men, not only to eliminate inequalities, but also to promote equality, as signed in the Treaty on European Union, the Treaty of Amsterdam (May 1, 1999).

The REFORM consortium will give due consideration to the integration of a gender perspective into all of the project policies and programmes with specific actions in favour of women. To this extent, the Treaty of Amsterdam which formalises the gender commitment and the gender mainstreaming process at the European level is considered as fundamental reference, as it mentions explicitly within the Part One - "Principles" two aspects among the tasks and objectives of the Community: the elimination of inequalities (Article 2) and the promotion of equality between women and men (Article 3.2.).

The REFORM consortium is fully committed to encouraging and supporting women who seek to follow a career in the sciences. REFORM will address equal opportunities by:

- Encouraging women's participation in research activity at all levels, in activities related to own research and development and as manager in activities of coordination, management and international cooperation.
- Combating the largely diffused opinion of needs for different roles in research between men and women and encouraging women to enterprise technical as well as management roles in the field of research.
- Promoting the involvement of women as well as men in conferences, workshops and other international scientific events related to the project.
- Encouraging and supporting women's mobility.

The REFORM consortium also understands that promotion of gender equality means campaigning women's interests and needs, which also include those of young families. Therefore, the REFORM consortium will ensure family-friendly working conditions, realise gender equality and promote women without positive discrimination. The possibility of hiring women, especially young mothers, for part-time work or tele-work is to be considered in order to allow them to pursue their career as well as to take REFORM of their families. Such part-time work or tele-work will alternatively be offered to young fathers.

The REFORM partners represent both genders in leading positions, involved in the different scientific and non-scientific activities. Of the named individuals, the gender representation is evenly balanced.

## 6 Annex

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<sup>iii</sup> Kaplan, Sarah (2008). Framing Contests: Strategy Making Under Uncertainty, *Organization Science*, Vol. 19, No. 5, sept-oct 2008, pp729-752

<sup>iv</sup> L. Boltanski and E. Chiapello, 2007. "The new spirit of capitalism", Verso Books, United Kingdom

<sup>v</sup> note: development related to deregulation and financial innovation

<sup>vi</sup> "Organizational Genesis, Identity and Control: The Transformation of Banking in Renaissance Florence," in Alessandra Cassella and James Rauch (eds.), *Markets and Networks*. Russell Sage Foundation, 2001. Reviewed in *Journal of Economic Literature*, 41q: 545-566 (June 2003).

<sup>vii</sup> Feldstein, (1972)

<sup>viii</sup> Stigler, (1971)

<sup>ix</sup> Barth et al, (2008)

<sup>x</sup> Kane (1977)

<sup>xi</sup> Charoenrook and Daouk, (2005)

<sup>xii</sup> Ayadi and Behr (2009)

<sup>xiii</sup> Morrison, (2005)

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