Get rid of banks and build up a modern financial world

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Get rid of banks and build up a modern financial world!

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The financial crisis has revealed fatal institutional and structural deficits at the finance market. Politics has reacted to the financial crisis with a sea of legal bills and regulations. But all regulating efforts are merely system-imminent reparation measures and do not solve the core problems. For this, a fundamental financial reform is needed. This article analyzes the finance system's shortcomings, documents the reform approaches from the past three years, and designs a base structure for modern finance architecture without banks.

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1. Introduction

The crisis in the Euro-zone clearly shows that the "banking sector" is still a systemic risk for the whole economy. Although no way leads around a restructuring of Greek and Portuguese state debt, the EU financial politics recoils from such actions out of fear of the consequences for the European bank-system. What is publicized as "Euro-crisis" by politics and media is first and foremost a structural deficit within the European bank and finance system.

The recent financial crisis has revealed fatal institutional and structural deficits at the finance market. Politics has reacted to the financial crisis with a sea of legal bills and regulations. But all regulating efforts are merely system-imminent reparation measures and do not solve the core problems. For this, a fundamental financial reform is needed. This article analyzes the finance system's shortcomings, documents the reform approaches from the past three years, and designs a base structure for modern finance architecture without banks.

2. Insights from the financial crisis

2.1. Herd behavior versus market efficiency

In the past crisis, it was the American real estate prices, which developed into an "asset bubble". In the 167 systemic bank crises before, counted by Laeven and Valencia (2008) between 1970 and 2007, it was an equally extreme increase in market prices, just in other asset markets. A "bubble" is a suitable metaphor for such a price rise, which is not based on fundamental factors. The increase is a mere exaggeration and is being produced by a massive inflow of capital.

Several empirical studies prove that herd behavior of investors prevails in financial markets (Deutsche Bundesbank, 2011a). The individual investor does not orient himself by the fundamental factors of his investment decision (return and risk), but rather orients primarily by other investors' decisions, hoping, that they have advanced knowledge. Simplified, this behavior can be explained as follows: One only looks where the herd runs to, jumps on the same train as early as possible and tries – and this is where the actual risk lies – not to miss take-off. Typically, the herd selects "small" markets, with a lesser liquidity and flexibility in supply. In the real estate market, for example, the increased demand cannot be satisfied by a short term increase of supply, so that the price rise is especially distinct here. Well suited, in this sense, are also commodity and food markets. Through the exaggeration prices distance themselves further and further from their economic "fair" value. In the real estate sector, the fair value of a house can be calculated without much difficulty. Usually, the average between its substance value (rebuilding costs) and its present value of expected returns is taken as a guideline. The speculative exagger-

ation in the US-real estate market was therefore obvious to market participants, but nevertheless did not change their herd behavior.

The history of banking crises and the prevailing behavior of investors in the financial market lead to conclude, that the paradigm of efficient markets, especially of efficient finance markets, is not valid anymore and probably never was. The, in the economic theory dominant rational investor, the so called "homo oeconomicus", who with the help of all relevant information maximizes his expected profit, is ideal to represent human behavior in economic models, but does not exist in reality. The same can be said for the efficient market hypothesis developed by Fama (1970). The development of US real estate prices clearly shows, that market prices do not include all available information, and that the price is not – as postulated by Fama – always identical to the so called fair or fundamentally justified price. Herd behavior leads to extreme volatility and speculative bubbles. Furthermore there is no self-regulation mechanism of markets in a way that a speculative price increase would lead automatically to a decline in demand. The market's self-regulation, market equilibriums, and market prices, which enable an optimal allocation of scarce resources to market participants, are wishful thinking of the economic model world, which – at least in financial markets – is far from reality.

2.2. The business model „bank"– a systemic risk

The rescue of banks with tax money in the financial crisis was justified with the argument of "system relevance". According to this the insolvency of banks up to a certain size and high interconnectedness endanger the entire finance system's stability and must to that extent be rescued by the state. The finance system's stability is a difficult to define term: primarily the danger of a domino effect is seen here, in the sense, that the collapse of a big bank endangers the liquidity of further banks in the finance system. With pending insolvency of one or more banks the economy's credit supply is threatened. Meanwhile a "bank run" threatens to occur, meaning that savers fear for the security of their deposits and withdraw them from the bank on short notice.

The problem is that the knowledge about system relevance and public rescue in an emergency stimulates banks or bank management to take even greater risks as to receive greater returns. In case of a success, the bank generates higher profits and the management receives greater bonus payments. In the case of failure and the bank's pending insolvency, the state covers the losses. Profits are privatized while losses are socialized. The best example for such a "moral hazard behavior" by banks is the current crisis within the Euro zone. The status of a bank, due to its size and interconnectedness, to be considered as "system relevant", is rather attractive. This reduces the bank's credit risk substantially. Hence refinancing costs for raising capital are reduced, stock prices go up, and the unspoken-of public guarantee facilitates the acquisition of new wealthy customers with huge savings deposits (Demirgüç-Kunt & Huizinga, 2010). Consequently, in this case, for the bank management the false incentive to gain system relevance as

quickly as possible by acquiring other banks subsists, especially considering that bonus payments and managerial influence correlate positively with the bank's size.

The essential origin of the systemic risk lies within business model "bank" that has changed significantly since the 1970's. In former times commercial banks collect money from savers on the liability side and hand out loans to the real economy on the assets side of the balance sheet. But since the technique of securitization came up in the 70ies, banks started to convert loans with high volume into small pieces of tradable securities (bonds), which are sold to capital market investors. In the case of conventional lending, the bank as an intermediary bears the full credit risk, as well as the interest rate change risk. Wherefore, the bank has a genuine interest concerning the selection of a creditworthy debtor. The securitization of loans, on the other hand, alters this state of interest fundamentally. Companies' great volume loans, are converted into fragmented bonds by a consortium of several banks, and sold to institutional customers (insurance companies, investment funds, banks, central banks, etc.) by telephone trading ("over-the-counter business"), as well as to private customers through the network of affiliated banks. And so the bank degenerates to a mere merchant of securities and is risk-free again with the bonds' successful placing on the capital market. Because now the bond investor bears the risks discussed above. The bank's interest merely concerns maximizing sales of securities, and not anymore the selection of a creditworthy debtor.

The dominance of investment banking over the credit business is mirrored in the balance sheet as well as in the bank's income statement. Holding of securities mainly for the bank's propriety trading are the overriding part of bank assets. The fraction of account receivables out of lending activities measured by the bank's total assets is much smaller in comparison (table 1).

Table 1: Balance sheet and income statement positions exemplary for four European high street banks

Bank	Deutsche Bank		UBS		RBS		BNP PARIBAS	
Balance sheet 2010	€ million		CHF million		£ million		€ million	
Total Assets	1,905,630	100%	1,317,247	100%	1,452,634	100%	1,998,158	100%
Securities/Derivatives	1,100,997	58%	781,255	59%	761,874	52%	1,064,232	53%
Loans	407,729	21%	262,877	20%	560,657	39%	747,404	37%
Income statement 2010								
Total operating income	27,293	100%	31,994	100%	32,662	100%	43,880	100%
Net interest income after credit loss expense	14,309	52%	6,149	19%	14,200	43%	24,060	55%
Net fee and commission income	10,669	39%	17,160	54%	5,983	18%	8,486	19%
Net trading income	3,555	13%	7,471	23%	6,138	19%	4,657	11%
Other income (loss)	(1240)	-5%	1,214	4%	6341	19%	5,773	13%

Source: The banks' annual reports 2010

Generally, the balance sheet volumes of banks have increased substantially over the past years, which was among others caused by the growing number of security holdings. In most European countries, the sum of national banks' assets exceeds the gross domestic product (GDP) by far. In

the income statement, the achieved interest rate margin (credit interest rate minus debit interest rate) usually contributes yet 50% to the banks' income. However, this profit is primarily generated through the acquisition of interest bearing bonds, and not through the credit business. Furthermore fees and commission generated by security sales and trading are becoming the main source of income for the business model "bank".

Due to securitization, loans are made tradable at the bond market. Large secondary markets are created for bond trading. Loan prices or issuers' interest rates are the result of the daily trading and therefore fall under the market speculation concerning future inflation and economic growth figures as well as the debtor's creditworthiness. While in the beginning, primarily corporate loans were converted into bonds; banks now increasingly create their own securities without a link to the real economy, such as certificates and derivate based financial instruments. In the past years, financial institutions issued much more bonds and interest bearing securities than the states or the corporate sector (see fig. 1).

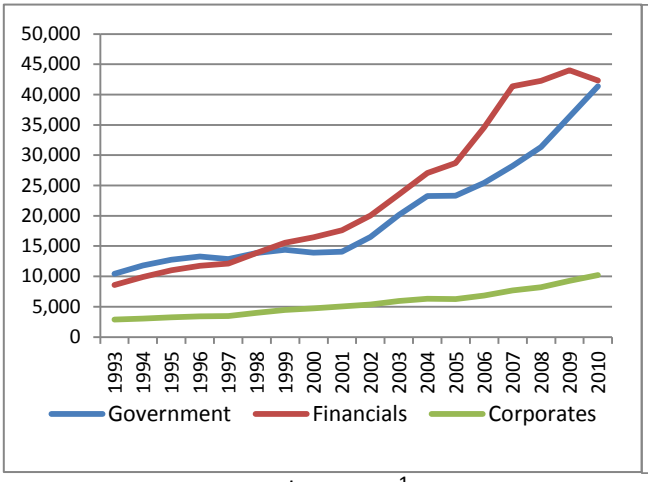

Fig 1: bond issuers ($-billion)[1]

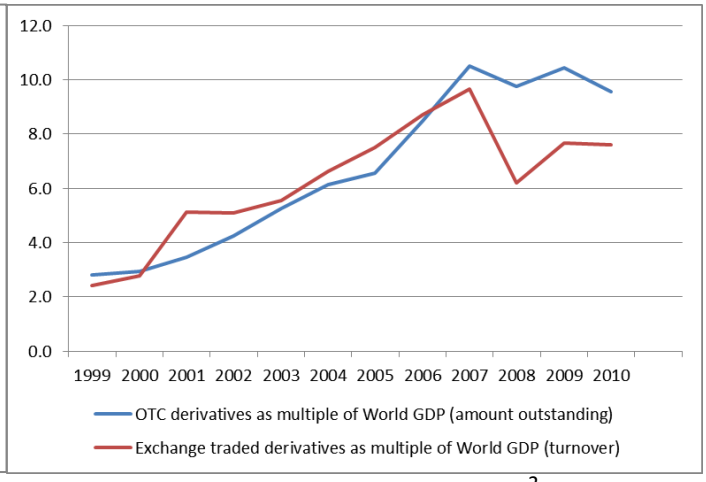

Fig. 2: derivatives in relation to GDP[2]

Higher margins can be achieved with securities that include options, because the price calculation is more difficult and therefore less transparent for investors. Originally, derivatives, such as options or futures were primarily used for hedging against business risks (for instance exchange rate risks or commodity price risk) by corporates. This has changed. The derivate market is dominated by the fraction of market participants without a real business position, i.e. the speculators. This circumstance can be documented with the development of the derivative in relation to the gross domestic product. The volume of closed derivatives by telephone trading between bank and institutional investor (over-the-counter trading) is nearly ten times greater than the

[1] Source of data: Bank for International Settlements, International and domestic debt securities, own calculations;
[2] Source of data: Bank for International settlement concerning the OTC and exchange-traded derivatives, International Monetary Fund concerning world GDP figures (GDP based on current prices), own calculations. The total volume of exchange traded derivatives is even higher as the BIS-data does not include options and futures on commodities and single equity.

real economic output of all economies. The volume of exchange-traded derivatives is also a multiple of the world-GDP (see fig. 2). If the derivatives were only used to secure real economic risk positions, the trade volume should roughly correspond with the worldwide annual production of goods and services. Because companies do not hedge their risk positions multiple times. Consequently, the fraction of derivatives used for purely speculative purposes and not for hedging of business risks, is more than 20 times the world-GDP.

Most derivatives have the leverage effect as a common feature, which means that a rather small change in the market price of the underlying leads to much higher change in the derivative price. In other words, on derivatives with a slight capital expenditure, a high nominal capital can be moved and so a multiple of profit or loss is achieved in comparison to spot market instruments. For the business model "bank", large holdings of securities and derivatives on the asset side implicate a high daily volatility in assets values. These risky investments of banks, in comparison to those of industrial enterprises, are financed by a rather small fracture of equity capital on the liability side. Here again, on the liability side of the banks' balance sheets, a leverage risk exists. Investment banks earn huge profits at high risk by working with a double leverage on the asset side as well as on the liability side. A clear indicator for the leverage effect is the investment banks' return on equity, which lies above 20%, while the long-term average for real economic businesses lies between 10 and 12% (Bank for International Settlements, 2011).

Packer and Tarashev (2011, p. 43) are writing in the June 2011 BIS quarterly report: *„Another reason banks' creditworthiness is especially hard to assess is that their earnings performance is highly volatile, not least because of structurally high leverage. For instance, on the back of leverage roughly five times that of firms in other sectors, the volatility of returns on banks' stocks over the past several decades has been consistently higher than that of non-financial stocks."*

The alteration of the business model has substantial macroeconomic implications. From an economic perspective, the banking system has the task of financing the real economy. In their function as an intermediary, banks transform macroeconomic savings into real economic investments. For this task alone – and not for issuance and trading of securities – the central bank privileges them with cheap refinancing. Out of financing an investment in the real economy, a real added value develops for the corporation; the GDP rise as more goods and services are produced, employment increases and this leads finally to a higher social welfare for the society. Investments in a banking certificate imply that savings do not flow to the real economy, but remain in the nominal, monetary sector. Such an investment - with no link to the real economy - is mere self-purpose, because no real added value comes from it. Thus, one investor's profit is the other's loss, because it is a zero sum game and assets are only redistributed in the nominal sphere. On balance, the economy's total assets remain unaltered if no real investment is financed (Flassbeck, 2010, p.25f.; Schulmeister, 2009 p.172f.).

With the investors' herd behavior in financial markets, only the nominal value of assets rise, divert more and more from its fair value, until a clear price adjustment occurs. The extreme asset price fluctuations, for example of currencies or of derivatives on commodities and foods hinder and destroy real economic investments and activities. In addition, the share of economic savings, which are invested in bank bonds, hedge funds, and certificates, so in the purely nominal sector, increases steadily in relation to real economic investments. Clearly, on short term perspective yields achieved by nominal investments are higher than those of real investments. However from an economic point of view, this inflow of scarce resources into the unproductive sector is a misallocation ("squander"), enforces the decoupling of financial economy from the real economy and increases the risk of financial crises. The market economy as a whole thereby becomes considerably more fragile and crises-prone.

2.3. The corporate governance „bank" failed

The great losses and the threatening insolvency during the financial crisis document the malfunction of the banks' internal risk management and its surveillance by the supervisory board. Another critical aspect in respect to a lack of corporate governance by banks is the practice of awarding high bonuses to the management, even in times of crises.

Responsible for this malfunction of banks' internal risk management are the following factors:

- Generally, the business model bank involves a nearly incalculable risk. Large holdings of securities and derivatives of various types, various markets and maturity on the asset side financed with a minimum of equity capital induce a risk complexity that cannot even be managed with help of the best risk models.
- The estimates of market risk and credit risk are based on ex-post data and subjective assumptions for future trends. The "Knightian uncertainty" as a factor, which cannot be calculated by mathematical models, remains existent.
- The investment banks' risk models focus merely on the risk of the own bank and do not include the systemic risk. This means, the domino effect, which results from the collapse of several banks, is not part of the risk observation.
- The direct liquidity requirement of banks in the financial crisis, which results from not being able to sell securities in the market and the simultaneous collapse of the interbank money market as a refinancing source is only insufficiently, implemented in the banks' risk models.

The supervisory board's job is to audit corporate policy and with that the risks taken by the management. Losses and threatening insolvency, de facto, document a failure in supervision. Positions on the board of directors, especially in banks with government involvement, are oftentimes occupied by persons lacking the necessary expertise for the banking business. A lot of

times, individuals have a multiple number of mandates on boards of directors to work on, so that no effective control of corporate governance is guaranteed.

Closely related to this, is the question of the liability of directors as well as of the management of corporations. According to Eucken, liability is a constituting principal of a market-based economy. Eucken (2004, p. 279f.) introduces the chapter about liability in his work "The Foundations of Economics" with the request "Wer den Nutzen hat, muß auch den Schaden haben (Who is the beneficiary must also have the damage)".

While private individuals and partnerships are directly liable, for capital corporations the corporation is liable as a separate legal entity. This legally limited liability to the entrepreneur's assets causes a dilution of Eucken's principal of liability, because the direct link between the manager's economic decisions and the liability for economic consequences is not granted anymore. By German law, every board member of the public limited company is liable with their own personal assets according to §93 AktG, for damages to the company resulting from a violation of their duty of care. But on one hand it is not a violation, when, in the case of a corporate decision the board director could, on the grounds of appropriate information, reasonably assume that his action would benefit the wellbeing of the corporation (§93 AktG). And on the other hand, capital corporations usually have a professional liability insurance for the actions of their boards (so called "Directors and Officers Insurance (D&O)"), which insures negligence risks. Factually, no individual liability is created with this additional security for the boards' misconduct in investment banks, even when their fault can be proven.

The asymmetry between profits and damages is very distinct in investment banking. Salaries in the banking sector are much higher than in other corporate sectors. The main problem from a corporate governance perspective, in this case, is the variable compensation structures. The management's bonus payments are oftentimes tied to short-term business successes (profit or stock price development), so that false incentives are set to take higher risks. Deals, that increase the corporate success short-term, and then prove to be a high risk and debit factor for the bank long-term, are actively promoted this way. Good corporate governance, in the sense of sustainable corporate development, looks different.

In their recommendation for sound compensation practices, the Financial Stability Forum (2009, p. 1) has especially emphasized the correlation between bonus payments and risk taking of bank management: "*High short-term profits led to generous bonus payments to employees without adequate regard to the longer-term risks they imposed on their firms. These perverse incentives amplified the excessive risk-taking that severely threatened the global financial system and left firms with fewer resources to absorb losses as risks materialized. The lack of attention to risk also contributed to the large, in some cases extreme absolute level of compensation in the indus-*

try. ….. The Principles are intended to reduce incentives towards excessive risk taking that may arise from the structure of compensation schemes."

2.4. Banking supervision and control

Basel II, the banking regulation on capital adequacy, initially published 2004, explicitly included the securitization and establishment of off-balance sheet transaction platforms, came too late. To avoid competitive disadvantages for a national banking system, such extensive reforms of the banking system occur on the basis of G20 agreements. The implementation of G20 regulations in national banking law regularly occurs with a considerable time delay. In Europe, the implementation was supposed to be finished in 2006, but due to exception rules etc. the implementation of Basel II just became effective in 2008. Too late to prevent the crisis. Although the US was substantially involved in creating the Basel II agreement, it was never implemented into US law (Cannata & Quagliariello, 2009, p. 14f.). Maybe the US now skips Basel II and directly implements the reform of the reform, "Basel III".

Basel II is a good example for the problems of bank supervision. The supervising authority does not act, but rather reacts to dynamic developments in the banking sector or financial market late. The voting processes for the introduction of new banking regulation are extremely time consuming. Reform suggestions must come from national levels to be discussed on the G20-level. Then after tedious negotiations about the details, a G20 agreement is reached. Finally, this agreement must then be implemented in national banking laws and to national regulatory authorities.

The negations on the G20-level are so difficult, because they are characterized by a political struggle over competitive advantages for the national banking system. This nationalistic thinking in politics, in the bank supervision, as well as in national banking legislation strongly contradicts a global finance market and banks that act independently from national boundaries. In past decades, the finance market was liberalized, but the supervision and control of the market, the legislation and lastly the thinking of the politically active persisted on a national level. Naturally, this reflects politics' limitless trust in the finance market or the market as a whole, which requires only minimal control and supervision.

When observing the set of Basel II regulations the complexity, the high level of detail and the extent of the policy become obvious. This complexity of regulations results from the ambition to create a possibly generally binding and unambiguous directive. The level of detail and the ruling of individual cases increase steadily from Basel I to Basel II to Basel III, so that in the end, the knowledge of these banking regulations can only be accessed by few experts. Nevertheless, in this competition between experts, banks will be the ones executing banking supervision. Because the long history bank crises documents the high innovative power of the finance markets in creating new financial instruments, which enable a legal way of bypassing bank supervision

and control. This competition is unfair, because the financial resources and with that the manpower between private banks and official supervision are unevenly distributed. In the face of the high costs of banking supervision now and the rather low return, the society must question whether it wants to further participate in this competition over banking regulation.

2.5. Mark-to-Market valuation – procyclic accounting

As the EU-Commission has decided, European credit institutions have accounted for according to International Financial Reporting Standards (IFRS) since 2005. One groundbreaking change is the valuation of financial assets, documented in the trading book, by their market price, so called "mark to market" assessment or "fair value accounting". Before, in the "Current Accounting Framework", the acquisition value of an asset has been taken for valuation.

This constraint to evaluate tradable assets with actual market prices involves high risks that were pointed out by Enria et al. (2004). As the development of US real estate prices demonstrates, market prices certainly do not always represent the fair value, but rather underlie speculative exaggerations and are volatile. With the mark-to-market valuation of tradable assets speculation and volatility are taken into the bank's balance sheet. Shareholders' equity, profits and losses, tax payments, dividends and lastly the credit institutions' solvency therefore reflect the market's volatility. Wherefore, the balance sheet, the income statement, and the annual report of financial institutions only have little reliability and limited significance.

Additionally, the market-oriented assessment of assets strengthens the speculative exaggeration of the finance market in both directions, meaning that it has a procyclic effect. This is proven in an empirical study about past financial crises by Adrian and Shin (2010). The functional chain can easily be comprehended. In the case of a mark-to-market valuation rising market prices automatically increase the value of financial assets, causing the shareholders' equity and profit to simultaneously increase on the liability side. Banks with higher equity capital can take up more loans and newly invest this capital at the finance market. The increased demand then again causes market prices to rise and so leads to steadily increase in banks' profits and equity capital. Gratifications for bank management (bonus payments), the dividend disbursements to shareholders and the number of bank analysts' recommendations to buy bank shares increase as well. The boom nourishes the boom. How else would it be possible for US-banks that were rescued by the government during the financial crisis, to pay back the high government grants within a short period of time after the crisis? With comparably modest revenues from financing real investments, such a turn of events from threatening insolvency to high profits is unexplainable. Naturally, banks that are especially active in investment banking have an advantage here.

2.6. Rating – no independent and neutral assessment

With the increasing sales-orientation of banks, as well as with growing complexity of financial products, there is a higher demand by investors for a "manufacturer-neutral" or bank-

independent assessment by a third party. The three big rating-agencies Standard & Poor's, Moddy's, and Fitch, who are responsible for 95% of all ratings, perform this task, but rather insufficiently. All three agencies are private, profit maximizing corporations, whose business is the assessment of credit risk of various kinds. To this extent, they are first and foremost liable to account to their shareholders. These are not investor or consumer protection organizations, which examine and attest the intrinsic value of stocks by government order, independently of economic interests as "Stiftung Warentest" (the German product testing foundation) does.

Furthermore every rating is a subjective assessment and evaluation of available information. Even though rating models have a closed inner logic, relatively many assumptions about future development of the corporation specifically, as well as the entire corporate environment flow into the assessment.

According to Packer and Tarashev (2011, p. 44.): *"Ratings are opinions about the creditworthiness of a rated entity, be it a sovereign, an institution or a financial instrument. They reflect both quantitative assessments of credit risk and the expert judgment of a ratings committee. Thus, no rating can be unequivocally explained by a particular set of data inputs and formal rules."*

In addition, the issuer of bonds, the one who has a direct economic interest in a "good" rating, is the one who pays the agencies for their services (so called "issuer-pay-model"). Especially lucrative is the assessment of structured finance products that are based on the securitization of an extensive pool of assets. Depending on the complexity and volume of the asset pool, the agencies receive between 300 000 and 500 000 Dollar for their ratings (Holmes, 1999). With that, the revenue from dealing with structured financings contributes significantly to the agencies corporate success.

The constellation of market dominance, profit maximization, subjectivity and payment practice in ratings has notably contributed to the financial crisis. With the help of portfolio models bad credit risks were blandished and attested with good ratings. During the financial crisis, it turned out, that the fundamental model assumptions (correlation and covariance) were a great deal too optimistic and the bonds were rarely valuable. 2007, Moody's reduced the ratings of 31% of all collateralized debt obligations. Of 94% of all the issued mezzanine tranches (structured bonds with a BBB to B rating) in 2006 and 2007, interest and redemption payments are not operated anymore. 45% of all AAA rated senior-tranches are also insolvent (Basel Committee on Banking Supervision, 2008, p. 14f.). This means, that the credit risk earlier attested as good has turned out to be a bad risk in retrospective.

Liability claims against rating agencies based on their false assessment are difficult to enforce legally. To do so, a premeditation or gross error would have to be proven within the model. Having a wrong opinion or a false evaluation about the fundamental risks is not indictable per se.

In terms of the ratings problem, it is also important, to observe the environment. The market participants align their actions with the ratings, so that a change of rating directly influences market development. In the case of a downgrade of a debtor's credit quality, his refinancing costs rise immediately, through which a crisis situation of an entrepreneur or a country can intensify further. The downrating therefore becomes a self-fulfilling prophecy, acts procyclic to that extent and supports the prevailing herd behavior of investors. Through the daily trading with securitized loans long-term forecasts about the probability of a default become a short-term play ball for the market.

The meaning of ratings and so the influence of the agencies are additionally supported by the fact, that national legislation concerning bank supervision and regulation in many states, so far for example in the German banking act, KWG, are based explicitly on the risk assessment of private rating agencies. This is hardly surprising, because the G20 agreement about banks' capital adequacy (Basel II and Basel III directives) is also applicable to the assessment by external rating agencies. The European Central Bank too explicitly uses ratings as a standard for the minimum requirements of collateral deposited by commercial banks for refinancing. This is how laws, provisions, and procedural regulations in the finance sector are implicitly based on the subjective assessment of three American corporations.

2.7. Credit derivatives and other derivatives – „perverse world“

The example of credit derivatives demonstrates how the expanding market negatively affects the real economy. With the help of credit derivatives, the actual stream of payments (interest and redemption) of a loan can be separated from its default risk. Since this is an exchange of credit default risks, this most widely used credit derivate is called "credit default swap (CDS)". Example: Bank A grants corporation B a loan and simultaneously gets insured for credit default by insurance C. As in any insurance, A, being the secured party, now pays C regular premiums and so is guaranteed to be compensated for his loss (nominal value of the loan) in case of B's default. As opposed to traditional credit insurance, the credit derivate is tradable at the market due to an extensive standardization of contracts. Furthermore, the buyer of such a credit derivate can insure the risk of credit default of B without even possessing a loan handed out to B. When taking up insurance, however, the insured party must possess the object to be insured.

Many economists view the development of credit derivatives as positive, because in theory they enable an allocation of risks to economically strong corporations. But this opinion overlooks substantial disadvantages. The incentive structure in the credit business of banks changes fundamentally. In the traditional credit business, the bank has a considerable economic interest in the debtor's solvency. When granting loans, the bank intensively examines the debtor's creditability and creditworthiness and requests a regular report about his economic development. When the bank sells the credit risk to a third party through a credit derivative, it has no more an

economic interest in carefully choosing debtors. Furthermore, the bank is not required to inform the borrower about the altered state of interest.

This “lack of interest” can even make a debtor’s economic demise or the bankruptcy lucrative for the bank. In a settlement proceeding or a restructuring of company’s B debt, the bank A only receives parts of its claims against B back, whereas in case of a bankruptcy it receives 100% of its claims through the credit default swap from C. This is not the only case, as the bankruptcy of General Motors in 2009 shows. The creditors refused to agree to a settlement deal aimed for by the US-government and insisted on GM’s bankruptcy (Sender, 2009).

In 1998 the CDS market volume estimated at $ 180 billion (the nominal value of the hedging volume), 2004 it was already at $ 6 trillion and in 2008 nearly ten times of that, at $ 57 trillion (Stulz, 2009, p. 13). With increasing liquidity and volume in the CDS market the bank’s decision about granting loans is influenced. Often a credit is only granted, when the risk can be sold, not otherwise. With that, the potential creditor’s economic situation becomes secondary as a variable for the bank’s credit decision. The same applies to the pricing of loans. The economic theory assumes that the price of the derivative is derived from the price of its underlying (basis price). That means the premium payment of the credit derivative results from the interest rate of the loan. But this is not the case in practice. Here, the more liquid market dominates the less liquid market. The market for credit derivatives demonstrates a much higher trade volume than the credit and bond markets, meaning that in the case of big corporate debtors, the price for the insurance of the credit risk at the CDS-market determines the interest rate for the loan.

However, the derivate price for the credit risk does not result from the individual creditworthiness assessment of the debtor but rather from daily trading with CDS at the financial market. It is volatile and shows speculative distortions. If the interest rate for the loan becomes a residual of credit derivative premiums, then the real economic use of capital, the entrepreneurial investment, becomes indirectly dependent on the development of speculative derivate prices. The Deutsche Bundesbank (2010, p. 58f.) has recently empirically proven the price-leadership of CDS compared to the loan market, but did not warn about the fatal economic consequences of this fact.

Supporters of the credit derivatives emphasize the advantages of optimal allocation of risks in the economy. The idea is that credit derivatives enable the transfer of risks to potent and powerful market participants. But the financial crisis shows, that exactly this was not the case. With AIG, a US insurance company has taken over default risks amounting to 562 billion dollar in 2007 with the sale of CDS, which brought them to the edge of a collapse when the insured event occurred in 2008. Only with a bailout package of altogether 182 billion dollar from the US government, AIG could be saved from insolvency. AIG especially sold CDS to buyers of structured bonds and with that secured the default of interest and redemption payments. Just like the

credit risk of these bond constructions was falsely assessed with a good rating, the premium payment of CDS was estimated too low. AIG, as opposed to banks and hedge funds, actually took over the credit default risk and only sold CDS unilaterally (ISDA, 2009). Contrary to AIG, Banks and hedge funds covered immediately every open risk position from a CDS trade with a reverse risk position. Had AIG really defaulted as a liable payer, the carousel business of the reciprocal buying and selling of CDS by banks and hedge funds would have also collapsed, because this deal requires, that each party complies with its obligations and that no party defaults. In such a carousel business the default of a single contractual party could already bring the entire finance system to a downfall in a sort of domino effect. The systemic risk because of the reciprocal linkage of the financial institutions from the buying and selling of CDS is very high. The previously portrayed business model of banks and hedge funds has nothing to do with the economic desirable optimal allocation of risks to economic subjects that are capable of carrying such risks.

The above statements can respectively be applied to other derivative markets. The trade volume of commodities or oil in forward markets is a multiple of its trade volume in spot markets. As in the case of credit derivatives, the forward market price determines the price formation in the spot market. Paradoxically, not the manufacture or production costs determine the price, but rather the speculative price development at option and future markets. The price trend in a purely nominal sphere determines the economic efficiency of production processes in the corporate sector.

3. Status quo of financial market reforms in Europe

3.1. European finance supervision – new institutional structures

The financial crisis revealed considerable weaknesses of the European finance supervision. In the beginning of the crisis, individual European member states acted isolated, with their own national bailout plans for "their" banks as well as national economic stimulus packages. There was a great lack of cooperation between supervising authorities as well as no superior establishment for coordinating rescue activities. Following the insight, that a liberalized, global finance market also needs supranational supervision structures, the EU used the crisis to create European finance supervision with own institutions and responsibilities.

Since 2011, the supervision on the micro level is the responsibility of the European System of Financial Supervision (ESFS), which consists of the European Banking Authority (EBA) in London, the European Supervisory Authority (Insurance and Occupational Pensions) (EIOPA) in Frankfurt, and the European Securities and Markets Authority (ESA) in Paris. While the general execution of the supervision remains the task of national institutions of EU member states, the new European roof institutions "*….. will be built on shared and mutually reinforcing responsibilities, com-*

bining nationally based supervision of firms with centralisation of specific tasks at the European level so as to foster harmonised rules as well as coherent supervisory practice and enforcement. (European Commission, 2009, p. 3)." To obtain national sovereignty, the new European institutions are hardly equipped with authority and powers to direct. Only in case of a crisis, the European supervisor has the right of initiative to intervene in national sovereignty.

<table>
<tr><td colspan="4">European financial supervision</td></tr>
<tr><td colspan="3">Micro-prudential approach</td><td>Macro-prudential Approach</td></tr>
<tr><td colspan="3">European System of Financial Supervisors (ESFS)</td><td rowspan="2">European Systemic Risk Council (ESRC)</td></tr>
<tr><td>European Banking Authority (EBA)</td><td>European Insurance and Occupational Pensions Authority (EIOPA)</td><td>European Securities Authority (ESA)</td></tr>
</table>

To recognize future risks early for the stability of the financial sector, an Economic Systemic Risk Council (ESRC) is installed. It is its task, to investigate potential risks for the stability of the finance system on the macro level and send out warnings and recommendations to national and European supervision institutions as early as possible. With the creation of a central authority in Europe for macroeconomic analyses, the research power of national institutions and supervising authorities, which are fragmented into resources until now, are supposed to be bundled. In general, the analysis of macroeconomic aspects becomes a much more important factor, than it was before the crisis. Even though, the, at the ECB located, ESRC does not have any explicit legal authority, its warnings and recommendations should nevertheless have substantial political influence, yet through the involvement of all EU central banks and the EU supervising authorities.

3.2. Reforms of the banking system

Despite the short period of time, numerous reforms were introduced in the banking sector. An overview of them will be given below:

Stress tests

The newly created European Banking Authority (EBA) has been conducting annual stress tests since 2009 for European banks. With this, the Europeans are following the US role model to test the risk bearing ability of individual banks under the assumption of negative developments of the entire market environment. In case of a simulated decrease of economic growth, as well as rising interest rates in the money market and in the capital market, the bank's equity capital (hard core capital, common equity tier 1) must not fall under the 5% mark. With the publication of the results of stress tests, transparency is supposed to be improved and to strengthen the market participants' trust in the European banking sector.

Basel III

As a reaction to the financial crisis, the Basel committee for bank supervision has passed a new capital adequacy and liquidity requirements for banks, the so called “Basel III-directive”, which, as a G20 agreement, is being implemented in national banking law step by step. Basel III is supposed to come into effect 2013. With Basel III, the existing capital adequacy requirements for banks in Basel II guidelines are successively being tightened. In addition, a wider risk spectrum is covered and current regulations are complemented by macroprudential aspects of the banking system stability (Bank for International Settlements, 2011, p. 75f.):

- Aside from the higher quote for core capital to be hold by banks, its quality also improves.
- To set a link between equity capital and the bank’s business risk as a whole, a maximum borrowing rate (so called “leverage ratio”) is introduced together with Basel III. The rate is derived from the relation of a bank’s core capital to its assets plus off balance deals and derivatives.
- Threatening losses from the bank’s own trading book are supposed to be covered by higher capital deposits for less solvent, credit risk sensitive assets in the future.
- Stricter capital requirements concerning the counterparty risk will prospectively apply for OTC derivatives. With that, Basel III sets the incentive for banks to increasingly trade derivatives on central clearing platforms in the future and so to reduce the systemic risk in the banking sector.
- Lacking solvency was a central problem for banks in the financial crisis. That is why Basel III on one hand leads to a minimum liquidity rate (the “liquidity coverage ratio”, LCR) and on the other hand to a structural liquidity rate (“net stable funding ratio”, NSFR).
- The problem of the bank regulation’s procyclicality in its reaction on the real economic development is supposed to be solved by the introduction of capital cushions. In economically “good” times, banks must hold more equity capital than dictated by the minimum requirements. This builds a capital holding cushion for bad times.

Capital requirements for global, system relevant banks (G-SIBs)

For the coordination and enforcement of G20 agreements, the Financial Stability Board (FSB) was founded in 2009. The FSB submitted a regulation concept for global system relevant institutions in 2010. Subsequently, financial institutions that are categorized by the FSB as system relevant according to their size, network, global importance and complexity, should also be able to bear greater losses. To secure this ability of absorbing higher losses, the deposit of additional equity capital of 1% to 2.5% is demanded from these system relevant banks. Meaning, that Banks must hold more core capital than Basel III requires them to. These additional equity requirements must successively be met by the banks from January 2016 until the end of 2018 at

latest. To solve the "moral hazard problem" of systemic relevance, the striving for banks for an even higher level of systemic relevance than achieved already will be punished with an additional surcharge of another 1% equity capital deposition.

More effective cross-border bank resolution

During the financial crisis, a master plan for the liquidation of defaulting banks did not exist, so that a liquidation would have been possible without simultaneously taking the risk of endangering the finance system's stability altogether. This systemic risk "bank" is supposed to be crossed by the elaboration of institution specific emergency plans. By the end of 2011, the FSB will develop a concept for resolution of globally active financial institutions, which will be implemented in national banking law as a G20 agreement (Financial Stability Board, 2011, p. 3). The EU commission too sees the necessity to act here and already has consulted about the technical details of enabling possible framework regulations in the field of bank restructuring and liquidation (European Commission, 2011).

Germany, with its laws on bank restructuring (RStruktG), which came into effect, in 2011, has already quickly pressed forward on a national level. This set of laws essentially contains three elements:

1. It regulates a two-level process for recapitalizing and reorganizing credit institutions. These processes give the bank management an instrument with which to find its own solutions without the involvement of banking supervision with its measures. Recapitalization and reorganization require reaching a consensus between the supervision authority, credit institution and debtors (Deutsche Bundesbank, 2011b).
2. If this is not the case, the RStruktG offers the federal financial supervision authority (BaFin) the possibility of a transferal command as an administrative measure, as long as the finance system's stability is endangered. A credit institution's assets including its obligations can be partly or entirely transferred to a different legal entity with the transfer command.
3. Commercial banks are obligated to deposit an annual contribution, which amount depends on the profit situation, in a restructuring fund. The fund is meant to collect €70 billion, while expecting an annual contribution of €1 billion (Deutsche Bundesbank, 2011b).

Legislative regulations of bank internal compensation systems

In 2009, the FSB developed fundamental principles for sound compensation systems (Financial Stability Forum, 2009) simultaneously established standards for implementation. According to these, the compensation is to be more closely connected to long-term and sustainable corporate success, whereby the risks taken must also be taken into consideration (Shlomo & Nguyen,

2011, p. 25). Likewise, supervising organs are supposed to be involved more closely in the development and control of bank compensation systems. In addition, payment structures are meant to be modeled sufficiently transparent in the future. 2010, the EU reacted by complementing the Capital Requirement Directive (CRD III) by principles for financial institutions' compensation systems (Committee of European Banking Supervisors, 2010). With the institution compensation regulation (InstitutsVergV), which causes an alteration of the banking act (KWG), these requirements by the FSB and European commission were enshrined in German law October 2010.

Improved corporate governance of financial institutions

2010, the EU commission has carried out consultation proceedings for improved corporate governance of financial institutions and published a Green Book about this (European Commission, 2010a). In it, especially the functions of the board of directors, of external auditors, and of supervising authorities in the financial crises are critically illuminated and essential deficits are documented. Usually, a legal bill by the EU commission follows a consultation proceeding. This however has not occurred to date (July 2011). Since the EU commission is currently conducting consultation proceedings for corporations' corporate governance, a legislative proposal by the EU can be expected shortly for all European limited companies, including financial institutions.

3.3. Regulation of the OTC derivative market

According to a G20 agreement from April 2009, by the end of 2012 all standardized, over-the-counter (OCT) derivatives must be centrally documented and traded with central counterparties (CCPs). To decrease the domino effect or the system risk in case of an OTC contractual partner's default, the CCP acts as a contracting party for the buyer as well as for the seller of derivatives. For this, market participants must deposit sufficient collateral at the central clearing house in the future. If derivatives are still traded over the counter and not by a central counterparty, banks must deposit much more equity capital in the future based on Basel III.

According to Heller and Vause (2011, p. 68), the majority of transactions at the derivate market are traded over the counter between financial institutions, where the risk is not sufficiently covered by the bank's equity capital: A*t present, central clearing covers approximately 50% of the $400 trillion of outstanding interest rate swaps (IRS), 20–30% of the $2.5 trillion of outstanding commodity derivatives and a little under 10% of the $30 trillion of outstanding credit default swaps (CDS).*

The EU has implemented the G20 regulations in the European Market Infrastructure Regulation (EMIR). The newly created European Securities and Markets Authority (ESMA) will establish a central transaction registry and in the future there will be an obligation to register derivative transactions (European Commission, 2010b).

In relocating the system risk on to central counterparties, it must be guaranteed, that the central contracting party itself is always solvent and complies with its payment obligations. A default by the CCP must absolutely be prevented. Consequently the Bank for International Settlements (BIS) has, in cooperation with the International Organization of Securities Commissions (IOSCO), formulated fundamental requirements for the equity base, liquidity, business model and corporate risks of CCPs (Committee on Payment and Settlement Systems, 2011).

3.4. Regulation of rating agencies

With an EU regulation concerning rating agencies, a unanimous regulation framework is created for the supervision and control of rating agencies active within the EU. Since 2011, rating agencies must register business activities within the EU at the ESMA and with that comply with the European requirements. Rating agencies based outside of the EU are supposed to be obligated to form subsidiaries within the EU. With this new directive, national supervising authorities now have the right to examine rating agencies, even without a concrete occasion, at any time.

The EU regulations roughly correspond with the IOSCO code of conduct for rating agencies (International Organization of Securities Commissions, 2004). According to this code of conduct, rating agencies must in the future reveal the fundamental assessment models and assumptions for their ratings. Additionally, the manner of the change of assessment due to changes in certain parameters of the model must be documented by a sensitivity analysis. Each rating is to be examined annually. The rating agencies' independence among others is supposed to be strengthened by a rotation system for an agency's analysts and employees. In addition, the rating agency's board of directors and administrative board must, to one third at least, consist of independent members. The directors and administrative boards' independent members' compensation is not supposed to depend on the rating agency's economic success. To avoid conflicts of interest, the agencies are not permitted advisory tasks, especially with respect to the establishment of structured financial instruments (European Union, 2009). Ratings for structured financial products are to be labeled as such by suitable symbols in the future.

The EU additionally carried out a consultation procedure late 2010 about the further proceedings with rating agencies. Possible alternatives to the "issuer pay model" and the establishment of a public rating agency by the European community were discussed there. Here another legislative bill by the EU in 2011 is still possible.

3.5. Regulation of the shadow banking system

With the Alternative Investment Fund Managers Directive (AIFM) from June 2011, the EU constitutes unanimous requirements for the approval of and the supervision over alternative investment fund managers. The term "alternative investment fund, AIF" covers organizations for joint investments, which get capital from professional investors to invest it according to a specific strategy for the investors. In fact, all forms of collective capital investments can be subsumed

under this term, so long as they are not retail mutual investment funds. This guideline is especially applicable to hedge, private equity and real estate funds. It focuses on alternative fund managers, legal entities that run the fund business and the individual fund itself. The AIFM directive has to be implemented in national law by EU member states within 2 years (Weitnauer, 2011, p. 144f.).

- Prospectively, an approval obligation exists for AIFs. Connected to this are minimum requirements for equity capital and the experience and knowledge of fund managers. With the approval, the AIF receives an EU-pass, which permits EU-wide activities.
- Within the fund management, it is to be strictly distinguished between risk and portfolio management in the future. The compensation system should be transparent and adequately fitting to the size of the fund and the complexity of the management. Also, the compensation practice should be in line with solid risk management and should not negatively affect the risk behavior of individuals.
- In the future, a regular assessment of asset values and fund values should occur. Additionally, the deposit-bank-principle - known from retail mutual funds – is introduced. Meaning there is an independent holding authority for the assets of the fund, which will simultaneously be a control institution for payment streams and valuation.
- With respect to the demanded transparency, the obligation to publish a detailed annual report with a balance of all liquefiable assets, list of revenues and expenditures, and the disclosure of compensation structures is introduced.

Hedge fund managers also have to verify the adequacy and compliance of debt boundaries of the administrated AIFs. For private equity funds, there is prospectively an obligation to inform the supervising authority when equity quotes of not publicly traded corporations over 10% are bought or sold. To impede the destruction of corporations or the sale of corporation parts by the private equity corporation (so called “asset stripping”), the AIFM directive envisages a prohibition period of 24 months for the sale after gaining control of the corporation through the AIF.

4. Technocracy versus regulatory policy

Politics reacted to the financial crisis with a number of new laws, directives, regulations and institutions for regulating the finance market. The deregulation and liberalization of the finance market, a process, which began with Margaret Thatcher in Europe and Ronald Reagan in the USA in the 1980’s, belongs in the past. With the legal bills discussed above, each segment and every institution of the finance market are to be regulated. This turn from an extensive deregulation to a complete regulation of the finance system takes only three years. Additionally it must be emphasized, that these are not national solo runs, but that instead the majority of regulations are based on international agreements by the G20 community of states. The origin, here,

is an international consensus about the necessity of the finance market's regulation. This poses the question, how it is possible to initiate such a multitude of laws and international directives to regulate the finance market within such a short period of time, while the international community of states has not come to a consensus for just as socially relevant topics like global warming or the General Agreement on Tariffs and Trade (GATT), even after many years of negotiating.

The previously discussed regulations of the finance system are aimed at increasing the system's stability as such and to prevent another collapse. But in the previous 30 years of deregulation, structures have evolved at the finance market, which prove to be counterproductive for the real economy and present a risk as well as a stress factor on a community's welfare. The regulation-attempts indeed improve the system's safety; do not, however, change its fundamental structures. The reforms are altogether system conform "repair measures" and cement the portrayed without getting to the core of the problem. This explains, why it was possible to come to an agreement on the international level in such a short period of time. When the finance system, despite all structural and institutional deficits, is not doubted in its foundations, and only details in the interaction of institutional players are altered, it is easy to find a broad consensus.

What would be the obvious solution to the phenomenon "too big to fail"? The size reduction of financial institutions. Banks could be split into small to medium sized business units, either by business type or by region. The rescue of banks with public resources here offers the state or the federal regulatory policy various design options. Additional capital requirements for system relevant banks or the development of plans for resolution or liquidation of defaulting banks do not solve this problem, but merely treat the symptoms. In this sense, the German way of creating restructuring funds with bank charges, so that future defaulting measures can be financed out of the fund, does not appear very sensible. These regulating measures cannot eliminate the system risk, but merely secure it.

What would be the obvious solution for the risk of a collapse of the economy's credit supply in case of a bank crisis? One changes the business model of banks and separates the lending and deposit business, which is important for the real economy, from the risky investment banking business. With this institutional separation, comparable with the American Glass-Steagall Act from 1933, the real economy's financing is secured. Only those commercial banks involved in financing the real economy earn the privilege of cheap central bank financing. Basel III, on the other hand, tries to reduce that risk from investment banking activities, instead of solving the problem. Indirectly, Basel III substantiates the current business model bank. A business model, which presents a risk for the financial stability as well as for society.

Knowing, that derivative-trade has negative effects on the real economy and the finance system, the trade of derivatives, as a result of pure speculative nature, should be prohibited. Credit

derivatives are counterproductive for the credit business and therefore to be generally prohibited. The regulations for the derivative market, meanwhile, strive for the development of an extensive system of central clearing parties for the derivative trade. With that, a state supervised infrastructure is created for speculative derivative trading and facilitates it. The risk for the finance system is reduced, but the serious disadvantages of speculative trading for the real economy remain. With standardizing futures contracts concerning central clearinghouses, even an increase of trade volume of derivatives is probable.

The above listing could be continued for the reform efforts in terms of rating agencies, hedge funds and private equity funds. Lastly, the reforms are lacking the regulatory policy's creative drive to remove the structural deficits and fundamentally change the system of the finance market. When thinking merely system inherently, all the reforms presented can objectively be justified and demonstrate a complete logic in themselves. Noticeable is the high degree of detail, which requires expert knowledge for legislation, supervision and control, as well as on the bank side. In the sense of a "technocracy", a sort of objective necessities legislature and organizational determination dominate over the political assessment of social benefits and disadvantages of finance institutions and instruments, for present reforms in the finance sector (Lübbe, 1998). This may not be surprising, because the legislative proposals all come from experts from the FSB, the BIS, the International Monetary Fund (IMF) and national central banks; institutions that are suspended from society's or national parliaments' democratic control, because of their supranational status (Roberts, 2010, p. 557).

To complete the assessment of the status quo in the regulation of the finance market, one more aspect must be pointed out: the majority of new regulations, the complexity and their great level of detail will increase the costs of finance market supervision immensely. This is especially the case in Europe. Because, despite the new founded centralized European institutions for security markets, banks, and insurances, the national sovereignty of EU member states in bank legislation and finance market supervision still remains. Opposite to these high public costs of finance market regulation only stands a small social benefit.

On the bank side, too, the reform's realization will create considerable costs. In a widely oligopolistic banking sector, a rolling over of costs for charges and higher interest margins from finance institutions on to customers is to be feared. Therefore, from an economic perspective, each citizen pays twice for the finance market reform, as a taxpayer and as bank customer.

5. Modern finance architecture without banks

The institutional separation between investment banking and commercial banking and the prohibition of derivative trading out of purely speculative motives are reforms of the finance sector for a transition phase to new structures. The finance sector's reform efforts must not come to a

halt at the divestiture of what presently persists and a prohibition of activities and finance products, but instead, new and more efficient forms of economic intermediation of capital as the conventional banking business must be created.

To establish a vision for future structures at the finance market, the historic lines of the banking sector's development must merely be continued. With the introduction of bank loans' securitization in the 1970's, the bank gave up its intermediary position and became advisor and seller of securities. Capital providers and demanders are now directly connected as buyer and emitter of bonds. This ongoing disintermediation process was continued in the 1980's with the creation of off balance transaction platforms for securitization. The credit derivatives' upcoming development in 1990's yet refined this general trend toward disintermediation and decentralization in the banking sector (Lenz, 2009).

This trend must now be continued in regulatory and economic politics: The web-based transferal of capital over Internet platforms will replace conventional banks step-by-step as an intermediary. That the web-based "peer-to-peer lending (P2P)" works successfully is documented by credit-platforms like "smava" in Germany, "Prosper" in the US, and "Zopa" in the UK.

Peer-to-peer lending over a web-based transfer-platform has vital advantages for the "players":

- P2P-lending is attractive for the investors (creditor) as well as for the credit user (debtor), because they can share the bank margin, meaning the difference between deposit and loan rates. The platform receives merely a transferal commission. These charges are much lower than the bank margin, because they do not have to finance fancy skyscrapers at great locations or bonus payments for investment bankers.
- The platform only takes over the transferal and does not enter into a contractual position. Hence, there is no systemic risk, because risks are now peripherally distributed throughout the users.
- In turn, investors can diversify the default risk by getting involved in various financing projects with small sums or by joining investor groups via the Internet.
- Money's undefeatable homogeneity makes it into a product, which is ideally suited for web-based transferals. The advances of information technologies can fully realize its economic benefits here. On the transaction platform, the application of information technologies will clearly increase the transparency, the competition and also the mobility of capital, in comparison to the oligopolistic bank market. Better transparency, increased competition and last but not least, the cessation of bank margins, reduce capital costs and simultaneously simplify accessing capital. From an economic standpoint, these advantages have the potential for a quantum leap within the economic growth of participating market economies.

- Increased transparency, central processing, and documentation within the transaction platform considerably simplify controlling and supervising finance market transactions. The extensive public resources that have been used for controlling banks so far can now alternately be used to protect investors.

Similarly, as in the securitization of large corporate loans, the web-based transferal enables the mobilization of high capital volume by bringing together numerous savers. The credit default risk, too, is broken up into small amounts and spread throughout the mass of capital providers. But as opposed to how it is in securitization, in p2p-lending, loans are not tradable as bonds at the market. With that, capital providers and borrowers devote themselves to a fixed capital commitment with each transaction, where the interest and capital commitment period can vary depending on the maturity chosen. With this inability to trade, the economy's credit supply is withdrawn from the daily speculation of the bond market and therefore receives a long-term stabilizing element. In this sense, it is important to guarantee the use of capital for real economic investments. Exclusively, individuals and commercial enterprises are acceptable borrowers. Financial institutions, such as banks, hedge funds, or private equity funds are excluded from the use of P2P-lending.

In the majority of European countries, the economic success and therefore extending peer-to-peer lending is so far blocked by tight legal supervising guidelines for practicing the banking business. For example, according to the German KWG, no banking license is required for the mere transfer of credits, however, bank business can be subject to authorization, especially with respect to platform-users as credit providers and deposit banking on the borrowers' side. Therefore the BaFin, the German banking supervision authority, examines each individual case (Mitschke, 2007). Consequently, the legal position in Germany is not very concrete. Comparable to for instance Basel III regulation there should be a G20 agreement about standards and supervision for internet-based credit transfers.

In a place of legal certainty, the P2P-market will in the future guarantee the economy's credit supply. A multitude of multinational enterprises will operate transaction platforms for capital transferal. Predestined for this, are corporations with Internet sales departments and a large client base, such as Amazon or Ebay. The market could also be of interest for providers of communication technologies like IBM or Apple and telecommunication corporations like Deutsche Telekom AG or AT&T. In the corresponding legal realm and under sufficient supervision, capital transfer would be possible through social networks like Facebook or Linkedin. With respect to the financial knowledge and the extent of the customer base, banks could also operate the transferal platform, as long as a strict institutional separation from conventional banking business is provided.

The finance market of the future consists of a network of regional commercial banks that process payment transactions and grant loans to regional customers. Parallel to this, there are a multitude of web-based transaction platforms for the transferal of capital. This global world of finance will, however, function without banks, because for the mere transferal of capital no local “players” are needed.

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