

# Finance and Societies

## A broader perspective

Thesis

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## Abstract

This dissertation examines the evolution of financial sectors and provides an analysis of the linkages among finance, the real economy, and the social structures in which they are embedded in the context of the evolution of financial sectors. It analyzes the social and economic consequences of an increasingly complex, financialized economy.

The first chapter examines the “finance-real economy nexus” and adopts a functional perspective on the recent evolution of financial sectors. It contends that there is a potential trade-off between the efficient allocation of risk and the efficient allocation of capital. It distinguishes the efficient allocation of capital from the efficient allocation of risk and reveals how financial sectors in developed countries evolved and transformed risk allocation into a predominant function.

The second chapter argues that modern finance serves only certain social groups, which are able to privatize liquidity and information. Two categories of market participants profit from the present financial system: 1) “Risk allocators”, which are well equipped to profit from unstable financial markets characterized by financial bubbles. These are stock markets and alternative trading systems, brokers, hedge funds, and high-frequency traders. 2) CEOs and owners of financial capital (High Net Worth Individuals and short-term shareholders) who are satisfied with the output of a financial system with inflated financial asset prices.

The third chapter adopts an institutional economic perspective on the “finance- society nexus” against the background of the rapid evolution of financial systems. It examines the tremendous development of financial systems in developed economies with respect to the very institutions that are intended to support them and advances the hypothesis of a “finance-society gap”.

The fourth chapter attempts to contextualize the “finance-society” nexus and demonstrates how the informal institutions of Russian society prevent the emergence of an efficient financial sector using the case study of SME financing. If society advances too slowly, as it is the case in Russia, or financial sectors do so too quickly, as it is the case in Western economies, financial sectors do not perform their role of allocating capital efficiently and instead operate at the expense of society. However, in both cases, specific groups are able to monopolize their relationships with financial sectors.

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## Introduction

The Global Financial Crisis of 2008, which engendered the worst economic downturn since the Great Depression, will have further consequences that have yet to appear. It revealed predatory lending and fraudulent underwriting practices in the U.S., the existence of massive shadow banking systems, mortgage-backed securities and other structured products based on diverse underlying assets, the risks of which were incorrectly priced due to faulty risk pricing models. In brief, it revealed the sheer size and complexity of the global financial industry. Economists, experts, and CEOs have struggled to explain the workings of complex financial deals and how toxic instruments can infect other financial institutions. Numerous intermediate events connect the burst of the U.S. housing market bubble to the sovereign debt crisis in the Eurozone and the social consequences of the economic downturn. Politics, most likely demagogically reflecting the concerns of the public and the press, declared that finance had become detached from economic reality.

The notion that financial sectors are tied to the economic life of societies is intuitive and not provocative per se. However, what links financial sectors with the productive economy and social spheres? By the same token, it seems evident that the financial crisis damaged confidence and trust. However, what type of trust? Trust in the financial sectors in which the crisis emerged, trust in a political system unable to design regulations to prevent it, or trust in an economic discipline unable to explain or understand, let alone forecast, such crises?

The linkages among finance, the “real economy” and societies are vast but suffer from a dearth of academic attention due, in part, to the separation between economics on one side and financial economics on the other. Social sciences such as sociology and anthropology are, evidently, even further removed from economics. The “finance-real economy” linkages have been reduced to the “finance-growth” debate. However, the debate over the relationships between the financial and economic sectors is not a new one. In the *Wealth of Nations*, Adam Smith had already noted how “*the trade of the city of Glasgow doubled in about fifteen years after the first erection of the banks there; and that the trade of Scotland has more than quadrupled since the first erection of the two public banks at Edinburgh*” (Smith, 2005:240). However, Schumpeter clarified this relationship between finance and economic activity. The debate over the “finance - growth nexus” took different forms as it evolved. It first concerned the direction of the relationship: Does growth in the financial sectors spur economic development or vice versa? The debate then focused on the “components” that comprised financial sectors and positioned banks against financial markets. The question was whether market-based financial systems

were more conducive to economic growth than were bank-based systems. As this proved a difficult question to answer, scholars began to devote greater attention to the legal structure underpinning the financial sector and argued that the legal origin and legal apparatus are what allow for efficient financial sectors, whether composed of banks or financial markets. The study of the links between law and finance gained momentum thanks to La Porta et al. (1998) (LLSV hereafter). They argued that shareholder protection affects corporate behavior and thus growth. The causal mechanism in their 1998 article is the following: A country's legal origin influences corporate law, which impacts financial arrangements and then affects corporate behavior. Economic growth depends on this legal scaffolding. The various contributions to the overall debate have clarified important elements of the equation. While these contributions are valuable, they nonetheless provide a static analysis of how finance affects growth. In other words, they fail to address the evolution of financial sectors. By the same token, explorations of the socio-economic consequences of this evolution fall outside the scope of established schools of thought. However, the 2008 crisis revealed that the foundations of mainstream disciplines were frail at best, and dangerous at worst. The financial crisis of 2008 is also a crisis of academic economics.

This dissertation examines the evolution of financial sectors and provides an analysis of the linkages among finance, the real economy, and the social structures in which they are embedded in the context of the evolution of the financial sector. In other words, against the contexts of a financial revolution that was silent until 2007 but became loud enough to shake the foundations of capitalism. It uses Eichengreen's definition of international financial systems, which also applies to national ones, as a starting point: "*The international financial system is a dense network of social, economic, and financial institutions. As with any complex mechanism, there are limits on the feasible changes to any component so long as the others remain in place. It makes no sense to install a jet engine on a Cessna Piper Cub. The same is true of the international financial system, whose structure is lent inertia by the interaction of its components*" (Eichengreen, 2002:2).

However, what happens when a jet engine is installed on Cessna Piper Cub? This dissertation attempts to answer this question. It analyzes the social and economic consequences of an increasingly complex, financialized economy. The first chapter examines the "finance-real economy nexus" and adopts a functional perspective on the recent evolution of financial sectors. It contends that there is a potential trade-off between the efficient allocation of risk and the efficient allocation of capital. It distinguishes the efficient allocation of capital from the efficient allocation of risk and reveals how financial sectors in developed countries evolved and transformed risk allocation into a predominant function. The potential conflict between these two functions can be articulated on different levels: At the institutional level, new instruments and services blurred the frontier between

market-based and bank-based financial systems, with new actors such as mutual funds, hedge funds and investment banks becoming prominent. At the temporal level, short-term finance could hinder long-term investment needs. At the geographical level, risk allocation is international, whereas capital allocation tends to be national. Finally, regarding lender-borrower relationships, it seems that a greater concern for risk allocation corresponds to the move toward transactional lending and a hardening of information. Paradoxically, rumors (including soft information) in financial markets have not disappeared.

Thus each section concludes that financial sectors pursue risk allocation at the expense of capital allocation. As capital allocation is the primary function that financial systems should fulfill, one should pay more attention to the economic consequences of the inefficient financial systems. Indeed, an inefficient financial system generates high opportunity costs. But it also changes the political economy landscape of the linkages between finance and the real economy. In other words, it modifies the revenue distribution and power relations between the different interests groups. Some actors benefit disproportionately more than others from the functional change of financial sectors described in chapter one.

Thus, chapter two takes a closer look at the linkages between financial sectors and the real economy, from a political economic perspective. It will identify the interests groups that Western financial systems tend to favor. Dembinski (2008) asked whether modern finance was a servant or a deceiver. This chapter shows that modern finance is a servant, but only for certain interest groups, which are able to privatize liquidity and information. Two categories of individuals profit from the present financial system:

- 1) “Risk allocators”, which are well equipped to profit from unstable financial markets characterized by financial bubbles. These are stock markets and alternative trading systems, brokers, hedge funds, and high-frequency traders.
- 2) Owners of financial capital (High Net Worth Individuals and short-term shareholders) and CEO’s that are satisfied with the output of a financial system with inflated financial asset prices.

The implication of such an analysis is that one must go beyond simple financial regulation. Liquidity and information must again become public goods if our financial systems are to function not only efficiently but also in the general interest. Thus, politics must reinvest in the field of finance, and the institutional authority left to the financial industry must be constrained by society.

So the first part, composed of chapter one and two, looks at the evolution of finance and the political economy consequences of that evolution. The first chapter borrows concepts

from the financialization literature and start from the idea that finance plays an increasing role in the economy in general. Its starting point is indeed Epstein definition of financialization as “*the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies*” (Epstein, 2005:3). However, this first part adds to that literature by showing a change in function, instead of analyzing the increasing volume (liquidity, debt, transactions) of finance. While the literature on financialization has directed scholarly attention to the increasing place that finance is taking, the disconnect between finance and the real economy has been neglected. This first part thus goes beyond financialization and points to a change of the nature of finance to identify the broken linkages between finance and the real economy. By the same token, it is argued in chapter two that certain interest groups benefit disproportionately more than others because of that functional change. In other words, it is the disconnection from finance with the real economy that allows some financial actors to extract fees. Some segment of the financial industry is rewarded *because* it does not serve the economy, and not in spite of it.

After discussing the separation of financial sectors and the real economy and its redistributive consequences, the second part, chapter three and four, will discuss the separation of financial sectors and society and its social consequences. This second part borrows from the Institutional Economics literature. North’s definition of institutions provides a good starting point to explore the institutional linkages between finance and society. Institutions are for him “*the humanly devised constraints that structure political, economic and social interactions*” (North, 1991:97). He adds that constraints can be formal (constitutions, laws, regulations) and informal (conventions, norms, routines). The added value of chapter three is that it applies this concept to the evolution of financial sectors. Formal and informal constraints are *humanly* devised and are thus changed by political, economic and social agents. It adopts an institutional economic perspective on the “finance-society nexus” against the background of the rapid evolution of financial systems. It examines the tremendous development of financial systems in developed economies with respect to the very institutions that are intended to support them and advances the hypothesis of a “finance-society gap”. If this gap can be observed in emerging economies because of underdeveloped institutions, this chapter argues that it should also appear in Western economies, due to overdeveloped financial systems. In that case, finance is developing at an overly rapid rate, outpacing institutions. Drawing on theories from institutional economics, it demonstrates that the informal institutions on which financial sectors are based are distinct from societies’ formal institutions. The complexity of financial systems then might not only imply a trade-off between the allocation of capital and the allocation of risk, as chapter one shows, but also other social costs. These costs can emerge either because finance developed too quickly or because society is too slow. In both cases, institutional gaps render financial sectors less efficient

than they could otherwise be. Indeed some characteristics of Western financial sectors also characterize transitional countries such as Russia. There are similarities between the social patterns underlying these societies and those underlying advanced financial sectors. In both cases, there is an institutional incompatibility between the financial sector and the rest of society.

Therefore, the fourth chapter attempts to contextualize the “finance-society” nexus and demonstrates how the informal institutions of Russian society prevent the emergence of an efficient financial sector using the case study of SME financing. This Russian case study of SME finance reveals how social practices can alter the structure of a financial services market. Bluntly, one could argue that society is too slow to allow for a well-developed financial sector. Former command economies were and in some instances remain in transition from communism (or even a feudal economic structure) to market economies, but high-income countries are also in transition. The destination, however, is unknown. If the Russian transition bred a “*Russian style*” capitalism (Gustafson, 1999), what characterizes current “Western style” capitalism? If society advances too slowly or financial sectors do so too quickly, financial sectors do not perform their role of allocating capital efficiently and instead operate at the expense of society. However, in both cases, specific groups are able to monopolize the relationships with financial sectors.

It is helpful to remember Eichengreen’s remark on financial systems cited at the beginning of the introduction: “*The international financial system is a dense network of social, economic, and financial institutions. As with any complex mechanism, there are limits on the feasible changes to any component so long as the others remain in place* (Eichengreen, 2002:2). This definition of financial system implies firstly that financial systems are not islands. They are part of a broader socio-economic environment made of institutions. Secondly, it suggests that the different institutional components of which financial systems are made do evolve. This evolution is however limited by the institutional equilibrium of the entire socio-economic environment. It determines the cost of adaptation. This dissertation identifies economic, political and social limits to financial sectors development and show that different socio-economic environments impose different costs of adaptation. The size and complexity of financial sector therefore concern societies in general and should be publicly debated.

## CHAPTER 1

# The silent revolution: Trade-offs between allocation of risk and allocation of capital

Recent studies have toyed with the notion that there are limits to the development of financial sectors. Arcand et al. (2012) demonstrated that financial depth, measured by the credit provided to the private sector as percentage of GDP, has a threshold (80 - 100 percent) beyond which further financing is associated with less economic growth. In 2011, it reached 136 percent and 194.4 percent in the E.U. and U.S., respectively (World Bank data). Philippon (2013) focused on the efficiency of the financial sector and found that the costs of intermediation, historically at approximately 2 percent, increased since the 1980s. This is puzzling because improvements in information technologies should have reduced these costs. He contended that increases in other financial activities with less social value, such as trading, might have outweighed the benefits of IT development for intermediation costs. In a similar vein, proponents of the concept of financialization contended that financial sectors are increasing in size and taking on a life of their own. Financialization refers to *“the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies”* (Epstein, 2005:3).

Thus, the phenomenon can express itself in terms of an increasing level of debt as a percentage of GDP. In the U.S., it rose from 140 percent to 328.6 percent from 1973 to 2005 (Palley, 2007:7). Duménil and Lévy used the ratio of net worth and the ratio of the profits of financial corporations to those of non-financial corporations and observed a dramatic increase from the mid-1990s onward (Duménil and Lévy, 2005:39). Johnson (2009) argued that earnings in financial sectors as a share of corporate profits increased from 1983 onward, reaching 181 percent in 2007. In Western countries, the share of value added in financial sectors in total value added in the economy increased steadily from 4-5 percent in the early 1980s to six to eight percent in 2010 (BIS, 2010).

These various measures all indicate an increase in the size of financial sectors, which is not without consequences:

- At the microeconomic level, such an increase can force firms to be immediately profitable, preventing them from making useful long-term investments (Albert, 1991), which leads to breakdowns in accounting standards and corruption among financial analysts (Berenson, 2003). The result is that financial markets have come to dictate corporate behavior. This might not be the optimal outcome if financial market behavior is short-termist (Palley, 1997) and subject to herd behavior (Palley, 1995).
- At the mesoeconomic level, financialization has entrepreneurial consequences. On the one hand, financial sectors have attracted increasing numbers of science, engineering, math and physics graduates because their talents are well-suited to design and operate new and complex financial instruments. On the other hand, while it may be a coincidence, Kedrosky and Stangler (2011) noted that the financial service industry boomed between 2002 and 2006, but *“companies founded in 2002 through 2006 performed just as poorly as those founded during recessions. This period also happened to coincide with poor performance in terms of initial public offerings”* (Kedrosky & Stangler, 2011:12).
- At the macroeconomic level, financialization arguably increases the inherent potential for instability that financial systems generate internally (Minsky, 1986).
- There are also social consequences: Gini coefficients are increasing more rapidly in the most “financialized” Anglo-Saxon countries (Dore, 2008).

Ultimately, there is little doubt that financial systems have experienced revolutionary changes that will be analyzed hereafter. Few studies have examined how changes in financial systems might affect the efficiency of capital allocation. That financial innovation increases the efficiency of capital allocation is generally taken for granted. However, directing capital to investments with the highest rates of return is the primary function of financial systems (Levine, 2006). Dembinski and Perritaz (1998) empirically demonstrated that *“at a time when NYSE companies were losing their advantage over non listed non financial companies in terms of combined factor productivity, the financial system was granting them ever better financing terms and letting them have an unlimited quantity of funds”* (Dembinski and Perritaz 1998:17). Paradoxically, the US financial system favors listed companies, though their asset productivity has decreased relative to that of non-listed, non-financial firms. This demands a more detailed examination and analysis because the efficient allocation of capital is the primary function of financial sectors, while informational efficiency, which lies at the heart of Efficient Financial Market Theory, has thus far received the bulk of academic attention.

This chapter first characterizes the change experienced in financial sectors. Second, it demonstrates how a functional analysis of the evolution of financial sectors sheds light on potential conflicts between the allocation of capital and the allocation of risks. It does so at the institutional level, the temporal level, the geographical level and the level of individual interaction (borrower-lender relationships). At the institutional level, it is clear that market-based financial systems supported by orthodox financial economics have become dominant, even if the advantages of bank-based and market-based financial systems remain a matter of debate. Second, such a division can be observed at the temporal level. The short-term imperatives of the stock market contrast with the long-term horizon of the real economy. Third, the geographical level reveals that international finance tends to favor risk allocation, whereas capital allocation is national. Finally, present-day financial sectors tend to develop transactions, whereas banks have traditionally stressed the importance of relationships.

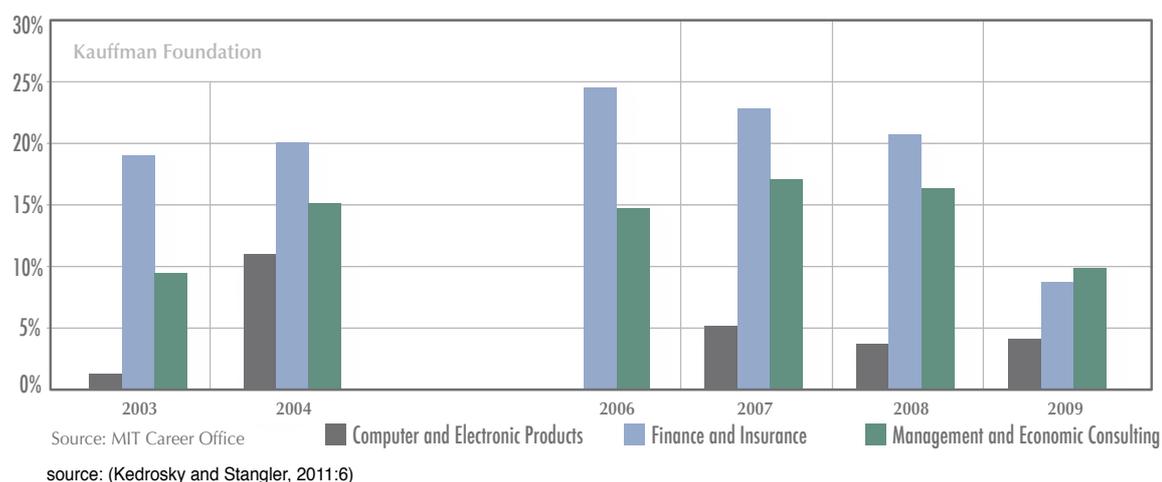
However, one must note that these levels are all interconnected, and it is difficult to strictly separate them. Although some arguments appear redundant, the distinction is nevertheless sensible because it allows us to observe the extent of the shift toward the risk allocation function mentioned by Allen and Santomero (1998). The strict distinction between risk and capital allocation might also appear overly dichotomic (the two are highly connected in practice), but it clarifies that the functions of capital allocation and of risk allocation can be in conflict.

### **1.1. The evolution of financial sectors: From “boring banking” to “fancy finance”**

Krugman’s (2009) turn of phrase captures the essence of the functional change that has occurred in the global financial sector in recent decades. The causes of change in the financial architecture of developed countries can be attributed to the politics of deregulation that began in the late 1970s, advances in telecommunication technologies, the emergence of personal computers, and academic work that contributed to establish financial economics as a separate discipline. These factors triggered a boom in financial innovation. The following are some financial novelties listed by Miller in 1986: Eurodollar accounts, eurobonds, sushi bonds, floating-rate bonds, puttable bonds, zero-coupon bonds, options, financial futures, options on futures and indexes, and income warrants (Miller, 1986). These are now common financial instruments. The following instruments, however, might deserve greater attention because they embody the shift that we intend to highlight in this chapter. Their primary function is to allocate risks more efficiently. Basic swaps - hidden bets on interest rates - and, subsequently, more complex structured notes linked to interest rates or currencies began to appear. Mutual funds, insurance

companies, pension funds and corporations all purchased these notes. Banks issued them, as did U.S. government-supported agencies and corporations: *“By issuing structured notes, these companies could save a half percent or more in interest costs. The companies didn’t really care if the note payments were linked to a complex formula involving interest rates or currencies [...] because the investment bank selling the structured notes always agreed to hedge the issuer’s risks with swaps”* (Partnoys, 2003:71).

This period also witnessed a boom in securitization, allowing for the increased use of credit derivatives. We now have access to the Collateralized Bond Obligation (CBO) and Collateralized Mortgage Obligation (CMO), Asset Back Securities (ABS), Collateralized Debt Obligation (CDO) and protection against a possible credit default, Credit Default Swaps (CDS). The yields of these instruments depend on which risk tranches they were issued from. The senior piece pays less, but is less risky, the mezzanine piece comes next, followed by the remaining tranches, down to “nuclear waste”, as insiders term it. The central appeal of these instruments is risk allocation, and not investment per se. This development was backed by the orthodox view of financial economics, which contends that financial innovation is a response to inefficiencies in the financial intermediation process and, on balance, *“innovations have been almost certainly beneficial for the system as a whole”* (Watson et al., 1986:10). This perspective holds that securitizing previously illiquid assets, such as mortgages, and thus allowing them to be traded on secondary markets, will reduce risks through diversification: Unbundling the risks involved in the various instruments, *“should increase the efficiency of the financial system since each element of a deal can be provided and the associated risk taken by the financial entity which can do so most efficiently. The increase in the number of separate risks should not, in itself, increase the total risk for the system as a whole”* (Watson et al., 1986:10). The rationale for this, in Arrow’s words, is that *“the possibility of shifting risks, of insurance in the broadest sense, permits individuals to engage in risky activities that they would not otherwise undertake”* (Arrow, 1971:137). This argument ties risk diversification to economic growth and provides theoretical support for the development of financial markets, which as we will see, perform this task better than bank-based financial systems. A clarification should be introduced at this point. Stock markets and financial markets are often confused with one another. However, they are two different institutions. The first refers to organized and regulated platforms on which stocks (shares) can be traded. Bond markets represent capital markets on which capital can be raised. Derivatives markets provide instruments to manage risks, the redistribution of which is also facilitated by the insurance market. Commodities markets exist to support commodities trading, and foreign exchange markets support the currency trading. Money markets provide short-term financing. In futures markets, traders exchange forward contracts. In all of these markets, which are regulated and structured differently, various actors trade diverse financial instruments for financial markets.



**Figure 1. Fields of entry for graduates of the Massachusetts Institute of Technology**

Another important characteristic is the intensive use of mathematics in finance (Wilmott, 2000). The increase in the size and complexity of the financial sector has been driven by financial innovation. As noted above, financial sectors have been recruiting increasing numbers of the graduates of science, engineering, math and physics programs to administer new and complex financial instruments. Figure 1 above, taken from Kedroski and Stangler (Kedrosky and Stangler, 2011:6), depicts the fields of entry for graduates of MIT. The preponderance of the financial sector is clear and embodies the link between hard science disciplines, such as physics and mathematics, and finance.

In a 1900 thesis, Bachelier assumed that the Paris exchange was a game of chance, a coin-tossing game in which participants could not predict price movements. The Gaussian distribution, however, provides a means of exploiting this ignorance. In the absence of new information, the price will not substantially deviate from its starting point, which is the current price. Thus, in a world in which data points are independent and each one having negligible effect on the others, the variation in prices tends to form a bell-curve. If individual prices cannot be predicted, the general way in which they move can. This is Brownian motion applied to financial market prices. Markowitz then applied Bachelier's conceptualizations to develop Modern Portfolio Theory, which was rapidly adopted by Wall Street because the understanding behind it - diversification - now seems obvious: Markowitz incorporated the notion of risk by linking it to the variance and standard deviation of price movements, in other words, the probability that incorrectly predicts the price. The problem was that one had to calculate how each stock fluctuates relative to every other stock, and because prices change, this implies a constant reevaluation of the covariance of every security. This was a costly exercise for the computers available in the 1960s. Sharpe simplified Markowitz's model and compared an individual security with the stock market as a whole, a measure that later became known as "beta".

The “*beta*” measures the sensitivity of an individual stock to the market and as such is a mathematical expression of the relationship between risk and reward. The practicality of this method was monumental: “*A one-hundred-security analysis that took thirty-three minutes on an IBM 7090 using Markowitz’ methods needed only thirty seconds Sharpe’s way*” (Fox, 2009:86). It also contributed to Black and Scholes solving the option-pricing puzzle using the measure of non-diversifiable risk given by the *beta*. At the time, the option-trading business was rudimentary and had to be conducted “*over-the counter, broker to broker. The Chicago Board of Trade was on a project to establish an options exchange and Black-Scholes became part of it. Black-Scholes wasn’t just predicting options prices. As the house formulae of the brand-new options exchange, it was setting them*” (Fox 2009:146). The notion of risk progressively became central to modern finance. Bachelier introduced statistics into finance, which allowed Markowitz to incorporate the notion of risk. Sharpe simplified the notion of risk and linked it to reward. Black and Scholes determined how to price it, which is now used by the entire industry. Walter and de Pracontal (2009) explained how the Brownian virus spread from Bachelier’s dissertation to Wall Street. They demonstrated how American scholars maintained the Brownian “philosophy” and applied it to finance using modern statistical tools. Bouleau (1998) argued that the widespread use of derivatives and the establishment of markets to trade them requires an intense use of mathematics and represents an epistemological break. Risk is spread and not only managed, but canceled, through the “thinking of the market”. Expert forecasts have less credence than the anticipation of the market as expressed through public opinion. It is therefore thus more important to heed the market and “*listening to the market becomes the main objective reality*” (Bouleau, 1998:XV).

This chapter argues that this epistemological break also corresponds to a distinction between two types of efficiency: The efficiency of capital allocation and the efficiency of risk allocation. New actors playing a prominent role in financial markets engage in risk allocation using sophisticated instruments, while capital allocation seems to play a lesser role. Let us consider the three following examples to illustrate the above statement.

Scoach Switzerland, a secondary market for structured products, now offers three structured product indexes (Dickinson, 2010). Such innovation introduces derivatives between the initial underlying investment and the final instrument. That it was designed to aid investors in assessing the performance of these products clearly demonstrates how difficult this can be, even for so-called “sophisticated investors”. On the one hand, this innovation improves the risk management function of the financial system, but on the other hand, the structure of these notes is highly opaque. Constructing an index on top of the note to track its performance might provide the illusion of transparency, while in fact, it does nothing to improve the efficiency of capital allocation.

Structured notes based on sporting events offer an even more telling example. The World Cup is now an occasion for issuers to market structured notes based on the underlying assets correlated with the possible victory of a team. It is difficult to develop a theoretical case to defend the added value of these sports betting products relative to fixed income investments or the bets offered by bookmakers (Breuer et al., 2009). However, it is more difficult to identify a link with the capital allocation function that a financial system should fulfill.

The daily and weekly option indexes introduced by the Amsterdam stock exchange in 2006 and 2008, respectively, have experienced substantial success, to the extent that NYSE Euronext is offering weekly options on certain equities. These financial innovations can be considered to provide successful and transparent products for investors (HedgeWeek, 2010). It might also represent the overwhelming importance of the risk allocation function, as daily options are not instruments for allocating capital.

These examples simply illustrate how innovation in the financial sectors can serve the productive economy to greater or lesser extents. To more clearly determine how the evolution of the financial sectors might bear on the economy, a functional approach is proposed hereafter.

## **1.2. A functional perspective on financial sectors**

Intermediaries have become facilitators of risk transfers and employ complex instruments. Thus, banks' operations have changed, and trading now occupies the bulk of a bank's efforts. The increased use of securitized loans has altered the lending functions performed by banks (Allen and Santomero, 1998). The OECD thus recommends that the new definition of Financial Intermediation Services Indirectly Measured (FISIM) include the output of financial services resulting from risk management and liquidity transformation activities. This indicates that financial products have moved beyond traditional deposits and loans (Supaarmorakul, 1995). Allen and Santomero (1998) demonstrated that new futures and options markets affected the number of intermediaries. Individual equity ownership decreased dramatically in the U.S. from the mid-1960s to mid-1990s, while the number of shares held by mutual and closed-funds, pension funds and insurance companies increased correspondingly (Allen and Santomero, 1998:1498). Here, we propose a functional perspective to analyze this change.

There are six main functions fulfilled by the global financial system that are generally recognized in the literature (Crane, 1995, Merton, 1995). These functions provide a system for clearing and settling payments, a resource pooling mechanism, a means of

transferring economic resources over time and across distances, risk management methods, price information and, finally, means of addressing the incentive problems arising from asymmetric information. It is possible to gather them under two main groups of functions. The first three fall under the category of the traditional form of intermediation, which is the channeling of money from savers to borrowers and performs a capital allocation function. The other type of functions includes risk management, pricing, and information channeling and enabling risk allocation. Employing a clear distinction between institutions undertaking these functions is no longer sensible. Banks participate in financial markets and have their brokerage desks for stock, bond, commodity, futures and derivatives trading. They also have risk management departments. Moreover, asset managers, brokers and pension funds participate in the channeling of funds from savers to borrowers. Institutional perspectives, taking existing institutions as given, have been weakened by these changes, which is why we follow Merton's advice and focus on functions, which are much more stable over time, rather than institutions. For Merton, the rationale for the use of a functional perspective is based on the replacement of traditional financial intermediaries by financial markets as the institutional structure fulfilling the system's functions and logically also argues for functional instead of institutional regulation (Merton, 1995:25,26,39). The analytical framework employed here has thus been substantially influenced by Merton's article, but we distance ourselves from Merton in the characterization of the shift from traditional intermediaries to financial markets. Merton wrote that this shift is accompanied by more transparent institutions. Transparency, however, is a complex concept that should be manipulated carefully. Financial institutions are not necessarily less opaque because there seems to be more available information flowing to financial sectors. In other words, increased information does not spontaneously entail transparency. The debate over the added value of Credit Rating Agencies illustrates this argument well (Ferri et al., 1999, Posen and Smick, 2008). There has been a shift in the importance of the functions provided by the financial system. As we noted above, Allen and Santomero (1998) contended that there has been an increase in another form of financial intermediation that now consists more in the facilitation of risk transfers than the channeling of money from savers to borrowers. They noted a change in the spectrum of functions that a financial sector provides. However, this change has consequences for the efficiency of capital allocation, which is the most important type of "efficiency".

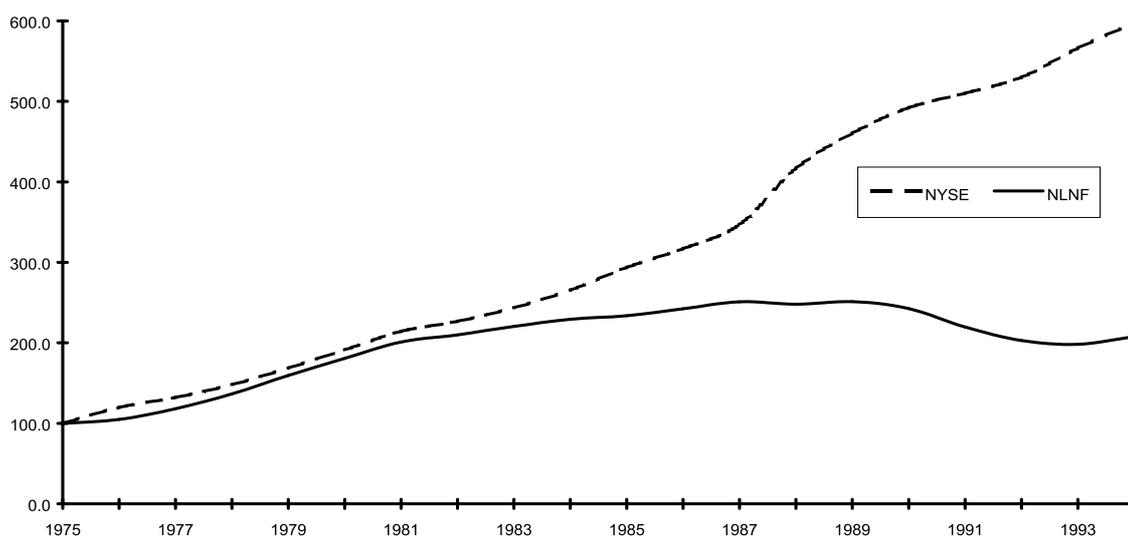
Aglietta (2008) differentiated among four types of efficiencies. Informational efficiency, which is central to the Efficient Financial Market Hypothesis, implies that markets instantly absorb new information that is reflected in prices. A second type is the efficiency of fundamental valuation, which depends on long-term informational efficiency. A third type is the efficiency of risk diversification, which financial innovation arguably enhances, and the fourth and final type is allocative efficiency. Allocative efficiency is the synthesis of the three types of efficiency, which for numerous reasons is very difficult to achieve.

Allocative efficiency can be constrained by differences between social and private returns or a tension between the short and long term (Aglietta, 2008:48). However, Aglietta noted that it is the only form of efficiency that could justify the resources absorbed by financial markets. This chapter highlights a potential conflict between the pursuit of risk diversification efficiency and allocative efficiency and outlines the different lines along which these functions conflict.

### **1.3. Risk allocation versus capital allocation: Conflicting functions**

Because firms are now required to navigate a more uncertain world, the use of derivatives answers a need that they face. The new regime of floating exchange rates allowed for endless possibilities for financial innovation in the 1970s, and the risk allocation function has thus been favored. The notion of a tension between risk management and investment is not new. Keynes had already expressed his concerns regarding this dilemma. On the one hand, the *“liquidity of investment markets often facilitates, though is sometimes impedes, the course of new investment. For the fact that each individual investor flatters himself that his commitment is “liquid” (though this cannot be true for all investors collectively) calms his nerves and makes him much more willing to run a risk. If individual purchases of investments were rendered illiquid, this might seriously impede new investment”* (Keynes, 1935:133). On the other hand, Keynes also warned, *“when the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill- done”* (Keynes, 1935:133).

Dembinski and Perritaz (1998) quantitatively expressed how poorly the job has actually been performed. On the one side, the balance sheet of New York Stock Exchange listed companies grew to a substantially greater extent than did US non-listed companies, meaning that the listed companies received more financial resources (see figure 2 below).



Source: OECD Non-Financial Enterprises Financial Statements; S&P Compustat

Source: (Dembinski and Perritaz, 1998:7)

**Figure 2. Annual balance sheet growth of NYSE listed and non-listed companies**

However, the contribution of US-listed companies to US GNP over the past 20 years remained constant on the order of 20-23 percent. This highlights what Dembinski and Perritaz called a “Paradox of Financial Inefficiency” because the financial system, as a whole, allocated much more resources to companies that were not particularly productive. Otherwise, their contribution to US GNP would have grown along with their balance sheets.

These empirical findings suggest that the preponderance of stock markets (with the benefits they provide with respect to risk management, liquidity and transparency provision, and positive effects on corporate governance) might have come at the expense of the overall allocative efficiency of the financial system. In other words, the growth of stock markets might have led to suboptimal resource allocations.

To obtain an overview of the conflict between these two financial subsystems, let us investigate the division between the risk allocation and capital allocation functions at the institutional level, the temporal level, the geographical level and the level of borrower-creditor relationships.

### **1.3.1. Conflicting functions at the institutional level**

Financial markets have gained in importance to the extent that institutional perspectives, differentiating between banks and financial markets, are no longer useful because the distinction between the two is now blurred. Investment banks, brokers, market makers, mutual funds, funds of funds, hedge funds and pension funds have gained increasing importance recent decades because a market-based financial system is based on the conduct of these activities to a greater extent than traditional banking is. As noted above, banks actively participate in financial markets that provide them with the financial instruments they invest in, use to develop new products and services and manage risks. However, asset managers, brokers and pension funds also participate in the channeling of funds from savers to borrowers. The task of private equity funds was traditionally left to banks, which now have brokerage departments.

Nevertheless, although the distinction is no longer clear-cut, this section demonstrates that financial markets obey a distinctive logic that favors the allocation of risk rather than the allocation of capital. Moreover, the debate over the relative merits of market- and bank-based financial systems persists and has recently been shaped by the “law and finance” debate, arguing that the different set of laws and institutions - understood in the sociological sense of the terms - underpinning any financial system is the important consideration (La Porta et al., 1998, Rajan and Zingales, 1998a, Beck and Levine, 2008). Banks and financial markets require different institutional environments, and there is therefore no single, universal blueprint.

Let us consider one purported advantage of a market-based system: The incentives to search for information because it is easier to profit from it (Holmstrom and Tirole, 1993). Boot and Thakor (1997) outlined the positive purpose markets serve in aggregating diffuse information and transmitting it to investors. The relationship-based model, by enforcing contracts through power relationships and thus substituting for contracts where they are poorly enforced, is said to suppress the price and signal mechanisms that contractual systems provide, which was the cause of the Asian crisis (Rajan and Zingales, 1998b). This emphasizes the centrality of information to the functioning of stock markets. The way information is spread lies at the root of the price formation mechanism. A key characteristic of financial markets is that the equilibrium generated by markets provides valuable information that will be considered in firm decisions. Bank-based systems lack this so-called “information feedback”. Because of agency problems, which are common in developing economies and lead to moral hazard, the market-generated information is not valued. Thus, depending on the informational environment, bank-based systems might be more efficient (Tadesse, 2002).

The distinctive feature of the logic underlying financial markets is the way in which information is conveyed and its importance to the formation of security prices. It is the logic underlying the price discovery mechanisms that allows one to argue that financial markets exhibit a development threshold beyond which they conflict with the notion of investment.

### **The price formation mechanism**

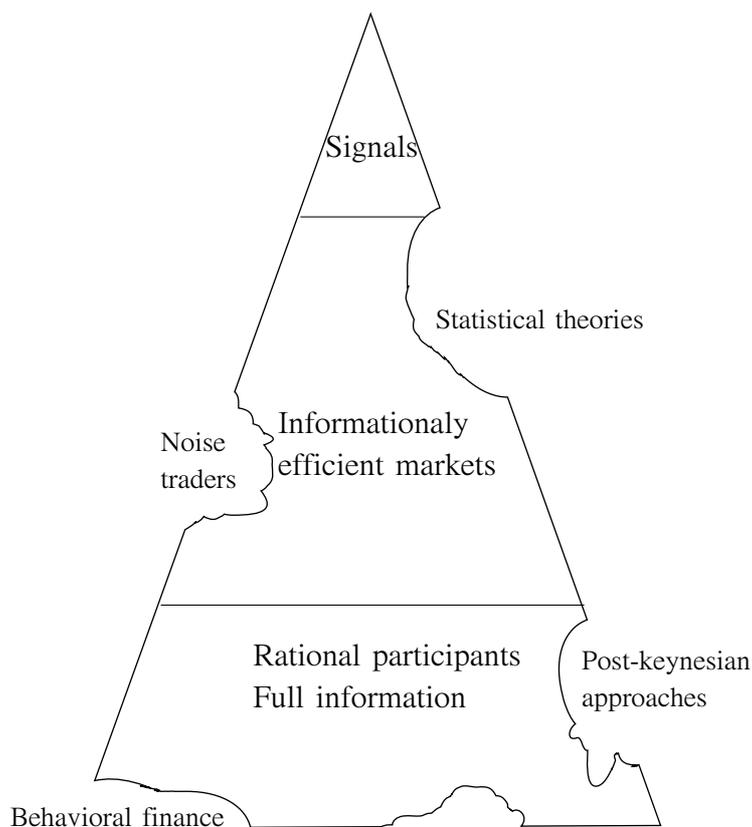
If markets are efficient, in the informational sense of the term, they will reflect the underlying economy. In other words, the assumption is that markets reflect all available information, and hence, when one purchases an asset, a fair price is paid for it. The primary difference between financial markets and banks is that markets talk. Markets send signals that help participants invest where the investment is most productive. Banks, in contrast, rely on experts and economists to analyze and forecast. The epistemological rupture that Bouleau (1998) wrote about is the gap between the wisdom of crowds and expert analysis. From a financial economics perspective, this new approach had no choice but to prove that markets are an efficient black box, in the sense that the signals received and transmitted are the best reflection of a firm's fundamentals. Philosophically, this new paradigm requires scholars to ask whether what markets say is reality or reflects reality.

However, Efficient Financial Market Theory (EFMT), which underlies the arguments in favor of market-based financial systems, is very controversial. The world depicted by EFMT is not one in which the future is entirely predictable. The knowledge requirement of EFMT is that "*what is known is not what will happen for certain, but the risk of it happening, which is measurable*" (Skidelsky, 2009:38). Thus, the risks attached to underlying assets are reflected by past available information reflected in the price of the corresponding financial instruments. However, EFMT has been critiqued from several perspectives.

Behavioral finance holds assumptions that are in direct contradiction with financial orthodoxy, the principal one being that investors do not behave rationally in their investment decisions because they are subject to several biases that cause them to assess probabilities subjectively (Kahneman and Tversky, 1979). The anomalies discovered by Kahneman and Tversky were initially rejected by orthodox financial economics because they were deemed anomalies, in other words, exceptions that confirmed the rule. Intelligent investors arbitraging abnormal prices would eventually force uninformed investors out of the market and drive prices back to their fundamental values.

However, even assuming that most market participants are rational and have full information, the presence of noise traders - investors only having access to irrelevant information and acting as if it were relevant - could disrupt the price signal mechanisms provided by markets. De Long et al. (1990) reassessed the arguments advanced by EFMT proponents by suggesting that rational participants are reluctant to trade against noise traders because noise itself creates additional risk. Noise traders create *“their own space and they can earn higher expected return from their own destabilizing influence, not because they perform the useful social function of bearing fundamental risks”* (De Long et al., 1990: 706).

Figure 3 below represents the intellectual edifice necessary to argue that financial markets provide investors with accurate signals. As noted above, this edifice has been questioned by the behavioral finance and the noise trader literature. Additionally, post-Keynesian perspectives have consistently been critical of the neo-classical assumptions on which EFMT rests. Moreover, an important body of literature has repeatedly criticized the statistical and mathematical models used to describe and construct financial markets (Mandelbrot and Hudson, 2004, Walter and de Pracontal, 2009).



**Figure 3. The edifice of the Efficient Market Theory Hypothesis**

We are thus forced to conclude that it is far from certain that financial markets outperform traditional banks in allocating capital. Since Keynes, Minsky and the birth of behavioral finance, financial markets have grown in size and complexity, and if anything, it is even more difficult to know what currently determines stock price formation. Keynes likened the stock market to a beauty contest. Fund managers attempt to conform to some benchmark established by the industry and tend to consider the same type of information (Mosley, 2000), therefore demonstrating that it is better to be wrong with everyone else than to be right alone. In other words, financial markets could perform well at reflecting the average opinion, but the process leading to price formation does not appear to be adapted to capital allocation. It is the result of numerous interactions among various players, and it is difficult to determine what role remains for fundamental economic parameters.

The four types of actors that Aglietta (2008) lists - market makers, financial market actors, noise traders, and institutional investors - do not appear to account for economic fundamentals. Market makers are fundamentalists but must integrate the effects of other actors on price movements. The second group of actors buys and sells on financial markets for liquidity reasons and is thus not interested in market fundamentals. The third group, the so-called noise traders, buys and sells based on baseless information. The actions of this group tend to reinforce the current trend, which they employed to make their investment decisions. The last group contains institutional investors managing large pension funds. Their concern is risk diversification because they need to be certain that the value of their portfolio does not fall below a certain minimum (Aglietta, 2008).

Moreover, these actors are immersed in a constant flow of financial information that is not necessarily conducive to capital allocation efficiency (Shiller, 2000, Akerlof and Shiller, 2009). Mainstream financial economists have also dismissed feedback theories, which account for the fact that past price increases can generate expectations of further increases, though evidence of such phenomena dates to the tulip mania. They also recognize the role that the financial news industry plays in allowing for irrational exuberance. Financial media stories no longer explain the facts; they became the fundamentals (Shiller, 2000). "*Buy on the rumors, sell on the news*" is a trader's proverb and describes a strategy of exploiting an observed phenomenon: Security price movements around the date of an anticipated event (Peterson, 2002). Thus, overconfidence, herd behavior and epidemics have entered the descriptive vocabulary of financial market movements (Shiller, 2000). Moreover, there is evidence that behavioral biases exist across cultures, contexts and even species (Chen et al., 2006). Although the focus is on the individual and how decision-making processes are constrained by numerous biases, the behavioral economics literature seems to echo the old argument, defended most famously by Le Bon (1896), that collective behavior tends to be extreme. According to this literature, the judgment of crowds is always intellectually inferior to the judgment of the individual. Interestingly, Surowiecki (2004) attempted to provide a counter

argument but conceded nonetheless that there are essential conditions that are necessary for crowds “to work”: Independence and diversity.

Moreover, increasing the flow of information is not necessarily conducive to improved decision making. Numerous studies have demonstrated how additional information weakens the decision making process (Andreassen, 1987, Redelmeier and Shafir, 1995, Bernartzi and Thaler, 1998). Studying investment research, Treynor (1987) concluded, “*the more persuasive a published opinion is, the more damage it does for market efficiency*” (Treynor, 1987:51). Demonstrating how public information is overemphasized, Allen et al. (2003) reached a similar conclusion. Prices are driven away from their fundamentals because market participants attempt to predict others’ forecasts (Keynes’ beauty contest) and thus favor public information over private information. An excessive reliance on public information causes overreactions in asset prices. Rational choice theory does not account for the multiple biases that influence decision making. However, their very existence indicates a “paradox of choice” (Schwartz, 2004), which could imply that there is a limit to the number of choices individuals are able to make. The few studies cited above demonstrated that this paradox might well apply to information. That some information is good does not imply that more information is better.

It is not only necessary to consider the sheer flow of information but also its complexity. Complexity contributes to the development of extreme events in the financial system (Landeau, 2008, Landeau, 2009). Financial innovation can lead to a loss of information (Gorton, 2008). Complex financial innovation can exacerbate asymmetric information problems, which explains why even sophisticated players evaluate these instruments quite differently. The variance in the valuation of complex derivatives can easily reach 17 percent (Bernardo and Cornell, 1997). The concept of computational complexity used to define the practical limits of computers can or cannot do also helps to demonstrate that complexity per se entails costs. “*It suggests that derivative contracts could contain information that is in plain view yet cannot be understood with any foreseeable amount of computational effort*” (Arora et al., 2010:50).

From that perspective, it appears that financial markets are not systems designed in a manner that is well suited to the efficient allocation of capital. Given the pricing systems and complex mathematical foundations of a financial market, it might be more appropriate for risk allocation. If an institutional distinction between bank- and market-based financial systems is obsolete, this is also because the logic of market-based finance became dominant. Financial institutions such as funds (mutual funds, pension funds, hedge funds) brokerage desks and trading desks, and risk management departments have become more important. These financial market participants have certain investment strategies that relate differently to time and place. Neither the time horizon nor the geographical ranges of investment opportunities of high-frequency trading are identical to those of a pension fund. The following two sections focus on these two elements - time and space -

and will demonstrate how recent developments in finance favor short-term over long-term considerations and are concomitant with international diversification. These developments, at both the temporal and geographical levels, reveal the greater importance of risk allocation relative to capital allocation.

### **1.3.2. Conflicting functions at the temporal level: Short-term versus long-term**

This section first explicates how the notion of risk used in financial economics eliminates long-term horizons and restates how this particular notion of risk (rather than the notion of uncertainty) is central to financial markets. Then, it reveals how the short-term behavior of financial market actors affects long-term investment. Finally, it considers how this behavior came to dominate firm management and how this is contrary to long-term growth.

Knight was the first to depart from classical economics by distinguishing between risk, which can be measured, and uncertainty: *“The practical difference between the two categories, risk and uncertainty, is that in the former the distribution of the outcome in a group of instances is known (either through calculation a priori or from the statistics of past experience), while in the case of uncertainty, this is not true, the reason being in general that it is impossible to form a group of instances, because the situation dealt with is in a high degree unique”* (Knight, 1921:233).

This view of uncertainty expresses the inability to link an uncertain future event to historical information. Risk can be measured because a class of past events is sufficiently homogeneous to be probabilistically attached to a future one; it is thus a question of the *“degree of assimilability of classes securable or, stated inversely, the degree of uniqueness of various kinds of business contingencies”* (Knight, 1921:247). However, even distinguished from the notion of risk, to which probability can be associated, Knight’s notion of uncertainty is not the Keynesian one.

Figure 4 below, taken from Davidson (2002:54), depicts how economic reality is perceived by the different theories. The colored arrows on the right were added to demonstrate how these theories relate to the notion of time. In an ergodic world, in which uncertainty is quantifiable and institutions need not be included in economic theory, only the short run is predetermined. The path of economic development is known, and human actions and the social devices that they design do not interfere with it. In the second type of economic reality, law and rules serve to facilitate coordination or reduce asymmetric

information, for example. Only the third type of economic reality includes a long-term horizon and thereby accepts true uncertainty in the Keynesian sense of the term.

Concept	Example of theories using this postulate
<p><b>A. Immutable reality (an ergodic system)</b> Type 1 in the short run, the future is predetermined and known to the people in the model</p>	<ol style="list-style-type: none"> <li>1. Classical perfect certainty models</li> <li>2. Actuarial certainty equivalents, e.g., rational expectations models</li> <li>3. New Classical models</li> <li>4. Some New Keynesian</li> </ol>
<p>Type 2 in the short run, the future is predetermined but is not completely known to all people in the model due to some limitation in the cost of human information processing and computing power</p>	<ol style="list-style-type: none"> <li>1. Savage's expected utility theory</li> <li>2. Some Austrian theories</li> <li>3. Some New Keynesian models, e.g., asymmetric information and coordination failure theories</li> <li>4. Chaos, sunspot and bubble theories</li> </ol>
<p><b>B. Transmutable or creative reality (a nonergodic system)</b> Some aspects of the economic future will be created by human action today and/or in the future</p>	<ol style="list-style-type: none"> <li>1. Keynes's General Theory</li> <li>2. Post Keynesian monetary theory</li> <li>3. Post-1974 writings of Sir John Hicks</li> <li>4. G.L.S. Shackle's crucial experiments analysis</li> <li>5. Old Institutional theories</li> </ol>

Source: (Davidson, 2002:54)

**Figure 4. Conceptualizations of external economic reality (time horizon added by the author)**

The goal here is not to write a philosophical treatise on uncertainty, but to show how neoclassical economic assumptions, on which financial economics rests, have eliminated the long-term perspective. Neoclassical economics assumes that economic phenomenon happen in an ergodic world. It assumes that the process generating change is the same over time and since it is impossible to draw samples from the future, one can use averages from past observations. It cannot be very different from future outcomes. However, these predictions can be accurate only on a very short time horizon. Financial economics emerged as a discipline with these neoclassical hypotheses. As mentioned earlier, the development of financial economics is intimately related to the law of normal distribution. Price changes are independent from each other, but the process generating these changes does not evolve and follow the proportion of the bell curve. In other words, prices might be erratic and follow a Brownian motion or a random walk, but financial economic still assume that, in the short run, it is possible to know where particles are likely to move. Ironically, these assumptions became less realistic as financial markets developed and volatility increased. Now that instability is the necessary condition on which the business models the most powerful players of the financial industry rest, it became increasingly clear that the ergodic assumptions that laid the intellectual foundation of financial economics, even if practically useful, are hiding the wild movements of the markets. In any case, the consequences of the “Brownian philosophy”

applied to financial markets is that, in the short run, uncertainty is nothing more than calculable risk.

For Keynes, conversely, money was a convention, a “store of value” that was necessary because the future is uncertain. It was “*a subtle device for linking the present to the future*” (Skidelsky, 2009:78). The neoclassical perspective did not incorporate Knight’s distinction between risk and uncertainty, with the consequence that any uncertain event becomes a calculable risk. It is necessary to regard economic reality from this perspective to construct an option pricing model.

However, financial markets are also characterized by a short-term notion of time due to the various market participants and their strategies. Keynes’ beauty contest insight also concerns how various market participants relate to time: “*Investment based on genuine long-term expectation is so difficult...as to be scarcely practicable. He who attempts it must surely...run greater risks than he who tries to guess better than the crowd how the crowd will behave*” (Keynes, 1935:157). A number of studies captured this tension between short- and long-term investments. It is of crucial importance to assess how costly it is for rational participants to hold their positions, as theoretical arguments supporting the efficiency of financial markets are based on the stabilizing power of rational actors.

As noted above, an environment including noise and positive feedback traders may be biased against long-term trading horizons (Shleifer and Vishny, 1990, De Long et al., 1990). By the same token, Froot et al. (1992) demonstrate that short-term speculators often tend to trade on very poor data or information bearing no relationship with fundamentals. Moreover, these traders tend to exclusively focus on a single source of information, echoing Mosley’s (2000) observations. This negatively affects information quality and leads to less-informed allocational decisions. In a similar vein, Hirota and Sunder (2006), using a laboratory experiment, found that investors’ time horizons affect the formation of stock prices. Long-term investors use backward induction, and prices tend to converge to their fundamental levels. Short-term investors, however, when leaving the market, consider the prices of securities and do not consider future dividends. Prices are then no longer anchored to dividends. Thus, in markets with a majority of short-term traders, the impact and frequency of the failure of backward induction are greater, and this increases the likelihood that prices will deviate from their fundamentals, which fuels bubbles. The findings of Hirota and Sunder suggest that the time horizon of investment is important for asset pricing (which is ignored by standard theories) and long-term investors are crucial for the stabilization of market prices.

High-frequency trading (HFT), the fairness and social benefits of which are in question, is at the center of an ongoing regulatory debate. However, HFT is the most vivid example

illustrating the functional tension between risk and capital allocation in the present financial system. “HFT is a type of investment strategy whereby stocks are rapidly bought and sold by a computer algorithm and held for a very short period, usually seconds or milliseconds” (Brogaard, 2010:1). Algorithmic trading (AT), occasionally confused with HFT, refers to an automatic trading process using computers. According to Brogaard’s estimates, HFT is involved in 77 percent of the dollar-volume traded in U.S. equities. By the same token, observers claim that buy-and-hold strategies, or long-term investments based on economic fundamentals, are dead (Kim, 2009, Cox, 2010). The literature on the impact of this technological change on financial market quality finds that HFT positively affects market quality measures such as short-term volatility, spread and the depth of the limit order book (Hasbrouck and Saar, 2011) or contributes to price discovery and provides better bid and offer quotes (Brogaard, 2010). By the same token, AT improves liquidity and information availability (Hendershott and Riordan, 2009, Hendershott et al., 2011).

These studies find that high-speed investment strategies improve market quality; however, this is only defined in terms of liquidity. The gap between risk allocation and capital allocation is flagrant in this respect. Can an approach still be considered an “investment” strategy when securities are held for less than a second? While the studies above show that HFT and AT do not reduce market quality defined in terms of liquidity, the link between these parameters and the efficiency of capital allocation is not theoretically, let alone empirically, proven. The benefit of an investment strategy involved in half of the dollar-volume traded in U.S. equities could certainly support the price discovery process, but this does not imply that it allocates capital efficiently. Furthermore, the abovementioned authors seem to imply that, provided that the market generates accurate prices, the remaining market participants will use the information to direct their investments accordingly, while behavioral finance findings mitigate this assumption.

The negative spillovers of short-term investment strategies also must be considered. The focus on quarterly “numbers” led to breakdowns in accounting standards and corrupted financial analysts (Berenson, 2003). Crotty (2005) argued that the change in corporate behavior is part of a neoliberal paradox: Non-financial corporations have become constrained by a shift from patient finance oriented toward long-term growth to short-term finance conditioned by financial markets. It shortened their horizons and changed managerial incentives. This shift forced managers to devote an increasing share of their cash flows to financial agents. Thus, the short-term behavior of market participants compelled the real economy to adopt their behavior. However, their notion of time does not fit economic reality. The stock market in particular obliges a firm to be immediately profitable and the “*tyranny of the quarterly report*”, in Michel Albert’s words, might force companies to reduce expenses conducive to long-term growth. Fears of IPOs have induced firms to adopt defensive strategies and hire armies of lawyers. Such behavior

and strategies make little sense from an economic and industrial perspective (Albert, 1991). However, if the time horizon has contracted, there are compelling arguments for the inverse movement at the geographical level. Finance has become quicker and more international.

### **1.3.3. Conflicting functions at the geographical level: international risk diversification versus domestic investment**

This section illustrates the increased importance of risk allocation relative to capital allocation at the international level. In other words, the rise of global finance and international financial integration has favored risk allocation to a greater extent than capital allocation. That finance is global is tied to international risk sharing. The end of the Bretton Woods system is intimately connected to risk management. The Mundell-Fleming model demonstrated that it is impossible for the free movement of capital, fixed exchange rates and independent monetary policy to coexist. Thus, the pegged-rate regime had to be sacrificed if capital were to move freely. The free movement of capital entails a preoccupation with exchange rate risks, which has to be added to the other types of risks (interest rate risks, market risks and idiosyncratic risks). Thus, it is logical that financial liberalization coincides with floating exchange rates, which demand risk management services. Financial liberalization primarily concerns the privatization of risk management that, until the early 1970s, was embedded in the pegged exchange rate regime. Capital allocation efficiency is rarely mentioned in debates on financial globalization, the primary arguments of which concern risk sharing.

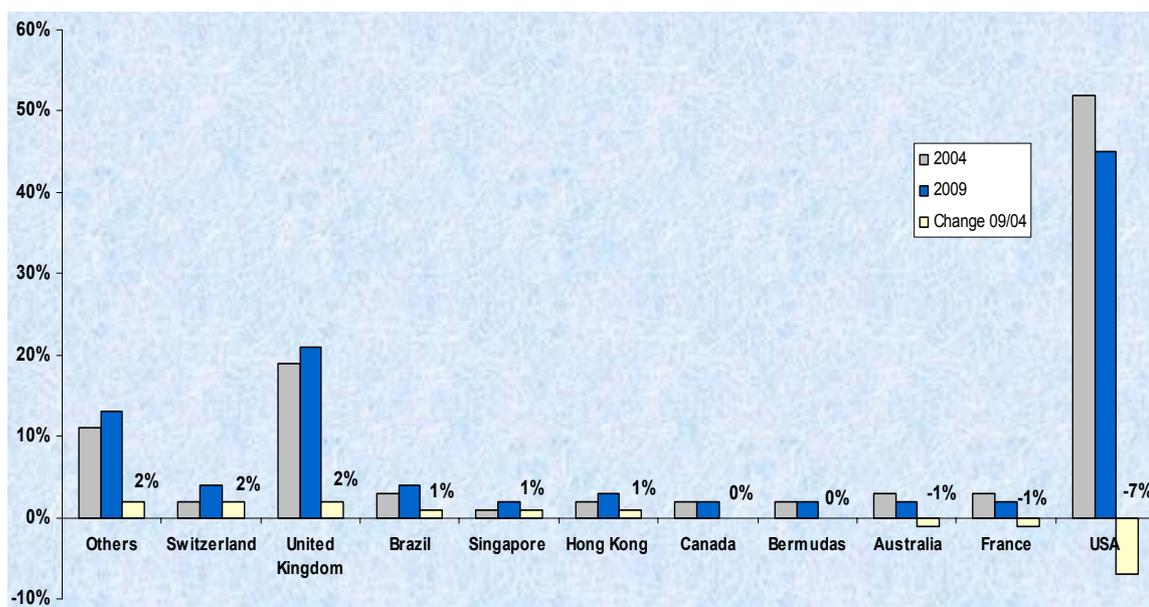
If theories of risk diversification are valid for the development of national financial markets, risk diversification should also be promoted internationally. Markowitz demonstrated that diversification reduced risks. However, adding securities to a portfolio only decreases risk to a certain extent. The remaining threshold represents the market risks, and one way to reduce these risks is to trade on the international market. Grubel (1968) long ago noted that incorporating foreign securities would reduce the risk of an investment portfolio. Despite the potential gain from international diversification, investors tend to retain surprisingly large volumes of domestic shares in their portfolios. This home bias was first documented by French and Poterba (1991). However, Coeurdacier and Guibaud (2011) recently noted that when investors hedge their positions, they do so correctly by diversifying their foreign equity holdings toward countries exhibiting low correlations with their own. Sorensen et al. (2007) demonstrated that home bias and risk sharing are inversely related. When home bias decreases, risk sharing increases. They more generally demonstrated that financial integration, if measured by the ratio of foreign assets to GDP, is closely related to risk sharing. Deregulation, capital account

liberalization and advances in communication technologies have supported financial integration. In addition to these factors, Lane and Milesi-Ferretti (2008) include financial innovation, which has also been an important driver in recent years. However, as we noted above, financial innovations are related to risk allocation or regulatory arbitrage. Among the structural changes driving international capital flows to emerging markets analyzed by an IMF report (IMF, 1997), nearly all are related to risk diversification and risk management. The growing importance of institutional investors led to their participation in emerging markets for diversification purposes. Second, institutional investors' desire to hedge exposure is linked to securitization, which involves an increased use of direct debt and equity markets. Third, the development of financial economics and risk pricing methods meant that risk could be traded and managed more precisely, and finally, the revolution in information technologies has facilitated more sound analyses of credit and market risks. This IMF reports suggests that the cause of capital flow in emerging countries is not capital investment, but risk management. Berger et al. (2011) noted, for example, that frontier markets offer excellent international diversification opportunities because these markets are not correlated with developed and emerging ones. Dicle et al. (2010) conducted a similar study on India and concluded, by contrast, that India was well integrated with international equity markets, thereby reducing the potential benefits of diversification.

From a neoclassical perspective, financial liberalization has primarily been supported by the potential for risk diversification. Stock market liberalization is supposed to spur economic growth because enhanced risk sharing reduces the cost of equity capital (Henry, 2000, Bekaert et al., 2005). If the most important function of capital markets at the domestic level is pooling savings to be efficiently allocated elsewhere, at the international level, the function of capital markets is to pool risks assured by a diversity of financial instruments (Obstfeld and Taylor, 2004:6). The primary function of world capital market is international risk diversification: "*A basic function of a world capital market is to allow countries with imperfectly correlated income risks to trade them thereby reducing the global cross-sectional variability in per capita consumption levels*" (Obstfeld and Taylor, 2004:6). Equity market liberalization is thus intended to increase growth via international risk sharing, which smoothes consumption growth (Bekaert et al., 2006). This was the Washington consensus argument for financial liberalization, and while this view has been criticized and empirical evidence indicates that financial liberalization has not been beneficial in all contexts, the emphasis on risk sharing is telling. In a study questioning the benefits of full financial integration, Stiglitz (2010) demonstrated that it might not be desirable because risk diversification does not deliver its intended benefits in a world rife with externalities and different institutional, informational and R&D structures. These studies indicate that risk allocation and international financial integration are intimately associated and risk lies at the center of the academic debate over international financial integration. To the best of our knowledge, no empirical study investigates the

motivations of global portfolio managers. Do most of them primarily invest abroad for risk diversification purposes? Most institutional investors have a part of their assets under management hedged internally and the primary purpose of this strategy is risk diversification. Whether risk diversification is generally more important for these actors than capital allocation remains difficult to determine, but one can note that the risk diversification function has been institutionalized.

One can cite empirical studies on the geography of investments as indirect evidence that international finance is more concerned with risk diversification and other factors than with performance. In a seminal paper, Coval and Moskowitz (2001) explored the relationship between geography and investment and found that mutual fund managers were earning higher returns in geographically proximate investments. They established a positive relationship between local investment and performance, thereby suggesting that distance and information are related. The relationship between space and information (and therefore performance) that they established had been outside the framework of financial economics. It subsequently gave rise to numerous other papers. However, the evidence is mixed, and the topic is widely debated. Dvorak (2005) differentiated between domestic and foreign investors and between local and global brokerages. He found that a combination of local knowledge and global expertise is the most beneficial. That is, domestic investors that are clients of global brokerage houses enjoy higher profits than foreign investors who are clients of global brokerages. Bae et al. (2008) examined the precision of the earnings forecasts of analysts in 32 countries and found that local ones performed better than foreign ones. Teo (2009) established a significant relationship between geographically proximate investments and abnormal returns for hedge funds. Moreover, linguistic distance has a similar effect, which lends further credence to the argument that hedge funds profit from being near their investments.



Source: (Meier and Anhorn, 2010:7) Meier's and Anhorn's own calculation based on Eurohedge database

**Figure 5. Development of market shares by domicile of HF management**

Interestingly, Teo notes that the majority of hedge funds are concentrated in the U.S., as the graph from Meier and Anhorn (2010) demonstrates (see figure 5 above).

There is a clear geographical asymmetry. While the majority of capital is managed in the U.S., hedge funds invest globally. Why are more hedge funds not located near their investments? Teo (2009) found that distant hedge funds charge higher fees and establish longer redemption periods than hedge funds nearer to their investments. They also have better access to capital. *“Distant funds, by being close to their investor base in developed markets (large institutions, pension funds, and endowment), trade investment performance for better access to capital”* (Teo, 2009: 3535). This phenomenon does not prove that risk allocation is the primary concern of distant hedge funds but instead indicates that capital allocation is the least of their concerns. If the efficient allocation of capital were the primary function of these institutions, as financial economics maintains, more hedge funds would be located near their investments, instead of near their investors.

### **1.3.4. The contradiction in the banking industry: Transactions versus relations**

This section analyzes the increase in use of financial instruments based on transactions rather than relationships. This transition corresponds to a hardening of information.

However, one should not ignore the persistent role of rumors - a type of soft information - in financial markets. Hard information can be reduced to a series of numbers, while soft information “*cannot be directly verified by anyone other than by the agent who produces the information*” (Stein, 2002:1892). Thus it is important to recall that while a distinction is made here between hard and soft information, modern financial markets might have blurred it. However, we return to this concern and the phenomenon of rumors below. Suffice it to say for the present that financial markets, which officially rely on hard information, allow the pricing of a variety of financial products, especially complex risk management instruments. Financial markets’ official, hard information is used to design other financial instruments or can be computed and then used as input in algorithmic and high-frequency trading. The functional shift toward risk allocation also corresponds to the increase in transaction volume, which is also fueled by consistent declines in transaction costs. Day trading and high frequency trading are in part possible because transaction costs have been dramatically reduced. This change can be perceived from a bank income perspective. The income structure of banks in the U.S. has changed, with non-interest income now accounting for 47 percent of total industry operating income. For every \$1 of interest income, the banking industry generates just under \$1 of non-interest income. The share of non-interest income has doubled over the past two decades (DeYoung and Rice, 2004:35-38). This structural change had a more substantial impact on large banks than on small ones. Non-interest income is a phenomenon of large banks, accounting for 50 percent of total operating income, while for the average bank, it only represents one-fifth. Size also affects the composition of non-interest income itself. Large banks derive a disproportionate volume of fees from securitizing, mortgage servicing and credit card loans, while the average bank generate fees from deposit funding (the checking accounts of households and SMEs) (DeYoung and Rice, 2004:41).

The financial innovation that triggered an explosion of credit derivatives has numerous advantages. From the perspective of orthodox financial economics, securitization creates a secondary market for loans that provides increased liquidity. It enhances risk management by unbundling credit risks, thereby allowing them to be more efficiently distributed. However, securitization and secondary loan markets allow banks to unbundle risks, thus separating balance sheet management from borrower relationship management. This fostered a shift from relationship lending toward transaction lending, echoing the functional shift from capital allocation to risk allocation. Credit derivatives are potentially beneficial because they allow for a separation between loan funding and origination and the allocation of the credit risk attached to the loan. While the effects of credit derivatives remain ambiguous at the bank level (Gibson and Murawski, 2008) and are a concern with respect to systemic risk (Kiff et al., 2009), secondary loan markets and risk unbundling also imply that a loan’s originator does not engage in monitoring. The originating bank no longer assesses the creditworthiness of the borrower, despite generally being best positioned to do so. This creates a moral hazard problem because

risk-monitoring incentives are reduced (Kiff and Morrow, 2000, Rule, 2001). Monitoring can be left to the market, but this implies that the price signal function of markets accurately reflects the fundamental credit risk, which as we have observed, is far from clear. Moral hazard could be reduced if the bank had an incentive to develop long-term business relationships with borrowers, and rating borrowers could attenuate asymmetric information. That is why the top beneficiaries of transition from relationship banking are large banks (Effenberger, 2003). However, SMEs are unlikely to be rated, and developing lasting relationships with SME is a characteristic of specialized banks. The type of effects that the increased use of credit derivatives will have on SME lending thus remains unknown (Effenberger, 2003).

There is an extensive literature on the importance of SME in job creation, innovation and entrepreneurship, and SMEs have traditionally been financed by banks because their opaqueness prevents them from raising capital on public markets. Against this background, it becomes essential to place the financial innovation occurring in recent decades within the context of SME financing. Has this move toward transactions altered relationship lending? Let us define relationship lending, in keeping with Boot (2000) as the provision of financial services by a financial intermediary that: *“invest[s] in obtaining customer-specific information often proprietary in nature and that evaluates the profitability of these investments through multiple interactions with the same customer over time and/or across products”* (Boot, 2000:10). Improved access to information seems a crucial aspect of relationship lending (Elsas, 2005). There is a substantial literature demonstrating the uniqueness of bank loans, beginning with James (1987), who underlined in 1987 that bank loans helped to resolve adverse selection problems for companies undervalued by public markets. Moreover, commitment-based finance is highly useful in periods of uncertainty (James and Smith, 2000). The contractual features of relationship lending, which allow for flexibility and discretion, including collateral requirements and the use of covenants, facilitate implicit long-term contracting (Boot, 2000). Additionally, repeated interactions have the potential to reduce loan spread by 10-17 basis points (Bharath et al., 2011). These benefits of relationship lending are controversial, however, because there is also evidence of a lock-in effect due to the informational advantages of banks once the relationship is established. Relationship banking could provide banks with incentives to extract rents in the form of higher interest rates (Schenone, 2010).

If relationship lending is indeed special, it is important to determine whether the financial revolution of recent decades affects it and, if so, how. Petersen and Rajan highlight a trade-off echoing that this chapter attempts to address: Long-term relationships and competition in credit markets might conflict (Petersen and Rajan, 1995). By the same token, Beck et al. (2008) demonstrated that financial development, when proxied by private credit from financial institutions to the economy, has disproportionately beneficial

effects on SMEs. However, they find that stock market development does not affect SMEs, confirming the importance of banks for SMEs (Beck et al., 2008).

The characteristic distinguishing relationship- from transaction-based lending is not that the first only may apply to opaque borrowers but that it uses soft information, whereas all other transaction-based technologies use hard information. We briefly explain the difference between these types of information and demonstrate that the trade-off between risk and capital allocation can take the form of hard versus soft information.

As mentioned above, hard information can be reduced to a series of numbers, while soft information “*cannot be directly verified by anyone other than by the agent who produces the information*” (Stein, 2002:1892). Because of organizational diseconomies, large banks are better positioned to exploit hard information, whereas small ones are advantaged in the treatment of soft information. Against the background of financial innovation, it is unsurprising that financial innovation, which was accompanied by this hardening of information, has benefited large firms.

This hardening of soft information increased large banks’ ability to process data and eventually led to greater bank productivity. This process is the cause of the increase in the distance between small firms and their lenders in the U.S., according to Petersen and Rajan (2000). Consequently, distance is less an indicator of creditworthiness than it was previously, meaning that small firms located at a substantial distance from lenders now enjoy wider access to credit. Agarwal and Hauswald (2010), conversely, demonstrated that distance still matters. Borrower-lender proximity is conducive to soft information gathering, which results in a trade-off between the availability of credit and its price. They found that nearby firms might enjoy easier access to credit, however at a higher interest rate, everything else being equal. In a recent study, they also noted the use and role of soft information during the loan origination process, which led to reduced credit loss.

Therefore, on the one hand, the hardening of soft information (which is concomitant with the functional shift from capital allocation to risk allocation) provides for increased credit availability for SMEs by reducing the distance between borrowers and lenders or making new lending technologies adapted to opaque firms available. On the other hand, it seems that the special character of soft information affects the cost of credit. The hardening of information in the borrower-lender relationship forces one to ask whether availability is more important than affordability. Moreover, the replacement of soft by hard information has limitations, as it implies a loss of information and information can never be reduced to numbers alone. As behavioral finance shows, financial markets are also driven by human psychology, biases, and stories, and accounting practices can be adapted to meet the quarterly requirements of markets (Berenson, 2003). In weak legal and judicial environments, relationship lending, which primarily relies on soft information, is the most

appropriate lending technology (Rajan and Zingales, 2003, Ergungor, 2004, Berger and Udell, 2006).

Goetzmann et al. (2004), in a study of intellectual property pricing in the market for screenplays, identified a dynamic that is also central to financial markets. The quality of scripts is too complex to be summarized by objective information alone. However, their empirical study demonstrates that screenplays with a substantial soft information component are underpriced relative to harder information screenplays proxied by, for example, reputation. Soft information is regarded as a risk factor. Thus, for risk management purposes, capital is allocated to films with authors that are more famous rather than ones that might be of higher quality but are written by less-known writers.

However, it would be misleading to argue that financial markets rely on hard information alone. Studies on the impact of rumors on financial markets are not new (Pound and Zeckhauser, 1990, DiFonzo and Bordia, 1997). In a more recent analysis, Oberlechner and Hocking (2004) presented empirical findings regarding the type of information used by market participants. Their survey reveals the circular character of information. Of the journalists surveyed, 87 percent believe that market participants can influence news providers, 75 percent agreed that media and participants are more interdependent than before, 67 percent believe that instant reporting has gained in importance at the expense of in-depth analysis, and 59 percent mentioned an increased in reporting unverified news resulting from advances in new technologies. *“Foreign exchange traders and financial wire journalists mutually rate each other as the most important information source. The most important information sources of wire journalists, their personal contacts at commercial banks, are also the main customers of the financial wire services. Consequently, information of the news services often consists of trading participants’ perceptions and interpretations of the market, which are fed back to the traders in the market”* (Oberlechner and Hocking, 2004:417). This new relationship between the financial news media and market participants explains, according to Oberlechner and Hocking, the role played by rumors. Recent developments in financial markets have blurred the distinctions between news and rumors and between market reality and market potential. Market participants have to consider rumors to be valid information because the rest of the market will also move in response to them. The rumors then become the underlying information. In light of such empirical investigations one must question the clear-cut distinction made between hard and soft information. Is hard information based on rumors still hard information?

## Conclusion

This first chapter attempted to demonstrate the existence of a trade-off between the allocation of risk and the allocation of capital. At an institutional level, the price formation mechanism aggregating decentralized opinions that makes financial markets efficient at pricing risks might not lead to efficient capital allocations. The intellectual edifice upon which this price discovery mechanism relies is deeply and fundamentally flawed, its neoclassical foundations are unrealistic, the models it employs rely upon Brownian motion and a Gaussian distribution, which has repeatedly proven ill-suited to the wild movements of financial markets. Moreover, behavioral finance reveals how human behavior complicates the simple reality upon which financial economics is based.

At the risk of oversimplifying, one can argue that the logic of risk allocation requires international diversification, whereas capital allocation rests on domestic and local knowledge. Finally, the financial revolution is associated with the rise of financial instruments based on transactional rather than relationship lending. This is facilitated by a hardening of information that also allows the transfer of borrower risk away from the lender. This advantages large banks over small ones. The consequences for SME finance remain unclear, as it stands between what appears to be two financial subsystems, a dominant one built on the logic of financial markets, the function of which has become the efficient allocation of risks, and another, much smaller, one performing the traditional role of allocating capital from savers to borrowers.

The concept of risk has replaced the concept of capital at the center of financial systems. This chapter argued that modern financial markets can be now characterized as made essentially of short-term transactions through financial markets at the international level. Financial markets composed of these won't allocate capital in the same way as financial markets made of long-term relationships between banks and firms at the national level. International short-term financial market transactions might be very efficient to allocate risks, but fail to provide the right kind of intermediation for investments. The beauty contest nature of the functioning of financial markets is amplified by the fact that it is happening on a global scale on a short-term time horizon. These are the essential elements of modern finance, which allow overinvestment in certain sector. For instance, the IT industry at the turn of the millennia and the U.S. real estate sector until 2008.

However, financial systems which rest on these elements will favor different interest groups. As we will see, this paradigm shift toward risk allocation implies more than a

simple and neutral “financial market liberalization”. Indeed, the business of spreading risks can be viewed as a value chain, and the next chapter argues that liquidity and information can be considered as the primary input used to supply other actors and clients with sophisticated financial instruments. In this new “liberated” market for risk allocation, liquidity and information are used by some players for their own benefit to allocate risk, but also to create it. The last chapter differentiates between the allocation of capital and the allocation of risk and the next one shows the redistributive consequences of it. But one should also note that the process of allocating risk is so profitable for some players that risk creation is part of their business model. Indeed, some “investments” strategy based on High Frequency Trading and financial instruments such as structured product and Credit Default Swaps are very profitable instruments to manufacture and distribute, but they also add on systemic risks, which economies and societies at large have to bear. Thus, focusing on risk allocation should not hide the fact that some actors have incentives to create risk, because their “*raison d’être*” rest on financial market instability. The next chapter will precisely attempt to show how this new market for risk allocation and risk creation benefit certain actors and disadvantage others. It shows the political economic side of the evolution of financial sector just described.

## CHAPTER 2

# The political economy of a silent revolution

Chapter one described a fundamental shift within financial sectors in several respects (institutional, temporal, geographical, relational). It argued that risk allocation grew in importance relative to capital allocation. This issue has consequences beyond financial stability and systemic risk. It reveals significant economic, political and social changes. A stringent re-regulation of financial sectors will only address the symptoms and not the causes. Ad-hoc regulations are patchy and occasionally contribute to uncertainty and systemic risk. Regulatory risks and the concerns they entail for financial firms are troubling signs of the paradoxical nature of complex regulation. To avoid these pitfalls and most importantly to prevent the debate on reforming finance from being circumscribed to regulation alone, one must adopt a political economic perspective. Only by addressing the issues mentioned in the previous chapter in such a manner will one be able to consider aspects beyond regulation. There is more to the story of the “silent revolution” that liberated financial sectors than a simple tale of financial liberalization. It is the story of a silent privatization also enabled by political and social liberalization that must be analyzed. Too few political economic analyses have attempted to connect the factors driving this silent revolution and even fewer identifying who this process benefited. As stated in the previous chapters, the literature has assumed that the development of financial sectors is beneficial to economic growth. The debate centered on which financial systems (banks versus markets) were performing better. Only recently have certain studies dared to argue that a financial sector could be detrimental if developed beyond a certain size (Arcand et al., 2012, Philippon, 2012). The literature on financialization (Epstein, 2005, Palley, 2007, Dore, 2008) describes the growing importance of finance, but fails to analyze its consequences from a political economy perspective. The literature on corporate governance continues to experience difficulties in considering these issues outside of the “agency problem” framework and thus fails to recognize the links with the evolution of financial sectors over the past 30 years (Collison et al., 2014). This chapter attempts to fill these gaps.

There are notable exceptions that must be mentioned here: First, Krippner (2010) showed how the state attempted to resolve the social dilemma of economic stagnation, first through inflation and, when it became obvious that this approach would not work, through finance. She revealed how *“the turn to finance offered policymakers a resolution of the dilemmas posed by declining affluence not because policy makers successfully transferred the task of imposing discipline to the market, but because the market failed to impose the discipline that policymakers sought”* (Krippner, 2010:447). Undisciplined financial markets provided expanded credit, which allowed states to avoid, until now, the distributional problems posed by capital. Krippner shows how difficult political choices, which became more difficult to make in a low-growth environment, were avoided by artificially inflating the size of the pie. The turn to finance was not a “natural move” that any market economy reaches when sufficiently developed nor was it by design. It was simply an ad hoc response to inflation. In other words, governments believed that financial markets would perform better in distributing scarce financial resources. *“The U.S. economy made the transition from a system in which credit flows were subject to strict controls internally and externally to one in which all such constraints had been removed”* (Krippner, 2010:467). Krippner’s analysis demonstrated how the U.S. government eased the difficult task of distributing credit but fails to note that it created new possibilities of making money through money alone or who benefited from this new arrangement. This is the purpose of this chapter.

The financial sector of Western economies, this new market for risk allocation, relies on myriad intermediaries who all participate in the creation of liquidity, thus making the entire system rather unstable. Some branches of the financial industry benefit from this instability and securities inflation, but their interests are also aligned with those of short-term shareholders. This latter category is better defined in the coming paragraph, but for the present, by “shareholder”, it is meant the direct or indirect owners of financial capital (High Net Worth Individuals and Ultra High Net Worth Individuals (HNWI/UHNWI), corporations and financial institutions) and not the owner of a firm managing such capital or SME shareholders. The second contribution that inspired this chapter must be mentioned in this regard: Lysandrou (2011) shed some light on the demand side of securities creation that preceded the 2008 financial crisis. In their search for high yields, hedge funds pressured the rest of the fund industry and signaled to the banking industry the need to create securities as a store of value. He demonstrated that securities were created as stores of wealth for high net worth individuals. In other words, security creation and inflation are profitable for certain investors, namely the owners of financial capital expecting high yields. This category of individuals can protect their assets and exit their investments at will. This chapter attempts to extend this logic to the operations of the financial sector during what are considered “normal times” and not only focus on the years preceding the 2008 financial crisis, as Lysandrou (2011) did.

In other words, this chapter hopes to fill the gap between Krippner’s analysis of policy choices to turning toward finance and Lysandrou’s political economic explanation of the 2008 crisis. This chapter attempts to reveal how these two perspectives are connected through the specific evolution of financial sectors and how the obsession with complexity and liquidity profits a minority of investors and certain branches of the financial industry. It proposes a political economy of modern financial sectors, which are characterized by liquidity, irrational behavior, and the prioritization of risk-allocation over capital allocation and short-term transactions over long-term relationships. As such, it reveals how what some have termed financial capitalism in the Western world favored certain groups at the expense of others. Finally, one must mention Alghietta and Rébérioux (2004), who offered such an account of the excesses of modern capitalism but remained highly focused on the rise of the shareholder value and its effect on operations of corporations and the perceptions societies have of them. Alghietta and Rébérioux returned politics to understandings of the corporation; this chapter will attempt to return politics to understandings of the current operations of the financial system.

The implication of such an analysis suggests that one must go beyond simple financial regulation because, as we will see, certain dynamics encouraging the contemporary finance-led economy are located outside the financial industry. The obvious conclusion is that politics must reinvest the field of finance and the institutional power available to the financial industry must be constrained by society.

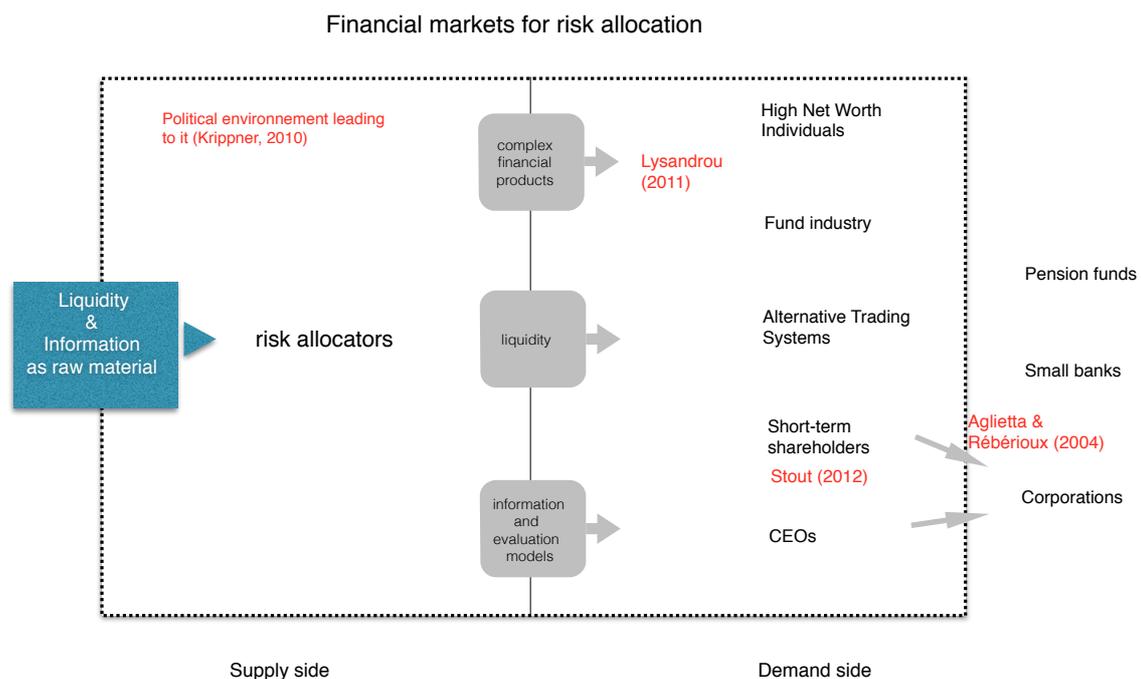


Figure 6. Financial market for risk allocation

As figure 6 above tries to illustrate, this chapter lays out a political economy of liquidity and information and shows the demand and supply side of this market for risk allocation that rests on liquidity and information. It argues that short-term liquidity and volatile markets profit to certain market participants first and foremost. On the supply side, one finds what we termed “risk-allocators” (hedge funds, high frequency traders and some stock markets). While these actors have the means to address and profit from high volatility and liquidity, this is not true of other more “traditional” financial players (pension funds, retail investors, small banks). On the demand side, liquidity and market data allow High Net Worth Individual to enjoy sophisticated products with tailored risk and yield approach. Also, liquidity and market data are necessary to align the interests of short-term shareholders with those of top management. Moreover, it gives short-term shareholders the opportunity to exit at any moment. As a result, the enterprise is redefined, as the “downsize and distribute” model of management shows.

While the modern financial system as a whole appears to be an unstable machine, it nonetheless produces high yields for rentiers and shareholders. An unstable and fragile financial system, with all of the consequences that this entails for the economy, are the corollary of the unrealistically high yields demanded by the owners of financial capital. Thus two categories of interests groups profit from the present financial system:

- The “risk allocators”, well equipped to profit from the unstable financial bubble economy. These are stock markets and alternative trading systems, brokers, hedge funds, and high frequency traders. It is those business depends on liquidity and information as raw material.
- CEOs and top executives, whose managerial decisions in favor of short-term shareholders are influenced by a normative discourse on shareholder values and generous compensation scheme. Owners of financial capital (High Net Worth Individuals and short-term shareholders), satisfied with the output of a financial system that inflates financial asset prices.

The point here is not to provide an exhaustive list of the institutions with an interest in the present operations of modern financial markets. It is difficult, for example, to include all of the pension funds, investing on the behalf of many different types of rentiers, in one group or the other. But the central argument is that these two categories, however ill-defined, managed to privatize the, until recently, public goods that were liquidity and standardized information. They are realizing impressive earnings from these two salient features of modern markets. Liquidity and standardized information are the foundations of modern financial markets, without which they could not be short-term, transactional or international. This new environment benefits these two interests groups at the expense of others and society in general. Pension funds, buy and hold investors, retail investors,

traditional banks, and alternative banks such as cooperative and agricultural banks are not thriving in this environment. Traditional intermediaries - banks and stock markets – have also lost their historical importance.

Liquidity benefits certain shareholders, who have been able to pressure firms to extract high yields and provide them with additional exit options, thereby reducing the risk of their investments. Liquidity allows the issuance of complex financial products that generate fees, but it is also necessary for hedge funds and high-frequency trading firms to thrive. Liquidity is logically associated with short-term horizons (long-term liquidity is an oxymoron), and modern liquid markets provide short-term liquidity. The possibility of quitting an investment at any time entails the possibility to exit an investment sooner rather than later. It thus follows that some actors favor short-term profitability at the expense of long-term investments.

The availability of recurrent, standardized information is then a precondition for a liquid short-term market. How can investors have the possibility to exit if they cannot review their investments relative to others? The commoditization of securities demands harmonization among the various evaluation methods. This is what Orléan termed “a convention” (Orléan, 1989). Thus short-term liquidity and standardized information are the salient features of the modern financial sector that align the interests of the risk-allocators, on the one hand, with those of rentiers, short-term shareholders and CEOs on the other. As observed below, the ideology of shareholder value, which places shareholders above all other stakeholders, creditors and employees, is concomitant with the financialization of industry.

Moreover, these various interests groups are favored by central bank policy. On the one hand, the new creed central banks have embraced - inflation targeting - supports the owners of financial capital. On the other hand, low inflation and low interest rates also represent the perfect ingredients for the development of a financial bubble economy and inspire innovation in financial products. The Great Moderation for the real economy, but Irrational Exuberance for the financial sectors.

Thus, the remainder of this chapter examines how liquidity and information combine the interests of the risk-allocators and those of the owners of financial capital. The commoditization of liquidity and information described below is eroding the public infrastructure necessary for markets to function properly and blurring the distinction between private and public good. The absence of the criteria of non-excludability and nonrivalrous consumption, which are the defining characteristics of public goods, is clear.

These two features of financial markets have been driven even further by the macroeconomic policies of the Great Moderation and Irrational Exuberance, which are also analyzed below.

## **2.1. Liquid market: Private or public good?**

### **2.1.1. Liquid market for the risk-allocators**

The obsession with liquidity has changed stock markets, thus rendering the debate over a “bank-based versus market-based financial system” obsolete. The stock markets considered in the debate are not identical to present-day stock markets, which more resemble a system of liquidity pooling. The logic behind these markets and their basic mode of operation, however, remained the same: A multitude of participants evaluate securities by integrating all available information, in contrast to a banking system that operates in greater proximity to its clients. A broad, general definition of liquidity is adopted here, namely, the possibility markets afford to easily, quickly and inexpensively sell an asset. It connotes a promise of reversibility. So there is an intimate relationship between liquidity and speed of transactions. The opportunity for market participants to sell their shares at any time entails constant trading. Thus, on the one hand, short-term transactions allow markets to be liquid. On the other hand, constant trading entails constant changes in prices. Speed is thus even more relevant in markets with continuously changing prices. From that perspective, the desire for zero-latency is a consequence of liquidity. In what follows, we observe that the privatization of liquidity happens through (1) the re-organization of the stock market industry (2) the speed of transaction that allows predatory practices to manipulate markets and change the informal rules of the game that any market needs to function efficiently and (3) the volatility induced by liquidity (understood here as greater price flexibility) that only benefits certain financial actors.

### **Changes in the market for stock markets**

Clearly, the organization of contemporary stock markets bears no relation to that of the past. They are fragmented into sub-markets, dark pools and other Alternative Trading Systems (ATS) and Multilateral Trading Facilities (MTF) in Europe. These “non-public” markets allow financial institutions to anonymously execute large orders. They can thereby avoid the impact of their trades because neither their identity nor the size of the trade is known before full execution. In Europe, trading of shares in these dark pools of rose by 45 percent in the months from May to October 2013 and accounts for

approximately 8 percent of stock trading. The corresponding figure is 16 percent in the U.S. (Stafford, 2013). Defenders of these MTF have voiced concerns regarding possible EU regulation, arguing that 8 percent is not a sufficient volume to justify more regulation. Some experts contend that concerns regarding increased trading on MTF amounting to only 8 percent in Europe are exaggerated. However, Europe contains numerous exchanges, some of which are relatively more important. A closer examination indicates that dark pools should be subject to regulation. Off-exchange trading accounts for approximately 36 percent of the total volume in the U.K., the main financial center in Europe, where the majority of firms choose to be listed. The corresponding figures are 14 percent in Germany and France and 8.5 percent in Switzerland (Stafford, 2013). Trading on non-regulated exchanges such as the alternative venues mentioned above suddenly take on greater importance if one recalls that such venues represent more than one-third of trades in the U.K.

Moreover, who is trading on these venues is more important than the volume of it. The majority of institutional investors choose to execute their trades in these venues according to Puaar (2013). This is the most alarming observation, considering the relationships between alternative venues and high-frequency trading and brokerage firms. Arnuk and Saluzzi (2012) demonstrated that dark pools sell information to HFT firms, and hence, their algorithms can exploit the order flows of institutional investors. These authors also denounced brokerage firms selling proprietary algorithms to their institutional clients to predict their trading patterns. These intermediaries are not “at the service” of institutional investors; they are exploiting these institutions’ lack of understanding of this new system of liquidity pooling. Because these new trading venues do not publish pre-trade information, institutional investors can trade large volumes of shares without affecting their prices. But in doing so, they become the prey of some players who are able to “game the system” by taking advantage of the sequence of institutional investors’ orders. Money is being made not from the investment itself, but from extracting rents from others’ trading flow, echoing a parasite - host relationship. *“Money that used to be made mostly through commissions is now made through trading around that order flow”*, as Arnuk and Saluzzi noted (2012:15).

That institutional investors prefer trading in the “dark” when the entire logic of exchanges rests on the diffusion of transparent information should serve as a warning that this paradoxical quest for liquidity might have reached a limit. Moreover, the proliferation of alternative venues has other direct negative consequences.

First, they make the existence of products based on assets traded on regular exchanges problematic because the volume traded in alternative pools is not considered. Exchange traded funds (ETF) that are issued by financial companies and can be bought and sold on a daily basis, akin to a typical security, are such products. It is another striking feature of

a security-pooling financial system. ETF are designed to gain exposure to certain assets without actually necessitating a direct investment in them. Thus, an ETF can track stocks, indexes, currencies, or commodities, but one can also be issued to represent the inverse of the asset that it tracks, in the case of an inverse ETF, or be designed to be more sensitive to market fluctuations in the case of a leveraged ETF. The growth of ETF is staggering: The number of institutional investors that reported employing ETF increased from 154 institutions in 14 countries in 1997 to 3,367 institutions located in 50 countries in 2012 (Fuhr, 2013).

Second, these alternative venues have driven traditional stock exchanges to compete for clients in ways that are detrimental to the overall system. Certain “lit” exchanges are offering rebates to liquidity “makers” and charging fees to liquidity “takers”. This model introduced an incentive for brokerage firms to route their clients’ orders to the exchanges offering the best rebate to the broker and not those offering the best price for their clients. Thus, both the exchanges and the brokers benefit from the current model at the expense of investors (Arnuk and Saluzzi, 2012).

The business of collocation is an excellent illustration of this phenomenon. Exchanges found a way to attract liquidity by renting spaces near their servers to allow certain liquidity providers to trade more rapidly than others. As a case in point, NASDAQ no longer considers itself a stock exchange. Robert Waghorne, senior vice president of European Markets Technology for NASDAQ, declared: *“We are really a technology company. It’s the core engine for all of our business. We can trade anything, anywhere on the planet”* (Miller, 2011).

The technological revolution and the emergence of alternative trading systems forced stock exchanges to adapt to a new and complex environment and has had profound effects on the corporate organization of stock exchanges. Amidst financial liberalization, they demutualized to obtain greater operational freedom, hasten decision making processes, avoid institutional gridlock and reduce conflicts of interest (Brito Ramos, 2002, Aggarwal and Dahiya, 2006). Stock exchanges were formerly owned by their members, but since the 1990s, they began to be demutualized, thus separating trading and ownership rights. During the mid-1990s, only 10 percent of the World Federation of Exchanges (WFE) was for-profit organizations. Fewer than 10 years later, for-profit exchanges accounted for 63% of WFE members (Brito Ramos, 2002:3). The main stock exchanges not only demutualized their ownership but also went public by listing the stock exchanges themselves. However, empirical evidence on the benefits of demutualization does not provide a clear picture. Serifsoy (2005) found that demutualization does not allow for greater flexibility and listing does not translate into greater productivity or efficiency. Jaquillat (2006), conversely, found that listed stock markets are more profitable than their unlisted peers while also exhibiting lower transaction costs.

Profits and operating costs alone, however, have never been a measure of productivity. Moreover, this focus on profitability forces one to consider the possibility of conflicts between the owners of stock exchanges and investors. Separating the traders from the ownership rights of exchanges allows for the possibility of conflicts between investors and exchange shareholders. Arnuk and Saluzzi (2012) recognized that the exchanges' race for liquidity was underpinned by serious conflicts that must be addressed: *"Demutualization changed the ownership of the exchanges from a member-owned, nonprofit organization to a shareholder-owned, for-profit corporation. What was once thought of as a quasi-government utility-type organization would now be a bottom-line driven publicly traded, shareholder-focused company. The old method of having members vote on proposals and rule changes would be abolished. Exchanges would now make decisions by executives who reported to the board of directors who served the shareholders. Unfortunately, as we have seen all too often, shareholder interests and investor interests are not always the same"* (Arnuk and Saluzzi, 2012:74). The demutualization of stock markets is a further means of institutionalizing the commoditization of liquidity and information. The mere possibility of conflict between shareholders in stock markets and the investor community as a whole demonstrates that the quality of prices is not the prime concern of stock markets.

The political economy question of the profitability of stock markets and who benefits from them is unavoidable because financial sectors are central to the functioning of a healthy market economy. Argawaal and Dahiya concluded that *"given the potential conflicts of interests between shareholders of exchanges and their consumers it will be interesting to see how these conflicts are resolved. So far the financial performance of listed exchanges has been quite strong. However, if there are periods in the future when for-profit exchanges face major financial difficulties then will they be allowed to go bankrupt like any other listed company?"* (Aggarwal and Dahiya, 2006:15).

This is a question that modern economies have to answer. Are stock market an important infrastructure, like bridges and highway, for economic development or is it just a "technological company" like any other ones? The profound change of stock market organization is relevant, if stock markets are not just like any other firms. In this regards, the trading speed, which is discussed hereafter, is also important.

### **The speed of transactions**

High-frequency trading was previously mentioned as an example of a market so characterized by short-term perspectives that it hampers capital allocation. A certain

amount of time is necessary for any allocation to occur. The definition of Brogaard, “HFT is a type of investment strategy whereby stocks are rapidly bought and sold by a computer algorithm and held for a very short period, usually seconds or milliseconds” (Brogaard, 2010:1), is therefore contradictory. The contribution that HFT makes to the traditional function of financial sector - capital allocation - is clearly null. Indeed, much of the academic debate related to HFT concerns its contribution to the infrastructure supporting the financial sector (liquidity, price discovery mechanism, volatility).

In 2012, HFT was responsible for half of the shares *traded* on U.S. markets and 40 percent of the value traded on European markets (WEF, 2013). This is, in itself, a problem because the effect that these “strategies” have on “normal” trading is unclear. However, apart from this consideration, the rise of HFT establishes a clear division within the financial industry: The sophisticated players with the access to the technology, information and understandings of the operations of this highly short-term liquidity pool and the remaining, more simple players, who are bound to lose to the former group. Faster-acting players who are able to “beat the market” have enjoyed the social legitimacy accorded by free market principles. This allowed the emergence of predatory trading strategies designed to profit from other player’s orders. Latency arbitrage, for example, exploits the common volume weighted average price (VWAP) formulas of institutional investors. HFT computers are able to detect these simple algorithms and, due to latency arbitrage, know that there is an order moving a quote higher. The HFT computer speeds ahead, purchases all available stocks and then serves as the counterparty to the institutional investor and offers a higher price. The institutional algorithm, driven by volume, is forced to purchase the shares at 0.01 or 0.02 per share higher than was initially publicly quoted. These strategies are designed to profit from large, simple institutional and retail investors. “Layering”, “spoofing” and “momentum ignition” are all pernicious strategies to lure normal participants and obtain profits at their expense. As if this were not enough, certain strategies exploit the market itself.

Let us consider the case of the “Dr. Evil” trade managed by Citigroup. It was programmed to sell a significant volume of bonds. In one minute, it sold EUR 13 billion worth of 119 European governments’ bonds across the platforms of the Rome-based exchange, the same volume that the entire market would trade on a given day. The program repurchased EUR 4 billion one hour later, making a profit of EUR 18.2 million (Gomes, 2013). A similar program, called “the hammer”, was designed by Optiver, a high-frequency trading firm active in oil commodity trading. Optiver engaged in a practice known as “banging the close”. The program was designed to purchase a large volume of oil futures just before the close of the market and thus establish momentum. It took the Commodity Futures Trading Commission 5 years, from 2007 to 2012, to prove that this procedure had been manipulating the market. The algorithm that Optiver used was simple. Those currently in use are much more sophisticated (Lelièvre and Pilet, 2013:79).

What these “investment strategies” indicate is that the “gentlemen’s agreement” that seemed to prevail among market participants to play by the rules has been severely weakened. The rapid gains that speed and technology allow certain actors to make outweigh the importance of the seemingly old-fashioned, informal rules of fair play. However, these informal rules that establish the boundaries of fair trading allow the market to operate. These examples provide excellent illustrations of how damaging these practices can be and why the debate needs to shift from competition to fairness: They compromise the very existence of a market in the first place.

It is clear that any market and, perhaps financial ones most of all, requires basic elements of fairness to attract participants. Equal access for all and fair rules of the game are more important than liquidity. However, it is difficult to change the status quo when certain players profit so much from it. Predatory trading alone is estimated to generate, from institutional and retail investors’ asset under management, approximately \$1.5 to 3 billion annually (Arnuk and Saluzzi, 2009).

### **Instability as a result of increasing speed and liquidity**

Speed made the establishment of such practices possible. However, the speed of transactions is intimately linked to liquidity. It is only sensible in an environment with continuously changing prices, that is, with constant trading. For a market to be liquid, individuals must be constantly buying and selling. This implies that financial assets are held at very short-term horizons. Thus, the liquidity of modern financial markets rests on the two pillars of very rapid transactions with respect to both their execution and maturity. This provides flexibility, but it also destabilizes the entire structure. In finance terms, volatility is the movement of prices relative to their historical values. Volatility is here understood, in its general sense, as the quality of something unstable and fluctuating. Liquidity increases volatility in the market because it increases the number of prices that market participants can “discover”. On a daily basis, myriad financial intermediaries profit from fluctuating markets. If prices were stable, high-frequency trading, algorithmic trading, hedge funds and arbitragers would have no reason to exist. However, as a society, how many different prices do we need each day for a single share?

From a long term perspective, liquid markets are more vulnerable to financial news and trends. In only six years, from 2000 to 2006, Western financial markets rushed into information technology and then over-invested in real estate. Liquid markets are more easily affected by irrational exuberance. This is when markets are excessively liquid that “market sentiments” and “market mood” are important. Keynes cautioned against financial markets based on short-term expectations: “*The professional investor is forced to concern himself with the anticipation of impending changes, in the news or in the*

*atmosphere, of the kind of which experience shows that the mass psychology of the market is most influenced. This is the inevitable result of investment markets organized with a view to so-called "liquidity" (Keynes, 1935:155). These market swings, which are completely disconnected from economic fundamentals, disproportionately benefit the risk-allocators who are well equipped to handle highly unstable financial bubbles. This provides the opportunity to sell all sorts of financial products. Stock markets have become so unpredictable and detached from economic fundamentals that betting on natural disasters has become an alternative. "Catastrophe bonds" are sold by reinsurers outside their industry and highly valued by investors because they are uncorrelated with traditional financial markets (Dizzard, 2013).*

Finally, liquidity breeds instability because liquidity is, as a whole, an illusion. It is peculiar to contend that markets are liquid, as only individual investments, considered separately from society, can be. If no one wants to purchase, as the last "liquidity" crisis demonstrated, the market ceases to function. Keynes' view on liquidity is again pertinent: *"Of the maxims of orthodox finance none, surely, is more anti-social than the fetish of liquidity, the doctrine that it is a positive virtue on the part of investment institutions to concentrate their resources upon the holding of 'liquid' securities. It forgets that there is no such thing as liquidity of investment for the community as a whole. The social object of skilled investment should be to defeat the dark forces of time and ignorance which envelop our future. The actual, private object of the most skilled investment today is 'to beat the gun', as the Americans so well express it, to outwit the crowd, and to pass the bad, or depreciating, half-crown to the other fellow."* (Keynes, 1935:155). This fetish for liquidity allows investors and other participants to forget that they are all playing a game of musical chairs. When the music stops, one is left with the "burning theatre scenario".

Thus the triad of "liquidity - speed of transaction – short-term maturity" is an engine of instability. The reorganization of trading platforms, predatory practices, market swings induced by news or rumors and flash crashes worsened by robot trading are the new conditions imposed by this triad. For shareholders, the contraction of time has taken the form of quarterly reports. These provide shareholders an exit window, which thereby pressures firms to be financially profitable in the short run, whereas shareholders can exit whenever they wish under the normative guarantee that they will be able to sell their shares.

### **2.1.2. Liquid market for short-term shareholders and CEOs**

Liquid markets and the commoditization of securities benefit risk allocators. However, it also allowed for new forms of corporate control, shifting the balance of power to the

advantage of short-term shareholders and CEOs. Liquid markets are the necessary condition for financial markets to control corporations. The separation of ownership and control, which began in the 1920s in the U.S., cannot be not truly effective without liquid markets for shares. Absent such markets, shareholders cannot maximize the benefits of this separation. Liquid markets, with a diverse and diffuse shareholder base, are needed to reconcile the contradictory principles of the separation of control and ownership and the maximization of shareholder value. The Law and Economics approach, which considers the firm to be a nexus of contracts and not an entity in itself, provided a coherent intellectual framework to justify the maximization of shareholder value. The alignment of shareholder interests with those of directors is achieved through a heavy reliance on managerial compensation schemes and stock options. Institutions, such as auditors, ratings agencies, market regulators, are partly established to protect the investors' interests.

However, all of the institutional machinery rests on the existence of liquid markets, without which the separation of control and ownership could not be effective. The shareholder value model of corporate governance gained hegemony over the holistic, stakeholder approach to corporate governance once financial liberalization reforms were implemented in the 1970s. The increasing importance of mutual funds and pension funds in the 1970s and 1980s provided a definitive push to the shareholder value ideology, and the prioritization of shareholder value was easily accepted. It is mutual funds and pension funds who implemented a series of practices to coordinate the votes of minority voters, proxy voting and voting guidelines (Orléan, 1999:216).

This phenomenon has not been confined to the U.S. The supremacy of shareholder value principles is clear in light of the evolution of corporate law in the European Union. Financial market integration and capital market liberalization slowly became the framework for the incorporation of corporate governance. *“Whereas company law and financial and securities market regulation had been distinct regulatory fields under the programme of company law harmonisation, with the integration of financial markets corporate governance regulation was more and more seen as subject to capital and financial market imperatives”* (Horn, 2011:2011).

The institutional infrastructure necessary to achieve shareholders' objectives, which valorize their participation by maximizing their profits from dividend payouts and increasing stock prizes (Orléan, 1999:214), has been established slowly since the 1970s and was fully implemented by the turn of the new millennium.

The increasing importance of shareholders within firms is reflected in the increasing shares of profits devoted to dividends. In the U.S., dividends amounted to 24.7 percent of the profits of non-financial firms in 1980 and reached 50.1% in 1990. As profits increased

throughout the 1990s, dividends stabilized at approximately 50%. When profits began to decline at the end of the 1990s and the beginning of the new millennium, dividends continued to grow as a share of profits, reaching 87.3 percent in 2003 (Aglietta and Rébérioux, 2004:57). The same phenomenon has been observed in France. From the 1960s to the 1990s, dividends evolved in inverse proportion to interest paid to creditors, which peaked in 1981 and decreased thereafter. Thus, dividends increased at the expense of banks following an “optimal” path from 1998 to 2003, with low levels of firm indebtedness and increasing profits and margins. Dividends continued to rise after 2003, when margins began to shrink. From 2003 until the present, firms have had to cope with the absurd situation of having to pay greater dividends than their profits allow. In other words, firm went into debt to pay their shareholders (Cordonnier and Van de Velde, 2009).

Within the enterprise, the equilibrium between liquid and immobilized goods has been disrupted. Shareholders, through the substantial power of pension and mutual funds, have been able to translate their financial power into political power within the structure of the enterprise, thereby according them priority over other stakeholders. This does not imply that the dividends paid to shareholders were taken from employee wages. In France and elsewhere in Western Europe and the U.S., the wage to profit ratio remained constant throughout the last century. It has stagnated at approximately 65 percent. However, it would be a mistake to reduce political issues within enterprises to a class struggle between employees and shareholders. As noted above, the growth in dividends in France in the 1990s corresponds to a reduction in the capacity of firms to finance themselves (Cotis, 2009). Enterprises are also devoting increasingly smaller shares of their profits to investment. Indeed, the ratio of investment to profits is clearly decreasing in Germany, France, the U.K. and the U.S. (Stockhammer, 2006, Stockhammer, 2007).

However, the ideology of the shareholder supremacy is not even in the interests of the shareholder themselves, once one recognizes that this is not a homogeneous group. It is this very notion of a hypothetically coherent group of individuals “owning” a corporation (whereas, as demonstrated below, from a legal perspective, companies do not belong to shareholders) that strengthened the shareholder-oriented model. Real persons ultimately hold stocks either directly or indirectly through mutual or pension funds. Real persons have various investment time frames and diverse expectations and ethical values. In other words, shareholders have different interests. This perspective is richer than the overly simplistic “shareholder versus stakeholder” dichotomy and allows us to realize that the shareholder value model is detrimental to shareholders themselves. Short-term shareholders, who are increasingly powerful in contemporary stock markets, encourage short-term results, thereby clashing with the interests of long-term investors, who plan to hold their stocks for numerous years. Towards whose interest is the shareholder value model oriented? *“The conventional shareholder-primacy ideology “solves” the problem of*

*inter-shareholder conflict by simply assuming - without explanation or justification - that the only shareholder whose interests count is the shareholder who is short-sighted, opportunistic, undiversified, and without a conscience. This approach keeps public corporations from doing their best for either their investors or society as a whole.”* (Stout, 2012:10). The conflict between the interests of the short-sighted shareholder and those of shareholders with longer time horizons are manifested through the management mechanisms, which devote excessive attention to stock market expectations. Financing firms through stock markets with the goal of maximizing shareholder value entails making managerial decisions using a set of indicators that conflict with the other possible interests of a firm.

We examined how technology and increased competition affected the financial industry. Banking, as we know, changed substantially, as did stock markets, where the race for liquidity is at the heart of the development model. However, the picture would not be complete absent another key element of modern financial markets, without which neither liquidity nor the speed of transactions would advantage the interest groups mentioned above: Standardized information.

## **2.2. Standardized information: Private or public good?**

### **2.2.1. Standardized information for the risk-allocators**

Against the background of financial market development, the line between private and public goods with respect to standardized information also seems to be blurred. Within the financial sphere, information is considered the primary raw material for HFT firms and hedge funds, and there are increasing opportunities for these firms to obtain this information first (as in the case of collocation) or, more rarely, exclusively (as in the case with dark pool data theft). Clearly this is a type of insider trading. Information is delivered to a handful of persons who can exploit it before it becomes public. High-frequency trading achieves the same end, albeit using technology. That insider trading is harmful to the efficient functioning of the market is clear, and hence, one fails to see why the excuse of financial innovation allows for practices that are considered theft in other contexts.

It is impossible to develop algorithms without a huge flow of data, hence the importance of liquidity. Stock market quotes have become a commodity that can be bought and processed. Financial economics tends to view financial market information as the final output of the financial market, one that investors and CFOs can use to make decisions. However, this perspective might no longer apply when the data from certain platforms are

sold to the swiftest and most sophisticated participants who trade before the rest of the public. They are able to do so because they have the technological means to be quicker but also because the flow of information is standardized. Information, in this form, even if it is not exclusively sold to particular players, advantages some more than others. Risk allocators need hard information. It is inconvenient to apply mathematical formulas to prices and shift risks using soft information that accounts for the context. The securitization “value” chain could not exist without the constant flow of hard information that financial markets produce. In this light, hard information must be regarded not as the final output but as an input in a chain of intermediation in the securitization process.

Thus, within the financial sector, hard and standardized information facilitated commoditization (as with every other product) and is used by risk allocators - high-frequency traders, hedge funds, and the various intermediaries involved in the securitization process - as an input. However, outside the financial industry, this constant flow of financial information is also useful for shareholders, who now have access to constant market evaluations and can in this way review their investments and decide to exit. Simply by knowing whether firms will meet their expectations every quarter reduces the risk associated with shareholders’ investments.

### **2.2.2. Standardized information for short-term shareholders and CEOs**

However, establishing quarterly assessments to compare firm performance with market expectations also relies on standardized information. There is no legal obligation to meet these expectations, but there are normative ones, and norms rely on conventions (Orléan, 1989). Several ratios can be used to measure the “value” of a firm depending on the perspective adopted. Approaching firms from a stock market perspective, Earnings Per Share (EPS) and the Price-to-Earnings Ratio (PER) are equity ratios that are considered measures of value, albeit contested ones. Economic and financial profitability ratios are more accepted. This category includes Return on Assets (ROA) and the Return on Equity (ROE), the financial profitability ratios that best represent the shareholder perspective. These standard ratios have long been in use. However, Lordon (2000) writes that shareholder values is actually conceptualized using a series of intellectual innovations developed by consulting groups, such as the Total Shareholder Return of the Total Business Return. One can note the erosion of formal public standards in contrast to the rise in private valuation methods. This also represents a type of privatization of information (which is supposed to be public, if the firm is listed). One measure in particular deserves our attention because it has become dominant in the field of practice and discourse: Economic Value Added (EVA), which the consulting cabinet Stewart &Co managed to impose as the most representative definition of shareholder value. EVA is

established as an alternative to accounting systems. The net result obtained from accounting methods does not indicate the correct remuneration of the shareholder, which is what EVA does. “*The correct remuneration is one that can be expected from another investment with similar risks. In other words, the costs of capital are an opportunity costs*” (my translation) (Lordon, 2000:122). EVA is defined as the profit after all funders (creditors and shareholders) have been repaid at the cost of capital. More precisely, it is the difference between the Net Operating Profit After Tax (NOPAT) and the cost of capital, which can be known by multiplying the invested capital with the Weighted Average Cost of Capital (WACC), because debt has not the same price as equity. If the cost of debt is predetermined and fixed, the cost of equity is more complicated to calculate. Returns are not set in advance and one must estimate it using models. The most common one is the Capital Asset Pricing Model (CAPM). CAPM rests on a series of unrealistic assumptions, such as unlimited borrowing under the risk free rate of interest and trade without transactions costs with all information known to all investors at the same time. The model thus predicts that the appropriate rate of return of an asset is equal to a risk premium (the value of risk) added to the expected return of a risk-free asset (the time value of money). The risk premium is composed of the *beta* multiplied by the market risk. The *beta* is a measure of the systemic risk (non-diversifiable) of a security in comparison to the market as whole. It measures the tendency of an asset to follow the market. The market risk is the difference between the return of a risk-free asset and the expected market return.

There is conceptual problem with EVA: It implies that a firm is profitable only when there are additional benefits to the owners, after having covered all operational costs and the costs of capital. It is usually a characteristic of undervalued firms only (Jones and Lowry, 2006). Moreover, its notion of economic profits determines a value that is already, *by definition*, above the cost of capital. Indeed, EVA claims to represent “shareholder value”, that is, the value that the shareholder should receive after having repaid all funders. Shareholders are compensated twice, once with the minimum guaranteed return and a second time with the EVA, in other words, the surplus that should exist once all funders have been reimbursed.

But EVA provides shareholders with a guaranteed minimum return by contending that firms only generate added value if shareholders are remunerated “correctly”, that is, based on the cost of capital and, consequently, independent of the firm’s accounting performance. We can now see how EVA relies on financial market data and how, through the *beta*, it introduces a risk sensitive measure derived from this data into enterprise management.

So it is not only a measure of value, but becomes a measure of performance, part of the Value-based Management approach which aligns the interests of shareholders with the

interest of the management. It constraints management, but through the logic of financial markets, which tends to increase the shortsightedness of managers. Indeed, it is high earnings today that are rewarded, not high earnings tomorrow. Thus, it is the interests of shortsighted shareholders and the top management that are aligned.

The innovation of such a concept is also political. It reorganizes power relations by stating how the added value should be shared, while removing shareholder's risks - the reason that shareholders exist in the first place - from the equation. Financial capital is not involved in production, but with EVA, it also does not assume the risk of investment. The shareholder is legally the owner of a company operating an enterprise, but from a risk perspective, enjoys the status of a creditor financing it. Top management learned the rules of the "shareholder maximization" game and is able to extract high compensations from it. Top percentile revenues have been receiving an increasing part the national revenue in Anglo-Saxon countries as well as in continental Europe and Japan, albeit at lower pace. This part increased by about 12 points in the U.S. and approximately 6 points in the U.K., while it rose by 2 or 3 point in Europe and Japan (Piketty, 2013). The differences between rich countries in the growth of revenue inequality cannot be explained by an increase in marginal productivity. Different institutional norms of corporate governance provide probably a better explanation for these differences, but do explain the fact that top executive salary rose everywhere in rich countries. To understand the overall increase in top managers compensations, the shift to neo-liberalism and the institutional linkages binding companies with financial markets seems to bring a better answer. Different contract designs generate differences in CEO revenue, but how these compensations are justified in the first place? Since Bertrand and Mullainathan (2001) showed that CEOs are paid for luck, i.e. for reasons external to the firm that they manage, academics have been paying attention to corporate governance flaws (Bebchuk & Fried, 2004) and contract design (Chaigeau & Sahuguet, 2014) to explain the pay-for-luck phenomenon. They however fail to view the enterprise as something more than an addition of contracts and overlook the influence of short-term shareholders and financial markets.

The rise of stock repurchase (which increases the company's stock prices) and evolution from a "retain and reinvest" regime to a "downsize and distribute" one are not natural phenomenon, but the result of an implicit coalition between short-term shareholders and top managers whose interest are tied by ideas and practices representing the neo-liberal ideology. From this point of view, it is clear that enterprises are more than simple web of contracts between separated individuals but are also the locus of conflicts of interest and that these conflicts affect business investments (Lazonick and O'Sullivan, 2000).

Because capital is rare and should be allocated efficiently, the financial industry adopted "risk" as a measure of efficiency, thereby inverting the financial industry's function by

awarding primacy to risk allocation. EVA is sensible from this “risk efficiency” perspective. However, the socio-economic reality implies different types of efficiencies at various levels. The efficiency of risk allocation is important to owners of financial capital, but, if taken to its extreme, it might come at the expense of the productive efficiency of a firm. How many opportunities for entrepreneurial ventures or investments in growth have been missed simply because economic value added was exclusively defined from the perspective of shareholder value?

The emergence of EVA is evident in the evolution of accounting standards and functions. There has long been an empirical diversity in national accounting systems, influenced by two large schools of thought. Following the dynamic method, called historical costs by Anglo Saxon accountants, these assume that the prices of physical and financial capital cannot vary for reasons exclusively linked to the activity of the enterprise in which they are used. Assets enter the balance sheet at their historical costs, and their prices vary depending on their use. The static approach to accounting stems from the wish to protect and valorize creditor’s interests. Assets are evaluated according to their current market prices, not their historical costs. The uses that an enterprise can put its assets to are less important than what these assets are worth in the event of liquidation.

The rise of capital markets, the need to manage cash flows and the distrust of traditional accounting methods have revived the static approach, now clothed in the notion of shareholder value (Aglietta and Rébérioux, 2004).

This is now the dominant approach in developed economies, and the international norms established reflect the privileged position acquired by shareholders. The accounting system is now at the service of the efficient functioning of capital markets, and the same concern regarding its efficient use underlies the logic behind current accounting standards. The concepts of “*market value*” and “*value in use*” are the pillars of this new system. It informs investors of the market value of firm assets and the actualized cash flow obtained from the use of these assets. Thus the “*value in use*” is introduced to eliminate opportunity costs and ensure capital is employed the most efficiently. However, by appealing to the market and anticipating future profits and interest rates, this accounting system does not reflect the activity of an enterprise, but what the market believes it will be (Aglietta and Rébérioux, 2004). When asset prices cannot be estimated because markets are insufficiently liquid, one can resort to theoretical models, which can be private. Here again, one can note the existence of private models to interpret public information.

That the financial sector should be privatized and liberalized does not imply that the public information required for this industry to operate normally should also be privatized. The perverse effects of credit ratings issued by semi-official, but private, agencies are a

good example. Here also, information is standardized to better inform creditors, but it is so abstract that it is stripped of its meaning. However, credit ratings are fundamental elements of the Basel II and III regulatory framework. An important element of the financial sector that should provide added value for creditors and the rest of the economy seems primarily serve the interests of a few: Credit ratings agencies and market participants that are able to use their information as an input in the securitization process to rate Special Purpose Vehicles and increase the prices of securities.

One must also note the extent to which the entire financial system, from High Frequency Trading to accounting standards, depends on liquidity. This is why it would be more appropriate to regard the 2008 financial crisis as *“not simply a particularly intense liquidity crisis, but is also a crisis of liquidity as the principle governing the organization of the credit system in the form of the financial market”* (Amato and Fantacci, 2012:25). As observed below, and as Amato and Fantacci argue, we must determine an exit from the realm of liquidity. This chapter has attempted to highlight that organizing the financial system around liquidity and standard information is not to the disadvantage of all. The following section argues that not only the structure of the financial system benefits a minority of players but also that the macroeconomic context of the past 30 years has amplified the structural advantages of these actors.

Some markets will never be liquid. Innovation, by definition, cannot be immediately priced by existing markets. However, if one manages risk by assuming a liquid market to determine the cost of exiting, one is not assuming her/his role as an investor.

Lysandrou (2011) demonstrated how hedge funds (the supply side) adapted to the demands of incredibly wealthy owners of financial capital and this collusion was central to the most recent financial crisis. We extended his analysis and advance the argument that the entire financial sector now serves the interests of the enormously wealthy individuals. That the present financial system generates crisis after crisis is only one issue among many. The changing nature of financial markets is a political concern when it is able to influence the way in which corporations and ownership are conceived. The change from a fordist regime to a one in which corporations downsize and distribute (Lazonick and O'Sullivan, 2000) is a political issue because it has redistributive consequences.

### **2.3. Macroeconomic conditions**

This analysis began by addressing the changing nature of financial markets and attempted to illustrate how this evolution benefits certain participants over others, but macroeconomic conditions have yet to be addressed. As Piketty showed, macroeconomic

factors, such as inflation, long-term growth and demographic trends, are important in explaining the revival of private wealth. From a long-term, historical perspective, earnings on capital have consistently been higher than earnings from revenues and economic growth. However, the macroeconomic conditions of the past 15 years, coupled with the evolution of the financial sector, lie at the roots of rising inequality in developed countries (Piketty, 2013). Inequality in France has been increasing since the 1980s, and since the 1990s, one can observe a clear rise in very high salaries, which is a new phenomenon in France. The highest 0.1 percent of salaries has increased to such an extent over ten years that their purchasing power has increased by more than 50 percent (Piketty, 2013:459). Conversely, the purchasing power of middle-class Americans stagnated, while the wealthiest 1 percent absorbed approximately 60 percent of the total economic growth in the U.S. over the 30 years preceding the 2008 crisis (Piketty, 2013:469). That the rise in inequality - forcing modest-income households into debt while paper assets inflate - should be considered a cause of the 2008 crisis is an increasingly accepted thesis (Kumhof and Rancière, 2010, Goda, 2013).

The growth in financial assets since the 1980s is so staggering that it is difficult to blame the 2008 crisis on the so-called “Asian savings glut” (Palma, 2009). In his words, *“The bottom line is that while Asia’s reserves grew by US\$2.2 trillion between 1997 and 2007, the overall stock of financial assets grew by US\$140 trillion (US\$ at 2007 values). As a result, by 2007 the overall Asian ‘savings glut’ was equivalent to less than 1 per cent of the global stock of financial assets (at the time, equity, bonds and bank assets were worth US\$241 trillion)”* (Palma, 2009:5).

The rise of neoliberalism lies behind this tremendous polarization of income that is responsible for the enormous increase in liquidity in the U.S. In this regard, Palma adopted a Foucauldian perspective that contrasts neoliberalism with classical economics. Neoliberalism is not the retreat of the state to allow the market to function “naturally”, but rather a form of “governmentability” by which the state adopts the mechanisms of the market because of a fear of itself, a “phobia of the state”. The state is not distinct from markets, but symbiotic with them (Foucault, 2004). From this perspective, the reintroduction of risk and uncertainty in economies overly constrained by welfare institutions is beneficial (international capital coordination, closed capital accounts, stable exchange rates, unemployment benefits). *“What some capitalists, politicians and intellectual networks thought best for capitalist development was that capital should regain the upper hand via an economic environment that was permanently unstable and highly insecure for the majority of the population and the state”* (Palma, 2009:30). For neo-liberals, the state must facilitate this unstable and uncertain environment in which capital has the upper hand. Thus, neoliberalism is not simply deregulation; it is a selective form of deregulation and the outcome of political decisions (Stockhammer, 2007).

That financial sectors and the myriad innovations and products they generate have tremendously profited from this unstable environment is indisputable. While states decided to deregulate financial markets, financial markets provided the mechanisms and instruments for financial capital to disproportionately benefit at the expense of the real economy. One need simply consider the chain of intermediaries involved in securitization: *“Little did the average mortgage-owner know that on top of his family he also had an ever-increasing army of rentiers, legal advisors and accountants to feed. And as so many mouths were eating from the same hand, volume was the only way to boost profits – according to data compiled by Morgan Stanley, sales of CDOs worldwide reached US\$503 billion in 2006, a fivefold increase in three years, leading to an overall stock of US\$2 trillion”* (Palma, 2009:50). Palma’s approach is interesting to the extent that it considers deep structural factors and recognizes the state as a major facilitator of the rent-seeking behaviors of financial intermediaries. In this light, the macroeconomic policies of the past 30 years represent a partnership among several actors: *“The architects of this experiment include some capitalist groups (in particular rentiers from the financial sector as well as capitalists from the ‘mature’ and most polluting industries of the preceding techno-economic paradigm), some political groups, as well as intellectual networks with their allies – including most economists and the ‘new’ left.”* (Palma, 2009:1). One important player is absent from this political economic analysis: Central banks. The following section is devoted to the role of central banking in allowing this environment that has been exceptionally favorable to financial intermediaries and financial asset rentiers.

### **2.3.1. Central banking**

Central bankers had to take unprecedented measures (asset purchases labeled quantitative easing) to contain the crisis and save economic growth. The stabilization of the conditions in financial markets should give rise to concerns that inflation might result and interest rates should be raised (Giles, 2014) while others warn of the risks of deflation (Economist, 2013). It is surprising that concerns of inflation are voiced at all because inflation declined sharply worldwide in 2013 (King, 2014). This obsession with inflation has a 30-year history and has been the primary focus of central banks. It is important to briefly explain how this came to be.

Following Milton Friedman and Robert Lucas, mainstream neo-liberal macroeconomists in the 1980s began to believe that the inflation rate was the only parameter that could be controlled by monetary policy in the long run. Therefore, price stability became the *raison d’être* of central banks, primarily achieved through inflation targeting. This theory is strengthened by the notion that unemployment has a “natural” rate, below which it sparks

inflation. Thus, at the beginning of the 1980s, maintaining sufficiently high interest rates, even at the expense of high unemployment was praised by neoliberal economists and politicians. Thus it is an idea presented as the truth that has led to real political decisions: The ECB is charter-bound to maintain price stability at all costs (Galbraith, 1999). However, there is no consensus regarding the “natural rate of unemployment” doctrine, and it is not supported by empirical evidence. Moreover, there are many other disinflationary factors to explain the slower growth and modest inflation of the past 30 years: *“Tighter fiscal policy, policy to promote greater labor “flexibility” (anti-union policy), globalization and increased competition from low wage countries, reduction of welfare and other social spending, balance of payment constraints resulting from pegged exchange rates (unification of European economies, pegged exchange rates among Latin American nations), negative demand shocks in the aftermath of exchange rate and debt crises (Asian Tigers, Latin American nations), and so on.”* (Wray, 2007:18).

Combating inflation took the form of a standard policy framework: Inflation targeting (the inflation-targeting framework ITF), which emphasizes transparency and an explicit long-run inflation target. The 2008 crisis has not altered the overriding goal of inflation targeting, even though it added the function of safeguarding financial stability (Reichlin and Baldwin, 2013). However, an important development is worth noting. The 2008 financial crisis necessitated the intervention of central banks into financial markets. A report by the Official Monetary and Financial Institution Forum indicates that a cluster of central banks have become the main players on global stock markets. The People’s Bank of China, which comprises many institutions, is the largest public sector holder of equities. In Europe, the Swiss National Bank has a 15 percent equity portfolio. The Danish central bank held an equity quota worth USD 500 million in 2013 (Atkins, 2014). This shows the limits of financial capitalism: Central bank are responsible for financial stability and so have to respond to financial crisis by intervening in financial markets, thereby risking fueling equity bubbles. At the same time, they are still independent from governments and politics and keep their inflation targeting framework. Central bank independence from government was sought so as to prevent government mingling into monetary policy. Now that their role has expanded beyond that, isn’t it reasonable to question the mantra of central bank independence again?

The notion that central bankers are above politicians and free of ideological influences needs to be mitigated. Central bankers’ decisions are not made in a political and ideological vacuum. However, the inflation-targeting framework insists that central banks be more independent and more accountable. Epstein (2002:7) noted a logical contradiction here because if central banks are independent, they are only accountable to themselves. He goes on to state that the contradiction is resolved in the sense that central banks have become accountable to financial markets instead of their governments and citizens (Epstein, 2002:8). In a similar vein, Buiter (2006) argued that

operational independence necessitates such substantial requirements (political, technical, financial, security of tenure and of terms of employment) that, if achieved, it would not be substantively accountable. This is, to varying degrees, the status of most developed nations' central banks. Monetary policy's narrow focus on inflation linked to unemployment is one of the unquestioned tenets of macroeconomic policy in OCDE countries. For Stockhammer (2007:7), this redefinition of monetary policy is a salient feature of the new finance-dominated regime.

The redefinition of monetary policy has placed price stability above all other possible goals. The notion that there is a "natural rate" of unemployment implies that it is pointless to attempt to reduce it. An inflation target of approximately 2 percent is now widely accepted as an obvious, "natural" standard. The technicality of monetary policy makes it appear as if this rate is neutral, with identical effects on all. However, inflation targeting is far from neutral, both politically and economically and, socially, from a redistributive perspective. It is not the aim of this chapter to review the inflation targeting literature and the effects of monetary policies, but simply to expose a few points to demonstrate that central bank independence should not be taken for granted, as it has real consequences. In addition to unemployment, this redefinition has other distributive consequences. First, low inflation advantages creditors over debtors. Moreover, in a macroeconomic context of low demographic and economic growth, it also entails that low inflation favors capital over wages, thereby exacerbating inequality (Piketty, 2013). The macroeconomic context of the past 15 years has provided even further advantages for rentiers when one considers that, on the one hand, inflation has remained under control in terms of prices, but on the other hand, it had migrated to assets. The Great Moderation corresponds to a period of low inflation and reduced output volatility, arguably ending business cycles. However, it simultaneously witnessed Irrational Exuberance in financial markets.

This period was a characterized by conventional monetary policy, in that both inflation and interest rates were low. Low inflation and high interest rates have traditionally been in the interests of creditors, but the past 15 years tell us a different story: That of "asset inflation". U.S. policy makers believed that they had found a way to depoliticize the complicated task of distributing capital among competing social groups by relegating the task to the market. However, the newly deregulated market failed, and instead of allocating scarce capital, it increased it and inflation remained high. In 1979, Volker, chair of the US Federal Reserve, raised interest rates in a decisive attempt to reduce inflation. *"But while Volker's punitive monetary regime did not restrict the growth of credit, high interest rates did suppress inflation by drawing capital out of the productive economy and into financial markets. Critically, with inflation vanquished to the financial markets - where it was not visible (or conceptualized) as such - the state would no longer confront seemingly impossible trade-offs between imposing austerity and facing ever mounting price pressures"* (Krippner, 2010:464). Asset inflation is now clearly visible: Wealth

creation “à la Greenspan” induced an increase of net worth per capita on average by approximately \$400'000 between 1982 and 2007. By mid-2009, it had regressed to its 1992 level (Palma, 2009:48). It is equally clear that the developed world finds itself in a bubble economy.

Perez’s analysis (2003) of the different stages of technology-driven interaction between financial capital and production capital is most appropriate to the current situation in developed economies. Following the emergence of a new technology, there is an excess of financial capital, too few good opportunities and the tremendous gains observed in the new industries set a standard. Financial capital, instead of funding old, unsophisticated enterprises, begins to imagine sophisticated instruments to make money from money. This represents the beginnings of the decoupling of finance from the real economy, which signals a phase of bubbles and frenzy. Financial capital now establishes its own conditions, criteria and norms for production capital. Entrepreneurs and managers in the real economy conform to these dictates to attract the funding from what now increasingly resembles a casino. New financial instruments are imagined as ways to generate money, and the line between dividends and earnings and capital is increasingly blurred. The divorce between financial capital and production capital is complete: *“For those pursuing the accumulation of wealth, the higher profits possible in the financial sphere discourage direct engagement in productive activities, except those related to the newest and most dynamic technologies, and attract even more money towards finance. This increases the disparity between the mass of money vying for high returns in the financial system and the actual aggregate rhythm of wealth creation in the production and trade of goods and services. The resulting inflation of asset prices generates unwarranted capital gains completely divorced from the profits and dividends of the real economy represented in them”* (Perez, 2003:111).

Considering technological revolution as an element fueling bubbles should not prevent to remember that the current phase of bubble economy is also the result of policies and has consequences for the distribution of wealth. Such an environment offers the owners of financial capital numerous opportunities and access to the financial instruments required to make money on capital gains and dividends, rather than earnings alone. Asset price inflation raises property prices, without influencing wages or consumer prices. As the saying goes, the bubble economy allows the rentiers to have their cake and eat it too. The growing importance of capital gains in this regime of wealth generation forced central bankers to hold interest rates low. *“The reason is the increasing importance of capital gains in the wealth accumulation of finance and “industry”. Hence, while price inflation is still out, “asset inflation” is definitely in – very in. This is why, in recent years, capitalists on both Wall Street and main street and, everywhere around the world, are very wary of increases in interest rates. They fear that interest rate increases would burst the asset inflation bubble, and, in fact, their fear does not seem to have been misplaced.*

*Financialization and asset price inflation may be a temporary state of affairs. But it might also represent a new era in the political economy of finance.” (Epstein, 2002:18)*

Following an interval of 11 years after Epstein’s article and a financial crisis with global consequences that exposed the flaws of the system, some dared to voice their concerns regarding the dangers of this “silent financial revolution”. However, debunking the myths of neoliberal ideology (shareholder value primacy, Efficient Financial Market Theory) and exposing the shortcomings of mainstream financial economics will be a time-consuming task, especially when there are powerful vested interests in the status quo. Thus, developed economies need not only to reform their financial sectors but also to implement an entire shift in policy. The question is not whether there ought to be more or less regulation, a financial stability board, or some new responsibilities for central banks to manage bubbles. These are ad hoc responses. What seems necessary is a set of policies that prevent some interests groups from holding up the interactions between finance and the real economy. The basic elements of that relationship - liquidity and information - cannot be privatized at the systemic advantage of the same few actors.

## **2.4. Policies**

A political economic analysis of the “finance and society” relationship allows one to observe the larger picture. As this chapter has attempted to demonstrate, there are some players for whom different rules of the game apply with respect to their relationship with finance. Against this background, one can contend that a series of ad hoc regulations will not repair the broken financial markets of developed economies. What is needed is a coherent set of new policies. The above analysis revealed three areas of reform:

- Making liquidity a public good
- Making public information a public good
- Redefining the relationship between the financial sector and the state

One should add here that these proposed reforms are most likely to be implemented at the regional and international levels. The focus of the following set of policies is not national because even if some differences persist across the financial systems of OECD countries, financial globalization has homogenized best practices and policies and banking regulation. Moreover, stock markets have also merged, erasing national differences.

### 2.4.1. Making liquidity a public good

The rents that some financial sector actors are able to extract and the profits that some are able to accrue at the expense of others stem from this obsession with liquidity in the financial system, which, as we have observed earlier, is considered a commodity. It becomes clear that the commoditization of the basic elements that allow actors to play the game leads to different rules of the game, thereby destroying the very foundation of what makes market economies an efficient system of resource allocation. To limit the commoditization of liquidity, **stock markets need to be remutualized and Alternative Trading Systems (ATS) (Multilateral Trading Facilities in Europe) should be closed.**

The arguments for the demutualization of stock exchanges assume that they are simply companies similar to all others. However, it is obvious that they are not. An institution with the function of reflecting the real and fair prices of shares in economic ventures is a public good and should be considered one to induce as many diverse investors and firms to be listed as possible. The efficiency of a stock exchange is not what is important. It is its contribution to the efficiency of the overall financial system in allocating capital. Ironically, ensuring that stock markets reflect economic reality to the greatest extent as possible and only perform this function will attract liquidity and not vice versa. Re-mutualizing stock exchanges and making them not-for-profit institutions when they have already been privatized would signal that fair access for all investors is the priority, not the profitability of exchanges. Mutualized not-for-profit stock exchanges will have fewer incentives to offer liquidity rebates to attract financial players.

This cannot be achieved unless Alternative Trading Venues are closed. One argument for the establishment of alternative trading venues is to increase competition, thereby forcing traditional venues to decrease trading costs. In encouraging competition among various venues, advocates of stock exchange liberalization implicitly admit that the primary function of stock markets is not to provide fair and just prices for their listed firms, but to increase profitability for the owners of stock exchanges. It becomes clear that it is not possible to have both. The latest accounts denouncing the unethical practices that the proliferation of trading venues and the privatization of stock exchanges have allowed to emerge reveal this distinctly. Moreover, the argument defending the existence of these alternative trading venues is that they are dark pools of liquidity. In these non-lit markets, institutional investors can trade large blocks of share without attracting the attention of the market and driving prices up or down. This inconvenience, which would not exist if institutional investors could trade their shares slowly, must be weighted against the additional problems created by ATS: A non-transparent price formation mechanism, conflicts of interest causing ATS to sell information to attract liquidity, the predatory

practices allowing certain players to profit from the fact that others are trading, and the still unknown influence of ATS quotation systems on lit market prices.

The European Commission decided to regulate alternative trading venues, proposing a trading cap for any one stock of 4 percent per venue or 8 percent on a European-market-wide basis. The EU commission is also concerned with the effects of dark liquidity (these platforms do not publicly display their orders) on the price discovery of publicly lit markets and thus insisted on pre-trade and post-trade transparency (Puaar, 2013). While the European Commission's concern evinces a willingness to "light up" alternative venues and limit their growth, it will not resolve the problem of conflicts of interest and the detrimental effects of differently regulated exchanges competing against one another for liquidity. Reducing the number of ATS does not resolve the question of principle that is the existence of predatory algorithms, which prey on institutional investors' trading patterns. It is clear that such practices have to be made illegal. This topic is mentioned below, as it is related to the general position of the state with respect to financial market practices.

**Imposing speed limits on transactions logically** follows nearly immediately from the above. It is another means of avoiding the privatization of liquidity that high-frequency trading has enjoyed. Trading at the speed of light only profits those who are able to locate their servers near the exchange. The argument that high-frequency trading adds liquidity to markets has repeatedly been proven empirically incorrect. Market liquidity vanishes once HFT firms consider trading to be excessively risky. Trading speed limits would slow the pace of transactions and restore fair access to stock markets for every type of investor. By the same token, the collocation of servers should not be permitted. Collocation is a means for stock markets to make money and again demonstrates that not-for-profit exchanges are needed.

Finally, it is important to address the issues of **corporate governance** and the primacy of shareholder value. Quarterly reports and managerial practices emphasizing share performance in stock markets serves to divert and privatize liquidity, which is a common good for enterprises and therefore the rest of society. It seems there is little that regulation can achieve in this regard because, as noted above, shareholder value is a myth. Academics, experts, universities and politicians should strive to debunk these preconceived notions that contradict corporate laws and corporate economics, as Stout (2012) has done. From a legal perspective, directors have no legal responsibility to maximize returns to shareholders. That the directors of public companies can be sued for failing to maximize shareholder wealth is a fable. As long as directors do not seize a firm's assets for themselves, they enjoy substantial autonomy in their decisions. It is important to recognize that increasing shareholder value is not a legal obligation, but a managerial choice. This choice relies on the following false premise in economic theory

that considerably weakens the principal-agent model. First, shareholders do not own corporations, they own shares of a stock, that is, a contract that affords them limited rights, similar to any other bondholder, supplier or employee. Second, shareholders are not the residual claimants in corporations. This notion has its roots in bankruptcy law, which considers the subject of dead companies and not living ones. Finally, shareholders do not hire the board of directors. The board of directors exists prior to and independently of shareholders. Thus, it is a normative view of corporate economics that imposes the maximization of shareholder returns in the short-term, as it is believed that this will improve firm performance. As Stout wrote (2012), this is clearly disproven by empirical evidence. Thus, it appears that corporate law and economics consider liquidity to be a public good, which neo-liberal ideology has managed to privatize. Corporations require capital, which cannot be reclaimed by shareholders whenever a performance measure indicates that they can (performance measures, as we have observed, are biased in whom they favor). There should be additional studies demonstrating the advantages, for the shareholders, of firms being able to control *their* assets. This would reduce shareholder opportunism and increase stakeholders' incentives to invest. That is, after all, in the shareholders' interest (Stout, 2012).

As noted above, if one considers the 2008-2009 crisis a crisis of the **principle of liquidity governing financial markets** (Amato & Fantacci, 2012: 25), rethinking the role of liquidity, and ultimately money, should be on the agenda. At the core of the problem is the dual function that money assumes: On the one hand, it is a measure of value, which is used to settle transactions. On the other hand, it is a store of value, which is accumulated. These two functions of money correspond to two functions of banks. As banks issue money, they offer payment and settlement services and simultaneously issue credit. To provide credit to the maximum of individuals and assume that all risks can be controlled, money in the form of credit has been made as liquid as possible. Credit was sold on financial markets, even to those who did not deserve it, as some have noted (Amato and Fantacci, 2012:31), as if it were any other kind of product, at the end of a complex process of securitization, which is the commoditization of money. However, the commoditization of money in the form of credit jeopardized money's ultimate function: That of settling debts. "*Finance has to do with settlement, the end of a transaction. The end of finance, understood as its purpose, is a meeting between debtor and creditor in which their relationship can come to an end*" (Amato and Fantacci, 2012 49). A creditor who is never able to settle his obligation is never free, with all of the social implications that accompany consistently being indebted. Greenspan once remarked that the more debt workers have, the less free they would feel to strike (Amato and Fantacci, 2012:227).

Whereas Amato and Fantacci analyzed the importance of liquidity from an historical perspective, the same conclusion can be reached from the post-Keynesian perspective of

“endogenous money”. This branch of monetary economics argues that, contrary to the money multiplier theory, banks endogenously create money through loans, which in turn create deposit mechanisms. These mechanisms, whereby reserves are sought after loans have been made, and not vice versa (Rossi, 2010), does not constrain banks, which have the opportunity to increase their loan portfolios to a considerably greater extent than their available income. As Rossi showed, the result is a massive flow of liquidity into financial and real estate sectors, as was the case in the years leading to the 2007 crisis, thus creating bubbles (Rossi, 2010). At the heart of the problem lies a structural flaw in the banking sector, which is amplified by modern financial practices, financial liberalization and technology and does not differentiate between money spent on the real sector and money spent on financial assets and real estate. In Rossi’s words, “*the monetary circuits of produced income (which has purchasing power because of the underlying production of real goods and services) are supplemented by monetary circuits of bank deposits that have no purchasing power originally, because they are not issued as a result of production. These bank deposits absorb therefore by osmosis a part of [the] purchasing power of produced income*” (Rossi, 2010:416).

As Rossi proposes, one means of resolving the structural tension between the conflicting roles of banks in money creation would be to record the various purposes of money in separate departments. That would protect the function of money as a measure of the value of economic activity. Separating the uses of money as credit and as a measure of economic transactions (payment) in terms of accounting would then make it possible to associate the amount spent in the financial market to the deposit created by the issuance of money for real, value added production and economic activity. In other words, the loan-creates-deposit mechanisms would not be operative in such a refined framework. This would considerably weaken the fetish for liquidity praised by financial markets. As such, this reveals one of the institutional means of escaping this fetishization of liquidity.

At the international level, another approach to strengthening the role of money as a means of payment would be to provide a true international settlement facility and an international currency, which would serve as a unit of account. The current situation, which has been in place since the breakdown of the Bretton Woods system, is a non-system that elicits exchange rate volatility and results in countries managing international reserves as if money were any other type of tradable commodity. The establishment of an international settlement institution and an international monetary system would ensure that “*within countries all payments are finalized in local currencies, while between currency areas all payments are finalized through the emission of international money as a vehicle of those real goods, services, or financial assets that move beyond a monetary space’s borders*” (Rossi, 2009: 16). In other words, these institutions, which were already proposed by Keynes in 1944 (Rossi, 2010, Amato and Fantacci, 2012) and recently

recalled by the Governor of the People's Bank of China (Xiaochan, 2009) would proceed in much the same manner central banks do in their national areas.

Another means of avoiding the privatization of liquidity by shareholders is to advance reforms to prevent the privatization of information.

#### **2.4.2. Making public information a public good**

Neo-liberal ideology was able to circumvent corporate law and corporate economics to impose a normative view of the primacy of shareholder value, but liquidity cannot be extracted from firms without the privatization of standard information. As noted above, the mark-to-market approach attempts to value each component of an enterprise, considered separately from one another, to inform shareholders of the true and just value of their investments. Accounting has ceased to be a tool to steer enterprises on the sea of economic hardship and opportunity and has become the shareholders' compass for measuring the performance of their investments. This approach to accounting is as biased by ideology as the approach used by Soviet economies that subdued accounting to central planning. In both cases, the value that accounting can produce does not remain within the enterprise but flows outward to either shareholders or the state. In both instances, society as a whole loses. Thus there is a serious need to **rethink accounting models and standards** such as the International Financial Reporting Standard (IFRS), proposed by the International Accounting Standard Board (IASB), an institutional evolution of which reflects a transition away from the accounting profession (Aglietta and Rébérioux, 2004:165).

**Private models and ratios** that have been proposed by consulting companies, such as the Economic Value Added (EVA) and the others that Lordon (2000) analyzed, **should be banned** from quarterly reports and other accounting reporting. Under the disguise of technicality, these measures are not neutral and clearly favor one party. The enterprise is a political arena in which the interests of all parties should be considered in equilibrium if it is to be efficient. That also includes long-term shareholders, who have been ignored by proponents of models such as EVA.

Regarding stock market **data, what constitutes private and public data should be clearly differentiated**. Information that is already private, such as non-displayable orders, should remain so. Stock exchanges and alternative venues leaking private data to the High-Frequency Trading industry, as appears to have been and may remain the case, should be illegal (Arnuk and Saluzzi, 2012:115). Such behavior is already banned in other economic sectors, and there is no reason that stock markets should constitute an

exception. “How would you react if other types of financial institutions sold similar data? Would it be okay if a bank sold information about to whom you wrote checks? Would it be okay if Visa/MasterCard sold information about what you bought? Would it be okay if the telephone company sold information about who you called?” (Arnuk and Saluzzi, 2012:123). By the same token, data resulting from actual trades on stock exchanges should be processed and displayed before quotes produced by HFT interference. Because of collocation and private data feeds, HFT firms are able to produce quotes that are faster, and hence more accurate, than the actual public Securities Information Processor (SIP).

One way to privatize information is to make it complex. Therefore, transparency is considered important. It does not add to regulatory costs or have distortionary effects and is key to consumer protection. It is imperative to inform clients of the risks attached to the financial products in which they are investing. However, transparency is not necessarily linked to the amount of information provided, but to the way in which this information is conveyed. In that regard, **approaches to transparency need to be refined**. As Guiso (2010) wrote, “*the main problem with disclosure is that it takes for granted that investors are able to understand what is disclosed and its implications in terms of incentives*” (Guiso, 2010:17). Therefore, Guiso proposed the introduction of a system of third-party ratings based on a “fairness index”, the operation of which would be understandable to the typical bank customer. The “bank-fairness index” would measure the bank’s ability and reliability to advise inexperienced investors. In that respect, one should rethink the distinction between unsophisticated and sophisticated investors and the amount of information provided to these two categories of actors. Paradoxically, sophisticated investors who are able to understand the risks of their investments should require additional information, whereas unsophisticated investors might not know how to interpret the information provided. Also, the commission costs included in financial products should be disclosed, to allow clients to evaluate the potential conflicts of interest that financial institutions have in selling products created by other issuers. Mutual funds should also disclose the brokerage commission and custodian fees in their prospectuses (Guiso, 2010).

Finally, the manipulation of public information via algorithms specifically designed to drive market quotes up or down, as in the case of Citigroup’s “Dr. Evil program” mentioned above, must be severely legally punished. These practices are harmful to the market itself. While concepts such as Social Corporate Responsibility have gained traction in recent years, it is important to emphasize that it is also a matter of Corporate Market Responsibility (Gomes, 2013). Financial companies need to establish internal mechanisms and an appropriate culture to avoid these types of behavior. This demonstrates that some financial market actors believe that stealing public resources is the new rule of the game. Was it the influence of technology, adding distance and

anonymity that changed the moral equation underlying these behaviors? The development of illegal downloading spurred by the proliferation of the Internet clearly demonstrates how technology can deteriorate moral standards.

The direct manipulation of public information, as in the case of the LIBOR and FOREX scandals, is more troubling. The forex trading probe, for example, has its own topic on the Financial Times' website,<sup>1</sup> which provides a notion of the extent of the manipulation. These two cases are more serious in that they involve financial market actors, who should normally compete against one another, conspiring against the state and the general public. Joshi (2013) highlighted how reciprocal relationships allowed such cooperation to take place: "*Traders and brokers often promised to repay the submitters' favours in some way. This was a two-way relationship that submitters knew would benefit them in the future, or had already produced dividends in the past*" (Joshi, 2013:20). It is difficult to not perceive a similar pattern in the operation of former Soviet economies. As chapter three revealed, the culture of reciprocity and relationship-based deals implies an evident loss of efficiency, but it also erodes state standards and symbols. The state monopoly in issuing money is the result of a long and hard-won political battle. Counterfeiting money is a criminal offense, not a regulatory breach, in most countries. The 18 security features of Swiss bills exist to ensure that counterfeiting is not possible, and the laws for those who attempt to do so send clear signals. Why is information manipulation, which has similar effects to counterfeiting, not treated in the same way? Do the LIBOR and FOREX cases reflect the process of financial markets eroding state monetary sovereignty and imposing a new, universal standard based on tradable securities (Orléan, 1999)?

These two massive, global frauds reflect states' permissive stance toward financial sectors. No regulation will be effective unless there is a profound policy shift to reframe the relationship between the financial sector and the state.

### **2.4.3. Redefining the relationship between the financial sector and the state**

In analyzing the bubble economy and how rentiers benefit from it, Palma (2009) observes that it is sustained by the state. "*Accordingly, for classical liberalism the state and the markets each have their own space, separate from one another. For neo-liberalism, in contrast, the distinction between the space of the state and that of the markets disappears; so the state (and everything else) should be mapped out as a function (or as a sub-set) of unregulated markets*" (Palma, 2009:33). From the neo-liberal perspective,

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<sup>1</sup> See [http://www.ft.com/intl/topics/themes/Forex\\_trading\\_probes](http://www.ft.com/intl/topics/themes/Forex_trading_probes)

the market is the optimal form of social organization, and market failures are not inherent, but accidental to the system; the question thus becomes how best to adapt political power, discourses and practices to this new creed. Following Foucault, this new interaction between politics and market principles gives rise to a new form of “governmentability”. In this new configuration of power, financial market de-regulation is actually market-friendly re-regulation. Assuming that markets are not composed of persons, the proponents of neo-liberal regulations elude the political question of who benefits from market-friendly re-regulation. In what follows, we propose that states should seek to restore their authority vis-à-vis financial sectors by initiating a policy shift that clarifies their position toward financial sectors.

### **Introducing simplicity in financial regulation**

There is a fierce debate over government intervention in the economy, but as Zingales (2004) argued, one should consider the problem of intervention to be a continuum and not two opposing choices between government intervention and laissez-faire. To what extent could the government regulate the financial industry by simply defining what can be owned (and thus traded) and what cannot? In this regard, a case-by-case approach to highly complex instruments would be sensible. Short selling, for example, was temporarily banned for varying lengths of time in several countries, and no one raised concerns that governmental intervention would kill innovation. By the same token, stock markets can be closed in response to extreme events and then reopen. The proposition of a time ceiling for financial orders (addressing the many concerns associated with high-frequency trading) is somewhat different and reflects an issue of political philosophy: Should the government impose a limit on innovation? That is, of course, provided that one regards high frequency trading as a real innovation with clear social benefits. However, this is akin to arguing that societies should not impose speed limits on highways for fear of undermining the innovation potential of the automobile industry. To continue the metaphor, a speed limit on a highway is a very simple and clear rule that prohibits driving at excessive speeds. Thus there is perhaps a place for **government intervention before the moment of financial regulation**, simply by defining what is possible. This type of regulations would be a component of a comprehensive, Keynesian model of financial regulation, as proposed by Canova (2009). Higher margin requirements in lending, as Canova argued, would draw a bright distinction and reconnect the risks of lending to the borrower. It would be as simple as not allowing unsafe vehicles. He argued that *“without such discipline - without traffic lights, stop signs, and an occasional toll booth in the financial marketplace - those with privileged positions in the marketplace will follow their incentives to become overleveraged and to gamble with other people’s money. They will continue to present a moral hazard to the marketplace as a result of their ability to benefit from bailouts and hidden subsidies”* (Canova, 2009:393). This type of government

action should obviously be coordinated at the international level to address issues of financial industry competition.

**Taxing complexity** also appears to be a straightforward solution: *“There is a case for taxing complexity directly at its source. Recent events have redemonstrated the problems that arise in risk-managing large, complex financial firms with multiple models and management information systems. They make the world’s largest banks, arguably, too big to manage. At present, no explicit regulatory charge is levied on those complexity externalities. Doing so would help protect the system against failure, while providing explicit incentives to simplify balance sheets”* (Haldane, 2012:22). This is the perspective from which the much-debated Financial Transactions Tax (FTT) or Financial Service Tax (FST) should be approached.

By the same token, there is a need to **increase taxes on High Net Worth Individuals (HNWI)**, who are the primary clients of hedge funds. As we have observed, the financial revolution allowed rentiers to accumulate and concentrate unprecedented amounts of wealth, especially in the form of paper money. This created pressure on hedge funds to find ways to obtain higher returns, as regulated stock markets can only absorb a certain volume (Lysandrou, 2011). A tax on HNWI would slow the process of accumulation and potentially decrease the pressure for security on the demand side.

Regarding the concern that firms have become “too big to regulate”, *“banking supervisors would be well advised to leave as little as possible to management discretion and to go for bold, simple rules that are easy to understand and possible to enforce”* (Augar, 2012). Zingales proposed, for example, to **increase the penalty for fraud**. Increasing the costs of fraud relative to its potential benefits provides effective incentives to not engage in fraud and would be costless (Zingales, 2004). Similarly, whistle blowers should be rewarded. Zingales rightly noted that all of the fraud in recent years could not have occurred without the knowledge of numerous employees. Rewarding whistle blowers would compensate them for the risk that they take because without it, alerting regulators to the irregularities of their employers and colleagues is too costly. Such a system would create competitive enforcement. Another set of simple measures would seek to **strengthen internal control and encourage improved corporate governance**. Regulatory policies and corporate governance are complementary, and the success of the former depends on a culture of the latter (Lumpkin, 2009). Corporate Social Responsibility (CRS), even if used by firms as window dressing, has been widely accepted among multinationals, and a corporate governance culture that suggests that employees should care about their clients is clearly in the direct interest of economic entities. Thus, educating a client, for example, could be a component of a CRS agenda for large banks, especially regarding sophisticated products. Addressing certain issues at

the corporate governance level could also be a means of altering moral standards in the financial sector.

### **Central banking**

A genuine shift in governmental policies with respect to the financial industry would logically include certain measures to reposition central banks vis-à-vis governments, that is, to rethink their “independence” and the set of measures necessary to contain inflation. This would demand a profound change in academic circles and the ways in which economic ideas influence policies. It is not the purpose of this thesis to review the vast and diverse literature on central banking, but one can nevertheless question two central notions structuring modern central banking: Its assumed independence and the presupposed natural rate of unemployment.

First, it is important to recognize the linkages between financial sectors and central banking. That interest rates were kept low to avoid bursting the asset bubble that led to the 2008 global crisis is now beyond doubt. Thus, it is perhaps time to challenge certain fundamentals that central banking took under the neo-liberal form of governance. It is important to challenge these fundamentals because the current reform program aims at making central banks the managers of economies prone to boom and busts because of its ties to financial sectors. However, the episodes of the Great Moderation/Irrational Exuberance taught us that regulatory capture is not restricted to micro regulation. Macroeconomic policies can also be captured. According to Palley (2011), this is an understudied topic. As mentioned above, central banks are neither impervious to group-think nor free of ideology. Therefore, the concept of central bank independence needs to be reviewed. Independence from government and populist pressures on monetary policy does not necessarily translate into independence from financial market pressures.

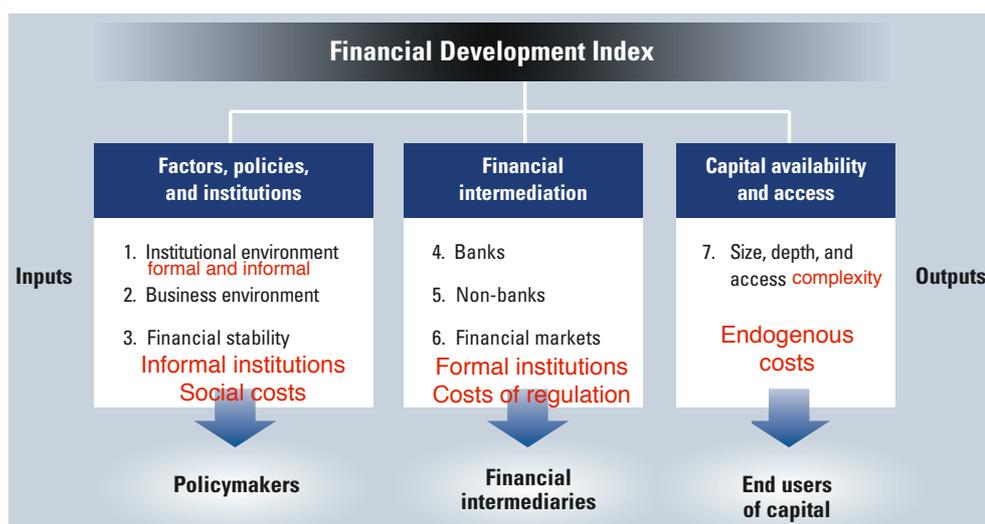
Second, it is crucial to question the “natural rate of unemployment” theory that targets an inflation rate of approximately 2 percent, which has weak theoretical and empirical foundations (Galbraith, 1999, Epstein, 2002, Palley, 2011). Inflation targets can be raised, especially during recessions, when deflation poses a greater threat than real price increases. A 4-5 percent inflation target would be perfectly acceptable and equilibrate the distributional effect of monetary policy.

### **Rethinking financial development**

Rethinking financial development forces one to reconsider the poorly named process of financial innovation. Poorly named because most of the “innovative” financial instruments

developed in recent decades are not true examples of innovation and, according to Partnoys (2003), have been designed for regulatory arbitrage purposes. Such a mandate for this new state agency would help link the regulatory structure to innovative activities, one challenge of financial regulation according to Lumpkin (2009). He provided an overview of the regulatory framework in most OECD countries, which entails the following activities: “1) *licensing, registration, and prudential supervision of some categories of financial institutions*; 2) *disclosure requirements for public offerings of securities*; 3) *authorization and oversight of securities markets*; 4) *regulatory and supervisory procedures governing the management of financial distress events and the restructuring or exit of insolvent financial institutions*; 5) *regulation of anti-competitive market structures and takeover activity*; and 6) *regulation of market conduct*.” (Lumpkin, 2009:12). These activities have to be linked to processes of financial innovation. Ultimately, in most other industries, before innovations enter markets, it is necessary to demonstrate that they are not harmful to consumers.

Thus, financial development has to be considered against the background of financial innovation and complexity and the costs they produce. These costs are reflected (in red) in a modified version of the Financial Development Index designed by Roubini and Bilodeau (2008), as figure 7 below shows. As it became quite obvious for other economic phenomena (economic growth or financial liberalization), a financial development index should include “qualitative” elements to capture the quality of financial development. Such a costs approach would question financial development as an unconditionally beneficial process.



Source: World Economic Forum, (Roubini and Bilodeau, 2008:5)

Figure 7. Composition of the financial development index (costs of financial development added in red by the author)

What are the consequences of having large and deep financial sectors selling instruments that are so complex that professional wealth managers have to ask consultants before purchasing them? The regulatory and social costs have to be considered because they will impact the output (size, depth and access) that Roubini and Bilodeau selected as their definition of financial development. Finally, it should also include a measure of the complexity of the financial sector. The obvious problem is to agree on a definition of complexity, but a practical approach would be to use a survey and solicit the opinions of market participants and investors. What is important is not whether a financial instrument is complex in absolute terms, but whether industry professionals can manage such complexity. From this perspective, accessibility would be measured by the number of persons who feel confident enough to use it. If financial literacy is a recognized factor that is important for the development of inclusive financial sectors, one must determine whether, in light of the extraordinarily pace of financial innovation in recent years, the financial literacy of market participants has also become an issue. This could serve as a sort of "barometer of complexity".

Additional regulation, responding to the lack of confidence in the solvency of financial institutions, is not necessarily the solution. While it can provide short-term solutions when markets are prone to panic, it does not address certain fundamental flaws in modern financial sectors that this dissertation has attempted to highlight. At worst, this could increase uncertainty through pro-cyclicality and systemic risk. Financial regulation seems trapped in a vicious cycle in which additional regulation entails further uncertainty and risk, which increases distrust and thereby increases the demand for regulation. Zingales' (2004) notion of a governmental body dedicated to the analysis of the costs and benefits of new regulation could be a means of escaping this negative spiral, but it should also be coupled with a reflection on which types of costs should be considered. This could be an occasion to more clearly define the purpose of financial development. The main challenge of regulation is to balance private propensities for risk-taking, which should not be zero because such activity provides substantial benefits for society, and the disastrous social costs of instability. A perspective that accounts for social costs could help maintain equilibrium. This social component of regulation stems from the common good that finance provides to society, and the protection of this common good should be a policy concern.

Few studies have analyzed how financial market participants cope in a low-trust environment, and it is necessary to empirically understand the link between certain norms and rules, their impacts on financial sectors, the interactions they produce and how these are materialized as outcomes. Understanding this would be important for financial institutions with respect to the best practice policies they are establishing, the moral standards that they attempt to encourage and the training of sales and relationship

managers who are in direct contact with clients. It is also relevant for policy making because it would clarify the link between trust and regulation.

In this regards, a closer look at the LIBOR scandal is valuable. *“The lesson of Libor,”* Yglesias wrote in Slate Magazine, *“is that regulators need to recognize that bankers have cast aside the clubby values of yore, and they need to respond in kind. Banks will try to abide by the letter of the law, but where loopholes exist, they’ll be ruthlessly exploited through dishonest means if necessary and the financial cops need to have a fundamentally suspicious attitude toward the regulated entities”* (Yglesias, 2012). The LIBOR scandal offers a glimpse of the broken relationship between regulators and the regulated. However, responding to dishonesty with increased suspicion is treating the symptoms and not the root cause of the disease. If the respectable bankers of the past are gone, regulators should find ways to promote incentives such that finance becomes honest again. There is a solid theoretical basis for markets functioning absent any sort of legal enforcement (Tesler, 1980, Klein and Keith, 1981, Boot and Thakor, 1997). However, for contracts to enforce themselves, participants need to value reputational capital to a greater extent than financial capital. The invisible hand of the market is effective, provided that participants are disciplined and evolve in a structure in which they will lose much more by cheating than by abiding by their words. Quinn’s study of goldsmith-bankers in the late seventeenth century revealed that cooperation emerged endogenously among them through self-interest supported by a certain social structure: *“In lacking a formal institutional structure governing acceptance and clearing, goldsmith-bankers evince how economic incentives, supported by apprenticeship, proximity, and social ties, shaped an early modern banking network integral to the Financial Revolution”* (Quinn, 1997:414).

In a similar vein, Stringham (2003) demonstrated how securities trading in seventeenth century Amsterdam developed outside the legal structure of the era. Complex financial transactions occurred in Amsterdam though they had no legal support because there were sufficient market incentives to favor that behavior. Stringham showed that stockbrokers relied on the discipline of continuous dealings and reputation alone. Basing his findings from the report of a Jewish merchant dealing in Amsterdam, De la Vega’s *Confusion de Confusiones*, Stringham wrote: *“At the Amsterdam Bourse each broker had to work to get business. Capitalists and merchants were able to make the trade themselves so they would only choose to go to the broker and pay his fee if they were getting value out such an arrangement”* (Stringham, 2003:336). Surprisingly, he did not mention another element at work in this context: Learning. The clients of Amsterdam stock-brokers were able to conduct trades themselves, if they wished to do so. Examining the historical records documenting the last three decades of the seventeenth century, Carlos et al. (1998) described how learning enabled the London stock market to emerge. *“Each transaction provided the basis for the growth of knowledge capital that could be*

*thought of, in part, as a public good available in the coffee houses of the period” (Carlos et al., 1998:320). From this vantage point, it is the knowledge of the market and the learning process among agents that allowed the London Stock Exchange to emerge. It was formally created by the establishment of the Bank of England and all of the other laws strengthening private property that were passed in the wake of the Glorious Revolution, but learning had to occur first. “Individual investors learned how to make (and lose) money in ways that did not directly involve productive processes. They learned how to share risk in commercial and financial endeavors; how to buy and sell, and where to buy and sell. They learned about the financial rewards and losses they could incur. Concomitant with this was the learning by specialized brokers who managed the trade during these early years. The goldsmith bankers increased their expertise in the equity section of the market” (Carlos et al., 1998:342).*

These examples of financial markets development show that it is necessary to consider the institutional and social context in which finance sectors develop. The costs of financial market development will depend on specific institutional settings. In other words, the interplays between institutions, defined after North (1989) mentioned in the subsequent chapters, and financial sectors are worth exploring. The main argument of the following and final two chapters is that it is in these interstices, between institutions and finance, that one can locate the conditions for the efficient functioning of financial sectors. Thus, chapter three will consider the institutional and social costs of financial sector development, while chapter four will use the case of SME finance in Russia to show the importance social structure underpinning financial system.

## **Conclusion**

This chapter showed that three notions of time coexist: Firstly, the nearly speed-of-light transactions of the most sophisticated players who use financial markets to prey on other, “weaker” players. Secondly, short-term horizon binds the interests of short-term shareholders, whose claim on firms in terms of financial profitability are not realistic, with those of top managers, who are using the notion of shareholder value to justify asset stripping and share buy back. Finally, the longer time horizon of the enterprises that financial capitalism seems to consider irrelevant. Some financial market participants profit enormously from this new financial market system, while short-term shareholders’ interests and CEOs are protected. This clash of temporality stems from the obsession with liquidity that is the hallmark of financial market development over the past 30 years supported by the increasing speed of transactions. Short-term transactions allow markets to be more liquid.

It is as though exchanges are not seeking actual clients whom they can serve, but simply liquidity providers. The question of the nature of a financial intermediary and in whose best interests it has to operate is no longer important provided that the shareholders in the companies operating the stock market are able to profit. Does this mean that the question of conflicts of interest can be eluded provided that stock exchanges are financially healthy? If stock exchanges do not operate in the interest of the investors first, do they then not lose their very purpose? Would a hospital in which patient health is not placed before all other concerns still be called a hospital? In other words, one must ask whether the profound changes that affected the stock market over the last 30 years did not affect its very nature and the nature of finance itself.

Information only becomes public when it is delayed. This might not have been a problem when transaction speed was not particularly important, but execution times are currently measured in milliseconds, which alters the public nature of financial market output. Data are provided by the various trading venues, stock markets or alternative trading systems, and substantial fees are extracted from these data. This privatizes information that is supposed to be public but only becomes public after having passed through the servers and trading venues of the most sophisticated players. Even then, it is filtered by the financial media and financial analysts, which amplifies price movements. As noted in chapter one, this is symptomatic of a new relationship between financial markets and the financial news industry, one that confuses market reality with market potential. Here again, the drive for more transparent and standardized data has profited the same players whose businesses thrive on liquidity.

By the same token, the supremacy of liquidity and shareholder value narrowed the real nature of the shareholder to an unconscious, short-sighted, opportunistic individual. One can well argue that a shareholder who does not support the risk of his/her investment, either because his/her investment time frame is less than a second or because ideology managed to obscure the legal and economic reality of a corporation, is no longer a shareholder. While shareholders should be those who take on the risk of entrepreneurial ventures, financial markets provide them with a free “exit opportunity”. This “exit opportunity”, sustained by the production of financial information, is changing the nature of shareholder involvement in the firm. It is inverting economic logic. Not only has the share received by shareholders increased over the past 30 years, even as profits have decreased, it also became unthinkable that shareholders should receive less. As mentioned earlier, firms borrowed money to maintain shareholder satisfaction (and stock market quotations) at high levels by leveraging their economic activities with debt.

As mentioned, there are some attempts to determine whether the financial sectors of developed economies were oversized. Recent studies have toyed with the notion of limits to the development of financial sectors. Arcand et al. (2012) demonstrated that financial

depth, measured by the amount of credit provided to the private sector as percentage of GDP, has a threshold (80 - 100 percent) beyond which additional finance is associated with reduced economic growth. Philippon (2012) focused on the efficiency of the financial sector and found that the costs of intermediation, historically at approximately 2 percent, have increased since the 1980s. This dissertation reveals that while these measures might be useful, one must analyze the importance of financial sectors political economy perspective. If the entire machine seems to work for shareholders when auditors, ratings agencies and market regulators serve as watchdogs for the shareholders' interests, it is important to recall that this institutional infrastructure that privileges shareholders is the result of political decisions and not a natural evolution.

The mediation of the confrontation between various efficiencies is a political issue and should not be left to market forces alone, just as environmental efficiency (which occasionally contradicts economic productive efficiency) can be protected by state environmental standards. It is not the case that simply because capital is and should be a private good that the profitability of entire economic systems should be defined by the profitability of capital alone. Similarly, privately owned chemical plants cannot define environmental standards. The efficiency of risk allocation is important to owners of financial capital, but, if taken to its extreme, it might come at the expense of the economic productive efficiency of a firm. How many opportunities for entrepreneurial ventures or investments in growth have been missed simply because economic value added was exclusively defined from the perspective of shareholder value?

These are questions that cannot be ignored under the justification that financial markets are the best available means of allocating capital efficiently and financial market efficiency is the only form of efficiency that matters. The hegemony of neoliberalism does not summon the *end of capital*. Bell famously wrote in 1978, "*The problem of capital - of raising it and spending it - is still very much with us, in the advanced industrial societies as well as the underdeveloped economies. In economic fact, it will always be with us.*" (Bell, 1978:230). This dissertation has attempted to demonstrate that this problem cannot be resolved based on the efficiency of financial systems alone because financial systems are evolving and financial systems are a part of broader institutional structures that influence the way financial systems operate. It is, modestly, a reminder of D. Bell's corollary questions: How much do we want to spend and for whom? Krippner's political economy of financial liberalization showed that politics decided to let financial sectors answer that question to avoid political damage. By letting finance developed into a huge and complex risk distribution mechanism, the political costs that Bell's question entails have been swept under the carpet until now, but others have emerged.

The development of financial markets has favored some financial institutions using strategies that imply increasingly complex instruments and short-term horizons, which

can impede economic growth. These institutions also benefit the most from international financial liberalization. Financial information circulates among financial journalists and market participants who know one another and only reaches outside investors after a series of feedback loops (Oberlechner and Hocking, 2004). Thus, certain groups of market participants have access to data and information unavailable to outside circles. This is an ironic development, as one of the primary advantages of financial markets over banks was the more efficient spread of information. The conflict of interest and the recurrent instances of scandals and frauds involving listed firms and a series of informational intermediaries (ratings agencies, financial analysts, the finance media, auditing companies) indicates the manipulation of information. The LIBOR scandals of 2011-2012 are the most symptomatic of a financial system functioning with different rules for certain participants.

So as complex finance develops its own set of rules, it also processes data and information in a manner that is less accessible to the rest of society. That is what chapter three will argue. The informal norms it developed conflict with financial regulations and the informal norms of the rest of society.

What are the social consequences of such a transition? How is the institutional structure (from a sociological perspective) adapting to it? How are the formal and informal rules, norms and routines governing the financial sector changing?

The following chapter attempts to address these questions. After having discussed the consequences of financial sectors developing separately from the economy, the next chapter will articulate the consequences of a financial sector developing separately from society.

## CHAPTER 3

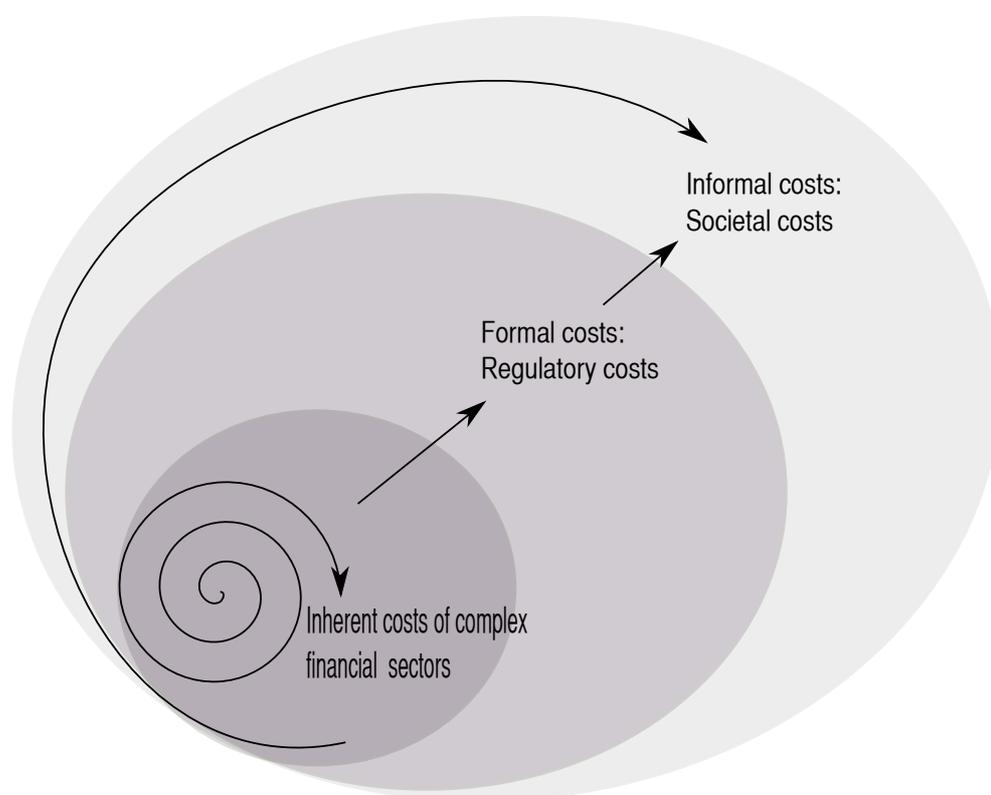
# The “finance – society nexus”: When finance is too quick

Asking the questions concluding chapter one entails admitting that financial sectors evolve and do so within the broad institutional structures of societies. In chapter three, we will describe the formal (rules and regulations) and informal (norms and habits) institutional frameworks among SMEs and those connecting them to the banking sector in Russia. In many transitional and emerging economies, financial sectors do not develop at the same pace as formal and informal institutions. As chapter three shows, this affects the relationship between the productive economy and the financial sector. The formal rules of the game function well but do not correspond to informal norms. The weight of informal constraints affects the operations of a reformed financial sector (on paper). Simply put, society is too slow. However, what are the consequences when financial sectors evolve too rapidly relative to society? This “finance-society gap” can be observed in emerging economies due to underdeveloped institutions, but it also appears in Western economies, due to overdeveloped financial sectors. The tremendous developments in the financial sectors of developed economies have exerted pressures on the very institutions that are intended to support them. Thus, as financial systems became increasingly complex, there might not only be a trade-off between the allocation of capital and the allocation of risk but also other costs. In that case, finance is developing too rapidly, thereby rendering institutions obsolete. This second chapter examines the social costs of large and complex financial sectors.

In other words, this chapter will extend the intense debate over “too big to fail” (TBTF) institutions to an arguably “too complex to be beneficial” financial system. The issue of “too big to fail” (TBTF) has received substantial attention of late. From bailouts to scandals, the international financial media have used TBTF to describe financial institutions that state could not afford to let fail and then summarized the difficulty of

regulating these institutions through the catchphrase “too big to regulate”. The latest scandal involving HSBC demonstrated that certain banks were even “too big to jail”. This chapter adopts the unfortunate evolution of the journalistic terms used to describe large banks but does so for the entire financial sector, as figure 8 below depicts.

Thus, it first presents the issue of TBTF. It is, ultimately, an important component of the social costs of a financial system. The second section briefly cites certain benefits that complex modern finance has generated. Modern financial systems are not only large but also complex and thus display numerous additional advantages beyond the simple economies of scale obtained by megabanks.



**Figure 8. The costs of large financial sectors: An institutional perspective**

However, these benefits come at a cost. The costs of a financial system that is “too complex to be beneficial” are manifold and embedded in the social fabric of which financial sectors are a part. This chapter categorizes these costs into formal ones (costs of regulation) and informal ones. The implicit subsidies and bailout funds that distressed financial institutions received constitute just the top of the iceberg. Just as the insufficiently developed institutions of emerging economies are unable to properly support their financial sectors, the financial sectors of developed economies have pursued innovation to such an extent that institutions have had difficulty adapting. Thus, the third

section analyzes the regulatory issues (formal institutional costs) associated with such innovation. It examines how complex financial sectors transfer the burden of complexity onto formal institutions, namely the regulatory framework. Regulations have direct and indirect costs, but they also distort markets and affect societies, while maximizing the welfare of society is their primary concern. However, Institutional Economics reminds us that formal institutions alone are insufficient. Norms and habits also must be considered too. Are modern financial systems destroying the social basis on which formal rules rely and that ultimately allow efficient transactions to take place? The fourth section attempts to determine how complex finance affects informal institutions. Complex financial sectors, for example, provide increased opportunities for fraud, which has a direct impact on the level of trust that societies have in the financial sector. These types of effects must be acknowledged as a consequence of complex finance.

### **3.1. From “too big to fail” to “too complex to regulate”**

The recent crisis of 2008-2010 demonstrated that the sheer size of certain financial institutions can be detrimental. The social costs of TBTF institutions are first realized in the implicit subsidy that governments provide to megabanks, free of charge. There are several approaches that obtain different estimates of these costs. A recent paper by Jacewitz and Pogach (2013) revealed a risk premium gap of approximately 45 basis points between the largest and other banks. The interest paid on money market deposit accounts is lower for large banks than it is for smaller banks, even after controlling for balance sheet risk and market conditions.

This gap of 45 basis points could be attributed to a TBTF subsidy. Kane (2013) calculated this subsidy using an option pricing approach. The implicit safety net provided to large financial institutions can be considered a taxpayer’s put sold by financial institutions to governments. Systemic risk can then be conceived as a portfolio of taxpayer puts. Haldane (2010) suggested a simple proxy. Ratings agencies provide both “standalone” and “support” ratings because they account for expected government support when analyzing large banks. By the same token, ratings are on average lower for small UK banks than they are for large UK banks. One can then associate the difference in ratings to the yields paid on banks’ bonds and then scale this difference by the value of each bank’s rating-sensitive liabilities. The expected support that governments provide free of charge thus reduces large banks’ funding costs, but the costs of this insurance are paid by society. The forgone subsidy is not spent elsewhere.

Boyd and Heitz (2011) adopted a slightly different approach, beginning with the extreme assumption that the last crisis was entirely due to large banks. They then calculated the

costs of the 2007-2009 crisis based on a loss of real per capita output for the US of only 37.8 percent. They then estimated the benefit of economies of scale, which amounts to approximately 24 percent of base year per capita output. These figures result from an intentionally biased assumption that overestimated the benefits of economies of scale and underestimated the costs of the crisis. Even under these assumptions, costs exceed benefits at a ratio of 1.82. They also entail that a repayment period of 63.04 good, non-crisis years is necessary to compensate for the losses of a single crisis.

The selection of a method to calculate the precise costs of large financial institutions is controversial. Should one consider the costs of a crisis measured by lost economic growth, one would have to prove that large banks are the primary cause of a crisis. If implicit subsidies are treated as the primary costs, it remains unclear which methods one should employ. However, at a minimum, there seems to be consensus that large financial institutions are somehow costly. The debate concerns the extent of such costs and how to calculate them. The same cannot be said of the benefits of size. Some academics have found evidence of economies of scale (Berger and Mester, 1997, Wheelock and Wilson, 2009, Mester, 2010). However, others have found that economies of scale depend on banks' capital structures and the risk models (Hugues et al., 2001). By the same token, De Nicolo (2000) argued that if the benefits of diversification stemming from scale exist, they are more than offset by the greater risk-taking associated with a larger size. Haldane (2010) agreed that if there were economies of scale, they would be obtained below a critical size of \$100 billion of assets under management, perhaps much less. In a similar vein, consolidation in the commercial banking sector is only beneficial up to a certain point. In other words, economies of scale follow a U-shaped pattern with a minimum at approximately \$10 billion (Amel et al., 2004). Thus, the benefits of size are far from clear.

Moreover, complex environments and their degree of connectedness can drive diseconomies of scale. Larger is not necessarily better in complexity economics. The number of interdependencies grows exponentially relative to the number of nodes. As the number of connections increases, so does the probability that a positive change in one segment of the network will have a negative effect somewhere else. The denser a network, the less adaptable it is. There is a "*clear trade off between the benefit of scale and the coordination costs and constraints created by complexity*" (Beinhocker, 2006:151)

This causes us to consider not only the size but also other parameters, such as connectedness and correlation, and not only banks but also the financial sector as a whole. An evolutionary economics perspective suggests that one should consider the financial sector as an organism in an environment. If TBTF arguments were valid for banks in the financial sector, similar arguments would apply to the financial sector within

society at large. Therefore, let us attempt to extend this perspective and consider the benefits that complex finance has delivered, before considering its costs.

Chapter one mentioned certain advantages of complex finance, which relate to two features exhibited by market-based financial systems: 1) the spread of information and 2) the transfer of risks.

- 1) The informational efficiency of financial markets has received substantial academic attention, as the question of whether prices reflect fundamental economic efficiently is a crucial issue that lies at the core of the operation of financial markets. Once the notion of informational efficiency is accepted, financial markets have numerous advantages. As mentioned in the first chapter, the incentives to search for information are greater because it is easier to profit from it (Holmstrom and Tirole, 1993). Markets play a positive role in aggregating diffuse information and transmitting it to investors (Boot and Thakor, 1997). The way in which information is spread is fundamental to the price formation mechanism. A key characteristic of financial markets is that the equilibrium generated by markets provides valuable information that will be considered in firm decision making. Bank-based systems lack this so-called “information feedback” (Tadesse, 2002). This feature, combined with the technological progress, has allowed for reduced transaction costs and time for financial market participants. The development of High Frequency Trading (HFT), mentioned in chapter one, is the most visible result of this combination. Findings indicate that HFT positively affects market quality, as measured by short-term volatility, spread and the depth of the limit order book (Hasbrouck and Saar, 2011), and aids in price discovery by providing improved bid and offer quotes (Brogaard, 2010). By the same token, Algorithmic Trading (AT) improves liquidity and information display (Hendershott et al., 2011; Hendershott and Riordan, 2009). That HFT strategies entail that securities should be held for a very brief time is typical of the risk management feature of financial markets. These are characterized by a short-term perspective on time, which is also due to the various market participants and their strategies.
- 2) Risk management is closely related to risk transfer and the possibility of transaction and diversification. The prevalence of “transactional” over “relational” finance stems from the use of hard information. Hard information can be reduced to a series of numbers, while soft information *“cannot be directly verified by anyone other than by the agent who produces the information”* (Stein, 2002:1892). Due to organizational diseconomies, large banks are better positioned to exploit hard information, whereas small ones are advantaged in the treatment of soft information. Against the background of financial innovation, it is unsurprising that financial innovations, which were accompanied by this hardening of information,

have benefited large firms. This hardening of soft information increased large banks' ability to process data and eventually led to greater bank productivity. This process is the cause of the increase in distance between small firms and their lenders in the U.S., according to Petersen and Rajan (2000). Therefore, the hardening of soft information provides for increased credit availability for SMEs by reducing the distance between borrowers and lenders or making new lending technologies that are appropriate for opaque firms available. The development of securitization is a case in point. It creates a secondary market for loans, which provides increased liquidity. It enhances risk management by unbundling credit risks, thereby allowing them to be more efficiently distributed. The transfer of risk releases capital that can be reused for loans to other SMEs. Moreover, it provides investors with additional diversification opportunities (Kraemer-Eis et al., 2010). Finally, one cannot overlook financial globalization, which benefited the development of financial systems in emerging countries. It produced more efficient banking sectors and developed financial markets, which in turn positively affected economic growth (Levine, 2001). However, it also afforded international investors additional diversification opportunities. If the most important function of capital markets at the domestic level is the pooling of savings to be efficiently allocated elsewhere, at the international level, the function of capital markets is the pooling of risks assured by a diversity of financial instruments (Obstfeld and Taylor, 2004:6).

Therefore, it is undeniable that financial sector development is beneficial. However, chapter one also provided numerous arguments questioning the theoretical basis and the practical operation of capital markets. These arguments suggest that there might be limits to the development of financial sectors; some recent papers have addressed these issues (Philippon, 2012; Arcand et al., 2012) but failed to account for the institutional costs implied by large and complex financial sectors. The following section considers the formal institutional costs, namely regulatory costs, and the subsequent one focuses on informal institutional costs (norms and habits).

## **3.2. Formal Institutional costs: Regulation**

### **3.2.1. Costs of regulation**

Regulations are not a free good, and there is a trade off between providing protections for investors and the costs of financial services. Regulations are directly and indirectly costly and introduce distortion costs into the market (Briault, 2003). Thus regulatory costs

cannot be reduced to the operational costs of operating regulatory agencies alone (the direct cost of regulation). These are the easiest to calculate in transparent and open countries, but this presupposes a well-developed institutional system, which is more expensive in developing economies. The indirect and distortion costs of regulation should be added to these operational costs. Indirect costs - activities that financial institutions would not undertake absent regulation - are the incremental cost of compliance, for example, compliance staff and record-keeping expenses. It is very difficult to accurately measure the direct and indirect costs of regulation, but a 1998 estimate indicates that the US banking industry pays approximately 6-14 percent in non-interest expenses (Franks et al., 1998). More recent figures that would allow for a comparison are not available. Such information would also provide us with a measure of the transition toward risk management. Ellihäusen and Lowrey (2000) demonstrated that start-up compliance costs are insensitive to the extent of changes required to implement the regulation, meaning that it is less costly for financial institutions to implement large, sporadic changes (Ellihäusen and Lowrey, 2000:165). Thus, a policy of frequent, minor changes, perhaps more appropriate to the continuous flow of new financial products, would be very costly. The indirect costs of regulation could be well illustrated by the recent decision to require over-the-counter derivatives activities to pass through a clearing house. This entails hiring additional staff at clearing houses. Soffex (a former Scoach market) employed 2 persons for clearing activities. Eurex now employs 8. The clearing house requirement necessitates a staff of 25-30 mathematicians and experts in financial strategies (Garessus, 2012). The evolution of the financial sector toward increased complexity was answered by greater regulation requiring additional staff. While once there was one regulator for every three banks in the U.S. in 1935, there are now three regulators for every US bank (Haldane, 2012).

Finally, distortion costs are the altering the nature of markets by regulating firm entry, competition rules, and products. Regulations establishing a limit on the speed of transactions, for example, would create distortion costs. These costs are very difficult to assess but represent the most important type of costs. Among such costs, one can distinguish distortions to competition, increased supply shortages, increased moral hazard, and increased pro-cyclicality and systemic risk (Nebel, 2004). The remainder of this section addresses pro-cyclicality and systemic risk to demonstrate the paradoxical nature of a complex financial sector. In essence, one can see that complex finance demands complex regulation, which increases regulatory and systemic risks. This becomes counterproductive, as the function of regulation, from an institutional perspective, is to reduce uncertainty. The emergence of concerns such as “complex financial instruments” and “legal risks” during the 2000s until the onset of the credit crisis is a striking example of this paradox. The regulatory burden represented the most frequently cited risk in financial markets in 2005 and 2006 until the uncertainty that emerged in 2007 completely altered the risk landscape (CSFI, 2003, CSFI, 2006, CSFI,

2008, CSFI, 2002). The proliferation of rules and agencies, combined with increasingly sophisticated regulation, amplified regulatory risks. This ambiguous concept is not precisely defined but ranges from adverse government intervention to the risk of a regulatory breach (Ngo, 2006). Keith Hawkes, head of network support at HSBC, in the *Bananas Skins 2002*, observed that banks were “*facing growing risks simply from the pressure to keep abreast of the volume of regulation, and implement it without making mistakes or alienating customers*” (CSFI, 2002:14).

At the international level, the debate over whether international regulation is reducing or exacerbating risks is even more complex. Some experts feared that the Basel II framework would be a fiasco and that “*banks will end up managing Basel II rather than managing risk*” (Ngo, 2006:3). Regulation can have the perverse effect of aggravating instability. The market-sensitive risk management encouraged by regulatory measures considers the uncertainty of asset returns to be exogenous and estimates risks using historical data. This assumption leads to a failure to address the importance of feedback effects stemming from the use of these risk management techniques (Danielsson et al., 2002). The 2007-2009 crisis revealed that the international regulatory framework not only failed to protect the financial system but that it also contributed to it. The Basel II framework linked Capital Asset Requirements (CARs) to the ratings of external agencies, whose added-value has yet to be proven (White, 2001, Ferri and Liu, 2005, Posen and Smick, 2008) and which are inherently pro-cyclical (Ferri et al., 1999). Moreover, combining mark-to-market accounting with risk-based capital standards only aggravated the pro-cyclical character of the regulatory framework and exacerbated systemic risks (Kling, 2009). Additionally, a homogeneous regulatory framework creates an environment in which all actors have the same taste for indicators and information, which increases the risk of herd behavior. This highlights the inherent contradiction of financial regulation: “*No degree of greater sophistication in the modeling of the price of risk will get around this fact. In this world, where falling prices generate more sell-orders from price-sensitive risk models, markets will not be self-stabilising but destabilising*” (Persaud, 2008:2).

Moreover, international financial regulation has been further criticized because its necessity is debatable. Oatley (2001) claimed that international regulations emerge as a result of political motivations to level the playing field, but they might not be necessary from an economic perspective because international financial markets do not create new market failures that could not be addressed at the domestic level. The result is not a regulatory framework intended to protect the financial system but, instead, one with the purpose of minimizing the distributional consequences of various national regimes.

Thus, the harmful and unintended consequences of harmonization are advanced as a defense of regulatory diversity. Diverse environments in which redundancies and duplications are possible will better serve the cause of financial innovation (White, 2009).

However, such an environment is costly, and in practice, the process of financial regulation is already very complex; it is a “*hydra-headed monster due to problems of imperfect information, legal issues surrounding the allocation of responsibilities and powers, difficulties in design of incentive structures and accountability arrangements, and the ongoing evolution of the financial system*” (Davis, 2008:1).

Thus the shift to market-based financial systems improved liquidity in quiet times, but it also made the tasks of regulators more difficult. Institutional ownership, internationalization and computerization can be considered three contextual factors that dramatically increased all aspects of securities trading. The SEC’s staff, however, has not grown substantially since 1980, whereas between 1980 and 2000, all financial sectors increased in size and sophistication. Accounting became increasingly complex, for example, but it was well known that the SEC’s lack of interest in and resources for accounting prevented it from retaining expertise in that field (Berenson, 2003:55). The Levitt Chairmanship of the SEC was a constant struggle for resources. Under Levitt, its budget grew from \$ 253.2 million to \$ 382.4 million between 1993 and 2000, or an average of 6 percent per year. Staff positions grew at an average of 1.4 percent annually (Seligman, 2003:630). To make matters worse, more than 30 percent of the SEC’s employees quit between 1998 and 2000, meaning that the Commission was becoming inexperienced and understaffed and therefore unable to meet even modest objectives: “*In 2001 the division reviewed only 2,280 of the 14,000 annual reports it received. In other words, more than 80 percent of all annual reports were released to investors without any review*” (Berenson, 2003:133). The difficulties that developing countries face are even greater. The regulatory model applied in developed countries is highly dependent on accurate information, highly skilled technicians and an impartial bureaucracy. However, regulation alone is thus insufficient and relies on other institutional elements to work efficiently. This is why scholars have argued for sequenced liberalization (Brownbridge and Kirkpatrick, 2000) and against the exportation of developed countries’ regulatory models (Caprio, 1996). If the case has been made that financial liberalization has triggered a series of crises in developing countries and its pace should be aligned with institutional development, by the same token, there is a case to be made for “financial innovation sequencing” in developed countries. If the pace of financial liberalization should be measured against the capacity of developing countries’ regulatory and social institutions to adapt, then why should financial innovation be viewed in absolute terms? If the relationship between financial liberalization and the broad institutional framework must be considered to avoid high levels of instability in developing countries, it is also necessary to account for the relationship between financial innovation and the broad institutional framework in developed countries. In other words, financial innovation should be treated akin to financial liberalization with respect to its relationship with institutions.

### 3.2.2. Evolution of regulatory frameworks

Over the past 30 years, financial regulation has adapted to the shift from a bank-based to a market-based financial system. The functional shift from capital allocation to risk allocation, as exposed in the first chapter, has and continues to pose two fundamental challenges for regulators.

First the frontier between financial institutions and the financial instruments they offer is no longer as clear-cut as it once was. Non-banks entered the banking industry, and while this delivered numerous benefits, it nonetheless altered the subtle equilibrium between the privately and socially acceptable levels of risk.

Second the growing complexity of financial systems implied a paradigm shift, the effectiveness and efficiency of which has to be examined. In other words, in the face of ever more complex financial systems, one has to ask whether regulations are serving their intended purposes and how costly they are.

Regulation in the banking sector was based on the understanding that the charter value could be used to align a bank's appetite for risk with the social goal of a stable banking system. The goal of regulation is not to eliminate risk taking or fraud, but to reconcile the private missions of individual banks with the social purpose of a banking sector. Restrictions on the entry of competitors provided banks with an incentive to limit their risks because the charter value was high. Regulators sought to limit risk taking via incentives, such as restrictions on entry to the banking sector or interest-rate ceilings on liabilities.

These types of subsidies compensated for regulatory burdens such as capital requirements, prohibitions against certain types of activities and reporting. The effectiveness of both the restrictions and the subsidies depended on limiting entry to the banking sector (Gorton, 1994). Once non-banks are able to perform the same activities as banks, the charter value is reduced and banks are driven into more risky activities. In other words, once the central bank and commercial banks were no longer a closed "club", the rules of the game on which regulation was based also changed. *"Thus there is a tendency for the regulatory framework to expand by creating an ever-increasing set of rules, regulations, and fire walls which rely on regulators for enforcement rather than on the creation of incentives for limiting risk-taking"* (Gorton, 1994:108).

The shift in the regulatory paradigm was inaccurately termed "deregulation", which does not mean fewer rules but quite the opposite. Vogel (1996) illustrated this paradox through The British financial revolution of the 1980s. The Financial Services Act (FSA) was

passed on November 7 1986 after the Big Bang gave birth to myriad regulatory agencies. He also noted a change in “regulatory culture”: *The FSA may have revolutionized life in the City even more than the Big Bang, for in matters of regulation it replaced the informal with the formal, the flexible with the rigid, and the personal with the legalistic*” (Vogel, 1996:93). This demonstrates that financial regulation is also embedded in broader social and cultural structures that evolve over time.

However, academics, regulators and practitioners lack a theoretical framework for regulation that accounts for the embeddedness of financial regulations into the social economic structure. Curries’ words remain valid: *“There are no well developed theories of regulation that provides guidance as to the optimum regulatory mix for an economy at a certain stage of political, economic and social development given limited economic resources and infrastructure”* (Currie, 2005:3).

Early advocates of financial liberalization also failed to account for the social economic structure, and the implementation of financial liberalization was not consistently a success, to say the least. It led to financial fragility, and the emergence of crises following financial liberalization generated strong criticisms (Demirgüç-Kunt and Detragiache, 1998, Rodrik, 2000, Allegret et al., 2003). However, these advocates then conceded that there were two prerequisites necessary for financial liberalization: The existence of a sound domestic financial system resting on prudential regulation. Returning to the root of the problem, Arestis et al. (2005) contended that financial liberalization à la McKinnon and Shaw, occurring in an institutional vacuum, is doomed to fail. The McKinnon and Shaw model *“is abstracted from the complexities of money as a social institution. In reality, money is by nature socially embedded. The holding of money even in the simple rural setting discussed by McKinnon (1973), is subject to social obligations and constraints, and not simply driven by investment needs, the productivity of capital and real return on holding money”* (Arestis et al., 2005:5). The initial assumptions influenced economic reforms that were established without accounting for the economic and social realities of countries. While sound regulations are undoubtedly necessary, they are by no means sufficient. The need for an institutional approach that accounts for informal rules, local practices and knowledge is increasingly infrequently debated (Rodrick, 2000).

These considerations strengthen the argument for considering institutions in the design of economic reforms in developed economies. As developing countries need an appropriate regulatory structure to benefit from financial liberalization, developed countries must also ensure that they have the institutions needed to mitigate the costs of financial innovation while maintaining its benefits. Once institutions are included, what matters is not the sophistication of the financial sector and its regulation, but whether they are well suited to the rest of the social structure on which they rest.

### 3.2.3. Tensions between legal and financial systems

Ill-suited regulation can be reflected in frictions between law and finance (Macey and O'Hara, 2000). The financial functions of markets are market driven, whereas the legal structures surrounding them are an historical artifact. *“An interesting facet of [the interaction between financial markets and legal systems] is that while both the legal and financial aspects of markets evolve over time, they do so at different rates. That is, the legal structure of markets often involves political considerations, whereas the financial function of markets is typically market-driven. For example, the derivatives markets today are largely a product of financial innovations in the 1980s, but their legal structure is largely defined by laws and regulations promulgated in the 1930s. This divergence can create difficulties, or frictions, in how the markets operate, and these frictions can be exacerbated by uncertainty over how the legal framework actually applies in certain settings. Conversely, the existence of an exogenous set of rules, unaffected by market forces at least in the short run, can reduce other frictions in the market by removing some of the uncertainty surrounding the agency conflicts that arise in market settings. Thus, the interaction of the legal and financial both hinders and abets the efficient functioning of markets”* (Macey and O'Hara, 2000:113).

High Frequency Trading and the flash crash of May 2010 illustrate this point very well. Technological advances combined with financial innovation generate both advantages (Hendershott et al., 2011) and numerous concerns regarding stability, transparency and fairness. In this relationship, regulation is the tortoise running after the high frequency trading hare (Clark, 2011). *“With the growth of HFT”, Clark writes, “the equity market goal of raising capital for corporations seems to have been significantly diminished. This is evidenced, among other ways, by the lack of new listings in the market”* (Clark, 2011:285). This reminds us that regulation protects a social function of capital markets: Raising capital that is then allocated. Investor participation is conditioned by fair, transparent and understandable rules of the game.

The tension between legal systems and the functioning of modern financial markets is evident when one examines the classic legal genealogy of securities regulation in English law (Walker, 2008). The classic rationale, emphasizing the prevention of fraud via disclosure to protect investors, remained unchallenged from the emergence of stock markets (security regulation is an outgrowth of corporate law) until the development of the Efficient Financial Market Hypothesis (EFMH).

EFMH, in its weak and semi-strong forms, holds that the prices of securities reflect historical prices or all publicly available information. As prices themselves protected investors, attempts were made to adapt the regulatory framework accordingly. However,

the increasing complexity of financial markets began to pose challenges for the regulatory framework and its legal system. Walker argued that financial centers under the English legal tradition have to reclaim the classical genealogy of their legal systems when revising securities law (Walker, 2008). New rationales for regulation are emerging from behavioral finance that provide for a paternalistic approach to investor protection (because investors are irrational, they have to be protected against themselves) (Zingales, 2004). Complexity and fraud seem to occur in tandem. It is easier to divert resources within a maze of complex transactions. Moreover, the benefits of fraud, in other words, its effect on market evaluation, also increase, thus providing greater incentives to engage in fraudulent behavior. While one dollar of fraud resulted in a seven dollars increase in market valuation in 1980, in 2001, it resulted in a thirty-five dollars increase in market valuation (Zingales, 2004:39). “*There is a balance between market integrity and complexity, and the U.S. market, lately, seems very complex to us*” said Mr. Riess, managing director of Deutsche Börse in a 2010 interview.<sup>2</sup> The massive fraud illustrating this point is the LIBOR scandal that made headlines in 2012. The regulatory system applicable to reporting the rate relied on discipline and the assumption that integrity and reputation were more valued than the potential benefits of cheating. As the LIBOR scandal demonstrates, this assumption, derived from a regulatory framework in which financial authorities and financial institutions were collaborating, was false.

Waves of rapid and brusque financial liberalization in low-income countries have revealed the importance of a well-developed institutional framework. However, implementing sound and safe banking practices is not simple because institutions are composed of rules, procedures and norms that frame the decisions of economic and political actors. It is now clear that regulation alone is not sufficient and requires that institutional elements operate efficiently (De Capitani and North, 1994). As noted above, the need for an institutional approach that accounts for informal rules, local practices and knowledge is becoming increasingly accepted in the context of financial liberalization (Rodrik, 2000). The literature on financial liberalization, however, while recognizing the importance of the informal aspects of institutional development, has not, to our knowledge, extended this argument to financial innovation and complex financial sectors. Just as financial liberalization is an excess of complexity that institutions cannot absorb, the same is true of financial innovation. The very concepts that Western governments encourage their emerging partners to embrace (good governance, transparency, financial literacy, establishment of the rule of law) should find their way back into the economic policy arenas of developed economies. The LIBOR scandal demonstrates the urgency of rethinking the relationship between institutions (formal and informal) and complex financial systems. These systems engender costs far beyond the formal costs of regulation. The next section attempts to go beyond regulations and formal rules to

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<sup>2</sup> Interview by Jonathan Spicer for Thomson Reuters, available on the World Federation of Exchanges website <http://www.world-exchanges.org/insight/views/globally-flash-crash-no-flash-pan>

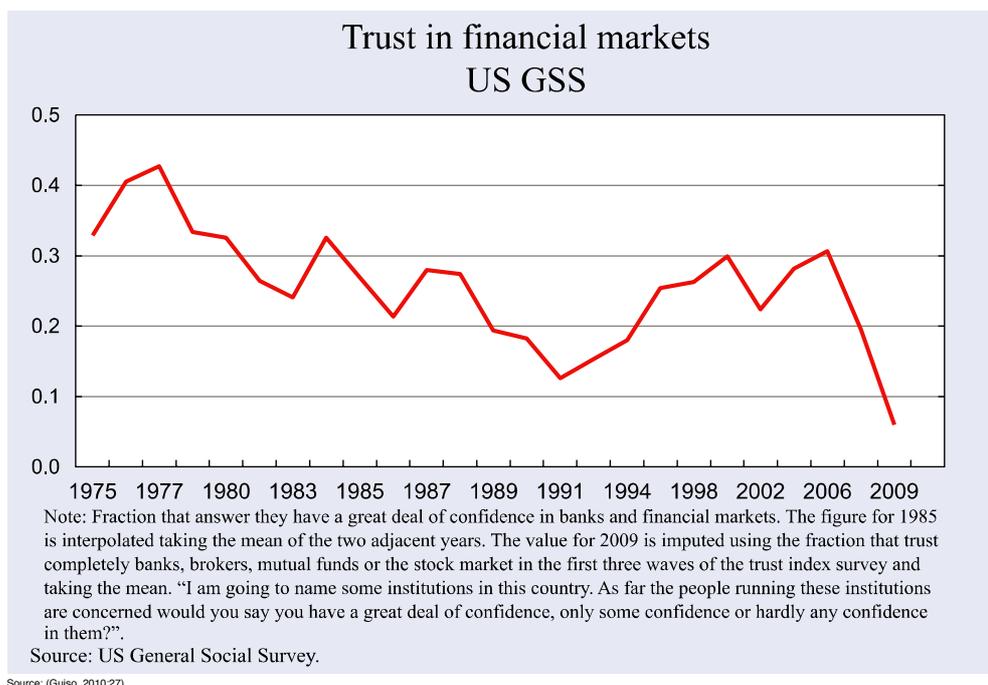
consider the “social damage” that complex finance could inflict. Politicians and scholars insist on the importance of “trust” for the financial industry, but there are few investigations of the social elements that constitute “trust”. What are the social costs of complex finance? “*Bankers*”, notes S. Strange, “*used to be thought of as staid and sober men, grave-faced and dressed in conservative black pinstripe suits, jealous of their reputation for caution and for the careful guardianship of their customers’ money. Something rather radical and serious has happened to the international financial system to make it so much like a gambling hall*” (Strange, 1986:2). Strange’s comment highlights a change in the “culture” upon which financial systems are built.

Thus, the functions of financial systems, the ways in which these functions are regulated and their “culture” all evolve. Because it is a broad term that could imply many different things, the following section draws upon institutional economics and concentrate on “informal constraints” (norms, habits, customs). Informal practices in Western financial systems can evolve in manners that are discordant with the rest of society’s understandings of the formal rules of the game, akin to how the informal practices of Russian society are at odds with the formal rules of the game that apply in financial sectors. As the third chapter demonstrates, the banker-client relationship in Russia follows human-devised, not generic, rules. In essence, the inertia in Russian society affects the operation of its financial system. The informal norms that continue to affect the behavior of many economic actors in Russia impact the development of the country’s financial sector. However, what about the reverse relationship? What are the social consequences of allowing financial market participants to devise their own rules that diverge from the generic rules of the rest of society? In other words, informal institutions in Russia affected the structure of the financial system. The “finance-society nexus” is examined in light of the transition process in chapter three. However, in the next section, we attempt to discern how the specific, informal norms of financial sector could affect society at large. We explore the “finance-society nexus” in light of the financial revolution in high-income countries.

### **3.3. Informal institutional costs: Socio-economic costs**

There are numerous studies on modern financial markets that emphasize the role of social factors. Lagoarde-Segot and Lucey (2008) examined the disturbances hindering the flow of information and could, in turn, affect in the allocational efficiency of stock markets in the Middle-Eastern North African region (MENA). They found that stock market size and liquidity are the main factors with positive effects on efficiency, but parameters such as a lack of transparency and the absence of a culture of equity must also be considered. Bos and Kool (2006), studying the domestic banking sector in the

Netherlands, attempted to identify variables that could capture local conditions. They sought to demonstrate the effects of social factors on cost and profit efficiency and found that these factors play a role, albeit to a limited extent. It has also been shown that in regions with high social capital, that is, where economic agents exhibit high levels of trust, financial markets are more developed (Guiso et al., 2004). Public trust can substitute for incomplete law and is thus crucial for economic growth in contexts where participants do not interact repeatedly (Carlin et al., 2009). Trust also increases the probability of investing in stocks and raises the share of the population investing stocks (Guiso et al., 2008:2558). There is a rich literature on the role of trust and social capital in economic development, spurred by Putnam and Helliwell's study (1995) on economic growth in Italy. While the importance of trust in economic transactions is not debated, much less attention has been devoted to how social capital and general trust die off. Is there an inverse relationship between the level complexity of financial products and the level of trust between economic agents? Financial markets, perhaps more than other markets, must rely on a "chain of trust" linking the various players from the end clients to the prime brokers. Could this mechanism be damaged by a complex financial sector? Guiso (2010) explored the impact of the financial crisis on public trust, using the Financial Trust Index Survey from the University of Chicago, conducted in several waves after the crisis on a sample of American households. Traditionally, Americans trusted banks and financial markets 50 percent more than they trusted a random person, which is understandable because individuals do not rely on a random person to manage their savings. However, this measure experienced a complete reversal: The decline in trust following the crisis was so substantial that respondents exhibited greater trust in a generic, unknown individual than in a bank or a banker, that is, in those institutions and persons that should be trusted the most given the role they play as the custodians of our savings. Guiso also aptly distinguished confidence in an institution's ability to repay its debt, which implies intrinsic riskiness, which differs from trusting that one will not be cheated when entering into economic relationships. That second notion entails a social risk and is much more difficult to rebuild than the former. The trust measures below, taken from Guiso's study, "*reflect the greater perceptions of an increased social risk that has deteriorated the relation between investors and financial intermediaries*" (Guiso, 2010:7).



**Figure 9. The collapse of trust in the US financial market**

The sharp decline in trust depicted in figure 9 above is due, according to Guiso, to the emergence of a series of frauds. He cautions that these frauds will affect demand for equities and other financial instruments. In other words, the social cost of fraud is a decrease in investor participation. In an earlier paper, he wrote that the "*the decision to invest in stocks requires not only an assessment of the risk return trade-off given the existing data, but also an act of faith (trust) that the data in our possession are reliable and that the overall system is fair*" (Guiso et al., 2008:2557). Three elements guarantee investors participation: The data, trust in the data, and trust in the fairness of the system, as follows:

$$\text{DATA} + \text{FAIRNESS} + \text{TRUST} = \text{INVESTOR PARTICIPATION}$$

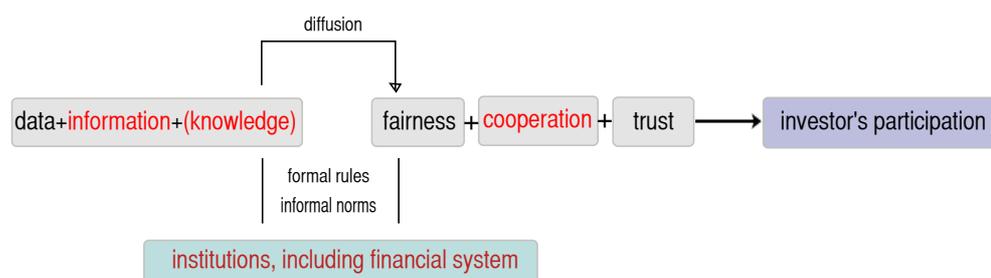
The above relationship, we contend, must be refined and detailed. Guiso's paper did not explain the source of trust in the data and the fairness of the game and seems limited to the influence of distrust during crisis periods. Overall, many factors seem to have been overlooked due to a lack of theory on the relationship. The increasing occurrence of fraud, for example, is not the only aspect of modern financial markets that jeopardize investor participation. To broaden the framework, we propose the use of an institutional economic perspective. One must abandon the key assumptions of classical economics and financial economics that demonstrate the estrangement between finance and

society. Money, for instance, is considered neutral and simply a mean of facilitating exchange. This atomistic view of financial markets, on which Bachelier relied, gave birth to the Efficient Financial Market Theorem. It also abstracted from the social and psychological elements of financial markets. Institutional economics, by contrast, accepts the complexity of economic phenomena and approaches them in a manner much more akin to biology. It employs a few general principles and then analyzes specificities. The result is a more operational discipline than all-embracing theories - however, it raises the concern of over-description.

Thus, we regard finance as part of the socio-economic fabric. The assumption that market exchanges are embedded in interpersonal relations and social structures is a notion that dates to Polanyi. His concept of “embeddedness” (Polanyi, 1944, Polanyi, 1957) means that markets are not autonomous and necessarily subordinated to politics, social relations and religion. He used this term to analyze the radical break induced by classical economics’ notion of self-adjusting markets. He emphasized that a disembedded economy could not exist and was a dangerous, utopian notion, as it leads to spontaneous and unplanned responses from society itself.

The concept of “embeddedness” helps us acknowledge the specificities of the context in which economic actions occur. Habits and rules are necessary for human action and this clearly depart from the assumptions of individual rationality. For example, institutionalism considers prices to be social conventions, embedded in specific institutions and thus in part dependent on ideas and habits.

In figure 10 below, we propose to consider institutions defined as “*the humanly devised constraints that structure political, economic and social interactions*” (North, 1991:97) or as “*a way of thoughts or action of some prevalence and permanence which is embedded in the habits of a group or the customs of people*”, following Hamilton’s definition (Hodgson, 1998:179). Defined in this manner, financial sectors are embedded in institutions. These can be formal (constitutions, legal structures) or informal (norms, behaviors, world views).



**Figure 10. Institutions to support investor's participation**

The purpose of institutions is to “*create order and reduce uncertainty*” (North, 1991:97). They do so by fulfilling three functions (Dequech, 2002) or “pillars” (Peng, 2003).

- 1) A restrictive function (the regulative pillar): Imposing constraints on individuals. These are the formal rules of the game enforced and sanctioned by the state.
- 2) They also fulfill a motivational function, that is, they influence the goals that individuals establish for themselves. This is the normative pillar, which “*defines legitimate means to pursue valued ends*” (Peng, 2003:276).
- 3) Finally, they fulfill a cognitive function, which can take two forms. They provide information to individuals and influence the perceptions that these individuals have of reality. This cognitive pillar can refer to imposed or internalized values and beliefs.

Thus institutions provide information and instructions on how to use it. Institutions belong to a different economic reality in which uncertainty is not equated with risk. This distinction was first made by Knight: “*The practical difference between the two categories, risk and uncertainty, is that in the former the distribution of the outcome in a group of instances is known (either through calculation a priori or from the statistics of past experience), while in the case of uncertainty, this is not true, the reason being in general that it is impossible to form a group of instances, because the situation dealt with is in a high degree unique*” (Knight, 1921:247). This view of uncertainty expresses the inability to link an uncertain future event to history. Risk can be measured because a class of past events is sufficiently homogenous to be probabilistically attached to a future event; it is thus a question of the “*degree of assimilability of classes securable or, stated inversely, the degree of uniqueness of various kinds of business contingencies*” (Knight, 1921:247). However, if separated from the notion of risk, to which probability can be assigned, the notion of uncertainty, as viewed by Knight, is not unambiguous.

Institutions thus play a role in economic systems because of uncertainty. According to Dequech (2004), the cognitive function of institutions, which provide information and influence individual perceptions of reality, help reduce uncertainty. Learning occurs within institutional structures. Institutions are a store of knowledge and reduce uncertainty through rules, habits and routines. “*Institutions are formed as durable and integrated complexes of customs and routines. Habits and routines thus preserve knowledge, particularly tacit knowledge in relation to skills, and institutions act through time as their transmission belt*” (Hodgson, 1998:180).

Early institutionalists, who were influenced by Darwinian biology, placed “habit” at the core of human action and belief. According to Hodgson, “*habit can be defined as a largely*

*non-deliberative and self-actuating propensity to engage in a previously adopted pattern of behavior*" (Hodgson, 1998:178). Habits, in that perspective, play a role in facilitating the interpretation and understanding of information and are thus one of an individual's cognitive tools. As such, they provide the foundation necessary for individuals to make choices and decisions. Individual choices, the cornerstone of classical economics, are thus replaced by habits in Hodgson's perspective on evolutionary economics. Choices are possible and explained by relying on habits, lodged between instincts and preferences (Hodgson, 2010). Habits aid individuals in addressing complex problems because they store information in a crude manner that economizes cognitive resources. Habits, in this light, serve the same economic function for individuals that Orléan's convention does for groups (Orléan, 1989). Similarly, to speak of habits at the collective level, one could use the concept of routines, defined as "*organizational habits*" (Hodgson, 2003:356).

Institutional Economics (IE) recognizes the function of conventions, routines and habits (these various concepts differ from one another in IE, but a discussion of these distinctions is outside the scope of this section), which in simple terms, is to allow institutions to transmit and interpret information. Agents require these mechanisms to process data into information and knowledge. This process is ultimately connected to cooperation and trust.

For Boisot and Canals (2004), a reflection on the distinctions among data, information and knowledge has much to gain from evolutionary and institutional economics. Data are a stimulus that originates from differences in state-of-the-world that are registered. Information is the significant regularities within the data. Routines, habits and conventions establish a threshold above which regularities are so significant that they become objective information. Information, they wrote, "*sets up a relation between in-coming data and a given agent. Only when what constitutes a significant regularity is established by convention, can information appear to be objective - and even then, only within the community regulated by the convention. [...] Knowledge is a set of expectations held by agents and modified by the arrival of information (Arrow, 1984). These expectations embody the prior situated interactions between agents and the world - in short the agent's prior learning*" (Boisot and Canals, 2004:47).

This distinction is quite useful because it reflects two important characteristics of information and knowledge. First, the stability of data, resting on convention, is necessary to transform data into objective information. This reminds us that new knowledge is dependent on old knowledge and the element of stability underlying this path-dependent process is vital. As Loasby (2001) wrote: "*If everything is changing, or even liable to change at any moment, then nothing can be relied on - for making decisions, interpreting information, for constructing new knowledge. Any process of variation and selection is*

*meaningless unless both the variants and the selection environment persist for a time*" (Loasby, 2001:405). Stability is crucial for knowledge because human cognition is less about logic than pattern-making.

## **Stability**

This question of the stability of data and information is essential and suggests that data need to be stable to become information that an agent can use to develop a set of expectations that becomes knowledge. One of the greatest advantages of market-based over bank-based financial systems is the transparency and price signals the former provide. However, if these are perceived as too volatile, valuable information will be difficult to extract and decisions difficult to make. In algorithmic and high-frequency trading, the task of identifying regularities in the behavior of asset prices (a task that humans cannot perform rapidly) is outsourced to computers. The contradictions examined in chapter one contribute to undermining the conditions necessary for stable and reliable data. The shift to market-based financial systems broke the link with fundamental economic parameters. When prices reflect economic fundamentals to a progressively lesser extent and seem to be set by the market's "mood" of the day, it is more difficult to understand what drives prices up or down. The shortening of time investment time horizons is a means of managing risk but has serious implications for the strategy, organization and planning in real economic sectors. By the same token, international financial liberalization might be beneficial for the development of the financial sector. However, earnings forecasts made by local analysts are more precise than those of global analysts (Bae et al., 2008). There also seems to be a positive relationship between local investment and performance, thereby suggesting that distance and information are related (Coval and Moskowitz, 2001, Dvorak, 2005, Teo, 2009). Finally, while decision processes and financial instruments are increasingly based on hard information, that is, information that can be reduced to a series of numbers, it has become clear that financial markets provide rumors with a voice, which the financial news industry amplifies. The interdependency, feedback loops and other biases of the media and financial actors identified by behavioral finance are evidence of information that is, by definition, unstable. The recent developments in financial markets thus blurred the distinctions between news and rumors and between market reality and market potential.

Thus, while the development of financial sectors into large and highly complex markets might have spurred beneficial financial innovation for enterprises and reduced transaction costs, the effects that it has on the way information is processed and how it affects investors' knowledge and trust has yet to be examined. The internationalization of finance, its market-type structure and the shortening of time-horizons are detrimental to the conditions necessary for the production of stable data and, by consequence,

information. From this perspective, the proliferation of intermediaries is unsurprising. They are in the business of providing stable data, information and knowledge. Reducing transaction costs and increasing public information is not sufficient for investors to participate in the game. In other words, transparent data are useless if they change consistently and do not allow for the accumulation of knowledge.

Modern financial markets are premised on the notion of informational transparency. In practice, however, market participants must associate hard data with social content. Traders' calculations include providing social context to these ambiguous numbers that they have to analyze. Solid numbers that are stable with respect to time and meaning acquire a certain status and perform certain functions: *"1) they establish expertise and authority, 2) make knowledge impersonal, 3) portray certainty and universality 4) contribute to resolving situations of doubt, conflict and mistrust"* (Zaloom, 2003:359). The problem, Zaloom adds, is that the volume and speed of financial transactions undermine this stability. The numbers produced by financial markets are actually *"temporary assessments of market conditions, momentary markers of approximate valuation"* (Zaloom, 2003:259).

## **Universality**

The stability of information is closely linked to objectivity within a community regulated by convention. Informal institutions such as conventions allow for the validation of information. In other words, conventions confer legitimacy on information and knowledge, legitimacy that makes information more trustworthy. However, the data and information produced by developed financial sectors only seems useable for a limited group of individuals. Conventions, indeed, are informal norms. That is, they do not have the universality component that characterizes formal rules. Thus the non-universal aspect of conventions suggests the possibility of a clash between informal and formal norms.

As complex finance develops its own sets of rules, it also processes data and information in a manner that is not accessible to the rest of society. The informal norms that it has developed conflict with the regulations and formal rules of the rest of society. Financial information circulates among financial journalists and market participants, who know one another, and only reaches outside investors after passing through a series of feedback loops (Oberlechner and Hocking, 2004). Thus, certain groups of market participants have access to different data and information from that available to outsiders. This is an ironic development because one of the primary initial advantages of financial markets over banks was the more efficient spread of information. Conflicts of interest and continual instances of scandals and frauds among listed firms and a series of informational

intermediaries (ratings agencies, financial analysts, the financial media, auditing firms) indicates that information is being manipulated.

The 2012 scandals in the financial industry are telling. The trading desk of JP Morgan London attempted to cover a \$2 billion loss, which ultimately was found to be a 7 billion loss. Barclays and UBS were fined \$450 million and \$1.5 billion, respectively for their role in the manipulation of the LIBOR benchmark. Standard Chartered Bank was fined \$667 million for having facilitated \$250 billion in transactions with Iran. HSBC was fined \$1.9 billion for having laundered \$7 billion for drug cartels and terrorist groups. Outright prosecution could have forced the bank to close, thereby damaging employment in the U.S.; this option was rejected, hence the expression “too big to jail” (Economist, 2012). In 2013, JPMorgan to agreed to a \$ billion settlement with U.S. authorities over overstating the quality of bad mortgages. In May 2014, Credit Suisse paid a \$2.6 billion in fines for having helped U.S. taxpayers cheat on their taxes. After settling the LIBOR scandal for \$1.4 billion in 2012, UBS is now talking with U.S. Department of Justice over the FOREX manipulation, which also involves Barclays, Citigroup, HSBC, JPMorgan Chase and the Royal Bank of Scotland. BNP Paribas was prosecuted of breaching U.S. sanctions against Sudan, Iran and other countries for wiring billions of dollars there. On the first of July 2014, it announced that it would plead guilty and pay an \$8.9 billion penalty. The same day, its stock rose by 4 percent. It is striking that the reassuring public statements of the executives of these banks is always directed at investors and focus on future growth and business development. These scandals are symptomatic of a financial system functioning with different rules and only represent a small portion of the true scale of such malfeasance. Banks settle charges with state authorities as if these were traffic road fines, calling it “the cost of doing business”.<sup>3</sup>

Gretchen Morgenson spent her journalistic career exposing abuses and conflicts of interest on Wall Street and came to the conclusion that the U.S. financial industry enjoys a different set of rules than the rest of society, which signifies a shift in the application and perception of the rule of law (Morgenson, 2011). The LIBOR system of reporting rested on the assumption that banks valued integrity, but the manipulation that occurred in recent years tells us that the financial system has changed, not only with respect to its complexity, volume, and speed of transactions but also concerning the moral standards of its participants. There is a lack of studies on what financial intermediaries consider “cheating”, “fraud”, or “illegal”, but the numerous scandals that emerged from 2008 to 2012 indicate a normative change. Certain practices and behavior (false signatures within the U.S. mortgage industry, cheating clients, the LIBOR scandals in all of the Western financial sectors), however illegal, seem to be considered normal in the financial industry.

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<sup>3</sup> For more information on the financial industry’s penalty in 2014, see HALAH, T. BNP is just fine after \$9B penalty. Are billion dollar settlement effective? *FORBES*, 01.07.2014. See also VOREACOS, D. Credit Suisse pleads guilty in three-year U.S. tax probe, *Bloomberg*, 20.05.2014, SCANNELL, K., SCHAFER, D., BINHAM, C. UBS in talks with DoJ to reach settlement over Forex probe, *Financial Times*, 16.10.2014

## The disconnection

Johnson and Kwak (2010) documented the disconnection of financial sectors from society. They demonstrated that the 2008-2010 crisis has socio-economic roots by shedding light on the rise of a financial industry oligarchy. The linkages between Wall Street and Washington, the “corridor” as they term it, takes the form of campaign financing and lobbying and the circulation of elites between giants in the US financial industry and government agencies. The case of Henry Paulson, who went from being head of Goldman Sachs to Treasury Secretary, is an ideal example of the incestuous relationship between finance and politics. A similar two-way street between Westminster and the City has formed since the big bang (Augar, 2010). This reflects regulatory capture by the financial industry. The City’s lobbying machine spent £93 million to secure policy victories in 2011 (Mathiason et al., 2012). In the US, according to figures reported by the Senate, the securities and investment sectors alone spent in \$96 million in 2012, while commercial banks dispensed \$61 million (OpenSecrets.org). Igan et al. (2011) argued that lobbying by financial institutions contributed to the crisis. The lobbying activities of lenders between 2000 and 2007 are linked to increased risk taking and decreased performance.

Financial markets have not emerged from a social vacuum (MacKenzie and Millo, 2003), and their operation, while now based on computerized technology, remains socially structured because the participants are all subject to bounded rationality and the potentially opportunistic behavior of others (Baker, 1984). However, if financial markets are not devoid of moral norms and culture, it is fair to ask whether these norms have not evolved in a manner that clashes with the rule of law and the rest of society’s norms. It can even be said that the relationship between the financial regulatory system and modern financial sectors is one of “deep capture”, whereby the interests of financial sectors systematically prevail over financial and economic policy processes (Baxter, 2011). The concept of “deep capture” is useful here to understand that the influences of modern financial sectors might not only operate at the surface through campaign finance and “revolving doors” but also reach beyond mere connections to influence implicit assumptions and perceptions. *“Indeed much of the power of deep capture comes from the fact that its targets include the way that people think and the way that they think they think”* (Hanson and Yosifon, 2003:214).

Deep capture can take the form of cultural capital and is salient in the case of financial innovation. That financial innovation is treated akin to technological innovation and considered inherently beneficial clearly represents cultural capital for the financial sectors (Johnson and Kwak, 2010). In France, it is the “Club des économistes” which represents a network of neo-liberalism influence of the French “financial intelligentsia”. They advise banks, insurances and politicians and monopolize the debate on financial and economic

issues (Mauduit, 2012). This cultural capital is also in part what allowed for the spread of the ethos of investment banking into corporate America (Ho, 2009). Is there not there a clash between the habits of Wall Street, as examined by Ho, which embraces an organizational model of employee liquidity, and the organizational structure, rules and norms of the “productive economy”? Crotty’s words on the influence of neo-liberal finance on corporate America are worth restating: “*It would be almost impossible to imagine a vision more at odds with the Schumpeterian and Chandlerian views of the firms than its financial conception in agency theory*” (Crotty, 2005:91).

It thus seems that the evolution of the modern financial sector appears to have diverged from the formal and informal institutions of the societies to which they are supposed to provide services. This statement already requires a correction, as it would obviously be misguided to imply that modern financial sectors are a single, indivisible block. Modern financial sectors comprise stock markets, investment banks, market-makers and dealers, brokers in diverse instruments, mutual funds, hedge funds, pension funds, funds of funds, exchange-traded funds, commercial banks, large and small, cooperative banks and insurance agencies. These financial institutions have different desks (front offices, back offices, trading departments separated by instruments) managed by different individuals. Thus, when speaking of “modern financial sectors”, one should be careful to bear in mind that they comprise diverse actors that do not speak with a single voice and do not lobby regulatory agencies on behalf of a single interest. However, bearing in mind that modern financial institutions do not fall under a single, large roof, chapter one noted similarities in the evolution of finance. This chapter attempts to uncover the formal and informal institutions underlying this evolution.

Woodruff’s (2000) distinction between human-devised rules (h-rules) and generic rules is useful in this respect. It allows for the possibility of a gap between Western financial sectors and the social spheres on which they rely. First, h-rules are embeddable, that is, they can be used in various contexts when convenient. Second, they are non-exhaustive, leaving some latitude for other possible actions and human creativity. Finally, they are violable. Generic rules are abstract, universally applied in the societies in which they emerge and form the basis for standardization. The abovementioned studies on financial sectors as a socially and culturally structured arena (Baker, 1984, Augar, 2010, Baxter, 2011) and the continuous series of scandals emerging in the wake of the 2008-2010 crisis suggest the possibility of a financial sector diverging from the Western set of social values, that is, diverging from the values necessary to sustain a certain form of capitalism. Economic efficiency, as Schultz brilliantly demonstrated, dating back to Adam Smith’s notion of efficient trades, is impossible without normative constraints. He showed that economic efficiency requires moral conditions (Schultz, 2001).

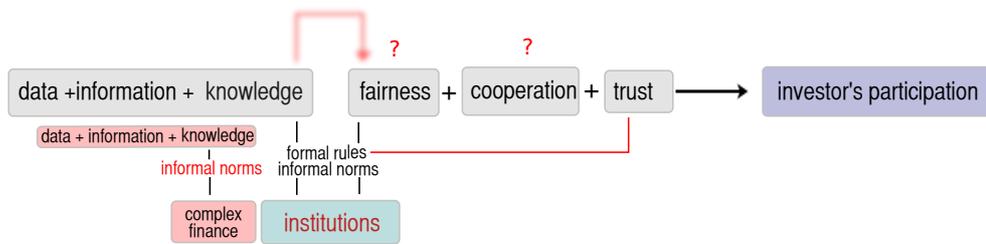


Figure 11. Formal and informal institutions to support investor's participation

Figure 11 above attempts to convey the separation of financial sectors from society. It attempts to schematize what occurs when bankers ceased to be “*thought of as staid and sober men, grave-faced and dressed in conservative black pinstripe suits, jealous of their reputation for caution and for the careful guardianship of their customers’ money*” (Strange, 1986:2). Formal regulatory rules no longer have an effect. They seem ineffective in providing transparency and protecting investors; in other words, they seem ineffective at reducing uncertainty. Because trust and regulation are complementary, distrust creates a public demand for government regulation (Carlin et al., 2009, Agarwal et al., 2011). The regulatory response in the form of strict prudential requirements (Basel III, stress tests, the Financial Stability Board) is a good example of the complementary relationship between trust and regulation. For Guiso (2010), these measures target confidence in the solvency of financial institutions and not broader “social trust”, which is negatively affected by fraud and cheating. Social trust is captured by the definition provided by Gambetta, “*as the subjective probability with which an agent assesses that another agent or group of agents will perform a particular action*” (Gambetta, 2000:217). It is closely related to knowledge and required in all situations in which “*others know something about themselves or the world, which the person in question does not, and when what that person ought to do depends on the extent of his ignorance of these matters*” (Dasgupta, 2002:8). There is a strong link between trust and information, and it then unsurprising that geographical distance seems to play a role in the development of trust. Local knowledge is an important element (Guiso et al., 2004). This chapter will add one ingredient - fairness - to the recipe for social trust.

There is a lack of studies examining the linkages between information and knowledge and perceived fairness in detail, but it seems intuitive that fairness is essential to ensure the players’ participation and cooperation. Fairness is accompanied by the notion that rules apply to all, not only to some privileged group. “*If there’s one thing about fairness, it is fundamentally an impartial notion, an idea that restricts us from privileging one group over another. When asking about fairness, we cannot ask whether X policy is fair for me, or whether Y policy is fair for someone with a yacht and two vacation homes. We must ask whether Z policy is fair, full stop. What we must ask here is whether the policy could be applied to all; whether it is the sort of system with which we could live, if we were to*

*end up in one of the many socioeconomic groupings that make up our diverse community, whether most-advantaged or least-advantaged, fortunate or unfortunate”* (Hale, 2012). Unreliable information makes it difficult for the common investor to perceive the game as fair. If other players seem to play by different rules with different information, the natural tendency would be to stop playing. It is useful to stress the adjective “natural”, as Brosnan and de Wall’s (2003) research reveals that this is precisely what Capuchin Monkeys do when they observe their counterparts receiving greater rewards for expending equal effort. They cease cooperating. However, cooperation is at the center of the process of wealth creation (Beinhocker, 2006).

The way in which modern financial sectors produce, analyze and spread information is another important element of wealth creation. As observed in chapter four, the Russian banking sector is not serving its intermediary function because the banking sector partly reflects old social structure that can still be perceived in the relationship between SMEs and banks in Russia. Information is contextual, as if it were constrained by social norms. What characterizes transitional economies in general and Russia in particular is that information is insufficiently codified and remains personal and contextualized. The line between soft and hard information in transitional countries is never particularly clear, as society’s informal norms conflict with formal ones. Nonetheless, information is an abstract commodity that forms the foundations on which market economies emerge. According to Boisot and Child (1996), the transition from feudalism to centralized economies and market economies can be followed along a continuum of information codification. *“European experience of modernization entailed, first, a shift in the transactional center of gravity from an institutional order based on feudal fiefs to one based on bureaucracies and, second, from there a decentralization toward markets. The move required both an ability and a willingness to codify. The very act of selection entailed by codification, however, leads to the suppression, or even the rejection, of data not selected and, hence, to the sacrifice of contextual data.”*(Boisot and Child, 1996:603).

While Western societies now benefit from codified data and impersonal transactions, the financial sectors in these countries are blurring the distinction between soft and hard information. In other words, some characteristics of Western financial sectors also characterize transitional countries such as Russia, as observed in the next chapter. There are similarities between the social patterns underlying these societies and the social patterns underlying advanced financial sectors. In both cases, there is an institutional incompatibility between the financial sector and the rest of society. While the complex Russian institutional environment maintained informal social norms that are at odds with the impersonal mode of transaction required to develop an efficient financial sector, the complex environments of Western financial sectors led to the emergence of informal norms that are at odds with the rest of society. That observation forces one to reconsider the process of financial sector development and relativize it. In other words, it forces one

to ask: Relative to what are financial sectors developed? What are the characteristics of developed financial sectors? These questions should enter the political arena just as the debate over sustainable growth. There should be a shift from mere development in the financial sector to the sustainable development of the financial sector.

## **Conclusion**

A historical examination of the emergence of stock markets indicates that an important ingredient in their formation is learning. Formal and information institutions are the custodians of learning processes in Institutional Economics (North, 1994, Dequech, 2002). Stable and universal information (within a community) are the preconditions for its codification and diffusion. It was shown that these conditions are under pressure in the wake of rapid development in the financial sector. Thus, while Western societies have developed to benefit from codified data and impersonal transactions (Boisot and Child, 1996), their financial sectors seem to diverge from the rules of the game followed by the rest of society. In other words, the normative and cognitive constraints of financial sectors appear to differ from those upon which the rest of Western societies rely. We concede that this conclusion oversimplifies the relationship between finance and society. As stated previously in this chapter and chapter one, financial sectors comprise numerous different actors working in diverse financial industries. These actors have different backgrounds, educations, worldviews, work practices and work ethics. Establishing more solid evidence of a general separation of developed financial sectors from their societies would require a research agenda centered on the sociology of finance. One could criticize the Institutional Economics approach applied here that assumed the financial sector to be a single institution. However, it has the advantage of placing a coherent theory behind scattered empirical evidence of frauds, rumors, and poor ethics. Such an approach allows one to demonstrate that these are part of a “habitus” à la Bourdieu, which are most visible on Wall Street (Ho, 2009) and distinguish finance from other economic activities. Johnson and Kwak (2010) revealed the political consequences of a large and complex financial sector in the U.S. that is transforming itself into an oligarchy. This chapter attempted to shed light on the social consequences of this process. It presented the foundations for questioning financial development. Dembinski (2008) asked whether financialization made finance a servant or deceiver with respect to society. In a similar vein, and employing an Institutional Economics perspective, this chapter attempted to provide an answer by highlighting institutional gaps between society and the financial sector.

It is these gaps that inform us that financial sectors are performing poorly as intermediaries. These gaps can exist either because finance developed too rapidly or because society is too slow. In both cases, institutional gaps render financial sectors less

efficient than they could be. As observed in the following chapter, certain characteristics of Western financial sectors also characterize transitional countries such as Russia. There are similarities between the social patterns underlying these societies and the social patterns underlying advanced financial sectors. In both cases, there is an institutional incompatibility between the financial sector and the rest of society. While the complex Russian institutional environment has maintained informal social norms that are at odds with the impersonal mode of transaction required to develop an efficient financial sector, the complex environment of Western financial sectors led to the emergence of informal norms that are at odds with the rest of the society that they are supposed to serve.

## CHAPTER 4

### The “finance-society nexus”: When finance is too slow

SMEs are a sorely missing element of the Russian economic landscape: *“But the costs of inaction are likely to be significant over the longer term, as sustainable economic growth founded on a diversified economic base with a dynamic small and medium-sized enterprise sector will only be realized through a deepening of the financial system that can efficiently intermediate between savings and investment”* (Robinson, 2003:122). More than 10 years after this was written, Russia still has the same problem to solve.

Medium-sized enterprises represent only 1 percent of SMEs, account for 13 percent of the SME workforce and represent 14 percent of total SME turnover. Thus, when speaking of SMEs in Russia, one should bear in mind that the Russian economic landscape comprises MSEs (Micro and Small Enterprises) and large enterprises and that this group of MSEs is primarily active in trading. Innovative SMEs, which are playing a more active role in promoting value-added economic growth, are quasi-absent from the economic scene. At present, one can conclude that the reforms designed to advance Russia’s transition from a centrally planned economy to a market economy have had little impact on SMEs. The loan value to SMEs as percentage of GDP was 7.6 percent in 2012.<sup>4</sup>

Despite over a decade of development in the financial sector, the dividing line between those served by the commercial banking sector (approximately 25 percent of enterprises) and those that lack access to finance (75 percent) has not moved (Kovalin and Moiseev, 2011:2011). Although the number of enterprises reporting improved cooperation with banks doubled between 2009 and 2010, the separation between firms with access to external finance and firms without has been stable over the past 10 years. *“At the same time, the current improvement in the relationships between enterprises and banks has not*

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<sup>4</sup> It was 5.23 in 2010; the figure was obtained from the CGAP database at <http://www.cgap.org/> but is apparently no longer available. The 2012 figure is calculated based on the value of the SME lending portfolio estimated by the European Investment Bank (2013:26) at 112 bln EUR.

*led as yet to any qualitative shifts. The responses to the question about the character of cooperation between enterprises and banks are indicative in this sense. The cumulative share of the enterprises that received bank credits for financing short and long term investment projects was not observed to increase during 2010 and lingered at a level of 24-25 percent. This means that banks that work with enterprises of the real economy are still unready to act beyond the frames of the established circle of borrowers” (Kovalin and Moiseev, 2011:207). Robinson’s conclusion in 2003 regarding the general inability of banks to lend beyond their respective networks seems verified by Kovalin and Moiseev’s findings.*

Although the percentage of credit to the private sector has increased since 2002 (according to World Bank data), the efficiency of intermediation in Russia’s banking is more similar to that in the central Asian former Soviet republics than to that in former communist countries from eastern Europe, let alone Western European countries. Fungacova and Solanko (2009) noted that the banking sector in Russia seems divided into two sub-sectors, with one part dominated by large banks serving large firms with international activities and another part supporting the local economy. This chapter demonstrates that an enormous number of small banks provide loans to approximately 40 percent of SMEs.

There are a number of studies on SME finance in Russia, and they can be separated in two streams of the literature depending on the level of analysis that they employ. At the individual firm level and banking sector level, the Ease of Doing Business indicator (EDBI) and the Global Competitiveness Index (GCI) attempt to capture the success of reforms and the quality of the business environment. Russia performs relatively poorly on both of these measures (it ranks in 123rd and 63rd place, respectively). A number of studies address issues specific to finance, such as the rate of loans, the collateral needed to secure a loan, the maturity of loans, the risk of lending to micro and small businesses, and the use of credit rating agencies (Barre, 2005, Shironin, 2007, ExpertRA, 2008). By the same token, a lack of finance is an oft-cited barrier to SME growth (Pissarides et al., 2003; Pissarides et al., 2003; Bessonova et al., 2010), and a low level of investment in fixed assets hampers innovation (Kossov, 2011, Gurkov, 2011). These measures and analysis tend to focus on barriers to SME development, as opposed to constraints. That is, they tend to be ahistorical and omit institutional and social variables. Barriers to the development of SMEs are less pervasive and structural than constraints. Therefore, if constraints can foster or hinder economic development depending on their design, barriers consistently prevent growth.

At the structural level, constraints stemming from the overall economic structure such as the Dutch disease - the decline of the manufacture sector due to natural resource exports - (Dobrynskaya and Turkisch, 2010) and the presence of entrepreneurs (Buttrick and

Moran, 2005) are analyzed to explain economic development. Political constraints, such as the role played by new elites played in the regions (Shurchkov, 2012) or the predatory role of the state (Frye and Shleifer, 1997), however, have not been conducive to the development of SMEs. According to Kihlgren (Kihlgren, 2002), entrepreneurial resources have been inefficiently reallocated in favor of certain interest groups. Walter (2005) failed to identify an institutional mechanism that could promote innovative SMEs in 2005, but there have been recent developments with the establishment of state funds and foundations to support innovation. However, the level of innovation in the Russian economy remains very low, and breakthroughs innovation in production and management have been rare (Kossov, 2011). Aidis et al. (2008) and Aidis and Estrin (2006) examine the influences of formal (the rule of law) and informal (networks) institutional constraints on entrepreneurship. Information asymmetry is a well-known characteristic of relationships between SMEs and creditors in mature financial markets, and this is exacerbated in the Russian context. A report on micro finance in Russia concludes that the primary concern from the perspective of the banking sector is the poor transparency exhibited by borrowers (Chapalova, 2011). As noted above, the accounting system's purpose was not investment but meeting of production target. Business plans also followed this logic. *"All these well-known problems are even more acute in Russia. Information asymmetry is general and the opacity of financial statements is well-known"* (Walter, 2005:27). Using the concept of *blat*, thoroughly analyzed by Ledeneva (1998), Hsu (2005) notes that Russia exploited social capital differently than Chinese businesses that relied on the similar practice of *Quanxi*. If *Quanxi* practices helped individuals reach out and create networks characterized by trust, *blat* evolved into defense mechanisms and failed as an instrument for extending one's networks and developing trust with strangers. Gréen (2009) analyzed entrepreneurship from an historical and sociological perspective and demonstrated how entrepreneurship in contemporary Russia can be traced back to notion of the Soviet manager.

To date, no study has examined the social fabric in depth to determine how it could shape the financial sector in Russia and explain why the banking sector has not been able to *"act beyond the frames of the established circle of borrowers"*, to borrow Kuvalin and Moiseev's phrase. The very few studies to approach this topic are dated. Cook (1999) studied firms obtaining trade credit from non-financial firms based on existing relationships and networks. Trade credit thus signals banks and thereby mitigates information asymmetry. Rehn and Taalas (2004) demonstrated how *blat*, understood as mundane activity, was at the center of the economics of everyday life and is the form that entrepreneurship took in Russia. Batjargal (2003) analyzed social networks and how they affected entrepreneurial performance in Russia. These studies suggests that the use of networks and informal institutions might affect the financial sector but do not directly link them to SME finance. Figure 12 below depicts the gap in the literature that this chapter intends to fill.

This seemingly permanent inability of Russian banks to reach potential borrowers seems to reflect much more than simple barriers. Deeper constraints are at work. They could also explain why local Russian banks are unable to translate their informational advantage into lower loan spreads when underwriting syndicated loans (Fungacova et al., 2009). Local players are typically able to alleviate informational asymmetries better than foreign banks and provide better loan terms for borrowers. However, in Russia, *“the apparent inability of local banks to exploit their advantages may result from their lack of experience in acquisition of information about borrowers, the international sophistication of Russia’s syndicated loan-taking community, as well as the harsh impacts of corruption on local banks, particularity domestic-owned banks, relative to foreign banks based in low-corruption countries”* (Fungacova et al., 2009:15).

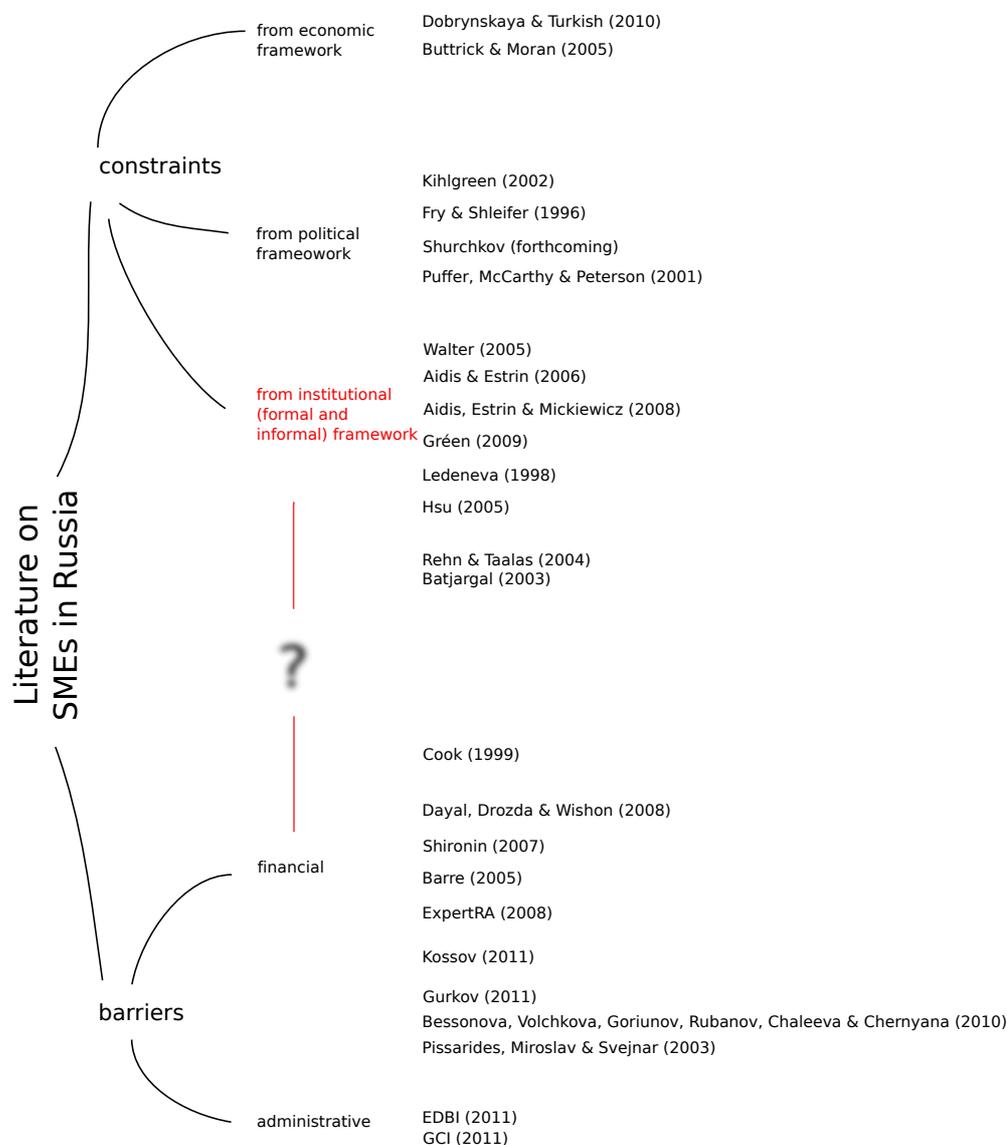


Figure 12. Review of the literature on SMEs in Russia

The asymmetric information with which Russian banks seem to struggle needs to be contextualized. Regarding opacity and information asymmetries as if they were simply administrative barriers to be removed would render them bereft of their contexts and only tell half the story. In other words, enhancing transparency and providing additional information is the formal aspect of the banking-SME relationship.

Obsolete accounting standards, or new ones that are implemented with difficulty, and laws strengthening corporate governance and protecting property rights are formal institutions. However, in addition to formal institutions, numerous informal ones (routines, informal norms, mindsets) that might contribute to structuring the relationships between SMEs and banks.

Thus, SME finance in Russia offers an interesting case study for an examination of the importance of informal institutions in the relationship between the productive and financial sectors. Informal institutions exist in every society and have varying degrees of influence. We believe that this is an underestimated aspect of the connection between finance and the real economy.

This chapter traces the contours of the informal side of that relationship, using SME financing in Russia as a case study. First, the methodological approach is explained. Then, the case study is examined, proceeding from the most general aspects to the most detailed ones. The second section provides a definition of institutions and explains the approach employed. It also presents a review of studies using an institutional approach in the context of transition. The third section presents a picture of the SME sector and of SME finance in Russia. The fourth section describes the structure of the financial and banking sectors. Section five demonstrates the influence of informal institutions on issues similar to SME finance, such as entrepreneurship. It also presents the historical background, which partly explains the nature of the relationship between SMEs and banks. Finally, we complete this analysis using the results of interviews conducted in Moscow and St Petersburg among 30 SMEs and business associations.

## **4.1. Methodology**

The variables that this study is attempting to identify - informal practices - demand a qualitative approach. It is most appropriate to, first, better describe and identify these informal constraints and, second, determine their roles within the SME - bank relationship.

This study attempts to identify independent variables and ask a “how” question: How do informal institutions (or cognitive and normative constraints) affect financial sectors and their relationship with the “real economy”? To answer this question, a case study research design employing ethnographic research was selected. Case studies present a number of advantages and are defined “*as an in-depth study of a single unit (a relatively bounded phenomenon) where the scholar’s aim is to elucidate features of a larger class of similar phenomena*” (Gerring, 2004:341). The intensive study SME financing in the Russian context, with a focus on informal constraints, perfectly qualifies as a case study. He adds that “*virtually any intensive study of a relatively bounded topic qualifies as a case study in this minimal sense, so long as it can be linked to with some larger topic via a key word*” (Gerring, 2004:345). The key words are this case “finance - real economy relationship”. He concludes, “*the narrowest terrains sometimes claim the broadest extensions. Studies of a war are studies of war*” (Gerring, 2004:345). Studying the linkages between finance and the real economy in Russia is, from this perspective, useful for understanding the “finance - real economy” nexus everywhere.

What makes case study research an appropriate methodology for this study? To identify how the financial sector is linked to the real economy, the example of transition countries seems expedient, due to the profound and severe institutional change they faced. Institutional Economics is well positioned to capture the formal and informal institutional changes occurring in transition economies, the process of which is historically and socially defined (Van de Mortel, 2002). Case study methodology allows social and historical factors to play a role and was therefore selected for this reason. Using a case study offers the possibility of discovering neglected variables and new hypotheses through a combination of induction and deduction (Bennett, 2004). Russia appears to be a relevant example, among the many transition countries that could have been considered, because of its uniqueness. The country’s financial sector developed very rapidly, and its social norms followed a unique path. The terrain for an exploration of the possible links between the two is rich. By selecting Russia, one can moreover rely on a much more extensive literature than for other CIS countries.

We are thus employing the “*logic of discovery*” (Bennett, 2004:21). The adoption of such a methodology stems from an ontological and epistemological consideration that needs to be expressed. The complex nature of the phenomena that we seek to understand - the relationship between the financial sector and the real economy in the context of transition - dictates the methodological choices. Hall (2003) argued that political scientists have moved “*toward theories, such as those based on path dependence or strategic interaction, whose conceptions of the causal structures underlying outcomes are at odds with the assumptions required for standard regression techniques and conventional comparative method to provide valid causal inferences*” (Hall, 2003:375). If the world is conceived as a messy and chaotic place, then our epistemological and methodological

approaches must be coherent with that reality. This ontology employed here is similar to that of the critical realism school, which views the world as composed of complex processes, structures and mechanisms (Yeung, 1997). Critical realism, differentiating between different domains of reality, allows for different notions of causality. That, in turn, implies another conception of how we come to know that reality. In other words, it allows for a different epistemology. Thus, at the epistemological level, one can conceive of another mode of generalization: “*Generality does not refer to generally occurring empirical events, but to constituent, fundamental properties or mechanisms. It is not statistical generalization, but analytical generalization that we can draw from case studies*” (Korf, 2006:469).

The purpose of this research is to understand the mechanisms of the informal practices between banks and SMEs in detail to obtain a richer view of how institutions emerge or are locked into a sub-optimal equilibrium. We thus proceeded with a causes-of-effects qualitative methodology. In other words, we moved backward from effects to causes, in a manner similar to a detective searching for the “smoking gun” (Mahoney and Goertz, 2006). In this approach, the effect is already known, and the case study is chosen accordingly. Russia was selected as the case study because the relations between the financial sector and SMEs have been unchanged for more 10 years and, more importantly, because a proper financial sector never existed in the country. The case study of Russia offered the perfect “scene of the crime”. Our goal here is not to discover a universal law concerning the relationships between the financial and economic sectors to explain this type of stalemate in all contexts. That would require a quantitative methodology of an “effects-of-causes” methodology, i.e., moving forward from causes to effects (Mahoney and Goertz, 2006).

The data were gathered during two stages: The first stage was the exploratory phase, during which the secondary data were studied. It contributed to establishing the main dimensions and formulating the hypothesis (Cooper and Schindler, 2001). These secondary data were gathered in Russia while working for a Swiss consultancy active in structured products in St Petersburg from 2008 to 2010. Moreover, a 9-month immersion (from September 2011 to May 2012) working as a consultant for a medium-sized enterprise helped to formulate the issues and refine the questions considered here. This immersion allowed for the complete maturation of the research questions through the gathering of primary data. The ethnographic method of participant observation functioned as a check of the relevance of the research question. Whitehead’s comments were considered concerning the methodological similarities between ethnographers and children: *Observations, interviewing, participating, and making interpretations*” (Whitehead, 2005:10). Working as a part-time consultant for a chain of acupuncture institutes operating in Russia and Europe was an opportunity to observe how a small Russian enterprise was organized and operated. It appeared that the issue at hand

demanded an ethnographic approach. The interaction between financial sector participants and enterprises perfectly corresponds to the attributes of human interaction that ethnographic studies help to capture: *“As socio-cultural beings, humans are users and producers of culture, which include the creation of routinized patterns or rules of behavior and interaction. Any human social setting or encounter (social situations) may have routinized patterns or rules of behavior and interactions. The rules or routinized patterns of social situations are functionally oriented toward the provision of order, regularity, and predictability to social interaction. Communication breakdowns occur when one or more of the actors in the situation do not know the rules for the situation, or the actors are attempting to interact utilizing more than one set of rules”* (Whitehead, 2005:15).

Thus, for the second stage of the fieldwork, a series of qualitative, semi-structured interviews was conducted. This genre is a common in qualitative studies. There is a debate between standardized and non-standardized interviews concerning which allows for more precise and reliable data. Standardized interviews with questionnaires eliminate human intervention, which is a source of bias and subjectivity. However, interviews without any human intermediation are impossible, not because the technology does not exist but because some type of human interaction is necessary for respondents to participate. In other words, one must choose between an operationalization that guarantees a uniform behavior on the part of the interviewer - the standardized interview - or a uniform understanding of the questions - the non-standardized one. Respondents can interpret the same questions differently. Thus, in atypical situations, conversational interviewing has more benefits than costs (Conrad and Schober, 2000). The present research question is specific and rests on a concept that needs to be explained to respondents. Moreover, questions concerning the influence of informal practices can be very intrusive and require a level of trust that only non-standardized or semi-structured interviews can secure (Beatty, 1995). In the context of this study, one of the costs implied by this type of survey, namely time, was irrelevant. As I was living in Moscow and had been in Russia for 4 years, I had the time to become acquainted with or referred to respondents to better conduct these interviews.

Semi-structured interviews were selected because they combine the freedom that non-standardized interviews allow with a prepared list of questions that need to be covered (Whitehead, 2005:17)). Thus 25 SMEs, 3 banks, 3 business associations and several experts and academics were interviewed between October 2012 and March 2013.

It was difficult to systematically audio record these interviews because the topic at hand remains sensitive, although the practices examined here are not illegal. By seeking permission to tape record conversations, one runs the risk of receiving less interesting

material. However, the transcripts can be returned to the interviewees for review and clarification if necessary (Mero-Jaffe, 2011).

## 4.2. Institution in transition

According to North (1990), institutions are humanly devised constraints that can be formal or informal. If barriers are nearly always understood to be detrimental to business and should be consequently removed, constraints are neither positive nor negative per se and are necessary for the operation of a market economy, however inefficiently it might be structured. Institutional arrangements can be locked into a sub-optimal equilibrium (Pierson, 2000).

From that perspective, the strength of institutions and their potential for universal applicability are important. Presenting the process of liberalization in the former Soviet Union framed only in terms of reforms is misleading, not because it prevents one from recognizing the necessity of gradualism but because it prevents one from recognizing that strong institutions are fundamental (Popov, 2002). At present, it seems uncontroversial to assert that simply reforming the old system by applying a Western blueprint has proven a naive understanding of the functioning of market economies. In that sense, the “hard versus soft medicine”, or fast reforms versus sequencing, is equally misleading because it does not differentiate between market liberalization and market creation. Once the obfuscating language of reform is dropped, one can recognize the importance of the presence (or absence) of institutions when constructing a market economy from nothing (Freeland, 2000).

The institutions of a market economy were absent, but this does not imply there was a complete absence of institutions. Transitioning to a market economy is not a smooth and linear process, as actors tend to rely on old routines when faced with increasing uncertainty. The waves of privatization must be considered in this light because privatization does not simply constitute the transfer of ownership from state-owned enterprises to private ones (Zahra et al., 2000). At the micro institutional level, in the context of transition, privatization is a process of institutional change (Johnson et al., 2000) whereby the managers of firms must internalize a private sector “template”. By the same token, the phenomenon of entrepreneurship, absent which privatization would be meaningless, must also be considered in the context of transition. The structure of incentives within which entrepreneurs in transition evolve “*encompasses the onslaught of rapid changes and the resulting uncertainty, a wide range of opportunities thrown up by the restructuring of formerly planned economies, imbalances between supply and*

*demand, fragile or only partial market institutions and a variety of informal rules and behaviors which are remnants of the communist past” (Aidis and Estrin, 2006:5).*

Thus, it is unsurprising that there is an intensive reliance on informal institutions because they are the only stable form of institutions upon which transitional economies can rely to reduce uncertainty. They are repositories of knowledge. *“Institutions are formed as durable and integrated complexes of customs and routines. Habits and routines thus preserve knowledge, particularly tacit knowledge in relation to skills, and institutions act through time as their transmission belt” (Hodgson, 1998:180).* Informal institutions do not necessarily favor market economies. Communist norms and routines can be quite persistent and, according to Granville and Leonard (2010), account for the differences in regional technological development. Social structures organized through networks and clans are another strong informal institution in Russia. Such informal norms allowed Russia to survive the application of ‘shock therapy’ (Cuddy and Gekker, 2002) but are not conducive to the emergence of efficient markets. Thus, information is non-codified and undiffused in general, as it is only codified and diffused through networks and clans (Puffer and McCarthy, 2007). It might not be efficient, but it is resilient.

Against this background, it becomes clear that there is no blueprint for a legal framework for economic development. Cultural receptiveness - the ability to anchor formal institutions to beliefs and norms – allows for smooth institutional change and is thus less costly (Greif and Laitin, 2004:635). However, exported formal institutions that are not rooted in the deeper informal institutional layer are likely to encounter resistance (Shirley, 2005).

Woodruff (2000)’s thorough analysis of two borrowed market institutions - the Joint Stock Company and the Monetary System - clearly demonstrates the normative clash. These two institutions functioned poorly (and arguably continue to) because of the tension between so called “g-rules”, for game theoretic rules, and “h-rules” for humanly devised rules. H-rules are embeddable; that is, they can be applied in different contexts when convenient. They are non-exhaustive, leaving a certain degree of latitude for other possible actions and human creativity. Third, they are violable. Woodruff concluded that *“therefore, though phrased abstractly, they never deal with abstract individuals” (Woodruff, 2000:442).* The evolution of h-rules into a set of g-rules is thus far from automatic, and the preconditions for this evolution are sociological. The interchangeability and standardization of abstract commodities (money and stocks) facilitated tacit coordination. Once the entire community adopts this vision, it is *“possible for tacit coordination based on abstract commodities to be adequately described by g-rules of game theory” (Woodruff, 2000:445).*

Woodruff's point is that there is a gap between the culture of world markets and the social preconditions in Russia. There is a clash between the imported template for the organization of exchange, the sovereignty of transactions that nation states are expected to control, and a vision of society. Thus, any analysis focusing on formal institutions only would only tell half of the story. It would not capture these tensions within the institutional structure. Pistor (Pistor, 2000) demonstrated that there is a remarkable divergence between corporate governance in transitional countries despite a trend towards legal convergence. *"Weaknesses in the governance structure that are noted today are often attributed to weaknesses in the law, which in turn leads to new proposals for improving statutory law. The evidence of the quality of the law on the books, however, suggests that this is at best a partial story. The level of shareholder and creditor rights protection in transition economies today is higher than in many other countries"* (Pistor, 2000:47).

If this only represents a partial story, the remainder of the explanation must be found elsewhere, and one has good reasons to examine the opaque layer of informal institutions: The country's formal institutions were entirely destroyed. The only types of institutions remaining to anchor social and economic interactions were social norms, conventions, and habits, which are encompassed by our understanding of informal institutions (Van De Mortel, 2002). The empirical literature suggests that the use of informal norms and networks to obtain financing, while being beneficial for firms at the micro level, might be inefficient at the structural level. This chapter contributes to the literature demonstrating the links between social embeddedness (trust and social capital) and finance (Uzzi, 1999, Dasgupta, 2002, Guiso et al., 2008). In the Russian context, trust is a concept that takes two forms: General trust and interpersonal trust, which are also termed "bridging" and "bonding". In Russia, the level of the former is low and that of the latter high, which creates a trust system that distinguishes between the "ours" and "not ours" (*nash vs. ne nash*) (Schrader, 2004). Investigating the effects of this "Russian" social feature on socio-economic development, Menyashv and Polishchuk (2011) used data from a major, nation-wide survey administered throughout Russia. At the systemic level, they found that bonding social capital had negative effects on development, as measured by socio-economic conditions, and local government performance, while bridging social capital had positive ones. This is the most recent empirical finding confirming the argument that social capital has adverse effects (Portes and Landolt, 1996). For instance, the informal practice of *"blat"*, examined by Ledeneva (1998) and consisting of an economy of favors within one's social network and shaping entrepreneurship, is anti-systemic (Rehn and Taalas, 2004). By the same token, former Soviet economies have hybrid banking sectors that have developed in phases (Dow et al., 2008). Moreover, the way in which financial sectors develop also reflects a broad social contract. Searching for a well-functioning financial sector entails searching for an efficient system for the transmission of capital and, thus, control over firms. The state has played and continues to play a different role in former communist countries than it has in

Europe (Borak, 2000). However, how are borrower-lender relationships determined by the clash of these different institutional rules? Because homo sovieticus is still alive (Gogin, 2012), how does he obtain a loan?

To understand how the institutional mix affects relations between banks and SMEs, the next sections provide an overview of both sectors and briefly expose the role of the banking sector in the Soviet regime to reveal how the understanding of the role of banks persisted through the liberalization reforms and into the present.

### **4.3. SMEs in Russia**

Studies of SMEs have experienced increased interest since Birch's claim that these organizations are important in generating employment Birch (Birch, 1981). There is a tremendous amount of literature on the economic benefits of small firms and entrepreneurship (Van Praag and Versloot, 2008, Henrekson and Johansson, 2010), and certainly one must take care not to take their advantages for granted (Davis et al., 1993, Biggs, 2002). It is now accepted that SMEs play an important role not only in terms of economic growth but also with respect to innovation and their ability to adapt to volatile market conditions. SMEs are sorely lacking on the Russian economic landscape.

Prior to 2008, there was no formal definition to distinguish small and medium-sized businesses in Russia. Moreover, the only existing definition did not account for financial criteria. This should make one cautious when comparing current data with those in the literature on SMEs in Russia produced before 2007. Nevertheless, Rosstat's (the Russian Federation Federal State Statistic Service) definition is now based on three criteria (employment, finance and independence).

Thus, a **medium-sized business in Russia is an enterprise:**

- That employs on average 100 to 250 employees
- That generates a turnover of max. 1,000 million RUB (approx. 25 million EUR)
- In which a legal entity that is not an SME does not own more than a 25 percent share

**A small business:**

- Employs on average 16 to 100 persons
- Generates a turnover of 400 million RUB (approx. 10 million EUR) or less

- Is a firm in which a legal entity that is not an SME does not own more than a 25 percent share

**A micro-enterprise:**

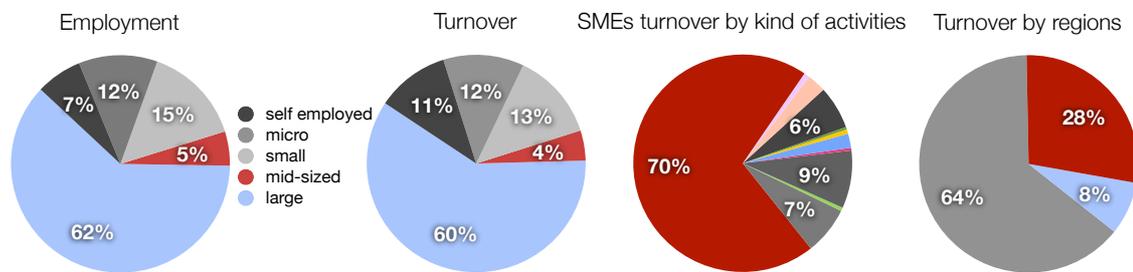
- Employs no more than 15 persons
- Generates a turnover of up to 60 million RUB (1.5 million EUR)
- Is a firm in which a legal entity that is not an SME does not control more than a 25 percent share

As figure 13 below indicates, individual entrepreneurs and micro, small and medium-sized enterprises accounted for approximately 40 percent of total private sector turnover, which is considerably less than in most developed countries. The figures below are somewhat dated, but they are the most recent available that provide a complete picture and include individuals and micro enterprises. Nevertheless, the most recent data on small and medium-sized firms demonstrate that little has changed and the sector remains substantially underdeveloped (European Investment Bank, 2013).

### SMEs Turnover by kind of activity, 2009 (In billion RUB, source: Rosstat)

	self employed	Micro	Small	mid-sized	Large	Total SMEs turnover	Total turnover of all organizations *
<b>Total</b>	<b>7,301.2</b>	<b>8,067.2</b>	<b>8,806</b>	<b>3,030.5</b>	<b>40,452.3</b>	<b>27,204.8</b>	<b>67,657.1</b>
Agriculture, hunting, forestry, fishing	59.6	75.8	209.6	218.6	570.4	563.6	1,134.0
Mining and quarrying	0.243	12.6	52.0	46.6	4,683.857	111.4	4,795.3
<b>Manufacturing</b>	<b>197.3</b>	<b>405.7</b>	<b>1,054.6</b>	<b>667.6</b>	<b>11,799.5</b>	<b>2,325.2</b>	<b>14,124.7</b>
Production and supply of electricity, gas and water	1.05	20.7	57.1	63.5	4,402.95	142.4	4,545.3
Construction	53.30	492.5	1,054.4	321.7	1,316.3	1,921.9	3,238.2
<b>Wholesale trade and commission trade; repair of motor vehicles, motorcycles: personal and household goods.</b>	<b>6,442.5</b>	<b>6062.5</b>	<b>5,228.2</b>	<b>1,307.0</b>	<b>9,440.2</b>	<b>19,040.2</b>	<b>28,480.4</b>
Hotels and restaurants		84.6	130.2	21.0	123.3	235.8	359.1
Transport and communication	134.385	219.6	277.1	120.6	5,309.915	751.7	6,061.6
Real estate, renting, and business activities	288.178	598.8	624.8	231.2	2,132.322	1,743.0	3,875.3
Education	3.866	3.7	2.1	0.2	237.834	9.866	247.7
Health and social work	6.671	26.8	39.1	11.8	207.029	84.371	291.4
Other community, social services activities	49.318	43.4	70.8	20.4	243.182	183.9	427.1

\* included state organization whose number account for 10% of all organization  
This exclude financial activity



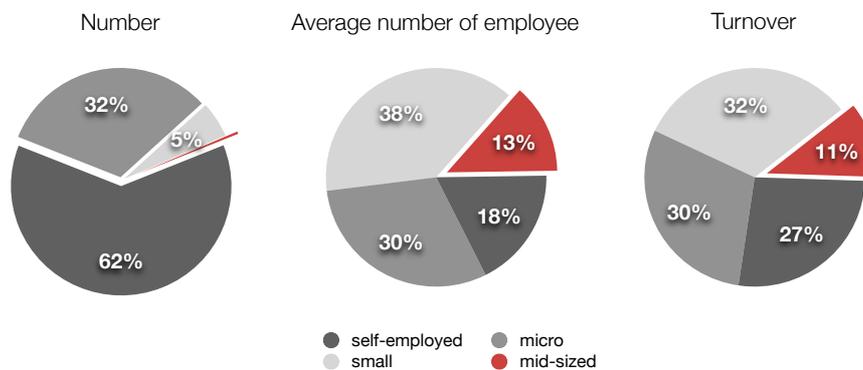
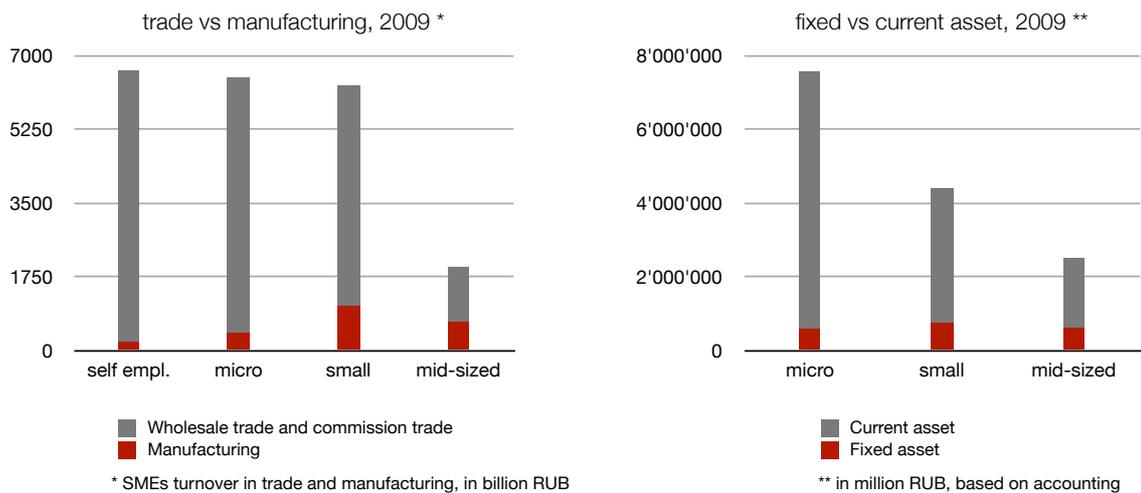
Source: Own calculations based Rostat

Figure 13. SME turnover in Russia

Furthermore, SMEs generated 38 percent of all private sector employment. Unsurprisingly, the activity responsible for most of the turnover (70 percent) among SMEs in 2009 is wholesale and commission trade, which is the activity that generates the least added value. Manufacturing, which is generally considered the cornerstone of economic growth, accounted for 9 percent of SMEs' activities. Examining the geographic distribution of SME turnover demonstrates Moscow's (and the surrounding region's) importance, generating 28 percent of that turnover.

However, the Russian case offers a good example of why regarding SMEs as a unified block (which is typically compared to large firms) can be highly misleading. Medium-sized firms in Russia account for only 4 percent of total firm turnover. The remainder - 36 percent - is generated by self-employed individuals and micro and small enterprises. Thus medium-sized firms are nearly nonexistent in Russia, in terms of both turnover and employment. If one disaggregates the category of SMEs, the picture is clear. Medium-sized firms represent only 1 percent of SMEs, accounting for 13 percent of the SME workforce and 14 percent of total SME turnover. Thus, when considering SMEs in Russia,

one should bear in mind that the Russian economic landscape is composed of MSEs (Micro and Small Enterprises) and large enterprises and that this group of MSEs is principally active in trading. This likely explains why current assets decrease as the size of the enterprise increases, as shown in figure 14 below. Statistics on SMEs' added value could not be found; hence, we can only cite Komkov's figures for the added value of small businesses (his definition of this term is unclear) of approximately 10 percent (Komkov et al., 2011). In any event, whether we consider the matter from the perspective of employment or attempt to deduce the value added, these figures are still low, even in comparison to other economies in transition (see figure 14 below)



Source: Rosstat [http://www.gks.ru/wps/wcm/connect/rosstat\\_main/rosstat/ru/statistics/enterprise/reform/#](http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/enterprise/reform/#)

**Figure 14. The missing middle**

The small, innovative firms that disproportionately contribute to a Western economy's GDP are not present in Russia. Innovative SMEs, which play a more active role in promoting value-added economic growth, are quasi-absent from the Russian economic scene. Despite being constantly mentioned in political discourse as the key to economic diversification, the number of innovative SMEs in Russia has actually decreased (Komkov et al., 2011). Only 2.6 percent of Russians constitute a new pool of potential

entrepreneurs. This measure fell by 6 percent and 24 percent relative to the levels of potential entrepreneurs in 2009 and 2006, respectively. By the same token, the proportion of “necessity-driven” entrepreneurs to “opportunity-driven” entrepreneurs, which was formerly stable at 70 percent, is now rising (Verkhovskaya and Dorokhina, 2011).

Thus while Russia has improved with respect to a “business environment indicator”<sup>5</sup>, the majority of the entrepreneurs interviewed by the Global Entrepreneurship Monitor in 2011 (Verkhovskaya and Dorokhina, 2011) felt that conditions for start-ups had worsened, and only 21.7 percent of respondents believe that conditions for business development are favorable.

Internal finance accounts for approximately 84 percent of investment, while in upper-middle-income countries, that figure is 60 percent. However, there are two impressive differences between Russia and developed countries. The percentage of firms with bank loans and lines of credit, 21.6 percent against 46.3 percent, and the percentage of bank finance allocated to investment, which is 6.3 percent in Russia and 23.7 in developed countries (IFC, 2012).

As the next section notes, this difference is linked to the particular structure of the financial sector in Russia and problems of asymmetric information. However, that does not mean that SMEs are absent due to of the difficulty of accessing finance. It is here argued that the difficulties experienced in the Russian financial sector when attempting to finance SMEs is not the cause of their underdevelopment, but rather a symptom of deeper institutional malfunction. Indeed, the “missing middle” argument creates a black box in the finance-SME relationship, contending that SMEs would flourish in the presence of a more developed financial sector. This chapter instead attempts to demonstrate that the problems of asymmetric information and the difficult relationship between the financial sector and SMEs also stem from the particular informal institutions cultivated in transitional economies such as Russia.

#### **4.4. The Financial sector**

As figure 15 below indicates, while the percentage of credit provided to the private sector has increased since 2002 (World Bank data), the efficiency of intermediation in Russia’s banking sector (based on that indicator alone) is more similar to figures for former Soviet

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<sup>5</sup> The Ease of Doing Business Indicator (EDBI) <http://www.doingbusiness.org/> and the Global Competitiveness Index (GCI) <http://www.weforum.org/reports/global-competitiveness-report-2013-2014>

republics in central Asia than to former communist countries from Eastern Europe and still further from those for Western European countries.

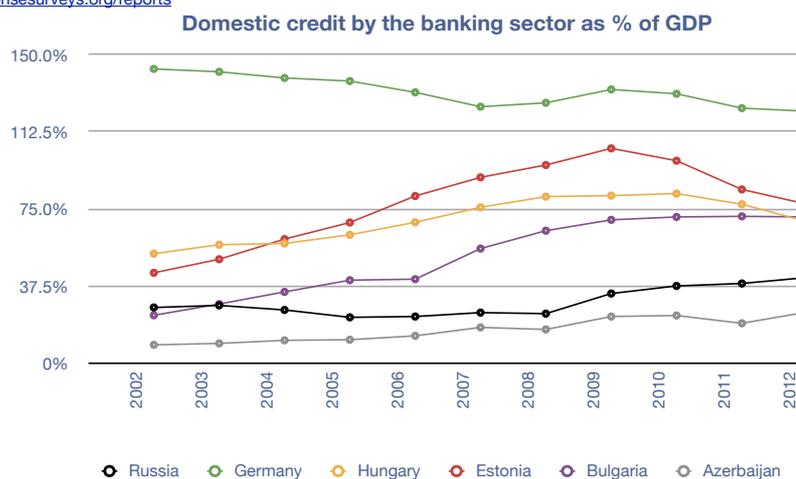
A brief overview of the banking sector reveals that its structure is not conducive to the establishment of long-term relationships with the SME sector. It is characterized by segregation, inefficiency and the domination of Sberbank.

### Financial sector indicators for 2012

#### IFC Finance Indicators - Russia 2012

	Russian Federation	Small (1-19 employee)	Medium (20-99 employee)	Large (100 + employee)	Eastern Europe and Central Asia	Upper Middle Income
Internal Finance for Investment (%)	84.3	83	83.1	88.5	60	60.7
Bank Finance for Investment (%)	6.3	4.8	7.3	7.1	22.8	23.7
Trade Credit Financing for Investment (%)	3.3	5.0	3.0	1	4.8	5.8
Other Financing for Investment (%)	3.3	4.4	3.1	2	3.5	4.4
Working Capital External Financing (%)	18.1	17.3	19.7	17.2	26.4	36.0
Value of coll. for a loan/% of the loan amount	116.5	158.7	146.3	171.5	134.3	163.2
% of Firms with Bank Loans / Line of Credit	21.6	14	27.7	36.9	43.4	46.3

Source: IFC indicators (2012) <http://www.enterprisesurveys.org/reports>



Source: World Bank Data <http://data.worldbank.org>

Figure 15. The Russian financial sector

Styrin's division of Russia's banking sector into four categories remains valid (Styrin, 2005):

- 1) State Owned Banks (SOBs) are the banking arm of the government and play a technical role in the allocation of capital. In that sense, they are not true financial intermediaries. Additionally, they enjoy certain unfair competitive advantages such as government or central bank financing and bailouts in difficult periods. SOBs control 50 percent of the banking sector's total assets (CBRF, 2013:26).

- 2) The largest private banks control approximately 27 percent of total assets (CBRF, 2013:26). They are the “pocket banks” in large Financial Industry Groups (FIGs) and act as the banking arms of their respective FIG. They tend to limit their lending to external borrowers and redistribution within their FIGs, and their role as true financial intermediaries is thus also limited.
- 3) The foreign banks operating in Russia initially specialized in international trade but now offer loans and control approximately 18 percent of total assets. They offer short-term trade loans and foreign exchange transactions.
- 4) The numerous “dwarf” banks, of which there are approximately 900, control no more than 5 percent of total banking sector assets. Their primary source of revenue is fees from grey services such as tax evasion, money laundering, and illegal capital exports. These “dwarf” banks, along with medium-sized banks, provide 40 percent of the volume of loans extended to SMEs.

The influence of the state extends beyond the level indicated by equity ownership because in this “multi-tier vertical structure”, a state-owned or state-controlled mother company in turn owns or controls several banks at lower levels of the hierarchy. This is the case for the third-largest bank, the state-controlled Gazprombank, and the second-largest bank, the government-owned VTB bank (Glushkova and Vernikov, 2009). Therefore, private banks may be considerably influenced by public authorities and individual officials at all governmental levels. *“Such influence is executed via control over banks’ decision-making on credit allocation, and involvement in politically motivated activities like acquisition of assets, providing services to priority industries, sectors or types of borrowers, etc. Dozens of Russian banks face a trade-off between profit-maximization and the desire to retain loyalty to public authorities in order to ensure from the state consequent support of both financial and non-financial nature”* (Glushkova and Vernikova, 2009:4).

Thus capital is allocated according to a chain of influence in which g-rules (the formal rules of the game in banking) and h-rules (humanly devised rules) are combined. Vernikov (2009) concludes that the hidden hand of the state in the Russian banking industry is eroding the private banking sector, which is not found to be more efficient (Karas et al., 2010). This confirms the double-edged functions served by Sberbank in the banking system and noted by Robinson: On the one hand, it provides stability and key government services, while on the other hand, its monopoly status prevents the emergence of a competitive banking system (Robinson, 2003:147). Fungacova and Solanko (2009) noted that the Russian banking sector appears to be divided into two sub-sectors, with one part dominated by large banks serving large firms engaging in international activities and another part supporting the local economy. Moreover,

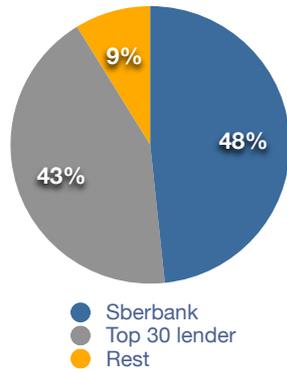
Fungacova et al. (2009) indicated that Russian banks provide no informational added value to syndicated loans. It seems, then, that the informational asymmetries are exacerbated in Russia, rendering even local banks (or especially local banks) useless in that regard.

Nevertheless, certain general improvements can be noted: The banking asset/GDP ratio has grown twice between 2000 and 2008, reaching 65 percent in 2008 and 79.1 percent in 2012 (CBRF, 2011, CBRF, 2013), and the ratio of credit provided to the private sector over GDP has also improved but is now stagnant at 37.5 percent (World Bank data). However, figure 15 above shows that this indicator remains below the levels exhibited in other Eastern European countries such as Estonia, Hungary or Bulgaria and is more similar to the figure for Azerbaijan. Moreover, the figures on lending to SMEs are not encouraging. Loans to SMEs as a share of GDP are at 5.4 percent, which is far below the average of the G20 countries (approximately 14 percent). However, competition has become fiercer since 2012, and increasing numbers of large banks are innovating through various programs and platform, streamlining their procedures to capture that segment of loan market. This subject is worthy of a more detailed examination.

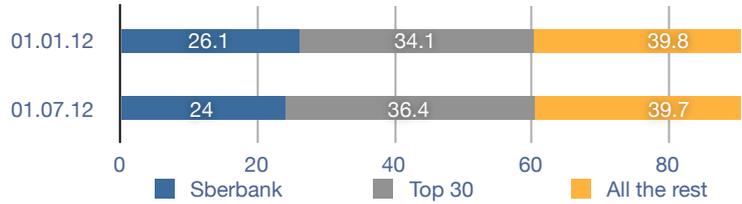
In Figure 16 below, one can note the importance of Sberbank among the 88 banks that lend most to SMEs. Sberbank dominates the SME segment, providing 48 percent of the loans when considering the 88 largest lenders. However, if we consider the totality of the banking sector, 956 institutions (CBRF, 2013:17), the picture of SMEs lending is very different. Not only does it become clear that the largest banks are capturing Sberbank's market share as a result of strategies employed by large banks to participate in that segment, but more interestingly, it shows that an enormous quantity of small banks also provide loans to SMEs.

**Structure of SMEs loan market (2011)** (source: Expert RA and Central Bank of Russia and own calculation)

SME market share of first 88 Russian banks



SME share of the market when considering all banks



Ranking of banks per volume of loans to SMEs	SMEs loans as % of banks entire loan portfolio
Sberbank	40
VTB 24	16
Promsviazbank	23
Uralsib bank	30
Moscow Industrial Bank	57
Vozrozhdenie	60
Uniastrum	50
Transcapital Bank	37
Homos Bank	6
Intensa	60

5 top banks per SMEs loans as % of banks entire loan portfolio	breakdown by economic activity
<b>Sberbank</b>	<b>40</b>
among which for individuals	21.5
among which for services	19.8
among which for trade	13.5
among which for manufacture	11.9
<b>Moscow Industrial Bank</b>	<b>57</b>
among which for trade	9
among which for manufacture	20
<b>Vozrozhdenie</b>	<b>60</b>
among which for trade	35
among which for manufacture	13.6
<b>Uniastrum</b>	<b>50</b>
among which for trade	26.2
among which for manufacture	7.1
<b>Intensa</b>	<b>60</b>
among which for trade	44
among which for manufacture	28

**Figure 16. The SME loan market in Russia**

This pool of small banks provides 40 percent of the loans to SMEs. Thus, while one should welcome the increased competition between Sberbank and the top 30 banks, it is important to recall that 40 percent of the market is served by an “unobserved” part of the financial sector: The “dwarf” and medium-sized banks (see Figure 16 above).

This “unobserved” part of the banking system that serves 40 percent of the SME sector is the result of the reforms to the financial sector that occurred at the beginning of the transition to a market economy and the institutional battle between the central bank (Gosbank) and the specialized banks. Specialized banks were created in 1987 to serve certain sectors of the economy, but without the appropriate institutional framework for the central bank to oversee these specialized banks. The spetsbanks and Gosbank rapidly began to blame one another for the numerous problems arising from this situation, which had consequences for short-term lending. However, in 1988, the Law on Cooperatives

authorized the creation of completely private cooperative banks. Gosbank had an institutional incentive to support the development of these private banks because it could assert its authority over them and break the monopoly of the spetsbanks. It was very generous with respect to licensing and declared that any former Soviet entity had the right to form a bank (a provision that was not included in the Law on Cooperatives). Many economic organizations quickly understood that owning a bank offered multiple advantages. The Russian banking system was not servicing the economy and was highly unpredictable. Creating a bank was a defensive response by enterprises. Thus, banks not only could implement survival techniques but also had the potential to make their shareholders immensely wealthy (they could open offshore accounts, convert non-cash assets into cash and thus privatize money by transferring it out of a government account). A “natural” relationship of mutual dependence between Gosbank and the private banks developed rapidly. Gosbank’s interests were to issue enough licenses to limit the influence of the “spetsbanks”, and Gosbank officials received bribes or other informal propositions to facilitate the license-issuing process, while enterprises could have their own banks and lend to their shareholders, suppliers and clients (Buyske, 2007:108-11).

Thus, this pool of banks that provide grey services and money laundering operations also plays a role in economic and social policies concerning economic diversification in Russia. Economic and social ties link these banks to the SMEs they serve. As such, this is the source of micro-efficiencies in the financing of 40 percent of SME loans. That corresponds to the defensive reflex of businesses. Measures that benefit firm survival, however, do not imply efficient growth. The Russian social fabric that produces these linkages, which are useful to firm survival, might also prevent the formation of others that are essential to the functioning of healthy market economies. Insider lending is prevalent in Russia (Laeven, 2001, Maternovsky, 2011). Numerous respondents consider their businesses to be parts of the various business ecosystems that comprise the Russian market. Even at the level of SMEs, banks tend to favor firms within their ecosystems.

This situation can also be perceived by examining the portfolios of the banks that lend the most to SMEs in figure 14. Some banks specialize in loans to SMEs, as over half of their entire lending portfolios are composed of SME loans. However, these are very small banks, as measured by assets. None of these banks were among the 30 largest banks, apart from “Vozrozhdenie”, which was in 27th place. This confirms that large banks are not specialized in SME lending and SME lending is primarily pursued by small, regional banks.

A survey of the 300 largest banks found that 42 percent of them consider the requirements on the financial status of enterprises as the largest impediment to SME financing (Vedev and Grigorian, 2011). Double or grey accounting prevents banks for accurately evaluating risks. As a result, banks shift their focus to collateral requirements,

approximately 116.5 percent (IFC, 2012), which are considered excessively severe by 31 percent of banks. According to this analysis, opaque accounting is thus at the root of a vicious cycle (Vedev and Grigorian, 2011). Russian SMEs have inherited the accounting practices of the Soviet system, in which accounting was not designed for investors but state planning. Transparency has thus never been a widespread notion in Russia. This might change as a result of a new law implemented in January 2013. This law does not concern accounting standards per se but instead updates how accounting should be organized. In any case, accounting in Russia remains tax driven. Double accounting is the norm. The interviews conducted reflect that SMEs do not consider accounting a tool to determine the performance of a business, but rather to conceal it. For the same reasons, firms are also divided into numerous legal entities that are frequently renamed and re-registered.

Loans to SMEs are generally of a short-term nature, and the first half of 2012 presents an increase in short-term loans relative to 2011. Among the 88 banks surveyed by Expert RA, 1-year credit and overdrafts for SMEs comprise over 50 percent of loans. Only 15 percent are loans with maturities of more than 3 years. Techniques for rating small businesses can be applied to SMEs, as this shifts the focus from the SMEs to the personal credit history of the owner. However, this demands objective and standardized measurements of risks and increased automation in decision making (Snyder and O'Brien, 2011). These techniques were only recently introduced in the financial sector of Russia. The interviews with the bankers revealed that providing credit to SMEs is a new segment of the banking market. It was only recently that providing credit to SMEs began to be considered possible and profitable. Moreover, that lending technology is best suited for small loans that account for a small percentage of portfolios because it is based on risk correlation and diversification. In Russia, such lending should target the micro loan segment. Automated procedures could be applied to loans of up to 1 million RUB (\$30'000), which is not sufficient to finance medium-sized firms' investments.

Leasing and factoring, which are appropriate in weak legal environments because risk management is focused on the performance of the transaction instead of the quality of the borrower's balance sheet (OECD, 2011), has been growing in Russia. However, leasing, which is an affordable instrument for SMEs to finance investments, is used by large firms for substantial transactions. The structure of factoring deals is similar. For both of these instruments, Expert RA observed a low number of transactions but substantial ones by large firms (see figure 17 below).

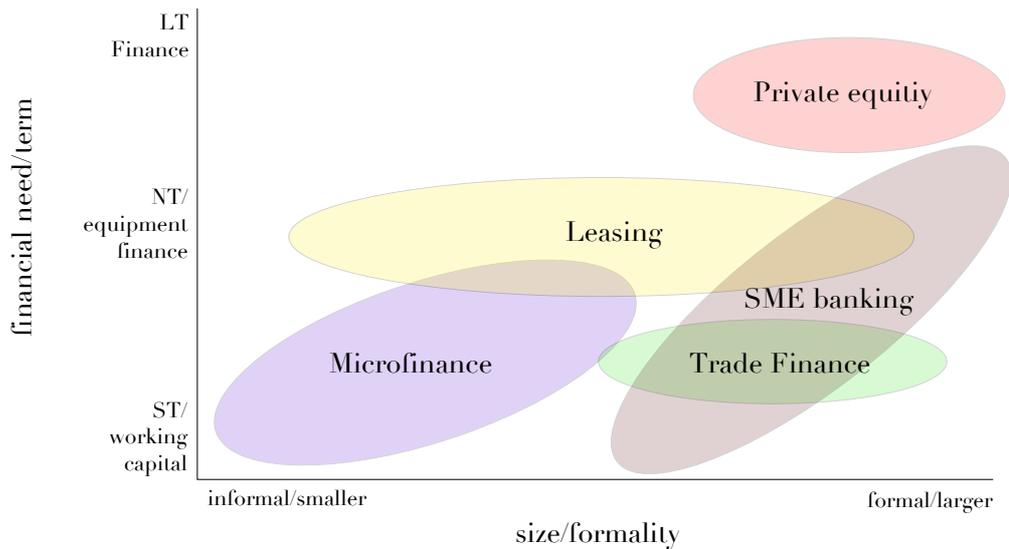


Source: Expert RA

**Figure 17. Structure of leasing and factoring deals**

Thus, while there have been developments in the Russian financial sector in recent years, the choices in terms of lending technologies for SMEs have remained very limited. Venture capital, angel investors and micro-finance can provide some financing for start-ups, but these vehicles have yet to become popular in Russia. They are not particularly developed in former Soviet economies because there are few innovative, fast-growing enterprises. Institutional factors such as a reluctance to dilute ownership and capital gains taxes constitute a barrier to the development of venture capital. By the same token, the lack of exit strategies for equity investors and the chronic deficit of confidence in business relationships make equity investment very risky (OECD, 2011:171).

When they are not underdeveloped, the instruments to finance SMEs are lacking. Figure 16 below from Naïm (2008) visualizes the problem.



Source: (Naïm, 2008:1)

**Figure 18. The MSME finance landscape**

The structure of SMEs provides few investment opportunities to Russian banks. The limited number of medium-sized firms and innovative companies does not trigger financial development. The structure of the financial sector is also not conducive to SME financing. Large banks belonging to industrial conglomerates and state-owned financial institutions are poor financial intermediaries for independent SMEs. Thus the state of SME finance in Russia appears to represent a vicious circle. SMEs require financial means to develop, while the financial sector waits for the SME sector to become developed before providing financing. This echoes the chicken-and-egg debate on whether finance precedes economic development. After 20 years of transition, the economy has not become diversified, and the financial sector does not perform its allocative function (Pagè, 2011). As noted earlier, there have been some improvements, but these have not influenced SME financing.

Kuvalin and Moiseev (2011) arrived at a similar conclusion: “*The cumulative share of the enterprises that received bank credits for financing short and long term investment projects was not observed to increase during 2010 and lingered at a level of 24 - 25 percent. This means that banks that work with enterprises of the real economy are still unready to act beyond the frames of the established circle of borrowers*” (Kuvalin and Moiseev, 2011:207).

Formal laws and regulations do not automatically cause banks to act “*beyond the frames of the established circle of borrowers*”. This is the difficulty in the emerging markets and demands breaking with old habits and social structures. In other words, “*these established circle of borrowers*” are social spaces filled by informal institutions. These are

worth exploring to obtain a complete picture of relationship between SMEs and the banking sector. The intuition is that part of what constitutes the Finance-SME relationship is influenced by the humanly devised rules underpinning social relations in Russia. To our knowledge, there are no studies considering aspects beyond the usual information asymmetry problems to analyze the nature of the relationship between banks and SMEs in Russia. The social element resulting in the peculiarity of this relationship in Russia is due to the role that banks formerly occupied in the Soviet Union.

#### **4.5. Historical background**

Monetary policy and the financial system were entirely integrated within the system of central planning. From a historical perspective, one can trace the relationship between banking and the government to Tsarist Russia. During the period before World War I, Russia represented the unique example of a central bank that was entirely dependent on the Ministry of Finance. The central bank was clearly a tool for the government to implement official policy. Shaparov, 20 years before the revolution, had already advanced the concept of “absolute money”, which would merely be a unit of account. This was very similar to what the Bolshevik revolution attempted to implement. The notion of a state monobank began to appear at approximately this time.

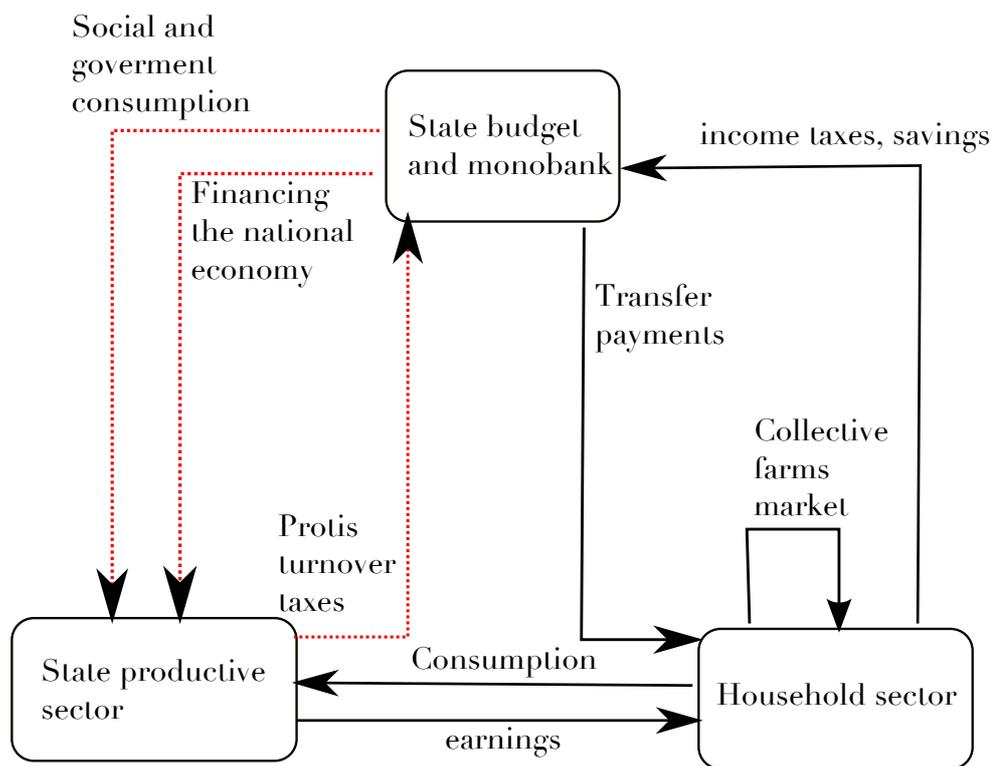
In Lenin’s view, the banking system was “*the skeleton of socialist society*” and was therefore considered a component of the state apparatus needed to transform society. “*Lenin saw (the banks) potential for central control and direction of dispersed industries in a country where regional and local units of the government’s administrative apparatus were inadequate to deal with economic problems. He was impressed with the technical functions performed by the extensive branch networks dominating the scene in Germany, the United Kingdom, France, and indeed Russia itself, rather than with the possibility of using monetary and credit policy as a tool for restructuring the economy and achieving adequate growth and stability*” (Gavry, 1977:22).

One can observe that the Soviet revolution regarded banks as administrative tools rather than financial intermediaries. It was thus only logical to completely integrate the banking system into the state apparatus. However, the organizing principle of the Soviet regime did not indicate how resources were to be allocated. Thus, if in capitalist economies, the primary function of financial sectors is the efficient allocation of resources, the primary function of the Soviet financial system was to prevent inflation and advance the aims of physical planning (Gregory and Tikhonov, 2000).

In a world in which money is exclusively considered a numeraire, a mere unit of account, it then follows that banks should be the accountants of the central plan. This was known as “*control by the ruble*”, whereby Gosbank could observe every transaction (DeMaris, 1963). For example, the flour delivered by a farm as output would be used by a bread factory, which would send a letter of confirmation to the farm that the flour had been delivered. This document would then be delivered to Gosbank, which would credit the account of the farm and debit the account of the bread factory by a like amount of “bookkeeping money”. The bread factory would then deliver its bread to a state store, and the same process would apply. When a household would purchase the bread with cash, the state store would deposit the cash with Gosbank and be given a credit of equal value. Thus, as the transfer of physical output was reflected in a financial transfer, Gosbank could theoretically monitor the plan “by the ruble”.

Financial intermediaries cannot exist in this type of environment. Credit only exists as an input required to fulfill a production plan. “[The] *Monobank system did not distinguish between central banking and commercial banking, and its role was limited to the organization of the payments system for the enterprise sector and pumping short-term credits to this sector to facilitate inter-enterprise trade as well as to smooth out any imperfections unforeseen in planning. Because all enterprises held their accounts with banks, banks controlled their financial flows, monitored their performance, and supplied all necessary information to the authorities. Notions such as market-determined interest rates, liquidity preference, cost of funds, collateral, and creditworthiness were irrelevant to soviet banking practices. The banking sector was used as an effective but neutral conduit in the government’s resource allocation policy*” (Dow et al., 2008:9).

Banks thus were never a bridge between savers and investors, but quite the opposite: They were instead the guards of the border between cash and non-cash transactions. Enterprises would settle their transactions in non-cash assets, while the household sector would use cash. The conversion of non-cash assets into cash was restricted. Figure 19 below depicts this Soviet system of separation between cash and non-cash transactions.



Source: (Green and Petrick, 2002:3)

Figure 19. The soviet financial system

Woodruff (1999) provided a gripping account of the monetary reforms that occurred before money regained its universality. The Ruble lost its universal value after the 1930s and was partitioned. Its value was subordinated to the status of its owner. Money in the Soviet system was considered no more than the "*lubricant of production*". However, when market liberalization occurred, the origin of economic value was still located in production, as the entire Soviet economic system preferred production to monetary stability.

The system soon became a barter economy because enterprises were unable to satisfy the prices of a monetary economy and Russia's governmental arrangement caused the barter economy to shift from the interregional level to the federal level. The barter economy reached 50 percent of the total in 1998. Understanding how demonetization occurred is crucial to understanding why the reforms were not as successful as proponents of rapid liberalization believed they would be (Yakovlev, 2000).

Non-monetary forms of payment emerged because of institutional weakness in the financial sector (Noguera and Linz, 2006). Moreover, this indicates the non-universality of Russia's formal legal system. Because the Soviet system only regarded money as a unit of account, its intermediation function was eliminated. Money was only necessary to settle transactions; it was a means of payment only, not a medium of exchange.

Developing a market economy would require not only formal laws and, more importantly, state sovereignty to reform the role of money beyond an exclusive means of payment but also formal and informal institutions to establish money as a medium of exchange. The notion of credit risk was absent from the previous financial systems, and credit was therefore considered an input, on the same level as other inputs that were necessary to fulfill the plan.

This understanding of the role of the banking sector can be perceived in SMEs' decisions to create banks for themselves during the reform period. *"Almost any group can organise a bank owing to the lack of regulation. "Wildcat" banks primarily accept deposits from members and borrow on the cheap interbank credit market to fund their own enterprises. These banks apply for credits at subsidised rates from the Central Bank and use this money to make loans to the designated enterprises"* (Johnson, 1994:979). The way the banking sector interacts with SMEs is partly the result of the Soviet legacy and the institutional struggle between the central bank (Gosbank) and the specialized banks (e.g., Sberbank for savings, Vnesheconom bank for external trade). Specialized banks were created in 1987 to serve certain sectors of the economy, without the appropriate institutional framework for the central bank to oversee these specialized banks. The "spetsbanks" and "gosbank" rapidly began to blame one another for the numerous problems arising from this situation, which had consequences for short-term lending. However, in 1988, the Law on Cooperatives authorized the creation of completely private cooperative banks. Gosbank had an institutional incentive to support the development of these private banks, as it could assert its authority over them and break the monopoly of the "spetsbanks". It was very generous with respect to licensing and declared that any former Soviet entity had the right to form a bank (which was not stipulated in the Law on Cooperatives). Many economic organizations quickly came to understand that owning a bank offered numerous advantages. The Russian banking system was not serving the economy and was highly unpredictable. Thus, creating banks for themselves was the defensive response of enterprises. Moreover, in addition to these survival techniques, banks also offered the potential to make their shareholder extremely wealthy. They could open offshore accounts, convert non-cash assets into cash and thus privatize money by transferring it out of government accounts. A "natural" relationship of mutual dependence rapidly developed between Gosbank and private banks. Gosbank had an interest in issuing enough licenses to limit the influence of the "spetsbanks", and its officials received bribes or other informal proposition to facilitate the issuing process, while enterprises could have their own banks, lending to their shareholders, suppliers and clients (Buyske, 2007:108-111).

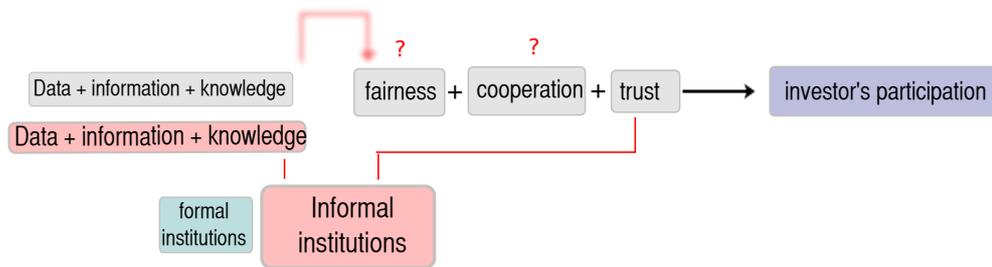
Thus, two processes were at work in the creation of the banking sector, neither of which had anything to do with efficient allocation of capital. On the one hand, private banks were converting non-cash assets into cash, without any reference to market prices, and

employing dubious and occasionally illegal methods, which poses a social and political problem. On the other hand, it seems that enterprises replicated the financial structure to which they were accustomed by creating banks that would serve the shareholders of a club of enterprises to allow for the continued operation of these businesses. These newly created private banks played, on a smaller scale, at the level of networks of enterprises, a similar role to the one that Gosbank formerly served in the country. They could control transactions and ensure that output was produced. The efficiency of capital allocation was not the primary consideration.

This is not to suggest that the Russian banking system has not evolved since the early transition period. However, as noted above, a lot of very small banks control 40 percent of the market for loans; these “dwarf banks” are the result of the defensive decisions of SMEs or groups of SMEs to create banks as a source of liquidity for their network. This is not the type of financial intermediation upon which developed market economies can rely. Moreover, the large banks have only recently come to recognize that SMEs are a potential market (circa 2006-2007, based on the interviews with bankers working in SME departments). From privatization onward, they had other opportunities for profit than simply serving “their function” as intermediaries. *“Spontaneous products of the decaying command economy, the Russian private banks were deformed by birth. They grew out of a system in which the skills and structured of conventional banking hardly existed. Then, from 1988 on, the opportunities for quick gain lay everywhere for the daring and unscrupulous”* (Gustafson, 1999:83). They first exploited inflation. The Russian central bank, captive and unsophisticated, agreed to maintain ruble deposits at low interest rates, while prices increased 10’000-fold between 1991 and 1995. Banks could thus convert low-interest ruble deposits into dollars and then lend dollars at high-interest rates to finance short-term commodity exports. After the “stabilization shock” of 1995-1996, which reduced inflation, banks turned to the GKO and OFZ (government bonds) debt market until the 1998 default.

The Russian banking system did not begin the transition, nor did it emerge from the 1998 default crisis, with a clean institutional slate. Thus figure 20 below, introduced in chapter two, can be used here to describe the SME-Banking sector relationship in Russia. One can observe the importance of informal institutions in the two processes cited above in the creation of the banking sector.

These informal institutions took precedence over formal ones. Data, information, and knowledge, here, are tied to these informal institutions and only allow those who share the same norms to benefit from them. Trust is strong between individuals who are already acquainted. In such an environment, formal rules cannot be considered fair by the broader society and do not spur the cooperation that impersonal transactions require.



**Figure 20. Informal and formal institutions to support investor's participation**

The following section details the informal norms and habits that are prevalent in the Russian sociological landscape and that have affected how SMEs secure financing from the banking sector. Thus, the structure of banking sector in Russia reflects a sort of institutional inertia. However, if the former institutional regime affects the banking sector's development, this is also because of more modest, quotidian habits. By adopting a sociological, "bottom-up" approach, one can observe that if the banking sector never developed a tradition of financial intermediation, this is also because of these informal institutions.

## **4.6. Informal institutions of the banking-SME relationship in Russia**

The interviews conducted reveal that habits and routines affect borrower-lender relationships. To maintain conceptual clarity, this dissertation uses North's definition of institutions as formal and informal constraints and consider informal norms, habits and routines to be the elements constituting informal institutions. The concept of *blat*, aptly described by Ledeneva (1998), illustrates the nature of the phenomenon that this chapter attempts to capture using the concept of an "informal institution". The purpose of this chapter is not to ponder theoretical considerations regarding the relationship between informal practices and informal constraints. Ledeneva struggled with different concepts to define *blat* as an informal practice. In this context, this dissertation uses the notions of informal practices, informal norms and informal constraints as equivalent concepts, all describing the informal social material that comprises institutions. The central question is how this social material influences the SME-bank relationship. Given the widespread use of *blat* and substantial influence of informal norms and networks in Russia and all CIS countries and the inability of the Russian banking sector to finance SMEs, it is surprising that this question has never, to our knowledge, been raised before. However, there are empirical studies on similar topics that allow us to deduce that informal practices might not be conducive to efficient financial intermediation.

This analysis attempts to contextualize these informal institutions within the framework of the SME-banking relationship. In that sense, it is similar to Uzzi's study of how social relationships and networks help the "midmarket" obtain financing (Uzzi, 1999). He employed the concept of social embeddedness, defined as "the degree to which commercial transactions take place through social relations and networks of relations that use exchange protocols associated with social, noncommercial attachments to govern business dealings" (Uzzi, 1999:482). At the relationship level, firms that conduct their transactions through a lender reduce their cost of capital. At the network level, however, firms are more likely to obtain financing and a lower interest rate if they have a mixed network of arm's-length ties and embedded ties. Uzzi explains that this "network effect" with arm's-length ties facilitates access to public information and market prices.

This chapter adopts a different stance, in that it considers other environments, such as Russia, in which arm's-length ties have never really existed and embedded ties, the informal constraints captured by the concept of *blat* mentioned above, are exclusive. How does this social structure affect SME finance? Rehn and Taalas (2004) demonstrated how *blat*, understood as mundane activity, was at the center of the economics of daily life and is a form of entrepreneurship in Russia. Understood as such, "*entrepreneurship can be subversive and anti-systemic. Even though (entrepreneurs) might be helpful to those who partook in these dealings, particularly those who could use their opportunities best to their advantage, they struck a blow against the strive (however shoddily implemented) towards equality among Soviet citizens, and were thus highly anti-social from this ideological perspective*" (Rehn and Taalas, 2004:247). *Blat* is an informal practice that lies at the center of an economy of favors. A favor implies an act of exclusion. If it can be given to everyone, it is no longer a favor. Using the concept of *blat*, Hsu (2005) notes that Russian businesses used such social capital differently than Chinese businesses, which relied on the similar practice of *Guanxi*. While *Guanxi* practices were helpful in the development of trust-based networks, *blat* evolved into a series of defensive mechanisms and failed as an instrument of extending one's networks and building trust with strangers. In other words, *blat* is not the sort of social capital identified by Putnam and Helliwell (1995) as a component of economic growth. It is not interpersonal trust. *Blat*, on the contrary, favors trust within the group and is the cement of the *nash/ne nash chelovek* (us versus the others) dichotomy described by Schrader (2004). Bonding at the expense of bridging is not conducive to economic development.

This argument is further reinforced by Batjargal's empirical study on social networks and entrepreneurial performance. "*Structural embeddedness is the structure of the overall network of relations. The structural properties of ego-centered networks such as network size, density and diversity are dimensions of structural embeddedness. Relational embeddedness is the extent to which economic actions are affected by the quality of actor's personal relations. [...] Resource embeddedness (is) the degree to which network*

*contacts possess valuable resources*" (Batjargal, 2003:537-538). Among the 75 entrepreneurs interviewed, relational and resources embeddedness are found to have direct positive impact on firm performance, while structural embeddedness has no direct influence. These findings confirm Rehn and Taalas' (2004) perspective on entrepreneurial activity as a means of survival. It might be helpful for individuals but entail negative effects for the system. While it allows agents to survive, it might compromise macroeconomic efficiency. Menyashev and Polishchuk (2011) reinforced this argument using data from a major, nation-wide survey administered in Russia in 2007. At the systemic level, they found that bonding social capital had negative effects on development, as measured by socio-economic conditions, and the performance of local governance, while bridging social capital had positive ones. *"Thus, what is known as "bonding" social capital upholds collective action within narrow confines of smaller isolated groups providing "club goods" for group members. The impact of such activities for broader social welfare could be detrimental, if smaller "Olson groups" are engaged in socially wasteful rent-seeking, or if they divert their resources and energy from eliminating root causes of social and economic problems. On the other hand, "bridging" social capital facilitates the creation of broad society-wide coalitions ("Putnam groups") which advance social welfare by producing public goods, such as efficient public sector governance"* (Menashev and Polishchuk, 2011:3). Thus, in a capitalist environment, employing survival tactics, based on a socially exclusive structure developed to protect persons and individual firms against a predatory state, comes at the expense of economic efficiency.

The interviews conducted with SMEs confirmed this analysis. Numerous SMEs and experts described the Russian market for financial services as being composed of a "network of influence", or "cartels". Some SME owners admitted that if it were not for their ties with certain banks, they could not have obtained the loans that they had. They described the Russian market for financial services as composed of various smaller markets that do not communicate with one another. If a person is outside this group of influence, he or she has no opportunity to obtain loans or other financial instruments. Recommendations and reputation appear to serve as a sort of currency in these circles. Numerous respondents underlined that recommendations were nearly obligatory to communicate with individuals belonging to a different "group of influence". It appears then that Russians' "insider-outsider" reflex affects the way in which financial services are provided. Some respondents cited a famous proverb that emphasizes how trust is socially structured in Russia: "our groups are good, but our people not". The network is thus a resource that can be substituted for leasing. This was the case of one interviewee. Lacking the necessary funds to purchase machinery to produce certain pieces of steel and other equipment, he contacted former colleagues from the Soviet era. They concluded a ten-year contract that has allowed him to use equipment and machinery in exchange for a fee.

Financial information is exchanged, and financial issues are resolved not between the financial sector and economic units but within the group. The group provides the social spaces in which trust can be improved and serve as the intermediary that financial institutions never have become. There are numerous associations of small and medium-sized enterprises in Moscow and St Petersburg. Some are only for businesswomen, some are for SMEs in the construction sector, and others are active in industrial projects. The interviews conducted with these associations demonstrated that their functions were to provide a platform for crafting solutions, including financial ones. Grouping businesses can be a lucrative activity as the platform “mnogobiz”, which means “a lot of business”, demonstrates. Mnogobiz provides accounting services and legal advice for its clients and has the necessary connections with the banks (due to the owner of mnogobiz, who has “friends” working in banks). Informal networks can then serve as a resource to establish a formal business, though their practices seem to occupy a legal no man’s land. Mnogobiz admitted that it occasionally “polishes” the books of some of its clients to obtain better access to financing. It has economic incentives to do so because it adds 2-3 percent to the interest rates of the loans that it obtains for its clients.

The above example describes a mafia-like system, but this does not imply that the entire Russian economy functions in this manner. However, one can characterize the Russian economy as being composed of numerous business ecosystems, on the words of one survey respondent. In the numerous business ecosystems to which banks belong, the latter can suggest partners ranging from insurance to cleaning services and customs administration networking. Thus, businesses are not necessarily members of a value chain but are instead linked by existing in the same ecosystem. The reflex to develop interactions within groups simply implies that economic efficiency and transparency are not the primary concern.

The primary concern seems to be survival and not growth. It is mentioned above that survival tactics must be considered in relation to the predatory behavior of the state, which has not evolved substantially since the Soviet era, despite that the economy was privatized. The interviews conducted clearly revealed that relationship between state authorities and enterprises is a serious issue in contemporary Russia. None of the businesses interviewed contended that the government was supporting the growth of SMEs in any manner. All of the respondents complained of the unpredictability of the tax department, which is as much of a state within the state as the famous customs department. According to some interviewees, opening a bank account is the first step toward transparency that will also jeopardize their business. In that regard, the nature of the state-private sector relationship affects the structure of the private sector and is another piece of evidence that formal privatization cannot be effective if a deeper institutional transformation does not occur.

This particularity of the Russian market must be considered if one wishes to better understand information asymmetries. Asymmetric information thus not only describes a relationship between an agent possessing more formal information than his or her counterparty but also the difficulties of transacting when economic actors value contextual information to a greater extent than they do transparent, coded information. The literature mentioned above and the empirical materials gathered from the interviews conducted suggest that Boisot and Child's (1996) analysis remains valid. According to them, different stages of economic development correspond to the degree to which information is codified. Thus, information is placed within the framework of various institutional characteristics. Viewed in this manner, transacting parties might have identical amounts of formal information, but the transaction can still be characterized by asymmetric information because the parties "belong to different worlds". Rules are highly dependent on context, and networks render the spread of information difficult; it is thus equally difficult for information to become knowledge. These substantial information asymmetries increase the costs of financial services and capital.

## **Conclusion**

The above considerations show the need to refine the typical view of transparency and opaqueness concerning SME financing. As the frontier between soft and hard information disappears in the face of informal and formal mechanisms, distinguishing lending technologies based on the categories of soft and hard information (Berger and Udell, 2006) becomes irrelevant. Indeed, such a distinction fails to account for the various forms that information can take, which depend on its institutional basis (formal or informal). As this chapter attempted to argue, informal practices occasionally overrule formal requirements, thereby affecting the interplay between formal and informal norms that allow for efficient relationships between the financial sector and the economy. For example, the value of hard information, such as financial statements, is low in an environment with pervasive double accounting such as Russia. Borrowers need to obtain preferential access to the internal functioning of an enterprise to evaluate its potential and risks. Western economies have developed formal institutions, such as accounting standards, auditing, and certified accountants, to ensure that investors and creditors analyze information that corresponds to the real value of the firm to the greatest extent possible. These institutions are intended to ensure that the external image of an economic unit corresponds to reality. In former Soviet economies, such institutions are very young. The interviews conducted confirmed the prevalence of informal institutions and corresponding mindsets. The accounting software used by most SMEs in Russia is actually a tax declaration software that SMEs are required to use to file tax documents every quarter. The value of an enterprise given by the tax software has to be

complemented by “management accounting”, which also records transfers of cash that do not appear on the first accounting document. The fieldwork revealed that Russian SMEs have two types of accounting practices and continue to regard accounting as a government tool to tax business. In that environment, hard information is de facto soft and thus requires the filter of informal institutions to be decoded. The frontier between the internal and external aspects of an enterprise is not fixed by corporate governance norms, which, consequently, are difficult to implement.

The case study of Russian SME financing reveals how social practices can alter the structure of a market, i.e., the market for financial services. This chapter details how these practices are part of the Russian social fabric, which prevents the emergence of an efficient market for financial services. Moreover, these social arrangements exhibit inertia. Bluntly, one could say that society is too slow for a well-developed financial sector. As chapter three attempted to demonstrate that the reverse is also possible: Financial sectors could be developing too rapidly for societies. Overall, the second part of this dissertation attempted to show that financial sectors are not immune to social arrangements and that these arrangements are not immune to the evolution of financial sectors.

Indeed, Dembinski (2009) explored the social and ethical consequences of the financialization process, and paradoxically, there are numerous striking parallels between these and the characteristics of planned economies. The growing complexity of finance introduces a distance between market actors and the consequences of their actions. Financialization is “totalizing” in the sense that the actors involved are part of the mass of financial markets insulated from the rest of the economy and society, akin to the way in which Soviet workers were part of a large, centrally planned economy that was out of touch with economic reality and insulated from economic systems that might operate differently. Dembinski’s following phrase, describing the diffuse sense of responsibility induced by financialization, could easily apply to the ethical consequences of Soviet planning. *“Ultimately, no-one feels responsible for the overall result, but everyone feels an exaggerated technical responsibility for his or her particular segment. No longer knowing why they are doing what they do, they become mere operatives who simply obey their superiors rather than using their common sense and their instincts”* (Dembinski, 2009:12).

Second, the process of financialization favors transactions over relationships, just as Soviet economies did. In that case, the only economic relationship possible were purely technical, previously planned transactions. One of the greatest challenges facing former Soviet economies is to rebuild cooperation and trust, which central planning destroyed. There is no need for cooperative, long-lasting relationships in communist economies. However, these sorts of relationships are precisely what financialization is destroying.

Could it be that economic systems in which finance is all important and those in which finance is meaningless actually impose the same costs on societies: Fewer long-term relationships based on cooperation rather than procedures, growing distrust, and ethical alienation?

Asking these questions is a means of broadening the scope of analysis of to the problems faced by the financial sectors and policy makers. Just as the debates over sustainable growth or financial liberalization were enlarged, there should also be a shift from financial sector development to sustainable financial sector development. Economic systems in which financial crises are recurrent are simply not sustainable.

Discussing the design of financial structures in Eastern Europe in the aftermath of the dissolution of the Soviet Union, Stiglitz wrote that "*they should know that the choices they make now may not be easily undone. Institutions once established are not easily or costlessly altered*" (Stiglitz, 1993:8). Arguing that this warning concerns transitional countries would imply that the financial sectors of developed countries benefit from the inalterable advantage of having begun on the right track. Is there no risk that the financial sectors of developed countries might evolve in the wrong direction?

This dissertation argues that financial sectors evolve and that the way they do so is a political issue. Former command economies were and in some instances remain in transition from communism (or even feudal economic structures) to market economies, but high-income countries are also in transition. The destination is, however, unknown. Developed market economies have created a form of capitalism that was under control since the Great Depression. But global finance arose from the ashes of the depression (Cohen, 1996), and traditional capitalism evolved into financial capitalism (Albert, 1991). The beginning of this thesis introduced the concept of financialization in light of the growing importance of financial sectors. Financialization refers to "*the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies*" (Epstein, 2005:3). This dissertation tried to show the economic contradictions of financialization and the political economic dilemma it poses in chapter one and two. Chapter three and four explored the social consequences of the evolution of Western financial sectors and based on the Russian case study, tried to show that it is institutions, formal and informal, that are the bedrock on which efficient financial sector can develop. If the Russian transition bred a "*Russian style*" capitalism (Gustafson, 1999), what characterizes contemporary "*Western style*" capitalism?

## Conclusion: Is financial capitalism sustainable?

What characterizes contemporary “Western style” capitalism? This dissertation showed that financial systems were growing in importance in developed economies, with consequences reaching far beyond the economic sphere. The different chapters identified the characterizing features of this evolution, which can be summarized as followed: Risk allocation is now the defining feature of financial sectors. It leads to a waste of capital and to the emergence of specific interest groups. This new market for risk allocation is costly in term of regulation and from a societal point of view because the actors in this new market devised a new set of informal rules contradicting the formal existing ones.

Indeed, chapter one concluded that by allocating risks, financial sectors lost their capacity to correctly reflect economic fundamentals. The combination of several phenomenon tend to separate assets prices from their economic fundamentals. Stock markets are now at the center of financial systems, but their functioning not conducive to correct pricing of economic fundamentals. Financial intermediation is now based on transactions and less on relations, which is a form of intermediation ideal to manage risks, but less so to allocate capital. Lastly, these financial transactions take place at the international level and on a short-term time scale. It is a financial system better equipped to manage risk than to allocate capital.

That finance does not serve the real economy does not mean that no one profits from it. This new market for risk allocation serve certain interest groups as chapter two mentioned. The business of spreading risk can be viewed as a value chain with liquidity and information as the primary input used to supply other actors and clients with sophisticated financial instruments. Alternative Trading Venues sell data to brokers able to profit from it. Traditional exchange rent their space to High Frequency Traders and other firms able to trade at the speed of light. Investment banks, hedge funds and High Frequency Trading supply High Net Worth Individuals and other wealthy clients with high returns while earning growing fees. International short-term transactions through financial markets is an ideal form of financial intermediation for this market. The “originate and distribute” model of finance which replaced the more traditional “originate and hold” illustrates that very well. It could not exist without that form of intermediation. By the same

token, the “downsize and distribute” model of management also requires information and liquidity. Listed firms are being constantly evaluated by financial markets which expect a certain return. This evaluation, whether it reflects the real economic potential of an enterprise or not, advantage the short-term shareholders, who can always exit the “investment” at any time, because the market is liquid enough. Compensation schemes implemented originally to align CEO’s interest with those of shareholders might have backfired. As chapter two mentioned, shareholders are diverse in their expectations and risk appetite and their time horizon are short or long. To what kind of shareholders are CEO’s interests tied? The dominance of the “downsize and distribute” model seems to suggest that short-term shareholder give their blessing to CEOs who are able to legitimize their revenue by taking managerial decision in the name of the sacrosanct “shareholder value”. The practice of stock repurchase is a telling example of managerial decisions that align interest of CEO and interest of short-term shareholders. Stocks buyback improves financial ratios and reduce dilution. It thus drives stock prices up. The company, by claiming to invest in itself, distributes in fact money to shareholders when that money could be spent on innovation or job creation. It has also been used over the past three decades to manipulate stock prices under the cover of “maximizing shareholder value”.

The political economy analysis of the linkages between finance and the real economy shows that financial system can indeed favor some interest groups among others. Financial globalization is said to benefit mobile capital in the first place, while fixed capital tend to gain from it in the long term (Frieden, 1991). But the biggest winners are actually financial intermediaries at the service of short-term and mobile capital who are able to extract fees while widening the gap between productive capital and the real economy.

The second part of this dissertation takes an institutional economic perspective at the separation between finance and the real economy. There is a need to examine the institutional bedrock upon which this separation takes place. From that point of view, it is an analysis of the separation between finance and society. Chapter three notes how modern complex finance has the potential to erode formal and informal institutions of Western economies.

Much like banks, financial sectors are today not only too big to fail, but also too big to regulate. Regulation implies direct and indirect costs, but also distortion costs and its unintended consequences. The multiplication of rules and agencies complicated the regulatory landscape and amplified regulatory risks. Complex financial sectors led to complex regulation when it should actually be simple. The key is therefore to write simpler rules of the game, and not more of it.

The rapid development of financial sector these past 30 years put pressure on informal institutions also. Under the layer of formal, written rules of regulation, there is a hard-to-grasp layer of implicit conventions and unwritten laws. Conventions, routines and habits allow institutions to transmit and interpret information. Agents require these mechanisms to process data into information and knowledge. Formal and informal institutions are not necessarily tied together harmoniously and indeed, the financial crisis and its myriad of scandals showed how informal rules within financial spheres grew apart from formal regulations. Financial markets are socially structured and not devoid of moral norms and culture. But these norms evolved in a manner that clashes with the rule of law and the rest of society's norms.

Indeed, the relationship between the financial regulatory system and modern financial sectors is one of "deep capture" whereby the interests of financial sectors systematically prevail over financial and economic policy processes (Baxter, 2011). The "secret tape of Goldman Sachs" by Ex-Fed employee Carmen Segarra reveals the overwhelming cultural capital of Wall Street over regulators and policy makers (Lewis, 2014).

That formal and informal institutions underlying economic systems be tuned in is crucial. It is one of the lessons of the market reforms in former command economies. That is why chapter four takes the example of SMEs finance in Russia. It shows how the interactions between formal and informal institutions shapes the SME lending market of Russia. The imported formal institutions that are intended to ensure that the external image of an economic unit corresponds to reality - accounting standards, auditing, and certified accountants – are not supported by informal institutions. Economic transactions tend to take place within one's own network. Rules are highly dependent on context, and networks render the spread of information difficult. The costs of financial services and capital are thus increased by these information asymmetries. It is hard to conclude that the Russian financial market works efficiently. It is liberalized, but it is liberalized "Russian style".

So what characterizes contemporary "Western style" capitalism? The dissertation advances that it is misallocation of capital, the rise of financial capitalism oligarchies, and economic inequality. Overall it also shows that the evolution of financial markets is a political issue, because it is through financial markets that the distribution of economic wealth is organized. Financial institutions distribute risk throughout society when it once used to hold it and enterprises distribute wealth to their shareholders when it once used to invest for innovation. It might sound too simplistic and describe the picture of a past that never truly existed. Of course, a financial system where institutions allocate capital efficiently while holding on to risks while letting enterprises free to choose how to use their cash flow is the ideal type of a financial system that serves the common good.

But that would be a true liberal financial system and this dissertation contends that the current one is very far from it. As Chesney (2014) argues, Western financial systems today are at the opposite of what Ludwig von Mises, Friedrich von Hayek and Milton Friedman would define as liberal. It is not structured to serve the common good but to work at the profit of particular coalitions. As Amato and Fantacci noted (2012), what was asked of the old capitalism was simply to be a more efficient system of production. Now that the competition for the best system of wealth production ended, what is asked of financial capitalism is the redistribution of that wealth. The rules of the game of that new capitalism clash with those of the old “productive” capitalism and seem to be, at least currently, incompatible with the notion of fairness. Political movements against the financial world such the Occupy Wall Street that happened in the US and Spain in the wake of the crisis can be seen through those lenses. Recent Swiss referendums trying to establish a ceiling for CEO’s revenue can be analyzed from that point of view too. The rise of inequality in Western societies is much debated, but what we should really ask is whether wealth redistribution through financial capitalism is fair.

The growing importance and complexity of financial sectors, the pressure they put on formal institutions and the subsequent rise of “financial” oligarchies are new elements that the political regimes of democratic societies will have to take into account to save liberal market economies and capitalism from the post-1989 version of capitalism. Political institution will have to find new ways of arbitrating between different interests groups and make this game of wealth redistribution through financial markets fair for all participants or Western economies might endure the risk of becoming “Russian style”.

## **Annex: Notes on the field work and interviews with SMEs in Russia**

The last chapter of this dissertation tried to illustrate how informal institutions weight in the relationship between finance and the real economy. It tried to contextualize the gap between finance and society introduced in chapter three. The analysis of the bank-SMEs relationship in Russia is enriched by a series of interviews with SMEs, banks and enterprises associations. The present annex will give more information about this empirical part.

25 SMEs, 4 bank representatives, 3 business associations and several experts and academics were interviewed between October 2012 and March 2013. 14 interviews were conducted in Moscow and 18 in St-Petersburg. These were face-to-face, semi-structured interviews that lasted from 45 minutes to two hours. In order to get access to these entrepreneurs, I applied to the several business associations and attended different conferences on the subject of SME finance in Russia. Two associations were particularly useful: The European Business Angel Network in Moscow and the Small and Mid-sized Business Association of St-Petersburg. Becoming a full member of these associations and attending the frequent meetings planned for members allowed me to convince some entrepreneurs to share their views on and personal experience with the Russian banking sector.

The size of these firms varied greatly. The smallest firms interviewed employed 15 people, while the biggest about 200. If the respondents had no problems indicating the number of people employed, it was very hard to receive any information on the turnover and revenue of the enterprise. In fact, owners and CEOs of mid-sized firms, because of their size and turnover, are the least accessible. These are also the one that fear the state and the corporate raiders most and therefore the most reluctant to provide any kind of information.

The sectors in which these firms were active varied equally. It ranged from consulting services to construction material and machinery manufacturing to food industry and pharmaceutical. Bank's representatives in charge of loans to SME were also interviewed.

This sample of enterprises interviewed was not randomly chosen and is therefore not representative. A handful of respondents are part of my own network of acquaintances. The rest are members of these association mentioned above. For practical reasons, I

was able to interview firms in Moscow and St-Petersburg only. SMEs active in peripheral regions of Russia would have provided more details and would certainly have underlined even more the fractured aspect of SMEs finance market in Russia composed of a lot of small ecosystems that do not communicate with one another.

Thus, on the one hand, the enterprises interviewed are all small and middle-sized companies belonging to business associations in the biggest two cities of Russia. But on the other hand, if these enterprises, located and active where the banking sector in Russia is the most mature, confirmed the prevalence of informal institutions such as *blat* and other network arrangements between banks and SMEs, one can safely assume that these informal bargains are even stronger in the periphery, where the financial sector is not as developed as in Moscow.

These interviews revealed that informal institutions structure these bargains and influence SME finance in three kinds of relationships:

1. Relationships between the SME and its own network in the private sector
2. Relationships between the SME and the banks
3. Relationships between SME and the state

### **SME and their networks**

The firms interviewed active in manufacture (mainly machinery for food industry and construction) started their business at the fall of the Soviet regime. Their business rests on the use of a technology that was developed by the communist regime. These plants and factories continued to produce and some of them are exporting their production in some former Soviet countries, but one fails to see how they can be competitive at the international level.

The use of old Soviet technology and infrastructure is a reminder that market economies are not built from scratch. By the same token, these enterprises rely on their old network of partners to solve all sorts of problems. Those who are able to exports in Ex-Soviet republics do so thanks to their network of “friends” with whom they used to work before. Others use their address book to solve problems with the administration or to rent some machinery. The unpredictability of the Russian environment, which is the responsibility of the state, as argued later, pushes people to gather in groups. The group is the unit where information is exchanged and problems are solved, because it is the only civil space where one can trust others. A lot of respondents, conscious that the level of trust between individuals in Russia is very low, replied with the following proverb: “Хороший человек,

это не профессии” (being a honest man is not a profession). It is a very interesting proverb, as it gives the measure of what the state has not been able to do: Forcing dishonest people out of business.

The function of the group then is to reduce the uncertainty of the Russian environment and financial issues, as well as all sorts of other problems, are sorted within that social space. Money is lent and machinery is leased from individuals to individuals, bypassing the traditional banking intermediation. Thus on the one hand, a lot of financial interactions escape the intermediation of the banking sector. On the other hand, since many of these associations have banking representative as their member, they can also facilitate financial intermediation, as they provide a platform where information and knowledge about each other business activity is shared. Facilitating informal exchanges between bankers and entrepreneurs is valuable, because most of the respondents from each side viewed the other as being “from another world”.

### **SME and banks**

Indeed, enterprises and banks do not understand each other business and concerns. They do not speak the same language. Bankers tend to think that SMEs are ignorant about business planning and management. On the other hand, lots of entrepreneurs tend to complain that Russia is now a country of bankers and lawyers with less and less engineers. It is common to hear them expressing a sense of nostalgia for a country that used to manufacture.

The low level of interpersonal trust and the “cultural” clash between bankers and entrepreneurs exacerbate information asymmetries due to the SME sector low transparency. The bankers interviewed admitted that this was an important element preventing efficient financial intermediation.

Nearly all SMEs have two accounting systems. A white one and a black one and SME loan officers insist on examining both sorts. The fixed cost for examining one set of accounting document for a simple credit without guarantee is 350 USD, which is why banks tend to be reluctant to even engage in any relationship with small enterprises. Moreover, it is hard to have information and data representing the whole business since its creation. A lot of firm have multiple filials and have changed name several time. It is a survival strategy for them to hide their business activity from the state. In other words, enterprises choose to stay non-transparent.

It is thus very hard for the banking sector to assess the risk of lending money at the level of the enterprise. Most of the time, SMEs credit are attributed to individuals who pledge real estate to guarantee the loan.

What these problems of bank-SMEs intermediation reveal is that the formal institutions of well-functioning state are not established properly. Asymmetric information tends to be attributed in economic literature to problems of market failure. These interview revealed that in the case of Russia, it seems to be a problem of state failure.

### **SME and the state**

The state has not succeeded in establishing the fundamental formal institutions that are supposed to reduce uncertainty. The Russian state is unable to tax people and corporation efficiently and fairly. Entrepreneurs fear the abusive power of state officials and prefer to have the least possible interaction with any kind of administration and the banking sector is one of them. Opening a bank account is viewed as the first step toward transparency that might put a business at risk. The nebulous structure of the SME sector is due to the fact that firms change constantly their name and have lots of filial. Enterprises have several lives, which last 1 year on average according to several respondents. Thus it is very hard for banks to have good database and credit history.

If the level of tax is the problem in other countries, in Russia, it is the unpredictability of the institutions that is the issue. Some firms active in exports and imports prefer finding complex and costly solution abroad to avoid dealing with the Russian state.

By the same token, the formal institution that recognizes and protects legal entities is not predictable enough, so that the banking sector can secure lending to enterprises themselves, and not their owners.

Altogether, these interviews allowed to enrich one's understanding of the issues of asymmetric information. In fact, the problem lies not only with the quantity of information, but with the nature and the value of information, both of which are determined by formal and informal institutions. The Russian state has not succeeded to implement universal and stable formal institutions. Indeed, many respondents noted the very specific social space that exists in Russian between legality and illegality. An expression describes that space very well: "Вор в законе", which means literally "thief in the law" or legal thief. These "thieves" are not outlaws, but act according to their own rules. The Western understanding of the rule of law cannot accept diverse interpretation by different individuals, which would be in direct contradiction to the very idea of the rule of law. Yet, the expression accepts plainly that contradiction and shows that the problem is not one of economic reform, but of state building.

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Global Entrepreneurship Monitor <http://www.gemconsortium.org/>

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