

Mitigating Systemic Risk: On Strategies against Synthetically Induced Risk in the Financial Sector

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Abstract: Financial intermediaries have the incentive to attain the attribute “too big to fail” in order to externalize risk. As a consequence, the public has to shoulder the burden. This paper discusses the origin of this – what might be claimed – moral hazard, as well as the potential of ethics to counter these synthetically induced risks.

1. Introduction

Financial intermediaries, such as global banks, have the incentive to externalize their exposure to risk by growing big, complex and interconnected in the entire financial system. By doing so, they urge governments and central banks to prevent a bank’s possible insolvency, since the institution’s insolvency and its contagious effects on the financial sector would cost more than the bailout by the government. Having this in mind, bankers integrate the probability of bailout in case of imminent insolvency into their risk analysis and, thus, externalize parts of the originally specialized banking risks to the government who acts involuntarily as an insurer. Further, due to the implicit insurance by the government, it might be argued that bankers are prone to take higher risks, as they do not have to integrate the risk of insolvency into their calculations. In economic literature, this mechanism is called the “too big to fail” doctrine.

As these incentives for banks clearly exploit the government, they are commonly seen as moral hazards in the literature. Thus, there is a recent argument on how to mitigate them. Considering advantages and disadvantages of big banks and of instability in the financial sector, a government or central bank has three options: Firstly, the concerned institution could not interfere at all and allow bankruptcies. This policy was the given standard before Walter Bagehot introduced the lender

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of last resort (hereafter referred to as LOLR) in response to the systemic crises that followed the insolvency of Overend & Guerney and Company in 1866. Secondly, the institution could consider Bagehot's doctrine by granting bailouts only in cases of short-term illiquidity. The third option is to constantly bailout or to assure ex-ante a bailout when needed. In this case, the manifold possibilities of bailout have to be taken into consideration. For instance, both the nationalization of the bank of concern and the alteration of the law concerning insolvencies are bailout techniques.

The incentive to externalize risk in regard to corporate governance as well as the incentive to bailout systemic important financial institutions (hereafter referred to as SIFIs) are not only matters of financial capital, but of social capital as well. Therefore, both social causes and effects need to be taken into account, when trying to reason for or against certain measures to mitigate the problem at hand. Having this in mind, I will firstly examine the status quo of the role of trust in the environment of finance, of risk management and externalities and of the fields of application of corporate social responsibility (hereafter referred to as CSR). Then, I will try to model the rationale of the financial institution's moral hazard with regard to externalities, trust and stakeholders. Having examined the environment and rationale for the synthetic, systemic risk exposure, I will discuss the government's approaches to mitigate systemic risk – Bankruptcy or Bailout – and the feasibility of regulation by higher mandatory equity and of reliance on CSR. This will bring me to the conclusion that regulation is needed as long as CSR and an ethical mind-set, especially in top-level management, are still in the fledging stage.

Due to the multiple approaches affiliated with the subject, namely economic, game and network theoretic, psychological and ethical, the methodology of this paper will be to identify the exposure of each approach to the morally hazardous incentive at hand. Thereby, I will construct a cause-effect relationship that allows to model different impacts of risk mitigation doctrines. It has to be taken into consideration that literature is not necessarily unanimous in this matter and, hence, results can differ, depending on the evaluation of each approach. In this way, this paper does not aim at a concrete recommendation for politics, but limits itself to a theoretic approach of this matter.

2. Status quo

2.1. The Role of trust in the environment of finance

There is a broad consensus in economic literature that trust is essential for a

functioning market (cf. James Jr., 2002 as well as Arrow, 1974) and corporation (cf. Fukuyama, 1995). As James Jr. (2002) elaborates, two concepts of trust, namely “trust as prudence” and “trust as hope” (James Jr., 2002, p.13), exist, whereas only trust as prudence is based upon rationality. This warrants interest, as “economists generally have little understanding of trust” (James Jr., 2002, p. 3), yet they are trained to focus on incentives that affect behavior (cf. James Jr., 2002, p. 4). In this way, trust as prudence, is calculable through the game theoretic prisoners’ dilemma (hereafter referred to as PD). Thus, it is of direct interest for economists, while trust as hope, does not directly affect economists’ calculations, since these incentives are unclear. However, trust as hope may be of specific interest when discussing both the influence of an ethical mind-set and an immanent insolvency, as people tend to “just trust” (James Jr., 2002, p. 14) when they fear being exploited (cf. James Jr., 2002 as well as Ridley, 1997 and Parks and Hulbert, 1995).

The intrinsic contradiction of the term ‘calculable trust’ that Williamson (1993) defined shall be neglected in this matter, since the substance of the modeling of economists’ behavior corresponds to rational choice theory (cf. Hausmann, 2003). This means that economists do not necessarily calculate the economic impact of trust and risk, but act as if they have calculated the impact (cf. Friedman, 1953 p. 82). Thus, trust is only calculated in our model. It may be argued that economists act upon the results of a PD (cf. James Jr., 2002).

James Jr. (2002) further elaborates that cooperation within a PD can only be achieved when a) the PD is iterated b) the preferences of the players change or c) an explicit or implicit contract is accepted. This means the calculation of trust as prudence in the environment of finance does not necessarily imply a bilateral agreement (cf. Acharya, 2007) as long as there are no other incentives. This challenge is often addressed in a principal-agent theory, because no principal can sufficiently control the agent. Consequently, the principal needs to rely on trust as hope, or work on the achievement of cooperation within a PD (cf. James Jr., 2002, p. 303). A second principal-agent challenge arises from the shareholder-management separation, as managers do not control their own property, but control the property of others (cf. Bhimani, 2008, p. 140). As a result, the decision-making process within the economic system is influenced by managers that strive rather for personal than for corporate success (cf. Fassin, 2011 as well as Adams et al., 2008).

In regard of a macroprudential understanding of the role of trust in the environment of finance, two correlations of trust have to be taken into consideration, because both an inner and an outer cycle of relationships exists (cf.

Thimann, 2014, p.18). The inner cycle is hereby the interbank system, in which banks and investors need to trust each other, so that a cooperation failure and a gridlock equilibrium are prevented (cf. Freixas et al., 2000). The outer cycle is referring to relationships based on trust between the banking sector and the civil society. Banks “are a means of payment and entail a public good function” (Thimann, 2014, p.12) and, thus, the civil society’s major concern is financial stability. In the bank’s view, this relationship means that trust is the major asset for banks (cf. Fassin, 2011). This is also because “people place actors into broad categories and assume similarity of attributes within these categories” (Barett 2012, p.688).

Concluding, trust is essential for the systemic stability of both the interbank system and the relationship between the banking system and the civil society as their consumers, because a single major misconduct or mistrust may lead to an eruption of the entire system.

2.2 Systemic risk and externalities

Acknowledging that trust as prudence plays a crucial role in the environment of finance, risk and trust management are closely intertwined.

There are two kinds of risk: On the one hand, specific risk that affects only a single company and, on the other hand, systemic risk that threatens the entire financial system. Whereas specific risk is generally appreciated in all sectors, systemic risk plays a crucial role in the financial sector. This is due to the contagious network effects that occur as a result of the interconnectedness among both banks and insurance companies (cf. Nastansky, 2014 as well as Selmier et al., 2014). The interconnectedness in the financial economic sector differs in particular to the one in real economy, because financial competitors are suppliers and demanders at the same time and in the same market. In addition, the financial economy is closely linked to the real economy, as private and corporate equity is invested in the financial sector (cf. Nastansky, 2014).

As appreciated earlier, risk is a calculation upon trust as prudence. Financial institutions are only capable and willing to mitigate their own risk, because they gain from an increase of trustworthiness (cf. Fassin, 2011). Systemic risk, however, is considered an externality and, thus, only of marginal interest for bankers. In contrast, bankers have the incentive to externalize and diversify their theoretically specialized risk, because this shifts the burden of risk towards others (cf. Nastansky, 2014, p. 3). This incentive is not only of psychological interest to top management (cf. Fassin, 2011), but also of financial interest to shareholders,

as they wish to limit their personal liability. In accordance to this incentive, bankers or risk managers aim at the status of systemic important financial institution (hereafter referred to as SIFI), because this status deliberately shifts specific risk towards systemic risk. This status is obtained by being too big, too complex and too interconnected to fail (cf. Nastansky, 2014; Hughes & Mester 1993).

According to consensual standards of ethics, the externalization of specific risk towards systemic risk, is considered a moral hazard (cf. Nastansky, 2014, p.8), because this inclines to be a deliberate asymmetry of guilt, burden and punishment. In a way, this would not be too explicit, if risk was only shifted in the interbank system, as it is the norm to diverse risk in this system (cf. Nastansky, 2014; Freixas et al., 2000). However, due to the possible negative effects on the real economy, the government is prone to guarantee the stability of the financial system with tax payers' money (cf. Freixas et al., 2000). Thus, it is civil society that has to shoulder the burden of systemic risk.

2.3 The fields of application of CSR

The social responsibility of businessman and, hence, of corporations in general is to act in accordance with the objectives and values of the society (cf. Bowen, 1953). Further, Davis (1967, p, 46) states “the substance of social responsibility arises from concern for the ethical consequences of one’s acts as they might affect the interests of others”. However, a business institution is the “basic economic unit” in a society (cf. Carrol, 1979, p.500). Thus, Carrol elaborates the definition of CSR as encompassing the “economic, legal, ethical and discretionary expectations that society has of organizations at a given point of time” (Carrol, 1979, p.500).

Having this in mind, the fields of application of CSR are manifold and reach from the accountants' department to the consequences of actions on nature. In this regard, successful CSR needs to be implemented into the core of a corporation (cf. Fassin, 2011, p.172). However, it appears that in cases of mergers and acquisitions, which are mostly influenced by external and systemic risks, CSR is neglected, because psychological preferences by top-management and by stakeholders drown out externally imposed ethical standards (cf. Fassin, 2011, p.181). Thus, CSR appears to be of second value in a corporation.

In contrast, a positive tendency towards CSR as specific risk management within the value chain can be recognized in recent literature (cf. Bekefi et al., 2006; Franz et al., 2011). This trend is supported by the benefits associated with

stakeholder dialogues, as they increase transparency and, thus, unveil risky hazards and strengthen cooperation (Franz et al., 2011). In regard of systemic risk and the moral hazard undertaken by SIFIs, however, CSR has little influence, since the externalization of risk increases the trustworthiness of the SIFI itself. Hence, a stakeholders' dilemma between shareholders and the civil society hinders successful use of CSR policies (Adams et al., 2008).

3. A financial institution's rationale behind morally hazardous incentives

Acknowledging that, in the environment of finance, trust is counterpart to risk, and further acknowledging that specific risk can be mitigated by diversifying and externalizing, I now pursue the identification of the rationale behind morally hazardous incentives. To do so, I will firstly identify the economic and network-theoretic reasons to externalize risk. Then I will examine the resulting effects on trust-relationships and on the institution's stakeholders in general.

3.1 Reasons to externalize risk

Economically, the overall incentive of management is to maximize shareholder's wealth (cf. Godfrey, 2005, p.3). In this context, it is in the institution's interest to minimize the risk associated with its banking products, because the returns for banking products are linked to the affiliated risk (cf. Hull, 2007, p.16). Diversifying risk, thus, mitigates the risk associated with the banking products and, hence, allows a greater radius of operation. As depicted in systemic risk and externalities, specific risk can be externalized when the status of systemic relevance is obtained (cf. Nastansky, 2014) and, thus, the risk of default and insolvency is in parts shouldered by the system (Tarashev et al., 2010). Further regarding the incentive to maximize profit, externalizing risk is synonymous to increasing the probability of being bailed out in case of immanent insolvency. This is due to a fiscal cost analysis, which shows that the burden of a financial crisis is more expensive for the civil society than a bailout (Rosas, 2006 as well as Rochet, 2003). Thus, the foremost reason to externalize risk as a financial institution is to attain systemic relevance and, therefore, urge the government to guarantee the institution's existence and augment the radius of operation.

In network-theoretic literature, a broad consensus can be found on how to attain this status of systemic relevance: Being "too big", "too interconnected" and "too many" (Nastansky, 2014, p. 8 et seq.) demonstrably increases the probability of being bailed out (cf. Hughes and Mester, 1993 as well as Nastansky, 2014). Further, complexity and interconnectedness are encouraged by risk management, because transparency has an adverse effect on the probability of bailout,

according to Rosas (2006). Also, Selmier et al. (2014) argues that network effects play a role when risk is consumed. It has been noted that an increased probability to being bailed out decreases specific risk and thus, adds value to the financial institution. This added value may positively influence shareholders and stakeholders to trust their bank. Also, Cordella and Yeyati studied that the extra value further decreases the probability of failure. This process of reciprocal endorsement between SIFI and the state might lower the overall risk (cf. Cordella and Yeyati, 2003). However, other sources claim that this kind of misconduct decreases general trust, due to reputational damage (cf. Barnett, 2012, p.12).

3.2 The effects on trust

As I analyzed the returns on risk of the morally hazardous incentives of financial institutions, I will now turn to the analysis of the effects on trust that these hazardous incentives might have. In this context, the role of trust in the environment of finance, as depicted earlier, is of foremost interest. Resulting from the incentives at hand, an equivocal game can be derived. This means that any hazardous incentive has multiple facets of trust. These facets are a) trustworthiness of the financial institution b) trust in the government or politician c) trust in the system and d) trust in systemic institutions (cf. Roth, 2009). Empirical evidence from the financial crises of 2008 shows that trust in the system and in systemic institutions suffered from the financial crisis while trust in governments did not (cf. Roth, 2009). In this context, the financial crisis may be understood as the systemic risk come true. At this point I will shift the focus towards other effects on trust and leave the analysis of the financial crisis from 2008 to others.

The interaction between financial institutions and a government may be described with the principal-agent theory (cf. Bhimani, 2008, p.5). Here, at first, the government is the principal and the institution the agent who externalizes risk without the consent of the principal. Then the institution is the principal and the government the agent who may or may not bail out the principal in case of immanent insolvency. Interestingly, already the commitment to bailout reduces the need to bail out (cf. Cornella and Yeyati, 2003). This means that institutions tend not to need a bailout when a bailout by the government is guaranteed. Thus, it can be argued that there is explicit trust in a rational cost analysis from governments (cf. James Jr., 2002). As opposed to this argument it needs to be said that the rationale of a government is manifold, as a government has multiple stakeholders (Cornella and Yeyati, 2003). Consequentially, psychological issues of politicians might influence the decision on bankruptcy or bailout. In terms of psychological issues, cronyism for example would promote the probability of a

bailout. In this sense, especially the trust of shareholders of financial institutions would increase while civil society might dishonor their government (c.f. Cornella and Yeyati, 2003). This problematic represents the entire ambivalent concept of trust in the model of the SIFI's incentive to unethically externalize risk. Just as risk is transferred from the institution to the system, trust is transferred from the system to the institution. However, it has to be taken into consideration that this does only apply to direct stakeholders of the institution and not to civil society in general.

In spite of the effects on trust that have been already examined, a second approach towards this problem can be reviewed in literature. The line of argumentation relies on the expectation that trust is obsolete when risk is externalized, because the government inevitably plays the role of an insurer (cf. Rochet, 2003). Thus, asset bubbles and other obviously malfunctioning financial products are used until the respected government allows the financial crisis to happen. Due to the idea that theoretically it is the duty of the regulating body to provide "fire walls" that prevent contagious effects (Freixas et al., 2000) and, therefore, bankers are not held liable for their actions, little is invested into trust (cf. Rochet, 2003; James Jr., 2002).

3.3 The effects on stakeholders

While the morally hazardous incentives of financial institutions are mainly a symptom of corporate strategy, top management is the primary agent. Yet, multiple stakeholders, in specific money lenders, shareholders, the government and the civil society, are directly or indirectly affected by this hazardous strategy. As the objectives of each stakeholder differs, top management needs to side with the one or the other (cf. Adams et al., 2008). The foremost differentiation is whether to externalize or not, which means in another aspect, whether to induce risk on the system or not. If risk is externalized, trust in the corporation rises while trust in the system suffers (Nastansky, 2014).

Consequentially, different aspects and effects need to be considered. Fassin and Gosselin argue in the *Collapse of a European Bank in the Financial Crisis: An Analysis from Stakeholder and Ethical Perspectives* (2011) that top management makes use of a utilitarian approach which means that they weigh possibilities and outcomes. Fassin and Gosselin (2011) as well as Adams et al. (2008) enlarge upon this utilitarian approach by arguing that top management consequentially tends to side with shareholders as they are the "ultimate owner" of the institution (Hull, 2010, p.12).

Nastansky calls attention to a different aspect. He claims that top management has an immediate interest to preserve the stability of the financial sector, since an insolvency of a single SIFI may erode the entire system. Thus, an insolvency of a competitor in the market is yet a risk that needs to be mitigated. Yet, Selmier, Nastansky and Freixas state that it is the government's duty to preserve the stability of the financial sector, since the harm to the civil society is greater than the one for financial institutions itself. For example, bank runs and gridlock equilibriums need to be prevented (cf. Nastansky, 2014, Selmier et al., 2014 as well as Freixas et al., 2000).

Moreover, "most investors are [...] concerned about the overall risk" (Hull, 2010, p.13) which means the owners of a bank do not encourage risk, although they should theoretically "encourage the companies they invest in to make high risk investments" (Hull, 2010, p.13). Here, overall risk is the combination of all risks associated with the institution's actions. Hull states that this is due to bankruptcy costs, which imply that shareholders get nothing in case of bankruptcy (cf. Hull, 2010, p.14). Also, threats to self-interest outweigh possible benefits (Barnett, 2012, p.9). Consequentially, it may be argued that it is the shareholders' incentive to prevent a banking crisis, as well.

Rochet states "losses were often covered ex-post by tax payers' money or by a compulsory contribution of surviving banks, what the Bank of France called 'solidarité de place'" (Rochet, 2011, p.8). This shows that a bank's failure was compulsory and deliberately covered by all stakeholders, so that the system would not erode. A similar technique is apparent in the USA where surviving banks buy eroded banks with the incentive to secure information, whereas the economic position of the failing bank is subordinate (cf. Rochet, 2011). This again shows that stakeholders have the incentive and possibility to secure the financial system's stability even when risk is externalized.

4. Government approaches on risk mitigation

The examination of the various factors that influence the incentive to externalize risk has shown that both economic and psychological expectations are taken into regard. In the following, I will, thus, analyze the government's approaches on risk mitigation, knowing that financial institutions try to shift risk and acquire more trust by their shareholders while trusting the rationality of the government or systemic institution at the same time.

4.1 Bankruptcy or Bailout

The system of banking has its roots in the exchanging of money and gold (cf. Rochet, 2011). Later, banks deposited treasures of merchants and lent or invested parts of these deposits. This concept works “as long as the bank keeps enough reserves to cover the withdrawals of the depositors” (Rochet, 2011, p. 4). Yet, bank runs or bank closures were the “Darwinian mechanism” (Rochet, 2011, p.4 et seq.) to select successful banks and eliminate the unsuccessful ones. However, this mechanism is vulnerable to speculation and, hence, a theoretically functioning bank may be driven out by a single speculative investment (Rochet, 2011, p.5). In the context at hand, this means that an immanent insolvency due to speculation does not necessarily imply that the financial institution is not functioning in general. It further means that multiple stakeholders lose money or jobs by mistake, when the speculation fails. To overcome this problem, Walter Bagehot published a doctrine that intends for governments to bailout banks, so that single speculations or similar unexpected events do not immediately lead to bankruptcy (cf. Rochet 2011). For example, this doctrine was successfully implemented in 1985 when a computer bug led to a “USD 22.6 billion deficit” for the Bank of New York (Rochet, 2011, p.146).

It is of further historic interest that the announcement to bailout banks when market stability is vulnerable “was enough to avoid any such disturbance” (Rochet, 2011, p.146) in England in 1995. However, this manifested incentive led to the desire of systemic relevance, as then, the central bank would bailout the affected institution when needed (cf. Rochet, 2011 p.147). Consequently, Bagehot’s original doctrine was twisted, so that systemic relevance would be the significant demarcation instead of a negative externality that brings a solvent bank to stumble (Rochet, 2011).

Thus, three different doctrines are to be discussed: a) the government or systemic institution could always allow insolvency b) bailouts could be limited to situations of Bagehot’s doctrine and c) bailouts could be made in accordance to guarantee the stability of the financial system.

In all cases, the government has multiple stakeholders and principals that need to be taken into consideration. Yet, it is not only the government that can bailout a financial institution in misery, but also the shareholders or other financial institutions as appreciated in the *solidarité de place*. Game theory however, analyzed that when multiple agents have the opportunity and willingness to invest in an institution, they might keep aloof of this decision due to a coordination failure (cf. Morris and Shin, 1998 as well as Rochet and Vives, 2002). In specific,

the possible investor anticipates that others are not convinced the financial institution is solvent and, thus, the investor would have to shoulder the entire negative effect that destabilized the financial institution in the first place (cf. Rochet, 2011 p.13 as well as Freixas et al., 2000). This is also called gridlock equilibrium (cf. Freixas et al., 2000).

Consequently, it needs a superior institution to assess whether to bailout or not. In today's market economics, rating agencies are prone to be these institutions. Yet, Rochet clearly rejects the idea that rating agencies are sufficient. In contrast, governments have the size and credibility to decide upon insolvency or bailout (cf. Masera et al., 2011). Fassin and Gosselin (2011, p. 184) state that "the domino effect could have been more limited" in regard to the failure of the Fortis Group in 2008, when governments had successfully intervened. Yet, without intervening, the institution that ought to decide on bankruptcy or bailout risks a systemic crises when relevant parties are negatively affected by the initial insolvency (cf. Rosas, 2006). These arguments become apparent in the default of "Lehman Brothers" that "led to banks becoming more cautious in their lending to other banks and to nonfinancial corporations" (Hull, 2010, p.222).

Despite the moral hazard that is induced by financial institutions on governments, it is argued that governments can mitigate the probability of bank failure and, thus, of a possible systemic crises, when they announce bailouts prior to an immanent case (cf. Cordella and Yeyati, 2003 as well as Rochet, 2011). It appears that the announcement itself is sufficient to add credibility to the financial institutions, so that private and corporate investors invest and, consequentially, mitigate the risk of bank failures. Further it has been noted that banks tend to reduce their affiliation to risk when profitability is secured (cf. Cordella and Yeyati, 2003). It seems reasonable that the only banks that fail in this theoretically insured system are the ones that do not function and, hence, should be eliminated by the market (cf. Rochet, 2011). However, allowing this elimination would decrease the credibility in the policy of guaranteed bailout and, thus, weaken the system in which investors only invested, because the government guaranteed its stability (cf. Hull, 2010, p.222). The question arises how to separate functioning from malfunctioning banks while convincingly assuring a bailout when needed.

4.2 Consequences of regulations

The widespread approach to separate functioning and malfunctioning banks is to regulate their incentives in the first place (cf. Hull, 2010, p.221 et seq.). Thereby, governments limit the possibility of morally hazardous incentives of financial institutions, as these institutions are obligated to play within certain rules. This

means the foremost consequence of banking regulation is to ensure a bank has enough reserves to shoulder its own risk, although the institution would – in theory – rely on the system. However, Rochet argues this does not successfully mitigate risk, as a financial institution can now enlarge its risk affinity beyond the reserves it has to consider. Thus, systemic risk is still to be ultimately taken on by the government or the central bank at hand, although regulation limits the radius of operation for banks (cf. Rochet, 2011).

It is argued that macroprudential governance and microprudential regulation is needed, because “the scale of risk grows and risk is transmuted from a private good into a club good or common pool” (Selmier et al., 2014, p.8). Other sources claim “cooperation cannot be assumed through trust, but must be enforced through contracts and controls” (Hosmer, 1995, p.13). Also, regulation appears to have the capability to “slow asset acquisition” (Thimann, 2014, p. 16) and, thus, decreases the probability of default. At the same time, these regulations offer an insight of the system and, consequently, positively influence trust calculations both in the interbank system and of the financial system in general (Rosas, 2006).

Selmier appreciates that in environmental economics the polluter pays for collateral damages (cf. Selmier et al., 2014 as well as Stiglitz, 2008). As it is experienced in environmental economics, regulation is not the only possible attempt to mitigate exposure (Laudal, 2010), but CSR and the attachment to the environment by stakeholders, in specific, by consumers, plays an important role in the mitigation of pollution.

Empirical evidence shows that a process of escalating risks and regulations take place, yet banking crises do not cease to exist. I will turn to consider consequences of reliance on CSR, since we discovered ethical and psychological issues to be influential when arguing in favor or against the externalization of risk (cf. A financial institution’s rationale behind morally hazardous incentives).

4.3 Consequences of reliance on CSR

History shows that financial institutions have the tendency not to function as hoped, but need corrective measures now and then (cf. Rochet, 2011 as well as Hull, 2010). Thus, an ethical approach towards stability of the financial sector is naïve. However, as the financial sector is also dependent on the consumption of its products, CSR could have the same beneficial effects as in other fields of application.

As noted in the examination of CSR potential in the clothing business (cf. Laudal,

2010), systemic interdependencies grant a high potential for CSR standards, but are highly vulnerable to the violation of these standards (cf. Laudal, 2010, p.11). Due to the manifold interdependencies and the lack of transparency in the interbank system, this exposure to CSR exploitation may be apparent, as well.

Yet, the financial system has a crucial advantage for CSR incentives, due to the great influence of psychology and trust within the market and the action plans of managers (cp. The role of trust in the environment of finance; A financial institution's rationale behind morally hazardous incentives). An ethical approach might be of interest, only when a consensus towards this approach is found. Fassin writes that an ethical mind-set could have helped to reduce the risk of bankruptcy in the case of Fortis (cf. Fassin, 2002). Further, Fassin elaborates that when bankruptcies become immanent, people start thinking egoistically instead of acting in accordance to ethical standards. This implies that CSR may be implemented to decrease specialized risk, but encounters problems when systemic risk is concerned. However, others argue that trust as hope can be expected when people are vulnerable for exploitation (cf. James Jr., 2002, p. 14). This weakens the assumption of egoistic behavior when insolvencies are apparent. Further, implementing CSR may provide "insurance-like" protection (Godfrey, 2005, p.2), because CSR adds moral and social value to a corporation (cf. Godfrey, 2005, p.2) which "mitigates negative stakeholder assessments" for a corporation (Godfrey, 2005, p.10). However, it has to be noticed that CSR might backfire as "stakeholders [...] adhere to different ethical values" (Godfrey, p.8) and the reputation of the corporation prior to CSR measures have an influence on the success (Barnett, 2012, p. 14).

A different angle on risk mitigation appreciates that CSR itself mitigates specialized risk (Goss and Roberts, 2010) and, thus, the need to externalize risk as examined in 'Reasons to externalize risk', loses its ground of reasoning. The morally hazardous incentive would be tackled by its roots.

Having this in mind, and having further in mind that all stakeholders approve systemic stability, the reliance on CSR does not necessarily fail. However, it has also been noted that it is the duty of the regulatory body to secure the system's stability. Due to the current situation, the understanding of self-liability and the asymmetry among bankers and owners, reliance on the concept of CSR is not yet sufficient, as seen in historic events.

Thus, an ethical approach to mitigate systemic risk may be only applicable, if the acting parties in the financial system comply accordingly. However, as of today, this is not yet the case. Therefore, a regulatory body is still crucial for a

functioning financial system.

5. Conclusion and future prospect

In this paper I examined the impact of trust on the moral hazard induced by bankers on the financial system. In this regard, three main challenges are striking. Firstly, how is it possible to differentiate between a functioning bank that had a one-time problem of illiquidity and a malfunctioning bank? Secondly, how is it possible to mitigate the externalization of risk through regulation, when further regulation reduces systemic risk and consequentially allows financial institutions to augment their affinity to risk? Thirdly, how is it possible to foster an ethical mind-set in bankers and managers when bankruptcy threatens individual careers? It has been shown that financial institutions externalize their risk, because by doing so they keep aloof of responsibility. Yet, it has also been considered that CSR policies mitigate specific risk, as well. Further, it has been noted that stakeholders in general, do not approve systemic risk, but the diversification of risk in general. This means that it is both possible and advocated to mitigate risk through unethical externalization and through ethical CSR measures.

The recent development in different non-financial environments might have an answer to these questions, as CSR gains public interest. In specific, CSR gains interest due to public awareness of consumer responsibility. Further, following the financial crisis of 2008 and the ongoing struggle for European nations, civil society is interested in the financial system and demands transparency. This implies in the future the ethical standards within the financial system are not only regulated by laws written by the government, but by laws written by the customers as well. As this shows changes towards a more ethical mind-set in other areas, this might as well have the same effect on the financial sector.

It is already striking that multiple banks advertise their ethical behavior. Also, multiple funds exist that are specialized in ethical products and investments. Due to this trend, it may be concluded the moral hazard induced by financial institutions to the financial system will cease to exist, when externalizing risk becomes unfavorable from a marketing perspective. In other words: until customers act in accordance to their responsibility and thus become aware of moral hazards in the economic environment, there is no economic downturn for financial institutions and, thus, no reason for the financial intermediaries to abstain from the unethical behavior that has been revealed in the doctrine of “too big to fail”.

References

- Acharya, V., & Yorulmazer, T. (2007). Too many to fail - An analysis of time-inconsistency in bank closure policies. *Journal of Financial Intermediation*, 1-31.
- Adams, R., Licht, A., & Sagiv, L. (2008, April). Shareholderism: Board Members' Values and the Shareholder-Stakeholder Dilemma. egci: Financial Working Paper N°. 204/2008.
- Barnett, M. L. (2014). Why Stakeholders Ignore Firm Misconduct: A Cognitive View. *Journal of Management*, 676-702.
- Bekefi, T., Jenkins, B., & Kytle, B. (2006, December). Social Risk as Strategic Risk. Corporate Social Responsibility Initiative Working Paper No. 30.
- Bhimani, A. (2008). Making corporate governance count: the fusion of ethics and economic rationality. *Journal of Management & Governance*, 135-147.
- Carroll, A. (1999). Corporate Social Responsibility - Evolution of a Definitional Construct. *Business & Society*, 268-295.
- Cordella, T., & Yeyati, E. L. (2002). Bank bailouts: moral hazard vs. value effect. *Journal of Financial Intermediation*, 300-330.
- Fassin, Y., & Gosslin, D. (2011). The Collapse of a European Bank in the Financial Crisis: An Analysis from Stakeholder and Ethical Perspectives. *Journal of Business Ethics*, 169-191.
- Financial Stability Board. (2010). Reducing the moral hazard posed by systemically important financial institutions - FSB Recommendations and Time Lines. FSB.
- Franz, P., Dr. Mayer, F., Loew, T., Dr. Clausen, J., & Braun, S. (2011). Verantwortung neu denken - Risikomanagement und CSR. Berlin: Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit.
- Freixas, X., Parigi, B., & Rochet, J.-C. (2000). Systemic Risk, Interbank Relations, and Liquidity Provision by the Central Bank. *Journal of Money, Credit, and Banking*, 611-638.

Godfrey, P. C. (2005). The Relationship between Corporate Philanthropy and Shareholder Wealth: A Risk Management Perspective. *Academy of Management Review*, 777-798.

Goodhart, C. A., & Huang, H. (2005). The lender of last resort. *Journal of Banking & Finance*, 1059-1082.

Goss, A., & Roberts, G. (2011). The impact of corporate social responsibility on the cost of bank loans. *Journal of Banking & Finance*, 1794-1810.

Hosmer, L. T. (1995). Trust: The connecting Link between Organizational Theory and Philosophical Ethics. *Academy of Management Review*, 379-403.

Hughes, J., & Mester, L. (1993). A Quality and Risk-Adjusted Cost Function for Banks: Evidence on the "Too-Big-To-Fail" Doctrine. *The Journal of Productivity Analysis*, 293-315.

Hull, J. C. (2010). *Risk Management and Financial Institutions*. Boston, Mass.; Munich: Pearson.

James Jr., H. S. (2002). The trust paradox: a survey of economic inquiries into the nature of trust and trustworthiness. *Journal of Economic Behavior & Organization*, 291-307.

Kytle, B., & Ruggie, J. G. (2005, March). Corporate Social Responsibility as Risk Management: A Model for Multinationals. Corporate Social Responsibility Initiative Working Paper No. 10.

Laudal, T. (2010). An Attempt to Determine the CSR Potential of the International Clothing Business. *Journal of Business Ethics*, 63-77.

Masera, R., Mazzoni, G., & Oldani, C. (2011, September 22). The twin moral hazard and the role played by derivatives. Retrieved from Siecon - Italian Economic Association: <http://www.siecon.org/online/wp-content/uploads/2011/04/Masera-Mazzoni-Oldani1.pdf>

Morris, S., & Shin, H. (1998). Unique Equilibrium a Model of Self-Fulfilling Currency Attacks. *American Economic Review*, 587-597.

Nastansky, A. (2014). Systemisches Risiko und systemrelevante Finanzinstitute. Essen: MA Akademie Verlags- und Druckgesellschaft mbH.

Nier, E., & Baumann, U. (2006). Market Discipline, disclosure and moral hazard in banking. *Journal of Financial Intermediation*, 332-361.

Parks, C., & Hulbert, L. (1995). High and low trusters' responses to fear in a payoff matrix. *Journal of Conflict Resolution*, 718-731.

Ridley, M. (1997). *The Origins of Virtue: Human instincts and the Evolution of Cooperation*. New York: Viking Penguin.

Rochet, J.-C. (2003). Why Are There so Many Banking Crises? *CEsifo Economic Studies*, 141-155.

Rochet, J.-C., & Vives, X. (2002). Coordinations Failures and the Lender of Last Resort: Was Bagehot right after all? FMG discussion paper, LSE.

Rosas, G. (2006). Bagehot or Bailout? An Analysis of Government Responses to Banking Crises. *American Journal of Political Science*, 175-191.

Roth, F. (2009). The Effect of the Financial Crisis on Systemic Trust. *Intereconomics*, 203-208.

Selmier, T., Penikas, H., & Vasilyeva, K. (2014). Financial Risk as a Good. *Procedia Computer Science*, 115-123.

Stiglitz, J. (2008, October 21). Testimony before the House Committee on Financial Services. Testimony on the Future of Financial Services Regulation.

Tarashev, N., Borio, C., & Tsatsaronis, K. (2010, May). Attributing systemic risk to individual institutions. *BIS Working Papers No 308*.

Thimann, C. (2014, July). How Insurers Differ from Banks: A Primer on Systemic Regulation. *Systemic Risk Centre Special Paper No 3*.

Williamson, O. (1993). Calculativeness, trust, and economic organization. *Journal of Law and Economics*, 453-486.

World Finance Conference. (2013, November). Does Corporate Social Responsibility Affect Firm Financial Risk? Evidence from Vigeo Data. Retrieved from World finance conference: http://world-finance-conference.com/papers_wfc2/294.pdf

