

Regulatory Forbearance and the Role of Financial Reporting Transparency during a Bank Crisis

Olaf Clemens and Ulrich Schüwer*

Abstract

Regulatory forbearance is a controversial strategy for dealing with weak banks. We analyze forbearance regarding the disclosure of a bank's financial difficulties, using a case study of the financial crisis of the mortgage bank AHBR during the years 2001 to 2005. AHBR was one of the largest German mortgage banks at that time and considered as highly systemically relevant. Our case study evidence shows that regulatory forbearance can be a successful short-term strategy for a single bank crisis. However, it also weakens the trust of investors in public information and the financial system. Our analysis suggests that the potential existence of zombie banks creates an adverse selection problem, which implies higher risk premiums in the interbank market and finally increases the risks of a liquidity crunch.

* Dr. Olaf Clemens and corresponding author Dr. Ulrich Schüwer, Goethe University Frankfurt, Department of Finance, Grüneburgplatz 1, 60323 Frankfurt am Main, Germany, e-mail: clemens@finance.uni-frankfurt.de and schuewer@finance.uni-frankfurt.de. We would like to thank Franklin Allen, Uwe W. Bloos, Richard J. Herring, Michael Koetter, Christian Laux, Reinhard H. Schmidt and Marcel Tyrell for their valuable comments and suggestions. A prior version of this paper was presented at several conferences. We are grateful for comments received from conference participants at the 2009 Eastern Finance Association meeting, Washington, the 2009 Midwest Finance Association meeting, Chicago, a 2008 Deutsche Bundesbank research seminar, Frankfurt, the 2008 ECGTN meeting, Santander, and the 2008 European Financial Management Association meeting, Athens.

Nachsichtiges Verhalten der Bankenaufsicht und die Bedeutung transparenter Finanzberichterstattung während einer Bankenkrise

Zusammenfassung

Nachsichtiges Verhalten ist eine umstrittene Strategie der Bankenaufsicht für den Umgang mit schwachen Banken. Wir analysieren aufsichtliche Nachsicht hinsichtlich der Offenlegung finanzieller Schwierigkeiten einer Bank anhand einer Fallstudie zur Krise der Hypothekenbank AHBR in den Jahren 2001 bis 2005. Die AHBR war eine der größten deutschen Hypothekenbanken zu der Zeit und galt als systemisch relevant. Unsere Fallstudie zeigt, dass nachsichtiges Verhalten der Bankenaufsicht kurzfristig eine erfolgreiche Strategie für die Krise einer einzelnen Bank sein kann. Sie schwächt jedoch das Vertrauen der Anleger in öffentliche Informationen und in das Finanzsystem. Unsere Analyse stellt heraus, dass die mit aufsichtlicher Nachsicht geduldete Existenz von Zombie-Banken das Problem der adversen Selektion hervorruft, welches höhere Risikoprämien im Interbankenmarkt verursacht und schließlich das Risiko für Liquiditätskrisen erhöht.

Keywords: regulatory forbearance, financial reporting transparency, trust of investors

JEL Classification: G28, G33, M40

I. Introduction

“It is striking that despite all the regulatory advances and progress in information technology, the financial system that has emerged over the last decade has been characterized by a lack of transparency in certain securities markets and intermediaries.”
(Jean-Claude Trichet, President of the ECB, November 2008)

Banking supervisors rightly complain that the lack of transparency created by complex financial instruments and financial institutions makes thorough supervision difficult, if not impossible. However, the banking supervisor does not have a purely passive role in supervising financial institutions. The banking supervisor has an impact on disclosure rules and can opt discretionarily for regulatory forbearance, a strategy consisting of leniency of regulatory rules towards an illiquid or insolvent bank, allowing the institution to stay in business. Forcing accurate information disclosure is crucial to promote a stable financial system. Therefore, the banking supervisor is not only a victim of circumstances but is also responsible for transparency and the trust of investors in the

financial system, particularly during a financial crisis, when the trust of investors is essential for safeguarding financial stability.

This paper analyzes the banking supervisor's strategy of regulatory forbearance and the role of financial reporting transparency during a bank crisis. Based on a case study, the first contribution of the paper is to provide detailed evidence of how a systemically relevant bank with a highly regulated business model became an opaque zombie bank and managed to continue operations for several years with the acquiescence of the German banking supervisor BaFin. The second contribution of the paper is to provide new insights on short-term effects of regulatory forbearance on crisis resolution, especially as regards the delayed disclosure of the bank's financial difficulties and its long-term effects on the trust of investors and the functioning of capital markets.

Our main result is that regulatory forbearance regarding the disclosure of a bank's financial difficulties may be successful in the short term for crisis resolution, however, at the expense of creating adverse selection problems in the long term, because it permits the existence of zombie banks. The long-term effect implies higher risk premiums in the inter-bank market and increases the risk of a liquidity crunch. Our analysis suggests that market participants' repeated experience with regulatory forbearance over the last decades contributed to the crisis of confidence in the financial system during the liquidity crunch of 2007 and 2008.¹ We argue that stringent banking regulation and transparency are preconditions for stable financial systems.

The paper extends the literature on regulatory forbearance, which mainly focuses on the effects of regulatory forbearance on crisis resolution and on how it may encourage moral hazard of a bank's management. *Kane* (1989) shows that during the US S&L crisis in the 1980s weak banks engaged in gambling for resurrection while healthy banks, anticipating that they did not have to fear closure, also started gambling. *Young* (1995) documents how accounting rules were changed in order to avoid closure of thrift institutions during the US savings and loan crisis in the 1980s. Several empirical studies show that regulatory forbearance leads to higher social costs compared with more stringent strategies, such as immediate bank closure (e.g., *Honohan/Klingebiel*, 2003; *Claes-*

¹ *Laeven/Valencia* (2008) study crisis resolution strategies and show that prolonged forbearance occurs in about two out of three crisis episodes between 1970 and 2007.

sens/Klingebiel/Laeven, 2003). In contrast to these results, *Goodhart* (2006) argues that this perception is flawed because these studies do not consider the many instances in which forbearance successfully avoided a crisis.

Despite the extensive literature on regulatory forbearance, to our knowledge little is known about the focus of our paper: regulatory forbearance regarding the disclosure of a bank's financial difficulties, its consequences for the trust of investors and the functioning of the financial system. This is surprising because the banking supervisor plays a prominent role in the functioning of the financial system.

To narrow this research gap, we consider both the classical literature on regulatory forbearance and the literature on accounting and capital markets research, which highlights the importance of financial reporting transparency for market efficiency and stable financial systems (e.g., *Kothari*, 2001; *Verrecchia*, 2001; *Barth/Caprio/Levine*, 2004; *Barth/Schipper*, 2008; *Leuz/Wysocki*, 2008). This literature finds that financial markets do not by themselves generate enough information for investors to allocate their funds appropriately and efficiently; therefore, supervision and market discipline should be seen as complements and not as substitutes (e.g., *D'Avolio/Gildor/Shleifer*, 2001; *Rochet*, 2008). Financial reporting transparency is especially important during periods of financial difficulties, when managers tend to withhold bad news and to use creative accounting practices in order to conceal the true financial conditions of their institutions (e.g., *Gunther/Moore*, 2003). More transparent firms experience less liquidity uncertainty during crisis periods (*Lang/Maffett*, 2011). As regards the recent financial crisis, *Huizinga/Laeven* (2012) show that banks, and especially distressed banks, used accounting discretion to overstate the value of their distressed assets. Lack of transparency is considered as one of the fundamental explanations for the liquidity crisis of 2007 and 2008 (e.g., *Eichengreen*, 2008; *Pagano*, 2008; *Trichet*, 2008).²

The case study, on which our analysis is based, covers the failure of the German mortgage bank Allgemeine Hypothekenbank Rheinboden (AHBR), a highly regulated issuer of *Pfandbriefe*, a German form of covered bonds. The failure of AHBR between 2001 and 2005 was caused by exces-

² Complementary explanations for the liquidity crisis of 2007 and 2008 are balance sheet effects, liquidity hoarding, and runs on financial institutions (*Brunnermeier*, 2009).

sive interest rate speculation and is considered to be one of the most dramatic failures of a German financial institution prior to the financial crisis of 2007 to 2009. Owing to the bank's high systemic relevance as one of the leading German *Pfandbrief* banks, the financial crisis of AHBR was closely followed by many German and international market participants and banking supervisors. Market participants feared a collapse of AHBR and a stress-test of the *Pfandbrief*, which was a common refinancing instrument for many German and European banks and considered very safe until then. The Deputy Governor of the Bank of England, Sir Andrew Large, named AHBR together with General Motors, Ford, Refco, and Delphi in a speech on financial stability and liquidity risks at a conference in London in November 2005 (Large, 2005). The German banking supervisor reacted to the crisis with regulatory forbearance. He induced capital injections by shareholders but did not enforce the transparency of the bank's true financial condition for several years, until AHBR finally collapsed and was sold to the US private equity firm Lone Star at the end of 2005. Compared with more recent bank failures during the financial crisis of 2007 to 2009, the AHBR failure occurred during a relatively stable period without major market turbulence. This study can thus largely ignore external macro factors and relate major changes in AHBR's business profile and financial statements directly to the actions of AHBR's management and the interventions of the German banking supervisor. Because the AHBR crisis developed over several years and led to lawsuits and a parliamentary enquiry, detailed information about the actions of shareholders, management, debt holders, and the German banking supervisor is publicly available.

While AHBR reported under the German Commercial Code (HGB) that applies historical cost accounting, lack of transparency is not a unique characteristic of the German Commercial Code. The subprime crisis has shown that it is also a major problem of the worldwide prevalent accounting standards US-GAAP and IFRS (see, e.g., *Laux/Leuz*, 2009). Both US-GAAP and IFRS were long praised for their true and fair view and their fair value accounting rules, demanding the mark-to-market valuation of financial instruments. However, banks and financial institutions all over the world, under almost all accounting standards, were able to keep their subprime investments off their balance sheet and their true exposure away from shareholders' monitoring for considerable periods of time. The underlying information problems of the AHBR crisis in Germany and other failures of banks and financial institutions are thus quite similar.

The paper is organized as follows. Section II. describes the origin and development of AHBR's interest rate speculations and subsequent failure. The section also explores the lack of accounting transparency in the AHBR failure. Section III. analyses the forbearance strategy of the German banking supervisor in the AHBR failure and discusses implications of our results for current policy reforms. Section IV. concludes the paper.

II. The Failure of AHBR

This section describes the developments from the beginning of AHBR's interest rate speculations in 2001 until its collapse and final sale to the private equity firm Lone Star in late 2005. Our exploration of the bank's failure is based on AHBR's publicly available annual reports, information contained in financial newspapers, e.g., *Börsen-Zeitung* (BZ) and *Financial Times* (FT), the records of a parliamentary enquiry (*Bundesregierung*, 2006) and the records of lawsuits against AHBR and AHBR's former management (*LG Frankfurt*, 2006; *OLG Frankfurt*, 2008, 2011; *BGH*, 2013).

1. AHBR's Business Model and Shareholder Structure

AHBR was formed in 2000 by the merger of Allgemeine Hypothekenbank AG, Frankfurt, and Rheinboden Hypothekenbank AG, Cologne, which resulted in one of the largest German mortgage banks at that time. The bank was among the leading providers of residential and commercial real estate financing and public sector lending. Similar to other mortgage banks, AHBR had a small profit margin on its loans, but a safe business model.

Interest rates changes were of particular interest to the bank due to its mortgage business. AHBR's borrowers typically obtained loans with fixed interest payments and maturities of about 15–20 years. AHBR refinanced the loans primarily by issuing so-called *Jumbo-Pfandbriefe* with shorter maturities, ranging from three to seven years. These *Jumbo-Pfandbriefe* are a special and very liquid form of the German *Pfandbrief*, i.e., a covered bond strictly regulated under the German Covered Bond Act (*Pfandbriefgesetz*) usually paying a fixed coupon. In the ordinary course of business, AHBR engaged in derivative contracts to hedge its interest rate exposure against interest rates changes.

AHBR was mainly held by two holding companies, which were in turn held by German trade unions. The principal shareholder of AHBR with a 50 % stake was Beteiligungsgesellschaft der Gewerkschaften (BGAG), a holding company of the major German trade unions. BHW, a publicly listed thrift institution, had a 39 % stake in AHBR and was also controlled by the trade unions. AHBR's equity was supplemented by institutionally held silent partners' capital (*stille Einlagen*) and a privately held special form of profit participation rights (*Genussscheine*).

2. AHBR's Interest Rate Speculations

During 2001, AHBR's management decided to become increasingly engaged in the interest rate derivatives market. It expected that it could generate extra profits for its otherwise low-margin mortgage business (*OLG Frankfurt*, 2011). As stated in its outlook for 2002, the bank expected interest rates to rise across all maturity segments (*AHBR*, 2001, p. 45). AHBR subsequently started massive interest rate speculations which were not justified by its core business. This strategy fundamentally changed AHBR's risk profile. It migrated from the relatively safe business of a mortgage bank towards a hazardously speculating bank.

In its 2002 annual report, under a new management, AHBR states that its future performance "will primarily be determined by the offsetting of inadequate interest rate margins in the derivatives portfolio" (*AHBR*, 2002, p. 11). A special audit by BaFin in June 2004 found that AHBR had an unusual high interest rate exposure in 2001 and 2002, resulting from a significantly higher volume of interest rate derivatives than justifiable by the assets from its lending business. This was not in accordance with the prudent principles required by the German Covered Bond Act (*LG Frankfurt*, 2006; *OLG Frankfurt*, 2011). Furthermore, the chairman of BGAG, AHBR's main shareholder, confirmed in an interview that AHBR's later financial crisis was caused by "AHBR's management which thought itself to be smarter than other market participants in the interest rate markets" (*DGB*, Jun. 23, 2003).

During 2001, AHBR's total nominal volume of outstanding interest rate derivatives nearly doubled from EUR 73 billion to EUR 139 billion, while its total volume of interest-related business decreased from EUR 85 billion to EUR 77 billion (see Fig. 1(a)). Note that the nominal volume of outstanding interest rate derivatives presumably includes offsetting positions and does not directly reflect AHBR's net exposure. Neverthe-

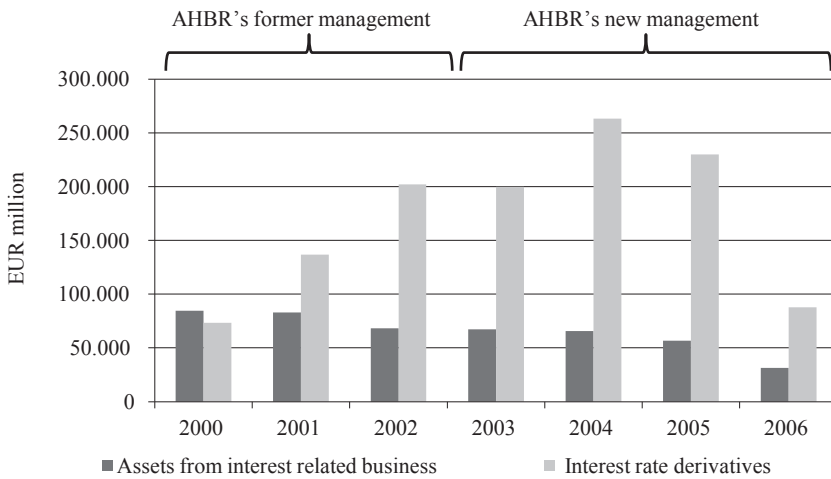
less, its massive increase and AHBR's value-at-risk (VaR) indicate extraordinary changes in AHBR's financial strategy. The bank's VaR that reflects its total interest rate exposure was EUR 69 million at the end of 2001 (see Fig. 1(b)), which was unusually high and represented 7 % of its 2001 balance sheet equity.³ The peak and the subsequent trend of the VaR indicate that the interest rate derivatives closed in 2001 were not meant for hedging purposes but rather for outright speculation. Lawsuit records (*OLG Frankfurt*, 2011, note 211) show the scale and speed of AHBR's failed speculation: a present value of its total interest rate exposure (incl. loans and interest rate derivatives) of EUR -598 million as of Dec. 31, 2001, and already EUR -1,878 million as of Jun. 28, 2002.⁴

A new management team, established in autumn 2002, brought AHBR's VaR back to EUR 9.1 million at the end of December 2002 and kept it below EUR 10 million in subsequent years. AHBR's nominal interest rate derivatives volume further increased from EUR 138 billion at the end of 2001 to EUR 200 billion at the end of 2002 and remained very high during the subsequent years. The increase in 2002 presumably had two reasons: First, AHBR's then acting management had continued to sign high volumes of derivative contracts until the second quarter of 2002. Second, based on AHBR's declining VaR figures, we assume that AHBR's new management started to cut the impending losses by entering into new, oppositely directed, derivative contracts instead of unwinding (terminating) the loss-generating contracts. New derivative contracts are typically free of initial charge, while any unwinding of existing derivatives with negative market values would have resulted in immediate cash payments to counterparties and losses in the income statement, respectively. This practice allowed AHBR to hide its true financial condition and to stay in business.

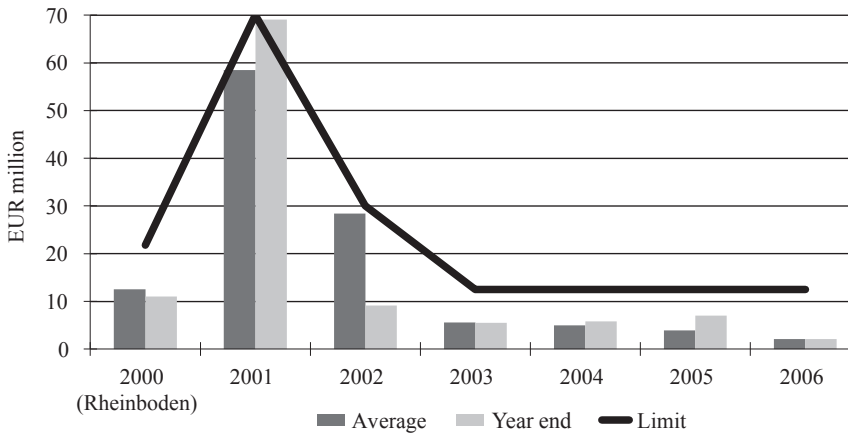
Conducted on behalf of the BaFin, a special audit from the accounting firm PricewaterhouseCoopers (PwC) confirmed in mid-2002 that AHBR's management was informed early on about the derivatives business and the associated risks by its internal risk management system (*BZ*, Sep. 17, 2002). It showed that the speculation was not the action of some em-

³ The basis-point-value, a risk measure of the German banking supervisor, was on average within the limit of 10 % in 2001 (8.2 %) and 2002 (8.7 %) (*AHBR*, 2001, 2002).

⁴ The market value of AHBR's interest rate derivatives was only publicly disclosed in its 2004 annual report, showing a net negative market value of around three billion Euros (*AHBR*, 2004, p. 75).



(a) AHBR's volume of assets from interest-related business compared to its volume of outstanding interest rate derivatives (AHBR, 2001-2006).



(b) ABHR's VaR (99% confidence interval 1 day holding period; last 125 days historical values; exponentially weighted; AHBR, 2001-2006).

Figure 1: AHBR's Interest Rate Speculations

ployees or a failure of the control system, as in the case of Barings in 1995, Société Générale in 2008 or UBS in 2011. Consequently, AHBR's chairman and the head of treasury, both members of the management board, resigned from their positions in September 2002. At the subsequent annual general meeting, AHBR's supervisory board recommended

not to discharge these managers and sued them for breach of duty (*BZ*, May 10, 2003).⁵

Regarding the incentives of AHBR's management, we have no information that their compensation structure highly rewarded profits, a general explanation for risk-shifting. More likely, AHBR's management expected to generate extra profits for its otherwise low-margin business, and was overconfident in its capabilities.⁶ Generally, investors can prevent speculation of overconfident managers by restricting liquidity, as managers then have to search for external funding (see, e.g., *Jensen*, 1986; *Heaton*, 2002). However, AHBR's managers circumvented such disciplinary measures by using interest rate derivatives which are unfunded financial instruments. AHBR's management probably also intended to make its accounting earnings better manageable and more stable. Ironically, they therefore invested in risky derivatives that allowed them a great deal of flexibility for creative accounting by means of hidden gains and hidden losses.

3. AHBR's Losses and its Collapse in 2005

The interest rate market developed sharply contrary to AHBR's market positions, causing enormous losses for AHBR from its derivatives contracts.⁷ Since AHBR's operating results were insufficient to cover the persistent losses from its derivatives contracts, the bank's survival depended

⁵ The damage suit against AHBR's former managers was initially rejected by German courts (*LG Frankfurt*, 2006; *OLG Frankfurt*, 2011), arguing that although the defendants violated the principles of the German Covered Bond Act, this was explicitly tolerated by the German banking supervisor. Further, the claimants have not sufficiently documented the precise damages, and it remained unclear to the court which derivative contracts were still appropriate in relation to AHBR's core business and which contracts were not. In January 2013, the German Federal Court of Justice annulled the decision and reversed the burden of proof to the detriment of the defendants: The former managers need to prove that the closing of the derivatives was based on adequate information to the benefit of the company (*BGH*, 2013).

⁶ In the 1990s, AHBR was quite successful with interest rate speculations and was known for its aggressive term transformation strategy (*BZ*, Jan. 22, 2005).

⁷ Apart from its failed interest rate speculation, AHBR was faced with problems in its core business. The sustained economic downturn of the global economy in the aftermath of September 11, 2001, and additional specific problems in the (Eastern) German real estate loan market hit AHBR's mortgage business. However, these problems were not specific to AHBR, but rather affected all German mortgage banks at that time.

on repeated cash injections from its shareholders. As a result of this situation and discussions with the German banking supervisor, AHBR's main shareholders BGAG and BHW granted AHBR a guarantee in 2002 to cover already accrued and future losses (AHBR, 2002, p. 10; BHW, 2002, p. 70). With these guarantees the banking supervisor induced the main shareholders to place more of their own capital at risk and effectively committed them to reduce AHBR's risk positions. These guarantees were one key element to safeguard AHBR's existence for the time being.

The whole dimension of the financial disaster was finally revealed in an ad-hoc press release from AHBR on October 25, 2005. AHBR's management stated that the bank would either be sold completely or in parts to an investor, or would be liquidated alternatively (FT, Oct. 25, 2005; AHBR, 2005a). This caused the credit rating agencies to put the bank's issuer rating on junk status on October 27, 2005; the ratings for AHBR's *Pfandbriefe*, however, were confirmed. During those days the market making in AHBR's *Pfandbriefe* nearly stopped and the high liquidity of *Pfandbriefe* – one of the most important properties, especially for international investors – ceased to exist (Euroweek, Oct. 28, 2005). In November 2005, under the organization of BaFin, the five leading German banks (Deutsche, Dresdner, Commerzbank, HypoVereinsbank and Postbank) in cooperation with the Depositors Guarantee Fund (*Einlagensicherungsfonds*) provided AHBR with a liquidity shield of EUR 2.5 billion. Although deposits played no role for AHBR, BaFin presumably engaged the Depositors Guarantee Fund to send a robust signal to the markets because of AHBR's systemic relevance. The core objective of BaFin and the involved parties was to ensure an orderly conclusion of the AHBR transaction and avoid a sale of the bank at fire sale prices, or even worse, a liquidation shortly before the selling process would have been completed (dpa-AFX, Nov. 16, 2005; BZ, Nov. 15, 2005; BZ, Nov. 17, 2005). AHBR was finally sold to the private equity firm Lone Star in December 2005 at a negative purchase price of EUR 380 million. BGAG had to accept a negative price to get released from its guarantees towards AHBR's remaining risks (FTD, Oct. 26, 2005), as stated by Norbert Massfeller, head of BGAG at that time.

AHBR's investors lost about four billion Euros over time. The main losses were borne by AHBR's shareholders, in total about EUR 3.2 billion between 2001 to 2005. AHBR's silent partners (*stille Gesellschafter*) lost more than 90 % of their initial investment of EUR 372 million by the end of 2006. The nominal amount of AHBR's *Genussscheine*, mainly held by

private investors, was written down from an initial EUR 567 million to EUR 83 million by the end of 2006. These losses harmed especially those private investors who had invested in AHBR's *Genussscheine* in 2004 and 2005 based on the impression of an investment in an apparently sound and healthy financial institution (FAZ, Jul. 14, 2006). Final results for private investors are pending as many have filed suits against AHBR's legal successor, COREALCREDIT BANK AG (*OLG Frankfurt*, 2008).

BGAG's decision to support AHBR might have been motivated by the following reasons: First, political requirements of BGAG's shareholders, the German trade unions, limited their possible actions. The failure of a large banking institution, abandoned by the very politically influential trade unions, would have been extremely unpopular.⁸ Second, BGAG already had a history of bad investments and had lost several billion Euros in the 1980s and 1990s in *Neue Heimat* (1986) and co-op (1988/1989). As the trade unions were under intense pressure during the years of AHBR's crisis – many members were leaving the unions for political reasons – news about another financial disaster would have been especially unwelcome. BGAG's representatives denied any potential failure in their supervisory role. They claimed that it was already too late to prevent losses when they learned about AHBR's risk position through its regular reporting (*DGB*, Jun. 23, 2003). Apparently, BGAG's monitoring was not adequate to prevent AHBR's speculation.

The banking market, specifically the German *Pfandbrief* market and the European covered bond market, profited from the forbearance strategy. BaFin's forbearance prevented an immediate run on AHBR and a test of the presumed credit worthiness of the AAA-rated *Pfandbriefe*. Neither senior debt investors, in particular AHBR's relationship banks and *Pfandbrief* investors, nor subordinated debt investors had to bear any losses.

4. Lack of Accounting Transparency in the AHBR Failure

AHBR applied historical cost accounting rules as regulated by the German Commercial Code. These rules do not require the disclosure of market values or of pending transactions under certain circumstances (see, e.g., *AHBR*, 2003, p. 53). This accounting environment allowed AHBR to

⁸ The so-called political view suggests that politicians or interest groups acquire control of firms or banks to realize political objectives, such as employment and benefits to supporters (see, e.g., *Shleifer/Vishny*, 1994).

stay in business and prevented contagion effects, which would have hurt AHBR's relationship banks and the broader *Pfandbrief* market.⁹

Beside the inherent options in the German Commercial Code as regards deferring the disclosure of impending losses, AHBR's management seems to have intended further to conceal its financial situation when preparing its annual statement for 2001. The bank initially did not intend to build sufficient provisions for imminent losses which were incorporated in the negative market value of its derivatives contracts. This created a conflict between AHBR and its statutory auditor KPMG, which caused BaFin to obtain a special audit from PwC (*BZ*, Apr. 24, 2002; *BZ*, Jul. 2, 2002). PwC confirmed the correctness of the accounting principles and valuation methods suggested by KPMG, and it estimated the anticipated losses at EUR 436 million (*LG Frankfurt*, 2006). As a consequence, the bank set up reserves (Sec. 340f or 340g HGB) for anticipated future losses from the derivatives deals in the annual statement for 2001.¹⁰

Despite significant losses on their derivatives contracts when measured mark-to-market, AHBR managed to show a positive net profit in each annual statement between 2001 and 2004 (see Fig. 2(a)). This was important for the bank to conceal its true financial situation. Positive annual results allowed AHBR to continue making interest payments to its *Genussschein* investors and dividend payments to its silent partners (*BZ*, Apr. 28, 2006a). After its sale to US private equity firm Lone Star, however, AHBR showed a net loss of more than one billion Euros in 2005, mainly due to the revaluation or unwinding of derivative contracts. This massive loss indicates that the earlier reported profits were not economically viable.¹¹

⁹ *Allen/Carletti* (2008) analyze the role of transparency created by mark-to-market accounting or its delay by historical cost accounting when a crisis is imminent. They argue that historical cost accounting may prevent distortions and contagion effects if markets are illiquid.

¹⁰ According to our calculations and estimates based on AHBR's annual reports, the bank's provisions for interest rate derivatives were EUR 79 million in 2001, EUR 808 million in 2002, EUR 345 million in 2003 and EUR 175 million in 2004 (*AHBR*, 2001–2004). In 2005, further provisions of EUR 600 million were set aside by AHBR's shareholders in the "Welteke" trust (*BZ*, Jan. 22, 2005). The yearly realized losses from derivatives contracts booked through the income statement via the Section 340f reserve were EUR 100 million in 2001, EUR 76 million in 2002, EUR 463 million in 2003, EUR 171 million in 2004, and EUR 175 million in 2005 (*AHBR*, 2001–2005).

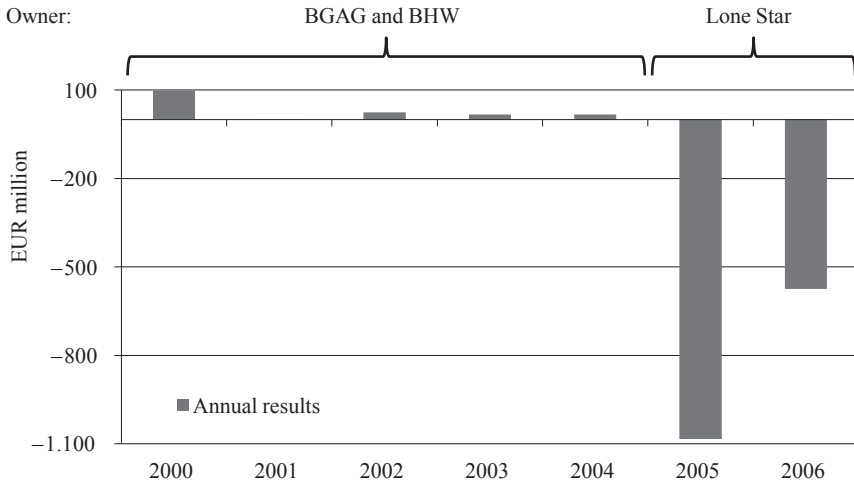
¹¹ Note that the new owner Lone Star might have had an interest in showing high losses. Hence, these figures need to be taken with caution.

AHBR's profits between 2001 and 2004 were only possible because of income from the early termination of selected derivatives contracts with positive market values and extraordinary income from shareholders' cash injections (see Fig. 2(b)). For the fiscal year 2001, shareholders already had to contribute about EUR 200 million in cash (*BZ*, Apr. 18, 2002). In 2002, the worsening of the interest rate development made another cash injection of about EUR 450 million necessary (*BZ*, Mar. 22, 2003).¹² Though the cash injections were transparent from an accounting perspective (being correctly accounted for and displayed as extraordinary income) they nevertheless helped to conceal AHBR's true financial condition. Instead of creating extraordinary income AHBR's shareholders could have chosen to recapitalize AHBR by increasing the bank's equity. However, such a recapitalization would not have been recognized in AHBR's profit and loss statement and AHBR's annual results for 2001 and 2002 would have shown a significant loss. This would have made the bank's financial problems transparent to the wider public and its different stakeholders.

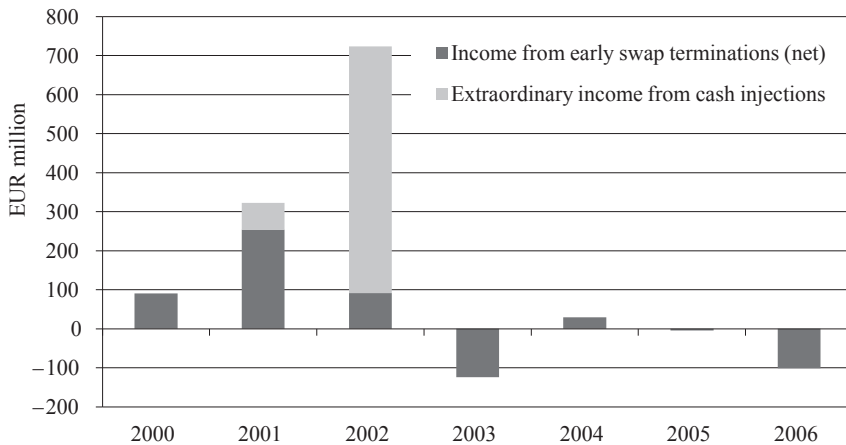
AHBR's accounting measures and the support by its shareholders safeguarded the bank's survival until the beginning of 2005. At that time BGAG started the process of selling its investments in AHBR and BHW (*BZ*, Jan. 22, 2005). Concurrently, additional provisions of EUR 600 million were paid by shareholders to a trust, held by the former president of the German Bundesbank, Ernst Welteke, which was set up as an additional shield against losses (*BZ*, Jan. 22, 2005). Finally, the whole picture of the failed speculation came to light in late 2005, when AHBR was sold to the investor Lone Star for a negative purchase price of EUR 380 million.

From an accounting perspective, the interest rate derivatives had two important characteristics for AHBR. First, the closing of an interest rate derivative does not lead to an immediate cash outflow as they are typically closed at a fair value of zero. AHBR did not have to provide credit support or collateral on its derivative contracts, nor was a Credit Support Annex closed. The only immediate cash effects under the derivative contracts were the periodic settlements of interest payments. Second, the market values of the derivatives apparently did not affect the profit and loss statement because AHBR filed its annual statement under the rules

¹² AHBR's cash injections appeared in the 2001 and 2002 annual reports as extraordinary income of EUR 68 million and EUR 632 million, respectively.



(a) AHBR's annual results under its owners BGAG and BHW from 2000 to 2004 and its new owner Lone Star from 2005 to 2006 (AHBR, 2000–2006).



(b) AHBR's income from early swap terminations and extraordinary income from shareholders' cash injections (AHBR 2000–2006).

Figure 2: AHBR's Financial Reporting

of the German Commercial Code.¹³ As interest rate derivatives are pending transactions they are not shown on the balance sheet, and accounting

¹³ A reform of the German Commercial Code partially aligning its rules with IFRS was adopted by the German parliament under the name *Bilanzrechtsmodernisierungsgesetz* (BilMoG) and enacted in May 2009.

rules permit hiding the results of the interest rate derivatives by offsetting the gains and losses against the interest income (see, e.g., AHBR, 2001, p. 65).

AHBR's opaque accounting and misleading signals prevented efficient monitoring and market discipline induced by outside investors. In particular, AHBR's *Pfandbrief* and *Genussschein* investors underestimated the risk of AHBR's speculations. Further, the German Covered Bond Act set strict limitations on the activities of AHBR. The bank was publicly rated by the three major credit rating agencies and was subject to the supervision of the German banking supervisor. However, neither BaFin nor the credit rating agencies made AHBR's true financial situation public.¹⁴

Moreover, AHBR made full interest payments on its *Genussscheine* between 2001 and 2004, although a principal characteristic of these *Genussscheine* is that payments are only required when the issuer has positive earnings. As discussed, AHBR had significant economic losses but managed to show positive earnings on its financial statements from 2001 to 2004. The arguable interest payments to its *Genussschein* investors were obviously costly to AHBR and its shareholders. However, they allowed AHBR to maintain the appearance that everything was satisfactory. This demonstrates how eager AHBR and its shareholders were to avoid transparency.¹⁵ As a consequence, it is plausible that outside debt investors felt relatively safe and did not see the need for thorough monitoring.

In summary, AHBR's true exposure and pending losses were not transparent. AHBR had huge off-balance-sheet liabilities from derivatives contracts that were partly countervailed by off-balance-sheet guarantees from its shareholders. Even if AHBR did not directly violate any accounting rules, it is questionable whether the financial statements represented a true and fair view of AHBR's financial position and performance. Notably, the documented lack of transparency is not unique to AHBR's accounting under German Commercial Code, as the same effects

¹⁴ The credit rating agencies reacted only in mid-2002 with a two notch downgrade of AHBR's senior unsecured debt from A-to BBB, A2 to Baa1, and A to BBB+ (S&P, Moody's and Fitch, respectively); the financial strength rating was changed from C+ to C-and from B/C to C/D by Moody's and Fitch, respectively. When the crisis culminated in October 2005, AHBR's senior unsecured debt rating was lowered to junk BB+ (S&P), Baa3 (Moody's), BBB-(Fitch); the financial strength rating was downgraded to E by Moody's and Fitch, respectively.

¹⁵ BGAG, AHBR's main shareholder, acted similar by paying a dividend to its shareholders, the trade unions, for the financially disastrous year 2002 (*DGB*, Jun. 23, 2003).

may be achieved with off-balance-sheet vehicles under various accounting standards, as repeatedly documented during the financial crisis of 2007 to 2009 (*Laux/Leuz, 2009*).

III. Analysis of Regulatory Forbearance

This section begins with a discussion of the objectives and options of the German banking supervisor in the AHBR failure. We then analyse the forbearance strategy of the German banking supervisor and derive consequences of regulatory forbearance for the short-term and long-term stability of the financial system. Finally, we discuss implications for the ongoing policy reforms of the banking sector.

1. Objectives and Options of the German Banking Supervisor

According to its profile, “BaFin operates in the public interest. Its primary objective is to ensure the proper functioning, stability and integrity of the German financial system. Bank customers, insurance policyholders and investors ought to be able to trust the financial system.” (*BaFin, 2013*). In the case of the AHBR failure, BaFin’s objective was not without conflicts.¹⁶ BaFin decided to back AHBR’s obfuscation strategy to avoid AHBR’s bankruptcy as long as possible – and thus possibly ensured the short-term stability of the German financial system – at the expense of its objectives of ensuring the proper functioning and integrity of the German financial system and of maintaining the trust of investors. The question then arises whether BaFin had better options for dealing with AHBR, taking into account BaFin’s extensive information about the bank’s situation and risks. The statutory auditors’ long form report for 2001, the report of PwC’s special audits in 2002 that was requested by BaFin, and finally the long form report of 2002 provided BaFin with a clear picture of AHBR.

A closure of AHBR was not an option. BaFin feared market disruptions and contagion effects from the bankruptcy of a leading *Pfandbrief* bank. Such a stress scenario – a closure of a bank of AHBR’s size and significance in the *Pfandbrief* market – would have jeopardized the refinancing of many other market participants, at least in Germany (*Fitch Ratings,*

¹⁶ For a discussion of conflicting goals of the banking regulator and supervisor, see *Wall/Eisenbeis (2000)*.

2004). A closure could even have affected the European banking market because many European countries used the *Pfandbrief* as a role model to establish similar covered bonds as refinancing instruments (*BZ*, Nov. 3, 2005).

Alternatively, AHBR's main shareholder BGAG could have fully recapitalized AHBR instead of covering the yearly derivative losses and giving a guarantee for the liabilities. However, this would have revealed the full disaster while a guarantee was much less transparent. We assume that BGAG was not willing to recapitalize the bank and create transparency, as this would have unveiled another bad investment in its already bad track record.

AHBR's acquisition by a healthy bank could have been another option. The German banking supervisor has used this strategy in many other cases, inter alia at Commerzbank/Dresdner Bank in 2008. At the time of the AHBR failure, however, none of the German banks was in a financial position strong enough to absorb a takeover of AHBR with all of its risk positions and financial problems.

Other strategies would have required the use of public funds to stabilize AHBR. However, as suggested by the "Supervisory Guidance on Dealing with Weak Banks" of the Bank for International Settlements, public funds are not really part of the tool kit of the regulator, and public bail-outs should only be considered as a last resort (*BIS*, 2002, p. 35, 42).

2. *The Forbearance Strategy of the German Banking Supervisor*

BaFin closely followed the activities at AHBR between 2001 and 2005. Apparently, it did not pressure AHBR to clean up its balance sheet and to create transparency for its existing and new investors, which probably would have caused AHBR's bankruptcy. Hence, BaFin condoned the existence of a zombie bank, whose viability heavily depended on the continuous financial support and credit standing of its owners BGAG and BHW.

To keep track of the developments, BaFin increased the monthly reporting requirements for AHBR (*Bundesregierung*, 2006). However, it was only in mid-2005, when AHBR published its annual report for 2004, that AHBR made the three billion Euro negative market value of its derivatives exposure public (*AHBR*, 2004, p. 75). To protect senior lenders including *Pfandbrief* investors, BaFin arranged repeated cash injections

and guarantees from AHBR's main shareholders, and it sustained AHBR's solvency until late 2005 (*AHBR*, 2002, p. 19; *BHW*, 2002, p. 70).

BaFin's primary rationale was presumably that, as long as any losses from the derivatives speculation were allocated to AHBR's equity or silent partners and *Genussschein* investors, the business operations could be allowed to proceed. As long as sufficient funds were available, any senior lenders would not be affected negatively by continued risks at AHBR, and contagion effects would not appear. The investors in *Pfandbriefe* were explicitly safeguarded in any case, due to the high amount of risk coverage underlying the *Pfandbriefe* and the strict rules of the Covered Bond Act.

A second rationale for BaFin was probably simply to gain time. Following the economic downturn of the global economy in the aftermath of September 11, 2001, the German banking industry was recovering from year to year, so a possible solution for AHBR without market turbulence became more and more likely. This motive of BaFin is related to the too-many-to-fail problem (*Acharya/Yorulmazer*, 2007; *Brown/Dinç*, 2011): The consequences of the closure of AHBR were unpredictable in an overall weak market environment but manageable in a strong market environment. The more BGAG struggled to cover AHBR's losses and the more the German banking sector recovered, the more BaFin exerted pressure on AHBR's main shareholder, BGAG, to find an acceptable solution regarding the bank's future (*BZ*, Nov. 17, 2005; *FT*, Dec. 15, 2005). When finally AHBR nearly collapsed during the sale process in 2005, the German banking sector was strong enough to grant a liquidity shield of EUR 2.5 billion as a bridge loan under the management of BaFin, until the sale of AHBR to Lone Star was successfully completed.

The relatively favorable end of the AHBR crisis for the immediate stability of the German financial system was mainly possible because, in 2005, the overall banking market was in a stronger position compared to previous years. Private equity had emerged as a new investor class, interested in German non-performing loans and exposure to the German real estate market. The banking supervisor's forbearance strategy turned out to be successful as it actively accompanied the bank's risk management strategy after 2002 and committed the shareholders to repeated capital injections.¹⁷

¹⁷ The forbearance strategy and lack of transparency also had the desired effect for BaFin, that it could avoid any criticism for not having noticed and avoided the

*Finding 1**(The Promise of Forbearance for Crisis Resolution)*

From the short-term perspective of the German financial system, it seems that BaFin, faced either with closing AHBR and risking market turbulences or with using forbearance regarding the disclosure of AHBR's financial difficulties, chose the lesser of two evils. BaFin successfully prevented a crisis of the Pfandbrief market and avoided the use of public funds.

Despite the apparent smooth resolution of the AHBR crisis, BaFin's forbearance to AHBR's violation of the German Covered Bond Act and AHBR's opaque accounting is controversial. BaFin has been subject to strong criticism from debt investors, market participants, and politicians for allowing AHBR to continue its operations rather than preventing further losses to private *Genussschein* investors (BZ, Nov. 15, 2005).

In defense of BaFin's behavior in the AHBR failure, the German government stated that "BaFin acts strictly in the public interest only. Its principal task is [...] not the protection of interests of risk capital investors." (*Bundesregierung*, 2006). However, the position of the German government ignores the important role of the banking supervisor for the integrity of the financial system and the trust of investors: To ensure that investors can allocate their funds appropriately and efficiently, a stringent supervisor is important as financial markets will not by themselves generate enough adequate information (*D'Avolio/Gildor/Shleifer*, 2001; *Rochet*, 2008). *Barth/Caprio/Levine* (2004) show in an empirical study that regulations and supervisory practices forcing accurate information disclosure promote financial stability. Market discipline can only work with credible closure policies implemented by the supervisor. Monitoring by banks and private investors can then generate useful information for the supervisor. Therefore, supervision and market discipline should be seen as complements and not as substitutes (*Rochet*, 2008). With regard to regulatory strategies for dealing with weak banks, it follows that the lack of transparency due to regulatory forbearance endangers the functioning of the capital markets.

The potential existence of zombie banks was a major issue during the financial crisis of 2007 to 2009. Market participants had learned about

problems at AHBR right from the start. This argument builds on *Enoch/Stella/Khamis* (1997) who assume a tendency toward forbearance when the supervisor is also responsible for closing the bank. The argument is also related to *Boot/Thakor* (1993) who point to the self-interest of regulators, and to *Kane* (2001), who analyzes opportunistic regulators with a short-time horizon who focus on their reputation.

the banking supervisor's tendency towards forbearance over the course of several banking crises. Since the US Savings & Loan crisis in the late 1980s they experienced that banking supervisors often favor a forbearance strategy over the closure or default of a bank. This experience may have contributed to the liquidity crunch during the financial crisis of 2007 to 2009. After too many banks had already failed or suffered from enormous losses due to their subprime lending activities under the eyes of the banking supervisors, the trust of market participants in the supervisors' crisis management disappeared, just as the liquidity in the interbank market also finally disappeared. As long as market participants expected public bailouts of all financial institutions, the potential existence of zombie banks had no immediate effect on the interbank market. The situation changed dramatically during 2008 with the bankruptcy of Lehman Brothers in September 2008. When market participants learned that they faced effective counterparty risk, they stopped lending to financial institutions.

We follow that the banking supervisor's strategy of regulatory forbearance regarding the disclosure of a bank's financial difficulties has negative long-term effects on financial stability. It may only be successful on a short-term basis, at the expense of the trust of investors and the banking supervisors' long-term standing.

Finding 2

(The Perils of Forbearance for the Financial System)

Investors' knowledge that forbearance is a common strategy of the supervisor weakens their trust in public information and in the soundness of the financial system. The potential existence of zombie banks leads to the classical adverse selection problem, which implies higher risk premiums in the interbank market, and finally increases the risk of a liquidity crunch.

3. Implications for Policy Reforms

Short-term and long-term consequences of regulatory forbearance have immediate implications for the ongoing reforms of the banking system, which were initiated as a response to the financial crisis of 2007 to 2009 (see, e.g., *De Larosière et al.*, 2009). Notably, several major causes of the financial crisis are similar to the causes of the AHBR failure: (a) The risk appetite of financial institutions and the inability (or unwillingness) of boards of directors to ensure an appropriate risk management framework (b) neglected rules of risk management and control; (c) complicated and unreadable disclosure to shareholders, especially with regard to risk

(*European Commission*, 2010a, b). In the following we discuss consequences of our findings for two important ongoing reforms: the EU Single Supervisory Mechanism and the EU Bank Structural Reform.

a) EU Single Supervisory Mechanism

In September 2012, the European Commission proposed a EU Banking Union with a single supervisory mechanism (SSM), a single resolution mechanism (SRM) and common safety nets as core elements (*European Commission*, 2012).¹⁸ The reform is based on the insight that banking problems should be addressed in a consistent, timely and determined manner, which was often not the case during the recent financial crisis (see, e.g., *Goyal et al.*, 2013; *Hellwig et al.*, 2012; *Mersch*, 2013). As argued by the proponents of the SSM, a new European supervisory structure and new rules will lead to more stringent supervision. Nevertheless, because forbearance can be useful in the short term to prevent market turbulence, the banking supervisor needs discretion in how to deal with weak banks. Regulatory forbearance will therefore be part of the banking supervisors' toolkit, but the reform will ideally lead to better supervisory judgement concerning benefits and costs of regulatory forbearance.

The idea of a single European supervisor has generally been welcomed by researchers, policy makers and involved institutions (e.g., *Deutsche Bundesbank*, 2013). However, a key challenge for the SSM has also been identified: Monetary functions and supervisory functions of the ECB need to be fully independent. Conflicts of interest are imminent when the ECB, in its monetary function, is a creditor to a bank and has to decide about a bank's potential closure in its supervisory function.

Based on the arguments developed in this paper, the supervisor's key objective should not only be the (short-term) stability of the financial system – the main focus of the reform – but also financial reporting transparency. Independence of the supervisor is not sufficient to ensure transparency, which is a prerequisite for investors' trust and the long-term stability of the financial system. So far, EU institutions do not seem to value transparency very highly. For example, the European Banking

¹⁸ Under the SSM, the ECB will be responsible for direct supervision of the largest, most significant European banks and – if considered necessary by the ECB – the ECB may also exercise direct supervision over all other banks, which are otherwise supervised by their national authorities.

Authority (EBA) has postponed updates of its banking stress tests until 2014. Similar to the German banking supervisor in AHBR's failure, EBA seems to prefer opaqueness over potentially bad financial news, and thereby abandons the objective to strengthen market confidence. We recommend that transparency should be given a more prominent role in the current reform of banking supervision.

b) EU Bank Structural Reform

In October 2012, the High-level Expert Group chaired by Erkki Liikanen published its recommendations on bank structural reform to enhance the stability of the financial system (Liikanen et al., 2012). One important recommendation of the report is to make bail-in debt instruments mandatory for banks.¹⁹ The Liikanen Report suggests that holders of bail-inable debt have higher incentives “to monitor banks more closely, thereby contributing to reining in excessive risk-taking provided that (i) national authorities take the necessary action when needed, and (ii) investors are actually able to scrutinise banks” (p. 92). This recommendation, if its implementation can be effective, stresses the need for a stringent supervisor.

In the AHBR failure, privately held *Genussscheine*, a special form of profit participation rights, represented such bail-inable debt instruments. As documented, these instruments did not lead to closer monitoring by investors, and they did not exert market discipline on AHBR. Instead, it seems that investors relied on the seemingly strict rules of banking regulation and supervision. They underestimated the true risks of AHBR's financial situation because of misleading signals and lack of financial reporting transparency. Further, if regulatory forbearance undermines the enforcement of strict rules and delays public information about a bank's financial problems as in the AHBR failure, this often increases the expected losses of bail-inable debt instruments. Consequently, market participants who observe regulatory forbearance will require a premium for the risk of zombie banks, making such financial instruments more expensive for all banks irrespective of a bank's individual risk exposure. These

¹⁹ Other recommendations of the report are to legally separate proprietary trading from commercial banking activities, to require banks to maintain recovery and resolution plans, to apply more conservative risk weights for the calculation of minimum capital standards, and to reform the corporate governance of banks (Liikanen et al., 2012).

considerations strongly support that a prerequisite for the effectiveness of bail-inable debt is that national authorities (supervisors) take necessary action when needed, as stated in the Liikanen Report. Policy makers need to take into account that any lenient behavior of the supervisor will immediately limit the efficiency of financial instruments that might be an important part of ongoing structural reforms of the banking sector.

IV. Conclusion

Regulatory forbearance has been and continues to be a tempting, but very controversial strategy. The experience from previous banking crises, e.g. the US S&L crisis of the 1980s and the Japanese banking crisis of the 1990s, warned bank supervisors that the lenient enforcement of their rules towards weak banks creates moral hazard among the banks' management and may therefore exacerbate a crisis. The consequence for banking supervisors seems to be that they try to limit the effects of moral hazard by replacing banks' management teams and by controlling the banks' risk positions, but they still opt for regulatory forbearance in many cases.

Based on findings of the AHBR case study, we argue that forbearance may be a successful short-term strategy for single bank failures. However, market participants will learn that banking supervisors tolerate zombie banks and that public information about a bank's financial position may be opaque or misleading. Hence, they cannot rely on stringent banking supervisors who close or restructure insolvent banks. We conclude that forbearance has harmful long-term effects: It weakens the trust of investors and creates an adverse selection problem, which increases the risk premiums in the interbank market and finally facilitates a liquidity crunch.

Though AHBR's crisis represents only one isolated case, its key features – a gambling management team, speculation with unfunded and offbalance-sheet instruments, failed corporate governance mechanisms, and a forbearing banking supervisor – are representative of other banking crises, including the recent financial crisis. As in the AHBR case, the management of those financial institutions involved in subprime mortgages and securitization created huge risk positions within a short time. The actual risks towards the banks' balance sheets and the reliability of the profits generated were often left opaque. When the crisis started, banking supervisors typically reacted with forbearance and seemed to

prefer opaqueness to transparency. The banking supervisors tolerated zombie banks and did not appropriately take the trust of investors into account. Banking supervisors' long adherence to regulatory forbearance as a main instrument in solving crises has jeopardized their standing and credibility in the financial markets. This has prevented them from posing a serious threat to the speculating banks and created uncertainty for investors as regards the solvency of each bank. In times of market turbulence, such as the collapse of Lehman Brothers in September 2008, the banking supervisor lacked the credibility to sustain investor confidence in the functioning of capital markets.

Our findings have several implications for the ongoing banking reforms. Regulatory forbearance regarding the disclosure of banks' financial difficulties immediately limits the effectiveness of the reform proposals and the prospects of enhancing the stability of the banking system. As long as market participants fear the existence of zombie banks in the market, mistrust among one another persists. In order to enhance the stability of the global financial system, an effective reform of the banking system rests upon a credibly and consistently acting banking supervisor.

References

- Acharya, V.V./Yorulmazer, T.* (2007): Too many to fail – An analysis of time-inconsistency in bank closure policies, *Journal of Financial Intermediation*, Vol. 16, pp. 1–31.
- AHBR* (2001): Annual Report 2001 of Allgemeine Hypothekenbank Rheinboden AG.
- (2002): Annual Report 2002.
 - (2003): Annual Report 2003.
 - (2004): Annual Report 2004.
 - (2005a): Ad hoc Meldung October 2005: Verkaufsprozess – Neue Anteilseigner bei AHBR.
 - (2005b): Annual Report 2005.
 - (2006): Annual Report 2006.
- Allen, F./Carletti, E.* (2008): Mark-to-market accounting and liquidity pricing, *Journal of Accounting and Economics*, Vol. 45, pp. 358–378.
- BaFin* (2013): Functions & history, http://www.bafin.de/EN/BaFin/bafin_node.html (Download June 23, 2013).
- Barth, J.R./Caprio, G./Levine, R.* (2004): Bank regulation and supervision: what works best?, *Journal of Financial Intermediation*, Vol. 13, pp. 205–248.

- Barth, M. E./Schipper, K.* (2008): Financial reporting transparency, *Journal of Accounting Auditing and Finance*, Vol. 23, pp. 173–190.
- BGH* (2013): Urteil vom 15. Januar 2013, II ZR 90/11, Bundesgerichtshof Karlsruhe.
- BHW* (2002): Geschäftsbericht 2002 der BHW Holding AG und des BHW Konzerns.
- BIS* (2002): Supervisory guidance on dealing with weak banks, Report of the task force on dealing with weak banks, Bank for International Settlements, Basel Committee on Banking Supervision.
- Boot, A. W. A./Thakor, A. V.* (1993): Self-interested bank regulation, *American Economic Review*, Vol. 83, pp. 206–212.
- Brown, C. O./Dinç, I. S.* (2011): Too many to fail? Evidence of regulatory forbearance when the banking sector is weak, *Review of Financial Studies*, Vol. 24, pp. 1378–1405.
- Brunnermeier, M. K.* (2009): Deciphering the liquidity and credit crunch 2007–2008, *Journal of Economic Perspectives*, Vol. 23, pp. 77–100.
- Bundesregierung* (2006): Antwort der Bundesregierung auf die Kleine Anfrage der Abgeordneten Frank Schäffler et al.: Verhalten der Bundesanstalt für Finanzdienstleistungsaufsicht bezüglich der Allgemeinen Hypothekenbank Rheinland AG, Drucksache 16/2949.
- Claessens, S./Klingebiel, D./Laeven, L.* (2003): Financial restructuring in banking and corporate sector crises: What policies to pursue?, in M. Dooley, and J. Franks, ed.: *Managing currency crises in emerging markets*, pp. 147–180 (University of Chicago Press), also NBER Working Paper No. 8386.
- D’Avolio, G./Gildor, E./ Shleifer, A.* (2001): Technology, information production, and market efficiency, Harvard Institute of Economic Research Working Papers 1929.
- De Larosière, J., et al.* (2009): The High-Level Group on financial supervision in the EU, Final report, European Commission.
- Deutsche Bundesbank* (2013): Stellungnahme zum SSM-Zustimmungsgesetz, 31.05.2013, <http://www.bundesbank.de/Navigation/DE/Presse/presse.html> (Download June 23, 2013).
- Eichengreen, B.* (2008): Ten questions about the subprime crisis, *Financial stability review – special issue on liquidity*, Banque de France.
- Enoch, C./Stella, P./Khamis, M.* (1997): Transparency and ambiguity in central bank safety net operations, *IMF Working Papers 97/138*, International Monetary Fund.
- European Commission* (2010a): Corporate governance in financial institutions and remuneration policies, Green paper, COM (2010) 284, June 2010.
- (2010b): Corporate governance in financial institutions: Lessons to be drawn from the current financial crisis, best practices, Commission staff working document, SEC(2010) 669, June 2010.

- (2012): Commission proposes new ECB powers for banking supervision as part of a banking union, MEMO/12/662, September 2012.
- Fitch Ratings* (2004): Analysis of German Pfandbriefe: Preparing for 2005, Special Report.
- Goodhart, C. A. E.* (2006): Is Forbearance always Bad? How can we test whether its use lessened the incidence of crises? Special Paper, LSE Financial Markets Group 169.
- Goyal, R./Brooks, P. K./Pradhan, M./Tressel, T./Dell’Ariccia, G./Pazarbasioglu, C.* (2013): A banking union for the Euro area, IMF Staff Discussion Note, February 2013, International Monetary Fund.
- Gunther, J. W./Moore, R. R.* (2003): Loss underreporting and the auditing role of bank exams, *Journal of Financial Intermediation*, Vol. 12, pp. 153–177.
- Heaton, J. B.* (2002): Managerial optimism and corporate finance, *Financial Management*, pp. 33–45.
- Hellwig, M. F. et al.* (2012): Forbearance, resolution and deposit insurance, Reports of the Advisory Scientific Committee, No. 1, July 2012, European Systemic Risk Board.
- Honohan, P./Klingebiel, D.* (2003): The fiscal cost implications of an accommodating approach to banking crises, *Journal of Banking and Finance*, Vol. 27, pp. 1539–1560.
- Huizinga, H./Laeven, L.* (2012): Bank valuation and accounting discretion during a financial crisis, *Journal of Financial Economics*, Vol. 106, pp. 614–634.
- Jensen, M. C.* (1986): Agency costs of free cash flow, corporate finance, and takeovers, *American Economic Review*, Vol. 76, pp. 323–329.
- Kane, E. J.* (1989): *The S&L insurance mess: How did it happen?* (Washington, D.C.: Urban Institute Press).
- (2001): Dynamic inconsistency of capital forbearance: Long-run vs. short-run effects of too-big-to-fail policymaking, *Pacific-Basin Finance Journal*, Vol. 9, pp. 281–299.
- Kothari, S. P.* (2001): Capital markets research in accounting, *Journal of Accounting and Economics* Vol. 31, pp. 105–231.
- Laeven, L./Valencia, F.* (2008): Systemic banking crises: A new database, IMF Working Papers 08/224, International Monetary Fund.
- Lang, M./Maffett, M.* (2011): Transparency and liquidity uncertainty in crisis periods, *Journal of Accounting and Economics*, Vol. 52, pp. 101–125.
- Large, Sir A.* (2005): Financial stability: Managing liquidity risk in a global system, Fourteenth City of London Central Banking and Regulatory Conference, November 2005.
- Laux, C./Leuz, C.* (2009): The crisis of fair-value accounting: Making sense of the recent debate, *Accounting, Organizations and Society*, Vol. 34, pp. 826–834.

- Leuz, C./Wysocki, P.* (2008): Economic consequences of financial reporting and disclosure regulation: A review and suggestions for future research, Working paper.
- LG Frankfurt* (2006): Urteil vom 25. Januar 2006, 3/9 O 143/04, Landgericht Frankfurt am Main.
- Liikanen, E. et al.* (2012): High-level Expert Group on reforming the structure of the EU banking sector, Final report, European Commission.
- Mersch, Y.* (2013): The Banking Union – a European perspective: reasons, benefits and challenges of the Banking Union, Speech, 5. April 2013, European Central Bank.
- OLG Frankfurt* (2008): Beschluss in den Rechtsstreiten vom 18. Juli 2008, Coreal-Credit Bank AG, Musterverfahren 23 Kap 1/08, Oberlandesgericht Frankfurt am Main.
- (2011): Urteil vom 22. März 2011, 5 U 29/06, Oberlandesgericht Frankfurt am Main.
- Pagano, M.* (2008): The price of transparency, The First Global Financial Crisis of the 21st Century Part II: June–December, 2008.
- Rochet, J.-C.* (2008): Why are there so many banking crises? (Princeton University Press).
- Shleifer, A./Vishny, R. W.* (1994): Politicians and firms, *Quarterly Journal of Economics*, Vol. 109, pp. 995–1025.
- Trichet, J. C.* (2008): Undervalued risk and uncertainty: Some thoughts on the market turmoil, Fifth ECB Central Banking Conference, November 2008.
- Verrecchia, R. E.* (2001): Essays on disclosure, *Journal of Accounting and Economics*, Vol. 32, pp. 97–180.
- Wall, L. D./Eisenbeis, R. A.* (2000): Financial regulatory structure and the resolution of conflicting goals, *Journal of Financial Services Research*, Vol. 17, pp. 223–245.
- Young, J. J.* (1995): Getting the accounting “right”: Accounting and the savings and loan crisis, *Accounting, Organizations and Society*, Vol. 20, pp. 55–80.

Press References

- Börsen-Zeitung* (BZ, Apr. 18, 2002): AHBR-Kapital wird gestärkt.
- (BZ, Apr. 24, 2002): Wirtschaftsprüfer zeigen Zähne.
- (BZ, Jul. 2, 2002): BaFin untersucht AHBR-Schieflage.
- (BZ, Sep. 17, 2002): Spitzkopf und Großmann scheiden aus AHBR-Vorstand aus.
- (BZ, Mar. 22, 2003): AHBR wird für BHW und BGAG zum Fass ohne Boden.
- (BZ, May 10, 2003): AHBR-Schieflage hat Nachspiel.
- (BZ, May 10, 2003a): AHBR-Vorstand Schumacher soll nicht entlastet werden. Aufsichtsrat will zudem Wirtschaftsprüfer wechseln.

- (BZ, Jan. 22, 2005): Gewerkschafter-Blues.
 - (BZ, Nov. 3, 2005): Der Pfandbriefmarkt braucht ein Krisenmanagement.
 - (BZ, Nov. 15, 2005): AHBR-Verkaufsprozess tritt auf der Stelle.
 - (BZ, Nov. 17, 2005): BaFin macht sich wegen AHBR keine Sorgen. Sanio: Hypothekendarsteller ausreichend kapitalisiert – Deutsche Banken hinken bei Erträgen weiter hinterher.
 - (BZ, Dec. 9, 2005): Heuschrecken im roten Reich.
 - (BZ, Dec. 9, 2005a): Lone Star schultert die AHBR. BGAG: Im Sinne der Bank – Plausibles Konzept zur Stabilisierung.
 - (BZ, Apr. 28, 2006a): AHBR droht stillen Einlegern mit Schadenersatzklage. Von Köller: Durch Blockade der Restrukturierung schaden Gesellschafter sich selbst – Kein Gewinn vor dem Geschäftsjahr 2008.
 - (BZ, Apr. 28, 2006b): AHBR kündigt für 2006 hohen Verlust an – Weiterer Abbau der Zinsschieflage nötig. Von Köller: Stille Einlagen und Genüsse werden erneut beansprucht – Fehlbetrag von 1,08 Mrd. Euro.
 - (BZ, Apr. 28, 2006c): Das 4-Milliarden-Desaster. DGB (Jun. 23, 2003). BGAG-Vorstand plant Dividende – Interview mit BGAG-Vorstand Dr. Rolf-J. Freyberg. einblick 12/03.
- dpa-AFX* (Nov. 16, 2005): BaFin bestätigt milliardenschwere Liquiditätsspritze für AHBR.
- Euroweek* (Oct. 28, 2005): Banks run from Pfandbrief trading as AHBR crumbles.
- Financial Times* (FT, Oct. 25, 2005): Stricken AHBR Close to Failure.
- (FT, Dec. 15, 2005): A steady hand on Germany's financial tiller Banking Regulation: Jochen Sanio has weathered recent crises at the financial regulator but there are others on the horizon.
- Financial Times Deutschland* (FTD, Oct. 26, 2005): Gewerkschaftsbank gehört künftig einer eigens eingerichteten Zweckgesellschaft – Letzte Reste der Gemeinwirtschaft vor dem Ende.
- Frankfurter Allgemeine Zeitung* (FAZ, Jul. 14, 2006): Genussscheinhaber der AHBR klagen.
- Handelsblatt* (Feb. 18, 2006): AHBR: DZ Bank wehrt sich.