

# Bad Banks: The Case of Germany

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by

Cordelius Ilgmann and Ulrich van Suntum<sup>2</sup>

Center of Applied Economic Research Münster

University of Münster

Am Stadtgraben 9

D-48143 Münster

Germany

[www.cawm.de](http://www.cawm.de)

## **Abstract:**

*This paper discusses the instrument of equalisation claims, which has successfully been used in two previous German debt crises as a method for stabilizing the balance sheets of financial institutions. A modern version of this method would swap temporarily illiquid assets for government bonds with open maturity, in order to avoid the problem of evaluating the toxic assets in advance. Not only will this method save taxpayers' money, but it also upholds the market principle of liability, thereby avoiding incentives for inefficient risk-prone behaviour in the financial sector. The current German bad bank approach principally follows this approach, but severely suffers from unnecessary complexity and voluntary participation.*

**Keywords:** Financial Crisis, Bad Banks, German History, equalisation claims

**JEL-classification:** E44, G01, N24

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<sup>2</sup> Ulrich van Suntum is Professor of Economics and Managing Director of CAWM, University of Münster; email: [vansuntum@insiwo.de](mailto:vansuntum@insiwo.de). Cordelius Ilgmann is Research Assistant at CAWM; email: [Ilgmann@insiwo.de](mailto:Ilgmann@insiwo.de).

# 1. Introduction

Concerning the current crisis, there is widespread agreement that priority must be given to restoring the financial sector to health. According to IMF (2009, pp. ix), three points are of particular relevance: (1) access to liquidity, (2) dealing with distressed assets and (3) recapitalizing weak but viable institutions and resolving failed institutions.<sup>3</sup> Concerning the second priority, proposals on how to deal with the distressed assets range from Swedish style bad bank models to revitalizing the market by government intervention as practised by the 'Public-Private Investment Funds' (PPIF) in the United States of America. However, all proposed schemes place considerable financial burdens on the public, thereby not only putting a lot pressure on already tight budgets, but also creating incentive for further speculative behaviour. Therefore, it is crucial for any sustainable approach to enforce the principle of liability.

Banks are necessary in a modern economy because they offer two different services to the public (Santos, 2006, pp. 461-462): At the liability side of their balances, they provide liquidity to households by issuing demand deposits, thereby insuring households against sudden shocks to their liquidity needs. At the asset side, they act as delegated monitors to investors, thereby improving the efficient allocation of capital. The classic story of financial crises and banking panics deals with liquidity shocks as depositors try to convert their deposits into cash due to a distrust on the bank's solvency. Since banks transform short term deposits in long term loans, they cannot meet a sudden shock to liquidity demand and are forced to sell their assets at a loss. Therefore, due to the desperate scramble for liquidity and the ensuing self enforcing pressure on asset prices, the failure of one bank threatens also to force other otherwise sound banks into insolvency (Bordo, 1989, p. 3-5).

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<sup>3</sup> The first priority is best served by central banks acting as Lender of Last Resort, and the Fed has shown a remarkable capacity to provide the financial system with liquidity (see for details Cecchetti, 2008). Recapitalisation on the other hand is debated quite intensely for it involves financial burden sharing by the public (e.g. the contributions in Reinhart and Felton, 2009). For example, Ingves and Lind (2008, pp. 23) argue that "similar to the need for a lender of last resort to deal with systemic liquidity shortfalls, there is a need for an investor or owner of last resort when all other sources of capital have dried up – and closing down an entire banking system is not a feasible option."

In order to protect the liability side of the bank's balance sheet against this threat, governments around the world introduced a combination of deposit insurance and Lender of Last Resort facilities. However, this safety net comes at a cost since it increases risk taking by financial institutions and therefore requires extensive regulation in the absence of market discipline (Santos, 2006, p. 460). Consequently, nowadays most pressure to the solvency of banks comes from the depreciation of assets, which leaves banks with little or no capital on their balance sheet (Bordo 2008, p. 9). Because during the course of a financial crisis, asset values drop considerably below their fundamentals due to fire sales in a very tight market (Kindleberger et al., 2005, p. 11). Paradoxically, in this situation, minimum risk adjusted capital requirements may even force the closure of in fact a sound banks due to balance sheet induced insolvency.

In this paper, we discuss a method for disrupting this vicious circle by applying an idea that has already used successfully twice in German history. After the demise of the Third Reich at the end of World War II as well as after the German Reunification in 1990, the turmoil of war and of peaceful revolution in 1989 had rendered worthless a substantial proportion of bank assets. In both cases, equalization claims ("Ausgleichsforderungen") were used to settle the resulting imbalances, which would otherwise have left most financial institutions heavily indebted. These bonds were non tradable, paid a low interest and were gradually redeemed by the German government over the course of time. As will be argued below, they have been a discreet, but highly efficient instrument in both instances.

In analogy to this successful approach of the past, we suggest that in the current crisis the toxic assets should be exchanged at book value for government bonds with open maturity, which yield interest below the market rate. The bonds should be refunded only after the toxic assets, by liquidation and reinvesting the receipts at the financial market, have eventually re-earned the face value of the bonds they have been swapped for. This procedure does not only save taxpayers' money, but at the same time spares the authorities the evaluation of the toxic assets in advance and yet averts the fatal devaluation spiral in banks' balance sheets. Ultimately, the sudden crisis induced

devaluation is thereby transformed into a long run real economic burden on the bank's profits, and all accruing losses must eventually be borne by the banks themselves. Moreover, as will be demonstrated below, the government bonds can serve as an automatic firewall against the mutual infection with insolvency within the financial sector.

The paper is organized as follows. In Section 2, we briefly sketch the historical background of the equalization claims. In Section 3, we develop our proposal by combining the equalisation bond concept with the bad bank idea. In Section 4, we assess the German bad bank act from 2009 and make some remarks on both its relation to our proposal and its genesis in the political process in Germany.

## ***2. Lessons from history: equalization claims***

We start by looking at the way the Germany authorities managed two previous debt crises after World War II and after the fall of the Iron Wall. In both cases, interest-bearing equalisation claims ("Ausgleichsforderungen") were used in order to avoid bankruptcies in the financial system. Their purpose was to support the asset side of the balance sheet, which had suffered from the trials and tribulations of war and communist mismanagement respectively, and to ensure sufficient cash-flow for financial institutions to survive. In both cases, their application proceeded smoothly and without serious repercussions on the real economy. In this section, we concentrate in particular on the approach of 1948, which was most similar to the model to be proposed below.

The 1948 West German currency reform had become necessary, because World War II had ruined the German public finances completely, since most of the war effort was funded by credit.<sup>4</sup>

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<sup>4</sup> The Third Reich was successful in paying roughly half of its war-related costs from current revenue. However, the other half was paid for by war debt. In order to conceal the increasing state deficit from the public, these war bonds were not issued to the public, but to financial institutions, which, in the absence of alternative means of investments, were forced to subscribe. (Wandel, 1998, pp. 34-36). The amount of money in circulation subsequently increased from 51 billion Reichsmark (RM) in the autumn of 1939 to 160 billion RM in the autumn of 1944 (Buchheim, 1988, pp. 199). At the same time, the supply of commodities was constantly declining due to ever-increasing arms production. During the war, inflation was kept at bay through a rigorous governmental control of the economy. After the war, a rapid inflation set in, rendering

The reform was one of the most fundamental in German history: with a general exchange ratio of 100 RM to 6.5 DM, nearly 93.5 % of the money in circulation was eliminated (Abelshauser, 2004, pp. 124). However, accounts receivables consisting mainly of government-issued war bonds, and liabilities such as rents, wages and pensions, were not converted evenly, but subject to various socio-political considerations.<sup>5</sup> This caused low or negative capital throughout in the financial sector, which was countered by issuing government-guaranteed bonds called “Ausgleichsforderungen” (equalisation claims).

The concept rested upon the so-called Colm-Dodge-Goldsmith plan of the Office of Military Government for Germany (OMGUS), which dictated key elements of the ensuing currency reform, including the nature of the equalization claims<sup>6</sup> (Wandel, 1980, pp. 162-164; Abelshauser, 2004, pp. 125). They paid interest below market rates and were almost non tradable. Claims allocated to the “Bank Deutscher Länder”<sup>7</sup>, to the central banks of the individual states, and to private credit institutions were generally charged 3% p.a.. Insurance companies and real-estate credit institutions received 3.5 and 4.5% p.a. respectively. Tradability was restricted to the financial sector. The only exception to this rule was the purchase or hypothecation of the claims by the central bank in the course of open-market operations. In reality, substantial trade of the equalization claims occurred only in the course of mergers and transfers of portfolio between financial institutions. Initially, there had been no amortization schedule, which meant that the claims would have to be itemized at less than their face value. However, this would have counteracted their purpose of equalising balance sheets. Therefore, by law, equalisation claims had to enter balance sheets at face value (Bundesbank, 1995, pp. 57-59).

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the currency virtually worthless. The black market, with its currency of cigarettes, became the norm in daily life (Wandel, 1980, pp. 142).

<sup>5</sup> For a review on the modalities of exchange, see Buchheim (1988, pp. 217-219).

<sup>6</sup> Besides “normal” equalisation claims, there were additional “Sonderausgleichsforderungen” and “Rentenausgleichsforderungen” (for details, see Bundesbank, 1995, pp. 58-59).

<sup>7</sup> The “Bank Deutscher Länder” was founded by Allied order in 1948 and was the forerunner of the Bundesbank, which was eventually founded in 1957

The official debtors of these equalisation claims were those individual German states in which the receiving financial institutions were located. Ultimately, they were claims against the federal government which did not yet exist. The 1948 reform and successive legislation created approximately 22.2 billion DM of equalisation claims, of which 8.7 billion DM were allocated to the Bundesbank, 7.3 billion to credit institutions, 5.9 billion DM to insurance companies and 66 million to real-estate credit institutions. In 1950, their average share of total assets was 15% for all credit institutions. For saving banks and cooperative credit associations, the shares were even higher, amounting to 38% and 27% respectively. Above all, equalisation claims were the main assets on the balance sheets of insurance companies. In 1950, on average these claims accounted for 60% of their assets. The debt was redeemed by the federal government through Bundesbank profits or by means of the federal budget, based on the laws of 1956 and 1965. From the 1970s onwards, amortization increased considerably and, by 1995, all equalisation claims had been paid-off. The only exceptions were the Bundesbank's claims, which are still in the central bank's balance sheet. Meanwhile, according to European law, central banks are prohibited from issuing credits to governments. Therefore, an amortization of these remaining equalisation claims was decided upon in the federal budget of 1994, with redemption taking place over the course of ten years between 2004 and 2014.<sup>8</sup>

Initially, the claims were a heavy burden on the profitability and liquidity of the financial sector (Bundesbank 1995, pp. 58-59). Although commercial banks could collateralize them in order to obtain liquidity, this entailed considerable credit costs. The Bundesbank turned to a variety of instruments in order to help financial institutions in extraordinary circumstances. So-called "Dringlichkeitskäufe" (urgent purchases) were exercised in order to temporarily relieve the economic burden, albeit arranging for a resale to the commercial bank once their economic situation improved. In addition, there were so-called "Nivellierungskäufe" (levelling purchases) which were designed to ease the burden devolving on those institutions that held a particularly high percentage of

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<sup>8</sup> For more detailed discussion of the equalization claim amortization, see Ilgmann and van Suntum (2009).

equalisation claims in their balance sheets. Due to this flexibility, the claims did neither impose a long-term negative repercussion on the financial sector nor on the economy as a whole.<sup>9</sup>

After the reunification in 1990, the uneven conversion of assets and liabilities caused once again a state of over-indebtedness. Therefore, during the decade following reunification, 88.8 billion DM of equalization claims were handed out, mainly to East German banks. The underlying idea was that financial and other companies should bear as much of the currency reform induced debt as possible. However, in contrast to 1948, these claims bore interest equal to the 3-month FIBOR rate as they were specifically designed to close the profitability gap between West and East German banks. The equalization claims had to be itemized with their face value and were amortized from 1995 onwards. In addition, irrevocably administered claims could be transformed into fully tradable bearer bonds. Therefore, their share in bank assets dropped quickly, and until the 1st of January 2001, an estimated 85.3 billion DM or 96 % were securitized. In sum, contrary to 1948, equalization claims were not only an instrument for stabilizing the capital ratio, but also a popular investment.<sup>10</sup> As a result, the equalisation claims from 1989 caused considerable costs which had to be borne by the German taxpayer (Bundesbank, 1996, pp. 44).

From these historic precedents one can draw some important conclusions. First, exceptional changes to accounting standards can be made without causing severe disturbances in the financial sector concerning completion and clarity. Second, the financial sector is thoroughly capable of absorbing a considerable share of low interest yielding assets in order to distribute extraordinary losses over many periods. Third, equalization claims are both flexible and transparent measures for supporting financial institutions in the case of exceptional balance sheet problems.

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<sup>9</sup> Given that most accounts of German economic history make little or no reference to “Ausgleichsforderungen”, it seems plausible that their impact may have been insignificant (see, for example, Wehler, 2003; Wandel, 1998; Abelshauser, 2004).

<sup>10</sup> For an extensive treatment of the “Ausgleichsforderungen” in the context of German reunification, see Kreiss (2003) and Bundesbank (1996). For a more detailed analysis and further references see van Suntum and Ilgmann (2009).

### **3. *The modern version: government bonds with open maturity***

Given the events following the bankruptcy of Lehman Brothers, only the most dedicated market fundamentalists would deny that financial crises do exist and pose a real threat to economic stability.<sup>11</sup> Therefore, the current crisis should serve as a powerful reminder to economists and politicians alike that financial<sup>12</sup> and economic crises are recurring phenomena.<sup>13</sup> It follows that regulating financial markets<sup>14</sup> and devising feasible solutions for systemic banking crises is a top priority, in particular because financial-crisis-induced recessions appear to be more severe and longer lasting than normal downturns (Reinhart and Rogoff, 2009, pp. 466; Bordo and Haubrich, 2009, pp. 20).

However, a simple bail out, be it purchasing risky assets or recapitalization by the government, would be counterproductive in the long-run. By impeding market adjustment and increasing overall risk tolerance, such a policy would set the stage for the next crisis (Crotty, 2009, pp. 575; Calomiris and Mason, 2003, pp. 5-6; Kindleberger et al., 2005, pp. 14).<sup>15</sup> On the contrary, reducing moral hazard through the application of liability is an absolute priority. In what follows, we argue that a modern version of the equality claims could help to escape this dilemma by preventing vicious devaluation circles in the financial markets and yet adhering to the principle of liability.<sup>16</sup>

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11 Garber (2000), for example, argued against this mainstream view. He disagreed with the classification of the Dutch Tulip Mani as a bubble and questioned the explanatory power of the bubble paradigm itself. "History is a rhetorical weapon to be used in influencing modern policy outcomes. In particular, the invocation of bubbles is one such use of history" (Garber, 2000, pp. 12).

12 The term financial crisis encompasses banking crises, currency crises, systemic crises and sovereign debt default crises (IMF, 1998, pp. 74-75).

13 Reinhart and Rogoff (2008) provide a "panoramic" analysis of financial crisis, their earliest observation being England's debt crisis in 1340. The Tulip Bulb Bubble in the Netherlands at the beginning of the 17th century and the Mississippi Bubble at the start of the 18th century are two prominent early modern examples (Ilgmann and van Suntum, 2008, pp. 741-743; Kindleberger et al., 2005, pp. 9).

14 Concerning the future financial architecture, we agree with Wray (2009, pp. 826) who stated that "we must return to a more sensible model, with enhanced supervision of financial institutions and with a financial structure that promotes stability rather than speculation".

15 "The implication is clear: safety nets themselves, through their effects on bank behaviour, have been a significant contributor to the cost of resolving bank distress. And it is worth reiterating that one of the supposed benefits of safety net assistance – limiting the reduction in bank credit supply in the wake of macroeconomic shocks is usually illusory: Financial crises produce the worst credit crunches because "resurrection strategies" by banks magnify initial bank losses from macroeconomic shocks and ultimately reduce credit supply accordingly. Once banking systems collapse under the weight of safety net-induced risk taking, the ultimate credit crunch is deeper and lasts longer" (Calomiris and Mason, 2003, pp. 5).

16 The following section follows the ideas laid out in Ilgmann and van Suntum (2009).



Besides its historical roots, our scheme is also closely related to the bad bank approach as implemented during the Swedish crisis of 1992,<sup>17</sup> but swaps the toxic assets against government bonds rather than money. In the first step, in case of a financial crisis, all banks must be forced by law to provide the government with all necessary information on their solvency, thus going way beyond the normal disclosure obligations. Based on this first-hand information, banks are divided into two groups, similar to the approach used in the Swedish crisis. The first group includes those banks that are expected to overcome their current problems and to recover within the medium term. Their capital will probably decrease, but remain above the required minimum level. Nevertheless, the crisis induced reduction of their capital may cause substantial deleveraging, with serious repercussions on the real economy.

The second group includes banks that are without future prospects without public support and recapitalisation. Their trouble goes far beyond temporary balance problems and hence cannot be successfully targeted by equalisation claims. They must be liquidated or merged with other banks.<sup>18</sup> Keeping them alive could even be counterproductive, since their owners might be even more drifted into highly speculative projects in a “gamble for resurrection” (Wilson and Wu, 2008, pp. 5-6).

Following this classification, those banks deemed for survival should participate in an exchange at face value of their distressed (toxic) assets against government bonds with open maturity. Advantageously, the toxic assets are purchased and administered by a central institution, which therefore serves as a bad bank. However, a special deposit facility is created for each participating bank, thereby ensuring that the performance of the securities remains individually traceable. With this arrangement, the government bonds are ultimately equivalent to deposit receipts.

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<sup>17</sup> The following section on the Swedish experience draws mainly on Ingves and Lind (1997), Andersson and Viotti (1999) and Ingves and Lind (2008).

<sup>18</sup> The German “Landesbanken” (state banks), which have incurred major losses, due to heavy exposure to international investment banking, are a prominent example.

Once the situation in financial markets calms down, the bad bank tries to sell or liquidate<sup>19</sup> their assets at best. The owner banks could be involved in the administration and resale of their assets, but the ultimate decisions should be made by the bad bank authorities, in particular because they are less likely to act pro-cyclically.<sup>20</sup> The profits from sales and liquidations are reinvested on financial markets, until there proceeds are on par with the face value of the government bonds for which these assets had been swapped. At this point the bonds are redeemed and the banks finally get real money for their once toxic assets. Depending on the quality of the portfolio, this might take years or even decades. Thus market discipline is enforced, because the better was the risk management of a commercial bank before the onset of financial crisis, the shorter is the time till redemption. In the extreme case of completely worthless assets, the respective government bonds remain within the bank's balance until the bank is able to write them off completely.

It is crucial for this plan to work that every bank with both systemic relevance and severe balance problems is forced to participate. The reason is threefold. First, otherwise the vicious circle of write offs and fire sales would continue, putting further pressure on asset prices. Second, because the government bonds must not be backed by equity, they improve the ability of the financial system as a whole to provide credit for the real economy. Third, compulsory participation avoids the stigmatization of participating banks.

One important advantage of this model is that it is nearly cost-free to the taxpayer, with the exception of the administrative costs of running the bad bank. The vicious debt-devaluation cycle is nevertheless forcefully broken and the risk of insolvency by pure balance problems decreases. At the same time, the problem of assessing the true market value of assets is automatically solved, because no evaluation in advance is necessary at all.<sup>21</sup> In fact, the true market values are revealed in

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19 In this case, liquidating means either awaiting the incoming payments or recourse to the underlying assets and collateral. Given the complexity of most financial products, this may take a considerable time. On the example of Sweden, see Ingves and Lind (1997, pp. 436-439).

20 Ingves and Lind (1997, pp. 436) stress the importance of setting the right incentives to employees of the "bad bank", since, in many aspects, the bank is different from normal companies, e.g. its ultimate goal is to eradicate itself.

21 As Ingves and Lind (1997, pp. 429-430) point out, evaluating the expected worth of bad assets is a rather strenuous and difficult task.

retrospect by means of their actual proceeds and accrue to the banks by the way of respectively differing redemption dates. By the corresponding loss in interest, commercial banks pay the price for their unsound business practice themselves, albeit elongated over many years rather than in the form of an instant write off.

For this scheme to work, the government bonds must meet some specific requirements. First, they must only yield a rate of interest which is below the market rate. Otherwise the toxic assets which they have been exchanged for could not earn their face value including the interim costs of interest payments. None the less, in contrast to their fair value, the bonds must appear at face value in the balance sheets. This is rather self evident for otherwise they could not stabilize the balance sheets. Given the fact that accounting standards must and have been altered in order to reduce the pressure on financial institutions anyway,<sup>22</sup> a respective exception for the bonds should be acceptable (Baetge, 2009, pp. 22).

The second requirement is that the government bonds do not have to be backed by equity. This can be justified because their repayment at face value is guaranteed, and because the state is a highly reliable debtor. With this privilege, the bonds even allow banks to expand their credit volume rather than reducing it due to the loss in value of their toxic assets. However, like the equalisation claims, the bonds should not be tradable, because otherwise they could be misused to manipulate the balance sheets of financial institutions. For the same reason, they should be openly revealed on the asset side of the balance sheets.

With such an endowment, the bonds get the nature of artificial liquidity or quasi-money. In effect, they serve as secondary, state-guaranteed monetary reserves in addition to cash reserves on the asset side of balance sheets, thereby helping banks to meet their capital requirements. However, the bonds cannot be exchanged for goods or for central bank money. Therefore, quite similar to

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<sup>22</sup> The EU Commission partially suspended fair value accounting with EU regulation No. 1004/2008 (15th of October 2008) (Baetge, 2009, pp. 22). For the overall risks created by the current accounting practice see EEAG (2009, pp. 79 and 98).

special drawing rights of the IMF, they provide liquidity for the financial sector without causing inflationary pressure on the real economy.

Even if a bank had participated in the exchange program, insolvency cannot and should not be ruled out if expected earnings remain permanently below zero. In this case, the bonds have a stabilizing function as well. Suppose that any Bank C becomes insolvent, due to a lack of profitability. Bank B, already affected by the financial crisis, had lent a sum of 100 to Bank C before. Assume that, after bankruptcy proceedings, Bank B would receive only assets worth 30 for its claims, causing an immediate write-off of 70 in its balance sheet. Thereby the initial shock was transmitted further within the financial system. However, if Bank B is compensated with zero bonds from Bank C, the write off in the balance of Bank B is avoided. For government bonds worth 30 appear in the balance at their face value of e.g. 100. In addition, they do not require capital, so Bank B can even expand its lending activities in order to compensate for its losses. Therefore, the bonds have a strong counter-cyclical effect, yet without relieving Bank B of its losses in real terms. The latter would only be distributed over the duration of the transferred bonds, as with its original holder bank C.

#### ***4. The German bad bank act from 2009***

In order to strengthen the bank's capital, the German government opted very early for a bad bank model. First proposals by e.g. the Federal Association of German Banks would have placed the risks solely on taxpayers' backs. The same effect would have had the original plan of the then German minister of finance, Peer Steinbrück. Following intense political discussion and growing public pressure against such a bailout, the eventually passed Financial-Market Stabilisation Improvement Act "Finanzmarktstabilisierungfortentwicklungsgesetz" (FStFEntwG) passed on the 17<sup>th</sup> of July 2009 adopted many of the ideas in the model presented in Section 3. In particular, the fatal write offs can now be prevented by replacing the respective assets by bonds which are guaranteed by the state, in analogy to the former equalization claims. Moreover, by an arsenal of

financial obligations, banks using this instrument cannot transfer the financial burden of their excessive risk taking on the public. Rather they will have to pay the bill ultimately themselves, although over the course of twenty years or more. Thus the main idea of the equalisation claims, namely converting a sudden death into a long time purgatory in order to prevent a collapse of the financial system, has been preserved. Nonetheless, the act still exhibits some fundamental flaws that severely hamper its effectiveness.<sup>23</sup>

The act establishes the so-called “special purpose entity model” as a bad bank approach for private banks. In this scheme, private banks can transfer their structured toxic assets for their book value<sup>24</sup> to special purpose entities (decentralized bad banks). In return, the special purpose entities issue bonds amounting to 90% of book value of toxic assets, which is then set in the banks’ balance sheets. (FStFEntwG, § 6a, (1)). This haircut was only incorporated into the act in order to comply with EU-regulation. These bonds are guaranteed by the Special Fund Financial Market Stabilization (“Sonderfonds Finanzmarktstabilisierung/SoFFin”),<sup>25</sup> which ensures the redemption of these bonds at par.<sup>26</sup> The public guaranty in turn reduces required capital backing, thereby releasing bank’s capital for other business activity. However, this comes at a price since the SoFFin in return charges the banks a fee for the guarantee in line with the market (FStFEntwG, § 6a, (5) 2), as required by EU regulation. According to the SoFFin, this fee will normally amount to 7% of the difference between the transfer value and the assumed fundamental value of the structured paper (SoFFin, 2009). In addition, banks also have to pay a fixed annual compensation to the SoFFin, which equals in sum the

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23 The following paragraphs concerning the current German solution are based on the FStFEntwG. A short and precise overview over the German solution is given by Bundesministerium der Finanzen (2009).

24 The value at which the toxic papers are transferred is either determined by their book value on the 30th of June 2008 or 31st of March 2009 or by their current market value respectively. The highest of these values is applicable, but may not exceed the book value on the 31st of March 2009. Another restriction is that the haircut does not lower the core capital quota of a bank below 7% (FStFEntwG, § 6a, (2) 2).

25 The official name is "Finanzmarktstabilisierungsfonds" (Financial Market Stabilization Fund). It is administered by the "Finanzmarktstabilisierungsanstalt" (Financial Market Stabilization Agency). The Fund was established by the German Financial Market Stabilization Act (Finanzmarktstabilisierungsgesetz) on 17th October 2008. The Federal Government enacted the regulation (Rechtsverordnung) appertaining to the Act on 20th October 2008. On 9th April 2009 the Act Amending the Financial Market Stabilization Act (Finanzmarktstabilisierungsergänzungsgesetz) entered into force. The Fund cooperates closely with the Deutsche Bundesbank on all professional matters.

26 The maturity of the guarantees is given by the duration of these bonds (FStFEntwG, § 6a, (1)). In addition, guarantees are only given if the duration of the longest running structured paper does not exceed the duration of the guarantee (FStFEntwG, § 6a, (2) 5)

difference between the nominal value of the transferred toxic securities and their fundamental value for a maximum of twenty years (FStFEntwG, § 6b, (1)). Since the latter can currently only be estimated, any deviation below the expected fundamental value would remain a risk to the SoFFin and therefore to the public. In order to avoid this, in the case of realized true value below the estimated one, banks are required by law not to pay any dividends to their stockholders until the difference between the expected and realized value of the toxic assets is paid for ("Nachhaftungspflicht") (FStFEntwG, § 6c).

In addition to the "special purpose entity model", the act contains also a special provision concerning the treatment of the public state banks ("Landesbanken")<sup>27</sup>, the so-called "consolidation model" (FStFEntwG, § 8a). It goes beyond the immediate swap of structured assets as it also allows the state banks to transfer other types of assets and even business divisions which are no longer profitable. These assets are transferred to individual settlement institutions, which serve as bad banks and operate under the supervision of the "Finanzmarktstabilisierungsanstalt/FSMA" (Financial Market Stabilization Agency). Nevertheless they remain organizationally and economically independent and work as "institutions within an institution". SoFFin guarantees are only given for structured products in the way laid out above (FStFEntwG, § 8a, (10)). The individual settlement institutions can also be independently set up at state level, but then they do not have access to SoFFin guarantees at all (FStFEntwG, § 8b). As with the special purpose entity model, economic liability remains with the original owners. Only the liability of savings banks is limited to the extent of the past guarantor's liability which ended on 30<sup>th</sup> June 2008. Any losses for the public from the past guarantor's liability will be divided between the federal and state government at a ratio of 65 to 35.

The complexity of this design results from EU and legal accounting problems, but also from the federal structure of Germany as well as from the fact that the act was drafted and passed in great haste. In particular, under the pressure of public sentiment and scientific criticism of previous plans,

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<sup>27</sup> The Landesbanken are banks owned by individual federal states and an idiosyncratic feature of the Germany's financial architecture. They are regionally organized and their business is predominantly wholesale banking. They are also the head banking institution of the local saving banks ("Sparkassen").

more and more safeguards against any form of a state sponsored bailout were incorporated in the act. In its final form, it is now determined that ultimately banks and their (original) shareholders respectively bear all losses. Only in the event of bank's insolvency there remains a financial risk for the taxpayers, as compensation payments and further regress on future earnings depend on the survival of the respective bank (see also SoFFin, 2009).

Besides its complexity, the act exhibits serious flaws in its design, especially with regard to the SoFFin guarantees. First, it is still unclear if the asynchronous temporal structure of guarantee payments and later repayments will cause interest payments. From a fiscal point of view, it is not enough to ensure the repayment of the guarantee, but the cost of pre-financing by SoFFin must also be recovered. A second problem is that the banks have only 20 years for refunding the difference between the fundamental value and the book value. In comparison with the design of the former equalization claims, this is relatively little time to pay off the accumulated losses. In addition, guarantee fees and compensation payments hamper profitability and recapitalization and therefore contradict a swift revival of bank lending to the private sector.

The third and most crucial drawback of the act, however, is the principle of voluntary participation. In fact, the banks have shown little interest in the model so far. One reason might be the loss of reputation upon participation in the model. In addition, it is at least unclear whether management compensation in participating firms will automatically be subject to the 500.000 euro salary cap, which was introduced by the Financial-Market Stabilization Fund Ordinance ('Finanzmarktstabilisierungsfonds-Verordnung'/FMStFV) for board members of banks which receive public support. This would, of course, be a powerful deterrent against participation.

Consequently, with the notable exception of the federal bank West LB, not a single bank, be it commercial or state owned, has participated in the scheme. Thus the act failed to achieve its main aim of preventing or at least reducing a possible credit crunch.

## 5. Conclusions

Capital shortages is still one of the most pressing problems for German banks, although total capital has risen from 4.1 % in mid 2007 to currently 4.3 % on average. Much of this increase was due to government intervention, without this support the average capital ratio would have fallen to 3.8 % (Projektgruppe Gemeinschaftsdiagnose, 2009, p. 10). The same applies to the core capital quota of fourteen major German banks which rose by 2.4 percentage points to 10.0 % (Bundesbank, 2009, pp. 40-41). However, this improvement in capital endowment is not likely to be sufficient. The financial crisis has impressively demonstrated that pre-crisis capital ratios of financial institutions were too low to absorb systemic shocks. Hence both regulators and creditors are likely to claim higher capital requirements for financial institutions, especially for those which are too big and too interconnected to fail (European Central Bank, 2009, pp. 91-93). In addition, bank's capital will come under further pressure as recession-induced write offs on commercial and private loans will increase. The Bundesbank estimates the necessary write offs of the German banking sector between 60 and 90 billion € (Bundesbank, 2009, pp. 60-62). Therefore strengthening the capital endowment of German banks remains a top priority, in particular with regard to the possible occurrence of a credit crunch.

With its historical experience in bank rescues, Germany was in an outstanding starting position at the beginning of the current financial crisis. Indeed, equalisation claims were suggested as early as January 2009 in the scientific and political debate as a already battle proven instrument.<sup>28</sup> The modified modern version as laid out above was intensively discussed during a hearing of the parliament's committee on budgets.<sup>29</sup> Although it was widely recognised as a both elegant and nearly cost-free way to solve the balance sheet problems, there was also some criticism which finally led to the more complicated, but basically very similar act of July 2009.

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28 Among the advocates for a solution with the aid of equalization claims were the Bundesbank, the spokesman on budgetary policy of the CDU Steffen Kampeter, and Ulrich van Suntum (Schäfers and Frühauf 2009; van Suntum 2009).

29 During the hearing such a solution was proposed by van Suntum and a similar proposal was made by Thorsten Polleit (Deutscher Bundestag, 2009).



One of the main counterarguments against the idea of government bonds with open maturity was that their true value would be considerably lower than their face value. Therefore the bonds would simply be obvious financial window dressing and thus be ineffective for restoring confidence on financial markets. A second objection rested on international accounting standards which would no longer permit the simple previous solutions. A third problem was the resistance of the banks' lobby groups, who were not inclined to accept the long term purgatory to which the proposal would have condemned them. Last but not least, as was mentioned above, the act was designed in great haste, in particular because the government intended to pass it before the general elections in September 2009.

From today's view, the July act was not too bad at all. After all, in contrast to many other nations, Germany widely succeeded in burdening the bulk of losses on those who were responsible for their occurrence, namely the banks themselves. Moreover, the vicious cycle of write offs and declining confidence was at least mitigated, although not stopped completely. On the other hand, up to now the act does not really work, because nearly all banks prefer to solve their problems in the conventional way through deleveraging. Consequently, there is still a severe lack of equity in the German economy as well as the danger of a credit crunch.

Apart from the relatively minor disadvantages referred to above, the key failure of the act was the principle of voluntary participation. It would be both advisable and still possible to fix this fatal error by making participation compulsory, at least for those banks which are of systemic relevance and have a substantial part of distressed assets on their balance sheets. It might also be worthwhile to consider a simplification of the act in line with the approach which was laid out above. For example, the estimation of a 'fundamental value' for those assets considered toxic has become pointless over the course of the act's genesis, because according to its final design, any difference between this value and the true revenues from these assets must be borne by the banks anyway.

Concerning international accounting standards, much of the criticism against the modern form of equalisation claims also applies to the act of July, as has become evident in the meantime. However, most of these objections can be encountered by carefully designing and implementing the various elements of that approach. At the end of the day, the economic rational should deserve priority over existing accounting standards. Anyway, the pragmatic and successful implementation of equalisation claims in German economic history appears a powerful response to the current financial crisis as well.

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