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Abstract

Against the background of the ongoing financial crisis the question of the genesis and persistence of trust in banks plays an important role not only for the prevention of bank runs and, related to this, for the regulation of banks, but also with respect to the perspective of customer loyalty of private investors towards their housebanks. Moreover, addressing issues of trust in banks will contribute to a better understanding of how private investors cope with the uncertainties and complexities prevailing in financial markets and will thus enrich the theory of decision-making.

In every type of financial system trust has an important role. Due to the high and ever growing complexity of financial systems *institutional* trust meanwhile plays a more important role than *personal* trust. A set of institutions facilitate trust-building or trust-guarding and sometimes even trust-granting functions. Trust allows the trustor to transform fundamental uncertainty into risk.

From an empirical point of view trust in banks has emerged over time as a process in which trust-guarding and trust-granting institutions played a crucial role. So it is no surprise that in a bank based financial system like Germany private households are still entrusting their money to banks today even after the financial crisis.

However, since the late 1980s the institutional framework of the financial market and the governance of corporations have changed dramatically. Actors have common experiences and rely on similar sources of information and institutional knowledge and are also exposed to similar discursive models. This contributes to a social normalization or habituation of the perception of risk. We conclude that such normalization – in the sense of a conventionalization – also greatly influences the economic decision-making behavior of private households. We argue that the bank-oriented 'conservative' investment decisions of German savers are due to a 'cultural embedded framework of logics of actions' and are based on 'intergenerational inheritance'.

The understanding of the embeddedness of economic actors in different cultures such as private households and the emergence of diverse institutional settings in a historic process enables us to understand from a micro-perspective their investment behavior in different economic systems.

Keywords: trust in banks, institutional and personal trust, trust granting institutions; decision making behavior of private investors

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Introduction: 'The path to domestic wealth' and other challenges

Against the background of the ongoing financial crisis the question of the genesis and persistence of trust in banks plays an important role not only for the prevention of bank runs and, related to this, for the regulation of banks, but also with respect to the perspective of customer loyalty of private investors towards their housebanks. Moreover and from a theoretical point of view, addressing issues of trust in banks will contribute to a better understanding of how private investors cope with the uncertainties and complexities prevailing in financial markets and will thus enrich the theory of decision-making. As Knorr Cetina (2007) emphasizes, the recent sociology of finance does not start from a single paradigm but rather from a set of open questions, one of which concerns the outcome of anonymous activities of atomistic actors. We will follow her advice to use at least a part of 'the larger toolbox of sociological [and economic] concepts and theories' (Knorr Cetina 2007, p.7) in explaining the genesis and persistence of trust in banks. While the United States is frequently the focus of analyses due to its leading role in processes of change, as is the case with financialization (Carruthers & Kim, 2011), our focus will be mainly on Germany which is a well-known example of a bank-based economy.

In the past it was customary in Germany that newlyweds were given as a gift a book called 'The path to domestic wealth' (Jungk, undated ≈ 1900). And, interestingly enough, it starts with the now well-known metaphor 'Yes you can' (Jungk, n.d., p. 2), referring to saving as a possibility even for low-income households. And some further popular wisdom can also be found there that might have contributed to a characteristic German (saving) behavior:

- Spend less than you earn
- Pay cash and
- Debts are a 'vengeful spirit' because 'to borrow brings sorrow' (Jungk, n.d., p. 5).

Referring to the British priest in the Church of England, William Marsh (1775-1864), who recommended saving as a virtue to his parish and therefore wanted to write the gold-lettered word 'Penny-Bank' into the sky, the author advised young couples to bank money with the post office savings bank as an early banking institution, which in those days could be found even in the smallest village. In this institution, according to his advice, 'through no effort of one's own the money is 'working' and the bank will still add a 'gift' to the invested money' (Jungk, n.d., p.5, authors' translation). These metaphors of 'working money' and interest rates as a 'gift' may be early guidelines that influenced private investors' behavior at

least at that time and perhaps continue to have an influence today by being 'learned' or 'culturally inherited', as we will explain in our conclusions.

A hundred years later, the CEO of the German savings banks' mutual funds, DEKA, argued that in view of the growing distrust towards banks as a result of the financial crisis, the savings banks had remained a counter-model by practicing genuine trust over the years (Waas, 2012). This statement, of course, should be taken as a partial view, rather, of the entire German savings bank association (Deutscher Sparkassenverband). However, it makes evident that trust is an important concern for banks. Surprisingly, in bank-based systems such as Germany it can be observed that private investors are still entrusting their money to banks even contrary to bank-critical opinions expressed in recent surveys, thus continuing to provide the banks with 'patient capital'.

In the following we develop explanations for this seemingly contradictory behavior. In doing so, we start with a look at the historical process of the development of the structure of the German banking industry. Germany is known to be a late industrializer. In order to catch up with its more developed competitors Germany developed cartels and strengthened its efforts to get 'a high degree of integration in the economy by the involvement of states and banks' (Fligstein & Byrkjeflot, 1996). One thesis is that with the visibility of the usefulness and high quality of loan financing transactions within the region where people lived and worked, people became willing to entrust their savings to these local banks. We go beyond this narrow focus on local presence. Instead we show that the development of the German banking system was marked by the evolution of institutional networks connecting localities and even regions which in their turn acted as stabilizers of relationships between clients and their local banks.

In every type of financial system trust plays an important role (Zucker, 1986). Due to the high and ever growing complexity of financial systems, both with respect to the prevailing products as well as to principal-agency relationships, institutional trust plays a more important role than personal trust (Bachmann, 2006). As has been explained by Shapiro (1987), the set of institutions which facilitate trust-building assume trust-guarding and sometimes even trust-granting functions. Based on these findings we propose the following hypotheses: First, market-based financial systems as components of liberal market economies and bank-based financial system as components of coordinated market economies differ with respect to the type of trust-guarding institutions which prevail in either system. In the German bank-based financial system, cooperative arrangements leading to banking associations

('Sparkassensektor' and 'Genossenschaftssektor') as well as close relationships between banks and industry have come to play an important role in this regard ('Grossbanken' holding controlling rights in corporations are an example). Second, a profound trust in the banks' superiority in handling risks has made the typical German household a 'lazy' manager of its own wealth. Third, a 'culturally inherited' robust belief in the trustworthiness of trust-granting institutions explains why after the financial crisis these same households still rely on their bank when it comes to gauging the risk of alternative financial products instead of improving their financial literacy and thus acquiring the necessary skills to manage their portfolios themselves. Consequently, the typical German household continues to trust banks more in this respect than other financial intermediaries.

Our article is structured as follows: We begin with a reflection on the complexity prevailing in the financial markets and the problem of financial literacy. This will be followed by an overview of the investment behavior of private investors within the German bank-based system in order to contrast it with the differences in behavior in market-based systems. Even though the business strategies of large private banks have changed over the last 20 years, a 'rediscovery' of private savers can be observed. We will show that the investment behavior of private investors did not change after the financial crisis. In chapter 3 we will continue by explaining our understanding of trust as a mechanism to coordinate actors' expectations in markets and to reduce complexity. In chapter 4 we will discuss the relationship between institutional guardians of trust and types of financial systems. Chapter 5 will be devoted to the evolution of German trust in banks from a historical perspective. In our last chapter we theoretically explain the development of consistent patterns of action of private investors that have been quite stable over time.

1. Limits to financial literacy and the necessity of trust

Before we turn to our conception of trust formation among private investors towards their housebanks we will take a look at the problems of decision-making that actors in financial markets are exposed to. It is well known that private investors are often unable to cope with the challenges of the financial markets. This is mainly attributable to the fact that private investors face the same challenges as professional actors do. But they are less well prepared. This not only refers to Germany but can be observed in other countries, too.

Carruthers and Kim (2011, p. 247) point to the problem that 'financial innovation has tested the financial literacy of ordinary households': already the contractual detail buried in

contemporary credit card agreements overtaxes non-lawyers and hidden fees on mortgages may outsmart naive or inexperienced borrowers. Many studies verify large gaps in financial knowledge. Following published opinion, the knowledge of German private investors does not rank highly either. For instance, the toxic Lehman bonds were explicitly sold to ‘stupid’ and ‘ignorant’ investors (DER SPlEGEL, 11/2009; FAS, 06/06/2010).

This lack of financial knowledge has just been confirmed in a representative multinational follow-up study. Fifty-six percent of the survey participants agreed with the statement that they were hardly or not at all knowledgeable in financial matters. Categorized into types of financial knowledge, 16 percent were classified as ‘ignorant’ while 46 (in 2012) to 51 (in 2010) percent were classified as ‘beginners’ (Axa, 2012).

Not only but also against the backdrop of this widespread financial illiteracy the European Parliament and the Council of Europe adopted the ‘Markets in Financial Instruments Directive (MiFID)’ to ensure inter alia a high level of protection for investors because in ‘recent years more investors have become active in the financial markets and are offered an even more complex wide-ranging set of services and instruments’ (MiFID, 2012). This points to the fact that in ‘today’s financial capitalism, answering questions of trust in financial promises lies in the hands of specialists who have expanded the conditions for effective promising into complex tasks, accomplished through, for instance, the science of financial analysis’ (Knorr Cetina, 2009, p.333).

But these characteristics of a high-skill sector of financial services do not prevent the actors in this field from being mistaken, both in their methods as well as in their analyses. This is due to the fact that every actor in a financial market has to face three remarkable challenges: Knightian uncertainty, also referred to as fundamental uncertainty (Dequech, 2000), risk and last but not least complexity.

It might be easy for financial advisors in banks to build up a professional image facing customers for whom the inverse relation of interest rate and security price is already too ‘complex’. But none other than Alan Greenspan remarked about the relativity of financial literacy just a couple of days before the Lehman Bank collapsed: ‘I’ve got some fairly heavy background in mathematics. (...) But some of the complexities of some of the (financial) instruments that were going into CDOs bewilders me. I didn’t understand what they were doing or how they actually got the types of returns out of the mezzanines and the various tranches of the CDOs that they did. And I figured if I didn’t understand it and I had access to

a couple hundred PhDs, how the rest of the world is going to understand it' (Faber, 2009, p.95).

We cannot go into detail here about actors facing risk and uncertainty in financial markets. Having discussed rational behavior and coping strategies for risk and uncertainty employed by private investors in financial markets elsewhere (anonymized, 2012), we would like to add to this discussion some remarks on the above-mentioned complexity which appears of crucial importance. The word's Latin root is 'complexus' as past participle of 'complecti' and means to 'embrace, comprise' (Webster's, 1995, 202). It indicates that something is entwined and refers to a status in which two or more components are interlocked in a way which makes it difficult to separate them, 'a duality between parts which are at the same time distinct and connected' (Heylighen, 1996, p.1). And, of course, the complexity of a (financial) system increases with more parts and more relations between them. It is well known as a general rule that persons who act in or are part of a complex (social) system encounter a series of specific errors resulting from some 'wicked' characteristics of open social systems. In particular these comprise an insufficient consideration of the time dimension, difficulties in coping with non-linear developments and thinking in linear chains instead of thinking in causal nets (von Lüde, 1996). This conduct can partly be explained by the fact that our biologically inherited constitution seems insufficiently prepared for living in an environment as complex as the present society (Heylighen, 1991).

We do not argue that the financial market is more complex than the society we live in and for which we have learned to survive by obeying some special rules of decision-making, among them some personal heuristics developed by experience, which we will come back to at the end of this paper. But in the financial market the actors are undoubtedly confronted with 'complex' products like the CDOs that Greenspan referred to. While this has been no problem for asset pricing theory that relies on a rational framework in which 'investors are able to conduct even the most complicated calculations by lightning speed' and therefore leaves little room for complexity, for modern economists it is surprisingly difficult to find a workable definition of the complexity of a financial instrument (Brunnermeier & Oehmke, 2009). They try to overcome these difficulties by assuming boundedly rational actors selecting three ways for coping with complexity (Brunnermeier & Oehmke, 2009, p.11).

(i) 'by dividing up difficult problems into smaller sub-problems or by using separation results,
(ii) by using models, but keeping in mind potential modeling pitfalls,
(iii) through standardization and commoditization of securities or investor restrictions.'

We also point out that simply increasing the quantity of information disclosed to investors does not resolve complexity, since in the presence of bounded rationality it leads to information overload. These strategies are likely to be adequate for some of Greenspan's PhD students or the research departments of some major banks, but they lack the appropriateness for the 'ordinary' private investor even if he or she belongs to that minority who is better informed in financial affairs. And certainly, this applies to the 'ordinary' bank counselor as well. With this example we attempt to demonstrate the fluid boundaries of financial literacy and far too complex financial instruments.

In order to show how trust in banks emerged a hundred-fifty years ago we have to remember that at that time financial instruments were less complicated. At least considering the attitude of most private investors in Germany the situation has not changed much since then. But, of course, in earlier times people were much less educated with the consequence that, for example, the interest paid on a savings book had to be explained as a 'gift' of the bank. And going back in history even more centuries we will be confronted with disputes about whether receiving interest on savings is a mortal sin that will be punished by eternal damnation (Le Goff, 2010)[1].

2. The persistence of German households' bank orientation

It is well documented that in comparison to Anglo-Saxon liberal market economies, Germany has long been described as a bank-based system where banks established close and long-term relationships with their customers (Vitols, 2001). However, against the background of a strong growth of the ratio of market capitalization to GDP in the second half of the 1990s in bank-based or 'network oriented' countries like Germany, van der Elst (2003) asks whether a convergence towards a higher market orientation can be observed. This question became especially important in the context of the deregulation of the German financial system and the dissolution of the 'Deutschland AG' – of 'Germany Inc.' – (Beyer, 2003), a network of cross-ownership of domestic banks, insurance companies and enterprises that has been (re-)shaped in the post-war period and contributed to the strong development of Rhenish capitalism.

[1] The study very carefully describes the long-lasting debate and the processes of change of the interpretation of the medieval Catholic Church which had long denounced the lending of money for interest. With the increasing need for money because of the differentiation of society as well as wars and the growing prestige expenditures of the Church itself, the usurer, the 'early bankers', could be purified through Purgatory (by donating money to the Church) and thus gain the grace of God. In the context of this paper the question is particularly evident if there are still some unconscious cultural consequences of that threat of Purgatory that still influence our (investment) behavior. This question, of course, cannot be answered here.

Savings deposits are a classical bank product for private households. The growth of savings deposits has shifted over time due to interest rate movements and institutional changes (Deutsche Bundesbank, 1997). From the banks' perspective, savings deposits serve as an important refinancing instrument. Their attractiveness is not only due to their low interest rates but also and particularly due to their de facto long-term character. Thus, they are ideal for refinancing long-term assets (Deutsche Bundesbank, 1997). Nevertheless, the large banks in Germany seemed to be less interested in their private customers after the deregulation of the German financial system. Similar to the banks in the USA, investment banking seemed to be able to boost profits sharply. This development has changed after the Lehman collapse. All large banks are now trying to reinforce their retail banking activities thus acknowledging the 'virtue' of deposits with a longer maturity as an important refinancing instrument.

With caution these developments allow to compare the relevance of bank deposits with that of stockholdings as a means of accumulating wealth between the US as a prototype of a market-based economy and Germany as a prototype of a bank-based system.

The following diagram shows the development of the two financial indicators 'Stock Market Capitalization / GDP' and 'Bank Deposit / GDP' for both countries. It covers the period between 1960 and 2009 and hence includes the 2008 financial crisis and subsequent recovery. Though both indicators have been rising over time as a typical trend for 'high income countries' it is obvious that stock market capitalization in the USA proceeds to a much higher level, whereas the ratio of bank deposits to GDP is higher in Germany. This evidence can be interpreted as supporting the assumption that Germany has remained a bank-based financial system.

Figure 1 about here

Indeed the figures reveal a strong trend in the US towards strengthening the already existing market-based system, whereas in Germany we observe a dominance of the deposit indicator even after acknowledging a slight increase in the shares indicator in the period observed. Of even greater interest is the evidence of rising bank deposits in the aftermath of the financial crisis of 2008, which supports our hypothesis that households are still entrusting their money to banks.

Since it could be countered that such a macroeconomic perspective is much too crude to describe the underlying differences in between the financial system and households' attitudes

towards their banks, we will substantiate the validity of our arguments from a different perspective.

Figure 2 about here

The graph shows for each year the changes in the acquisition of financial assets of German households. So for instance in 2002 the households reduced their stock of shares by 60,7 % and increased their bank deposits by 74,8 %. The graph underscores the high importance of bank deposits and insurance contracts whereas investment in stocks and funds have declined dramatically since the burst of the new economy bubble in 2001, and again at the beginning of the financial crisis in 2007 and finally after the Lehman crash.

3. Trust on the 'institutional' level: coordinating expectations and reducing complexity

The aim of this chapter is to reach a basic understanding of 'trust' which is able to address various accompanying aspects in respect to the problem of its genesis and persistence. Our choice is a blend of three important theoreticians of trust, namely Niklas Luhmann, Lynne Zucker, and Reinhard Bachmann who combines aspects of both authors in his more recent research (Bachmann, 2006).

Further developing some of Luhmann's thoughts, it is Bachmann who provides the starting point for our analytical needs. From his sociological perspective, trust is essentially seen as a mechanism to coordinate expectations between social (that is: individual and collective) actors (Bachmann, 2006). But, speaking of the coordination of expectations, it is the sociological twist that has to be taken into account: it is Luhmann (1984) who stresses that expectations unfold their social qualities only in being 'reflexive', in articulating expectations of expectations, or, to use the sometimes confusing opportunities of German language: *Erwartungserwartungen – expectation expectations.* What is meant here is nothing other than the simple as well as brilliant idea that Keynes also expressed a long time ago in his now famous 'Beauty Contest': what matters – also 'trustwise' – is to expect what others expect. And, as Bachmann further stresses, it is always a 'problem that in the empirical world is almost always already solved before any philosophical questions and problems may set in' (Bachmann, 2006, p. 394).

Moreover, it is this 'trust-grounded' interplay of expectations that can, using Luhmann's terminology again, be termed a 'reduction of complexity' (Luhmann, 2000). In this sense, as Bachmann points out, trust not only directs the choice of (expectation) expectations, but in doing so it takes a certain disposition in the present towards future outcomes – it manifests the future in the present (Bachmann, 2006).

Turning to our analytical field then, to the world of banking and financial markets, it becomes obvious why trust plays such an extraordinary role. As we all know financial markets have a very specific kind of good they deal in: promises (Knorr Cetina, 2009). Any financial contract turns around promises to pay. 'When people make promises, they assume a relationship with a promise-receiving party' (Knorr Cetina, 2009, p.332). And of course an engagement with this 'promise business' is a question of trusting counterparties as 'lenders have to decide if they trust the borrower's promise' (Carruthers & Kim 2011, p.240). What is established here then is a trust relationship in which Alter und Ego can be addressed as the trustor (who is 'investing' trust) and the trustee (the trust-taker). It is a relationship that does not have to be reciprocal, as Bachmann points out: 'It is by no means necessary that the trustee also agrees to act as a trustor and to establish reciprocal trust in a relationship, but he or she has to decide actively to take on the role of the trustee, who equally makes specific assumptions about the trustor's future behavior' (Bachmann, 2006, p. 395).

To put it another way, engaging in financial promises as an investor means not only to invest money, but also trust, as Bachmann sums up a thought of Luhmann: 'placing trust in another actor is like overdrawing a bank account. Similar to spending more money than one owns, trust draws on information that is not in stock. But as any business person knows, sometimes a little loan can be incredibly useful to start a profitable business' (Bachmann 2006, p.395). It is this little analogy, this 'usefulness' of trust in starting a 'profitable business', that can also be observed on a much broader scale – the scale of society. Well-known theoreticians of trust agree on an understanding of trust as a fundamental precondition for economic development and prosperity. It is the lack of mutual trust that can be seen as a feature of economically underdeveloped societies. It is trust that enables various sorts of collective enterprise that promote competitive, flexible forms of organization (Arrow, 1974; Fukuyama, 1995).

However, turning again to the banking sector, is becomes clear that financial promises, like expectations, define themselves through offering a specific outlook on the future while taking a point of view bound to the present. In this sense, they are a perfect match. But a

promise is not a promise if it cannot be broken. And an expectation is not an expectation if it cannot be disappointed. In other words: 'The trouble with trust is that it requires acceptance of risk' (Bachmann, 2006, p. 395).

From this perspective, another important theoretical aspect of trust comes into play. Trust can be described as a transformation from profound uncertainty into actual risk. To be more precise: to trust means to absorb uncertainty while producing risk – the risk that derives from the very decision to trust. But even if risk is the consequence – it still is 'incomparably better than a situation where an actor faces an unlimited number of possibilities as regards the other actor's future behavior' (Bachmann, 2006, p. 395). Consequently, the decision to trust requires the solution of a trade-off between (a profound) uncertainty and risk as its 'attractive' alternative.

It is this basic trade-off that has to be taken into account for the investment behavior of German households. But it also offers a good theoretical platform from which to take a look at the recent events of the financial crisis. Whereas the sociological approach to trust-based financial promises is well aware of the fact that one cannot get rid of the central problem of risk, it is the economic perspective that promoted quite a different point of view. It was Frank Knight who popularized an understanding of risk that is strongly attached to the idea of being calculative (in terms of probability) – which essentially means being manageable. Now, it is precisely this thought that expressed itself in the elaborated risk management models of high finance

This cumulated in the assumption that one could in fact not only 'reduce complexity', but, ultimately, by relying on – or trusting in – complex financial derivatives and securitization, even 'manage risk away'. Not too long ago, the 'Confessions of a Risk Manager' read like this: 'In January 2007 the world looked almost riskless. (...) We were paid to think about the downsides but it was hard to see where the problems would come from' (The Economist, Aug. 7, 2008).

But even after the banking sector gave this 'quite impressive demonstration' of its 'capabilities' to handle complex financial risk, the average German household continues to promise, continues to invest money – and therefore trust – in its housebank. But why is that so? In search of an answer our argument takes its path to the historical characteristics of the German banking system. But beforehand, we need an addition to our theoretical outline of trust. While thinking about the building of trust in a historical way, we need to specify our

level of analysis. It is in the works of Zucker and Bachmann that we find adequate distinctions to base our analysis on.

In the work of Zucker (1986) we find the distinction of three basic modes of 'trust-production': process-based trust, in which trust is tied to past exchanges in which the result is a certain reputation; characteristic-based trust, that derives from the personal characteristics of a trust-counterparty such as their family background or ethnicity;[2] and institutional-based trust, which is bound to formal societal structures including intermediary mechanisms. Turning to historical developments in the United States for the time between 1840 and 1920, she identifies an erosion of the first two modes of trust – caused by high immigration into the US, migration within the US and growing economic uncertainties (Zucker, 1986). Her core argument then is that institutional trust, as a specific mode of building trust, steps in on the societal level and compensates for the otherwise fading forms of trust. What is included here is the assumption that different modes of trust production can actually complement each other, or compensate for each other during periods of social change.

Bachmann takes up Zucker's classification and sharpens it in terms of a basic confrontation: that between interactional trust (including the first two aforementioned modes in which trust is the result of actual interaction, grounded in the process of an already established relation or personal characteristics) and institutional-based trust, or system trust (Bachmann, 2006). Whereas in the first case trust can develop independently from the surrounding institutional arrangements, it is of course the latter mode of establishing trust, its institutional side, that enables us to focus on the genesis of trust in banks on the societal level. Here, the importance of past experiences and emotional or financial costs that are bound to specific interactions becomes minor. Instead, the focus is on the 'institutional landscape' that allows for establishing trust on a more abstract level, or, as Zucker puts it: institutional trust 'generalizes beyond a given transaction and beyond specific sets of exchange partners' (Zucker, 1986, p.63).

Bachmann illustrates this argument while focusing on 'legal norms' as the most important catalyst of institutional trust. Included here are judicial conditions (law) as well as social norms or technical standards. He concludes: 'Irrespective of whether these rules and norms are legal, social or technical in nature, they have a latent potential to sanction non-compliant behavior and can thus reduce the possibility of opportunistic behavior on the part of

[2] Zucker's argument is questionable here, because attributes like ethnicity or family background are projected on persons but clearly derive their meaning in social contexts that are detached from the personal level.

potential trustee' – 'Thus, one can conclude, trust is significantly more likely to occur where reliable rules of behavior make potential trustees' future behavior more predictable than it would be if these rules did not exist' (Bachmann 2006, p. 396). In this sense 'trust in the form of "institutional-based trust" became a commodity that could be mass-produced on the basis of reliable institutional arrangements. (…) With regard to the economic system's further differentiation and growth, this was a vital development which came at some collective cost. But it relieved business partners from always having to develop trust at the personal level which overall is also much more costly for the business system as a whole' (Bachmann, 2006, p.398). Turning to Zucker again, she also points to the spread of rational bureaucratic organization, to the professionalization of occupations (via credentials) and to the upcoming of (financial) intermediaries and services (Zucker, 1986).

In the following section we take a closer look at the set of institutions which according to Bachmann (2006) act as catalysts of trust. In line with Shapiro (1987) we argue that these institutions crucially assume a trust-guarding and, as we would like to add, sometimes even a trust-granting function. Furthermore, we show that market-based and bank-based financial systems differ significantly with respect to the choice of guardians or guarantors of trust. In this regard the German trust in banks should be understood as trust in the relative advantage of cooperative patterns of coordination compared to competition.

4. Institutional trust, guardians of trust and types of financial systems

As explained in the previous section, trust allows the trustor to transform fundamental uncertainty into risk. It should be noted that uncertainty not only refers to yet unknown future contingencies but also to the behavior of other actors with whom we wish to or have to interact. Zucker (1986) as well as Bachmann (2006) emphasize the role of specialization and related to this of diversification for the emergence and necessity of institutional trust. Susan Shapiro explains in her article 'The Social Control of Impersonal Trust', that specialization has shifted problems of insufficient efficiency to those of relational uncertainty (Shapiro, 1987). This applies to basically all branches of the economy but is especially significant for the intertemporal exchange of purchasing power, which allows actors to smooth and tilt their expenditures over time. Take as an example a household that wants to save part of its income. Consider on the other hand a firm that plans an investment project but lacks the money to finance it. Whereas the household wants to postpone purchasing power into the future, the firm seeks the opposite. Hence, by exchanging purchasing power on an intertemporal basis

both parties could be better off. However, the situation is not that simple for the following reasons: First, the firm might need more money than the single household would ever be able to make available. Second, the investment project might turn out to be a failure thus making the firm unable to repay. Third, the firm might embezzle the money which it received from the saver. For the moment let us focus on the last two points. They are both crucially related to information deficiencies with one important difference: Whereas the first point is based on deficient information about future contingencies lying outside the realm of the firm, the second point results from a combination of selfish behavior with guile (to use Oliver Williamsons terminology) and an information advantage on the part of the investing firm. This relational uncertainty establishes between the firm and the household what has come to be known as a principal-agency relationship: the principal (household) transfers money to the agent (firm). In doing so, both parties expect to share a common surplus the size of which is unknown at the contracting date. However, since the agent is regularly better informed than the principal, he might have an incentive to redistribute the common surplus to his own advantage, leaving his partner with a loss. The handling of this relational risk has attracted the interest of both economists and sociologists but with a different focus: Whereas among economists there is still a pronounced tendency to emphasize the calculative capabilities of actors, sociologists point to the opposite, thus directing their attention to the role of trust.[3] In his article 'Calculativeness, Trust, and Economic Organization', Oliver Williamson even assigns to boundedly rational actors the capability to turn radical uncertainty into probability distributions. According to him this calculativeness of uncertainty should enable the parties to a contract to make credible commitments, thus replacing the need for trust. 'If calculative relations are best described in calculative terms, then diffuse terms, of which trust is one that have mixed meanings should be avoided when possible' (Williamson, 1993, p.469). Williamson takes for granted that business relations will be determined by calculativeness and leaves non-calculativeness to very special relations such as between family members, friends and the like. This rather optimistic attitude towards the handling of relational uncertainty has encountered the severe criticism that agents will hardly be able to reduce relational risks to nil (Shapiro, 1987; Nooteboom, 2007).

Due to specialization, individual actors have become part of a complex pattern of interdependencies (Shapiro, 1987; Nooteboom, 2007). Concerning the intertemporal exchange of purchasing power this leads us to our first point, namely the problem that the size of funds

[3] Exceptions are for example the contributions in Lazaric & Lorenz 1998.

that investors need regularly differs from what an individual saver is able to provide. The most important solution to this problem is the aggregation of individual savings to fund indivisible large-scale investment projects, i.e., pooling (Sirri & Tufano, 1995) or collectivization (Shapiro, 1987). Pooling allows low-income households the access to the financing of profitable projects and it allows the financing of large-scale projects. On the other hand, pooling creates multiple principal-agency relationships which regularly exclude personal relationships thus also ruling out the emergence of personal trust.

In fact we may say that the evolution of financial systems in the course of industrialization can be described as attempts to solve these principal-agency problems. Basically, two paths have been followed: the design of bilateral contracts and the design of multilateral contracts (Sirri & Tufano, 1995). In the case of bilateral contracts a single firm holds multiple bilateral contracts with providers of funds. Though each supplier of financial funds signs a contract with the final user of his or her funds, the relation is usually not personal. Alternatively, pooling may take place through multilateral contracts between a set of financial investors and a set of firms.

Most importantly, the design of these contracts is closely linked to the development of alternative governance mechanisms which are organized financial markets (for example stock exchanges) on the one hand, and banks on the other. Organized financial markets offer bilateral and multilateral contracts. In this regard securitization plays an important role. The underlying contract is highly standardized which makes it tradable, thus allowing for easy exit and diversification, which both offer protection against at least idiosyncratic risks. However, the use of the organized financial markets is by no means costless, and these costs act as barriers to perfect diversification and a frequent use of exit in particular for low-income investors. Equally important is the fact that due to the anonymity in organized financial markets and due to small investments in a single project, each individual investor only has a low incentive to monitor the users of his or her funds. This has led to the development of financial intermediaries who perform a delegated monitoring function (Diamond, 1984).

Concerning the relationship between the users and the providers of financial funds, banks create multilateral contracts. However, their conception differs from mutual funds in that they not only step in between finance-seeking actors and investors. Rather, the major difference lies in their offers to investors of riskless and highly liquid deposits unavailable in financial markets which they then primarily invest in risky loans. Consequently, they provide the depositor with the perception of being on the safe side and at the same time remaining

liquid and earning an income.[4] Of course this safety does not fall from the sky but has to be produced by some wise bank policy to be achieved primarily by diversification.[5] Hence a depositor typically places the responsibility for constructing a portfolio of assets which yields a safe income into the hands of his or her bank.

As should have become clear, governance structures like organized financial markets and banks seek to organize the pooling of savings in a manner that creates a win-win situation for both finance-seeking actors and investors. However, as evidence has shown, the ideal is hardly ever achieved. One important reason for this disappointing outcome is that banks hardly ever accomplish the task of creating a perfectly diversified asset portfolio, a second one relates to banks as producers and not absorbers of systemic risk, for example within 'normal accidents', as was widely discussed at the 'Markets on Trial Conference' in 2009 (Lounsbury & Hirsch, 2010). A third reason concerns the observation that governance structures like the market and the banking system create agency problems of their own. In particular '[c]ollective agency […] undermines […] that agent performance is accessible to principal's scrutiny and that ongoing relationships between principal and agent provide the mechanisms to deter and, if necessary, to punish unacceptable agent performance.' (Shapiro, 1987, p.632).

Hence a considerable degree of (relational) uncertainty remains, giving rise to the necessity of trust which in the face of a high degree of anonymity has to be of the institutional type. It is in this respect that guardians of trust, defined as institutions that exert social control measures, have gained importance (Shapiro, 1987). We propose that the type of trust-guarding institutions not only promotes trusting behavior of individual actors but also contributes to establishing a firm belief in the relative advantage of the prevailing dominating coordination mechanism, which is the competitive solution in market-based financial systems and a cooperative solution in bank-based financial systems.

Market-based financial systems are characterized by a predominance organized financial markets with the stock exchange as a prominent example. The term 'organized' seeks to remind us that the performance of such a system depends on supporting social control mechanisms which ensure that competition works for the benefit of all market participants, examples being the NYSE which ensures investors' protection but also rating agencies. In

[4] Moreover, as was found by Allen & Gale (1997), banks not only provide insurance against idiosyncratic (diversifiable) risks but also against systemic risks which they accomplish through intergenerational smoothing.

[5] Diamond (1984) shows that ideally a bank can achieve this by investing deposits in a high number of assets with identical and independent risks giving rise to the law of large numbers.

Germany, a cooperative system comprising bank associations as well as cooperative patterns between banks and the finance-seeking industry has gained crucial importance in this respect and has sometimes even acted as trust-granting regulations. In other words, German trust in banks should not be separated from the specific guardians of trust who all represent some pattern of cooperative behavior. How this organizational structure developed will be shown in the next section.

5. Revisiting the emergence of the German financial system from the perspective of trust

The literature on the historical development of the German financial system has primarily been devoted to analyzing the role of the emerging banking system in meeting the increasing financial needs of industrialization (Gerschenkron, 1962; Hellwig, 1991; Da Rin, 1996; Hauswald, 1996; Edwards & Ogilvie, 1996; Guinnane, 2002). In this respect the debate centered mainly around credit banks and their role in financing long-term and large-scale investments.[6] Only indirectly did this literature address the issue of trust and if so, this issue was largely reserved for the relationship between banks and their borrowers. Nonetheless, the manifold contributions deliver a rich body of information about how investors' trust in banks might have developed and how this trust might have been closely linked to a deep-rooted trust in the superiority of cooperative governance structures compared to the competitive governance structure of the market.

From a financial point of view, the process of industrialization describes a process of creating ever more efficient ways of pooling myriad individual savings and allocating them to the most promising investment projects in terms of their profitability and risk. Since this required coping with radical uncertainties concerning both the future states of the world as well as the behaviors of (potential) contract partners, a parallel to technological innovations in the real sector of the economy can be drawn to innovations in the accumulation and processing of information. Da Rin (1996) emphasizes that in light of information deficiencies both the pooling of savings as well as their allocation to investment projects requires the fulfillment of four functions: monitoring, coordination, control and commitment. We would like to add a further function, namely the establishment of a risk-sharing pattern in accordance

[6] An exception is Guinnane who emphasizes the role of savings banks as well as cooperative banks in promoting industrialization.

with risk preferences and capabilities. As we have already explained in the previous section, in a bank-based financial system investors not only delegate monitoring, coordination, control and commitment, but in addition and more importantly, they prefer to shift the risks involved in each investment onto banks. Their abandonment of controlling and monitoring, which includes banking activities as well, assigns a pivotal role to trust.

In the following we seek to find out whether the historical development of the German bank-based financial system provides us with information about how this trust evolved and whom the German investor in fact has come to trust. Our elaboration is intended to highlight that the evolution of the German financial system was paralleled by a process in which banks formed associations among themselves and in which a further cooperative pattern arose between lending banks and borrowing firms, leaving banks at least formally with significant control rights over the assets of their debtors. These solutions to an ever rising complexity of principal-agency relationships assumed important trust-guarding functions.

The German savings banks are of particular interest because contrary to the rural cooperative banks (‘Genossenschaftsbanken’) and credit banks, where we can observe a transformation of personal trust into institutional trust only in the course of an increasing complexity in the real economy in the last third of the 19th century, institutional trust characterizes the sector of savings banks from the very beginning. The German Sparkassen were founded to promote saving among poorer people and to this purpose offered safe deposits to low-income households which could be withdrawn after a notice period. In order to grant trust in the factual safety of these deposits, the bank owners (predominantly local/regional governmental bodies) assumed unlimited liability. Furthermore, the types of business a savings bank was allowed to undertake were limited to those bearing no (perceived) risk. Basically these involved government debt and mortgages (Guinnane, 2002). Notably, branching was not typical for savings banks, neither were flexible opening hours. This in turn did not offer opportunities to engage in personal relationships, which research has found to be an important condition for the emergence of personal trust (Sako, 1998). Hence, the trusting relationship between depositors and savings banks of the 19th century has to be characterized as being of the institutional type. By assuming unlimited liability for the deposits, the owners of the savings banks even assumed a trust-granting function. By imposing on savings banks limits to their risk-taking behavior which comprised the necessary controlling mechanisms, they acted as guardians of trust.

Quite the contrary can be observed in the rural cooperative banks ('Genossenschaftsbanken'), where personal acquaintance and personal relationships played a crucial role, thus giving rise to personal trust. Cooperative banks were first introduced in the 1850s, not with the purpose of promoting saving but to grant loans to a clientele like small artisans and farmers who would not have been accepted as borrowers by the then existing private banks (Guinnane, 2001). Their origin is attributed to German progressives who sought to promote the common good (Guinnane, 2002). The basic principle of credit cooperatives consisted of pooling the savings of members and non-members in the form of time deposits and in lending them to members only. In particular, the prospect of getting access to a loan whenever it might be needed was supposed to act as a promoter for investing one's savings in a credit cooperative. However, since borrowing and saving did not happen simultaneously, the interests of a depositor both as a member and a non-member and the interests of a borrower have to be considered as different. As a saver, one was interested in the safety of one's deposit. At least in the early years, members of credit cooperatives bore unlimited liability which means that the collective of depositors themselves assumed a trust-granting function. This raises the question of why a single depositor should trust in the collective of depositors. Finally, credit cooperatives were not managed by financial experts but relied on members with at the most limited accounting experience. With respect to rural credit cooperatives, Guinnane (2001, 2002) emphasizes that members and non-members 'had considerable knowledge of each other's habits, character, and abilities' (Guinnane, 2002, p.91). This knowledge might explain the evolution of personal trust among clients. On the other hand, the role of personal trust should not be over-emphasized because not only urban cooperatives, where personal acquaintances and hence opportunities to build personal trust were lacking from the beginning, but also rural cooperatives introduced special auditing associations meant to exert external supervision before this was made compulsory by a law in 1889 (Guinnane, 2002). These guardians of trust were private, voluntary groups owned and controlled by member cooperatives. They employed specialist auditors who examined the cooperative's books, corrected errors and made recommendations for changes in business practice. They had the authority to cancel a cooperative's membership in the auditing association, which according to Guinnane (2002) served as a powerful signal and hence undermined trust in this bank.

Another problem limiting depositors' trust in savings banks and credit cooperatives alike was their restriction to a local area which made them prone to regional shocks and limited their scope of risk diversification (Guinnane, 2002). Rural cooperatives for example

suffered from a considerable maturity mismatch which due to a local weather shock could cast them into insolvency. Generally speaking, regional shocks imply that liquidity shortages that not only concern a single bank but the vast majority of banks located in this region have a high probability. Savings banks as well as credit cooperatives reacted to this risk by introducing what is called in German the 'Finanzverbund' and can best be described as the creation of an internal capital market with the help of a 'central bank' which, too, stood ready to act as a lender of last resort. In terms of the savings banks, this task was assumed by the 'Landesbanken' or 'Girozentralen'. These central banks, which were owned by the Sparkassen, collected surplus liquidity from savings banks and allocated the funds to savings banks in need of liquidity. They furthermore provided their member savings banks with liquidity from other regions (later on from international capital markets). A similar approach was assumed by the 'centrals' among credit cooperatives (Guinnane, 2002). Centrals as well as Landesbanken and Girozentralen alike acted as a type of insurance against (regional) liquidity shocks and in this function even represent trust-granting institutions.

With respect to the financing of the German industrialization process, the credit banks that after 1870 developed into joint-stock companies have received particular attention. In the following we explain our argument that this banking group, with the Deutsche Bank taking a leading position, has also contributed significantly to the development of depositors' trust in banks and did so by gaining a high reputation in terms of managing credit risks. The credit banks developed out of private banks ('Privatbankiers') who had financed their business exclusively from their own capital. Private banks delivered only a moderate contribution to the pooling of savings, and in doing so undertook the role of a financial intermediary in the pure sense of the word. In particular they bought government bonds but also securities from the upcoming industrial firms and resold them to wealthy people. In this regard they assumed the role of a trust guardian by holding these same assets in their own portfolios for some time to signal their high quality (Guinnane, 2002).

Larger 'Privatbankiers' looked for ways to meet the need for larger funds of a growing industry. They grew into credit banks (Kreditbanken) among which some gradually developed into Germany's large banks ('Grossbanken'). The ways in which these credit banks adjusted to the growth of complex principal-agency relationships incurred by the fast changing conditions of the growing industrial sector not only manifest high capabilities on their part to efficiently manage implied risks. Furthermore, they can be interpreted as a major contribution to establishing a system of trust-guarding institutions in the eyes of depositors to whom these

banks increasingly turned as providers of funds. The period starting with the Joint Stock Company Act of 1870, which spurred the growth of German industry both in size and complexity and undercut the personal flows of information, is of particular relevance in this regard (Da Rin, 1996). Having been founded as a joint stock bank in 1871, the Deutsche Bank took the lead in responding to the changed situation by both increasingly seeking refinancing funds through the collection of deposits and lowering agency cost by introducing appropriate institutions. These institutions were primarily aimed at exploiting local information and in this sense established a kind of proximity banking by opening local branches and deposit offices (Da Rin, 1996). Loans were granted on a formal short-term basis (current accounts) which endowed the bank with the right to end a credit relationship whenever this was thought necessary, but on the other hand allowed the development of close relationships with bank clients thus reducing information asymmetries. A process of concentration among credit banks in the aftermath of the 1873 crisis was used by the large joint stock banks to absorb most of the regional credit banks thus gaining additional access to local information (Da Rin, 1996). Finally, the credit banks accumulated industrial directorships through contractual provisions and the increasing use of proxy voting. Proxy voting is interesting for our topic because it is a further example of a custom among German savers to delegate tasks in connection with the reduction of agency costs.

By the mid-1890s the German economy had finally recovered from the 1873 crisis and experienced sustained growth. Firms were increasingly able to reduce their bank dependency and instead relied on internal finance and on international capital markets. This development was accompanied by a growing cartelization which was supported by the German government. Managerial organization became more complex thus undercutting in particular personal information flows to banks. The Grossbanken reacted to this development by further spurring the process of concentration in the banking sector and by acquiring directorships in those corporations that were the decision-makers in the cartels (Da Rin, 1996). The process of concentration was accomplished by building networks around the five largest banks. Of particular interest for our topic is the construction of communities of interest (Interessengemeinschaften – IG) with smaller Kreditbanken and the continued absorption of local Provinzbanken and Privatbankiers (Da Rin, 1996). ‘IG.s, introduced in 1897 by the Deutsche Bank, were written agreements to coordinate banking activities under common strategic management, and to split profits accordingly, usually between a Grossbank and local Provinzbanken. IG.s allowed the Grossbanken to achieve significant external growth very quickly’ (Da Rin, 1996). On the topic of the presence of the Grossbanken in the supervisory

boards of their clients' industrial corporations, the literature provides us with rather controversial interpretations concerning the banks' factual influence of their firms' investment policies (Guinnane, 2002). In the context of trust in banks it is not so much their factual *influence* that is of relevance but their factual *presence* on the boards and the implied formal control rights which might have been interpreted by depositors in a trust-guarding sense.

The final steps towards the type of financial system which has characterized Germany in the 20th century concern the growth of Sparkassen and Genossenschaftsbanken into universal banks, though with legal limits regarding regional constraints and the degree of risk-taking in Sparkassen. This gave rise to a fierce competition between the three banking groups for depositors, but significantly less so for credit clients (Guinnane, 2002). Drawing on the insight in Petersen and Rajan (1995) that competition in the credit market may increase credit risk for the bank, this evidence of only limited competition in the lending market is again relevant for depositors' trust in banks.

The 20th century is marked by a development largely in favor of Sparkassen and Genossenschaftsbanken (Guinnane, 2002) who became the main lenders to small and medium-sized firms and were most successful in attracting deposits. An important role in this respect was played by their branching activities. 'Sparkassen existed nearly everywhere and had as their first priority the financing of local needs. Any city that felt neglected by other banking institutions could just establish one. Credit cooperatives were even more radically local, and any seven individuals could under the law form a credit cooperative' (Guinnane, 2002, p.117).

In this respect, the emergence of stable personal relationships between banks and their clients gained importance even for the group of savings banks. This raises the question whether these personal relationships were based on personal trust, which served as a substitute for institutional trust, or whether both acted as complements in the sense that bank officials were simply acknowledged as representatives of a system with institutional guardians of trust. Taking into account that due to the closing down of branches and the switch to a strategy aimed at changing bank managers more frequently (Reifner & Größl & Krüger, 2003) personal trust has been on the retreat for quite a while, it appears more plausible that German trust in banks is primarily based on trust-guarding institutions. This view is supported by the fact that bank officials were usually called 'Bankbeamte', the term 'der Beamte' meaning civil servant. It should be noted that even nowadays a famous online dictionary

continues this practice by offering the term ‘der Bankbeamte’ as the (single) translation for ‘bank official’.[7]

6. Conclusion: ‘Learned’ and ‘inherited’ trust as micro – macro link

In our previous chapter we showed how in Germany, as a prototype of a bank-based system, trust in banks has emerged over time as a process in which trust-guarding and trust-granting institutions played a crucial role. So it should be no surprise that private households in Germany are still entrusting their money to (savings) banks today.

However, since the late 1980s the institutional framework of the financial market and the governance of corporations have changed dramatically. The three large private banks in particular directed their business policies towards more profitable investment banking, since their return on capital had declined continuously over the previous years (Vitols, 2009). But also among the savings banks there was a growing interest in entering the business of securitization, thus passing risks to others and ‘freeing’ their balance sheets from their own risks. As a result, Grossbanken in particular were less interested in their ‘boring’ retail services with private households. The Deutsche Bank even closed 34 percent of its branches between 1999 and 2003.

Furthermore, the long established policies of the savings banks came under pressure because the European Union would no longer accept the competitive advantage of the Sparkassen resulting from the public guarantee obligation (‘Gewährsträgerhaftung’). Hence, with the ‘Brussels Concordance’ of 2002 one of the trust-granting institutions lost its binding force. Consequently, the Hamburger Sparkasse for example, which is the biggest savings bank, changed into a joint stock company and thus received the status of a ‘free’ savings bank. But also the other trust-generating institutions like the ‘Landesbanken’, which were called the ‘central banks’ of the Sparkassen, came under pressure. Their task of ensuring the borrowing requirements and lending needs of local investors seemed to be too unprofitable to their managers and lacked (from their point of view) the reputation of international operating banks. Wanting to keep up with large private banks they started an international investment strategy the end of which is very well known: After the Lehman collapse they suffered tremendous losses that absorbed their original capital and they had to be rescued by the federal states. In the case of the biggest one – the Westdeutsche Landesbank – the EU

[7] Cf. http://dict.leo.org

Commission forced the state of North-Rhine Westphalia to close the bank by July 2012 at the latest.

And yet another aspect that should be considered but remains beyond the scope of this paper is the loss of trust amongst banks themselves within the whole Eurozone which can be seen in the statistics of the overnight facilities of the ECB after the Lehman shock and the enduring Greece crisis.

While 'institutional trust' is a very useful term in approaching the aspect of the genesis of trust, there remain important questions concerning its continuing persistence within the German banking sector. So how can the inertia of private households' attitudes concerning their investment strategies as shown in Figures 1 and 2 be explained in view of this dramatic change in the institutional framework of the German financial system? And why are they still 'lazy' managers of their wealth? We started our argumentation from the micro-perspective of households in the 19th century and argued, still on the micro-level, that the limits of financial literacy might be an abiding foundation of trust building. Then we showed from a macroeconomic view that households are still entrusting their money to banks instead of acting on the organized financial markets themselves and they even withdrew their investments in stocks and funds within the last 20 years. We then explained from a macrosociological perspective how trust emerged over the last 150 years on an institutional level. We now have to return to the private households in order to explain the still missing micro-macro-micro link: how trusting in financial affairs became a persistent habit or how private investors 'learned' and 'inherited' trust in banks. We will refer to the concept of cultural embeddedness as introduced by Granovetter (1985) to show how we interpret the persistence of trust in banks in order to explain how 'learned' and 'inherited' trust is still (unconsciously) guiding the investment behavior of private investors.

The fundamental aspect of the embeddedness of economic action we refer to is that how a bank interacts with private investors crucially frames their set of choices. What has come to be known as cognitive and cultural embeddedness (Zukin & DiMaggio, 1990) determines the decisions of the actors in such a way that they frame the application of strategies under certain circumstances of exchange and interaction. Thereby emphasis is put on the link between culture and cognition because 'culture enters into everyday life through the interaction of environment cues and mental structures' (DiMaggio, 1997, p.279). Following DiMaggio (1997) and Dequech (2003) culture can be seen as constitutive of market actors under special aspects that are of some importance concerning our research. As well as being regarded as a

medium of conditioning the individuals to the market logic, or 'indoctrinating' in Dequech's words, culture also defines a frame for action by attributing roles in different interactions, for example between market participants or between family members. In addition, culture guides actors in choosing appropriate frames or logics of action in different situations. In our context, a fourth aspect highlighted by Dequech (2003) is of importance for our argumentation because culture even 'influences the specific way in which actors apply a specific logic of action' with the consequence that 'different cultures may imply different ways in which actors […] apply a specific logic of action' (Dequech, 2003, p. 468). This relation of culture and cognition may help to explain why, against the backdrop of their specific economic and societal developments and especially their financial markets, private investors behave differently in liberal und coordinated market economies.

However, this last step demands a broader understanding of the underlying concept of cognition, one which covers the full mental capabilities of a human being (including financial literacy), comprising values, attitudes and norms. To make it still more complex we have to acknowledge that culture and cognition may not be symmetric because culture might include norms and evaluations not fully present in the cognition of the individual, whereas the individual 'may have more subjective or idiosyncratic aspects' than found in culture (Dequech, 2003, p.466). To this framework of the cultural embeddedness of logics of actions DiMaggio introduced the concept of cognitive responses based on schemata which are defined as 'knowledge structures that represent objects or events and provide default assumptions about their characteristics, relationships, and entailments under conditions of incomplete information' (DiMaggio, 1997, p.269). Central to the application of schemata is the psychological state of automatic cognition, which can be imagined as a library-based mode of operation of the human brain.

Viewed in terms of the sociology of knowledge, it is especially true in the case of technological risks or environmental risks that actors have common experiences and rely on similar sources of information and institutional knowledge and are also exposed to similar discursive models (Burton & Pushchak, 1984; Lee, 1981). This contributes to a social normalization or habituation of the perception of risk (which we could not discuss here). However, we think that such normalization – in the sense of a conventionalization – also greatly influences the economic decision-making behavior of private households (von Lüde & von Scheve, 2012).

We argue that the bank-oriented 'conservative' investment decisions of German savers are due to such a 'cultural embedded framework of logics of actions' and are based on 'intergenerational inheritance'. Starting with a piggy bank very early in life and continuing with the annual 'World Savings Day', children are taught a special understanding of thriftiness that fits perfectly in the tradition of those 'saving virtues' from the 19th century we mentioned in our introduction.[8] Oral history of parents and grandparents, historical records and novels such as the 'Buddenbrocks' by Thomas Mann convey an image and help the private actor to check if his or her savings attitudes coincide with common traditional and familiar motives, ideas and norms for 'doing the right thing'. This behavior has contributed to a 'learned' and 'inherited' trust towards banks in which actors do not reflect their decisions consciously. In Beckert's (2009) terminology, even purposeful rational actors have at their disposal an 'action substitute' for dealing with the contingency of the future in the form of socially and culturally anchored scripts or conventions as 'collectively recognized references'. We find the notion of homogeneous acting based on 'habitual conventions' in the theories of Weber, Bourdieu, Berger and Luckmann or Garfinkel, in which habitualized normativity guides the hidden or routinized views of actors. Thus, they gain a set of behavioral patterns which enables them to act even in complex economic settings: 'Rather, in such situations actors construct courses of action that are intersubjectively defensible and sustainable as economically rational acts. This is an emergent process, a performance of rationality that is constructed in interaction with others and is rational in the sense that it appears rational to oneself and others within a social setting but not necessarily in some objective external sense' (Biggart & Beamish, 2003, p.457).

The understanding of the embeddedness of economic actors in different cultures such as private households and the emergence of diverse institutional settings in a historic process enables us to understand from a micro-perspective their investment behavior in different economic systems. In view of the above we have contributed to an understanding of the genesis and the observable persistence of trust in banks in a bank-based country such as Germany even in light of the current financial crisis.

[8] Whether this kind of behavior can still be obeserved in younger generations which grew up with much more pocket money and disposable income deserves more scrutiny and research.

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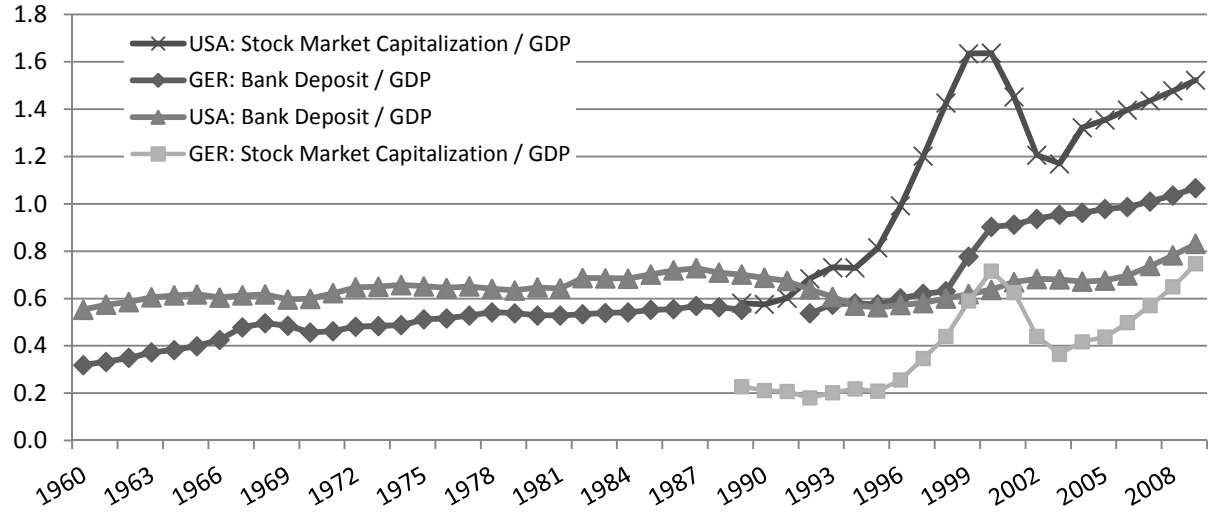

Figure 1: Indicators for bank-based and market based economies: USA and Germany 1960-2009

Stock Market Capitalization / GDP = value of listed shares to GDP, deflationed. The data are available only from 1989 onwards. *Bank Deposit / GDP* = demand, time and savings deposits in deposit money banks as a share of GDP, deflationed.

Source: von Lüde (2012). Compiled and designed by the author based on 'The World Bank: Financial Structure Dataset, Revised Version Nov. 2010' (cf. Beck & Demirgüç-Kunt, 2010).

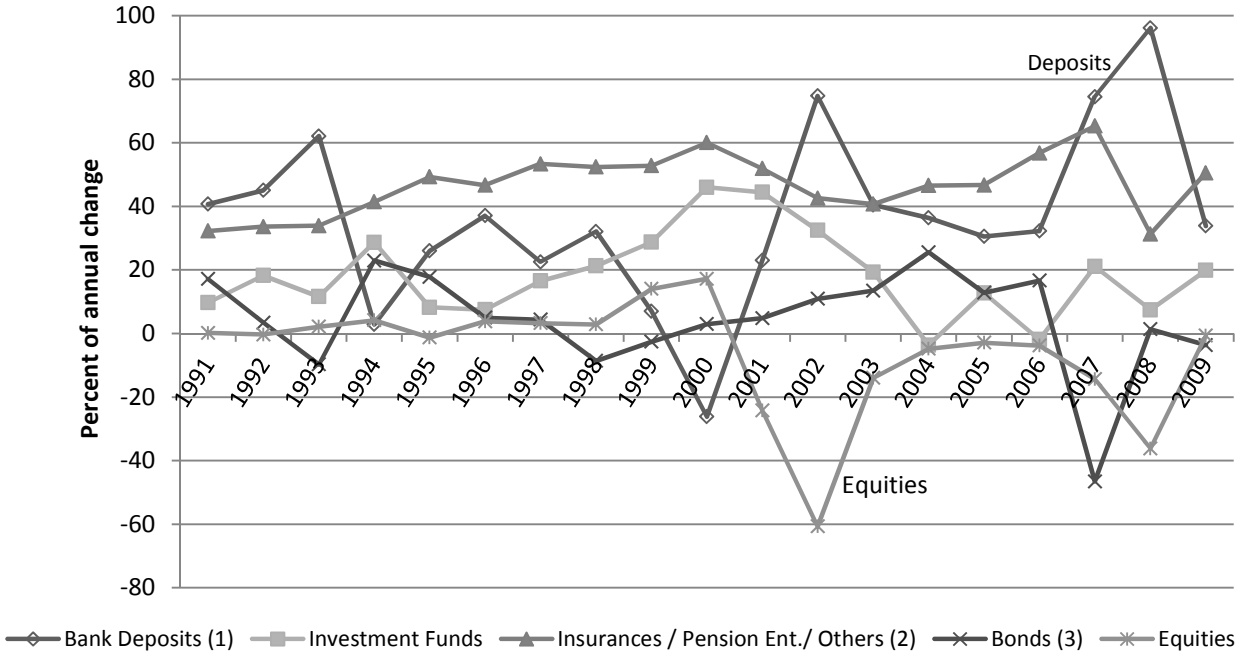

Figure 2: Savings and investment behavior of private households in Germany 1991 – 2009

Source: Compiled and designed by the authors based on Deutsche Bundesbank 'Spar- und Anlageverhalten der privaten Haushalte'. Data from 2010.