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SoFFin Guarantee Scheme (Germany)

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SoFFin Guarantee Scheme (Germany)

Claire E. Simon¹

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Abstract

Following a series of ad hoc interventions throughout 2007 and early 2008, the collapse of Lehman Brothers in the fall of 2008 and the resulting liquidity crisis caused the German government to adopt a new framework for bank support. The Financial Market Support Act established a new fund, the Financial Market Stabilization Fund (Sonderfonds Finanzmarktstabilisierung, “SoFFin”), that could provide up to €400 billion of guarantees on newly issued debt instruments of German financial institutions and German subsidiaries of foreign financial institutions. SoFFin could also provide support through recapitalizations and asset purchases, in addition to guarantees. The scheme was extended multiple times before the issuance window closed on December 31, 2010. The total volume of guarantees provided through SoFFin peaked at €174 billion in the third quarter of 2010. By the end of 2013, there were no guarantees outstanding and none had been triggered. €2 billion in fees were collected as a result of the program. Additionally, the German government reactivated SoFFin and allowed new guarantees starting in 2012.

Keywords: Credit guarantee scheme, interbank lending, SoFFin

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SoFFin Guarantee Scheme (Germany)

At a Glance

German banks began to feel pressure from the financial crisis in mid-2007 due to their exposure to the subprime mortgage market in the United States. This led the German government to provide assistance on an ad hoc basis to four banks throughout 2007 and early 2008. Once Lehman Brothers failed in September 2008, causing significant liquidity shortages in the interbank market, the German government recognized the need for a framework to preserve financial stability and provide support to German banks.

As a result, the German parliament passed the Financial Market Stabilisation Fund Act (Finanzmarktstabilisierungsfondsgesetz, "FMStFG") on October 18, 2008. FMStFG called for a new fund, the Financial Market Stabilization Fund (Sonderfonds Finanzmarktstabilisierung, "SoFFin") to be administered by the newly created Federal Agency for Financial Market Stabilization (Bundesanstalt für Finanzmarktstabilisierung, "FMSA"). SoFFin could provide support to distressed German financial institutions through guarantees, recapitalizations, and asset purchases.

Funding for the guarantee program was capped at €400 billion. Guarantees could be provided on interbank loans or bank-issued debt with a maturity of 36 months or less issued by German financial institutions or German subsidiaries of foreign institutions. The government does not appear to have established minimum maturity requirements for eligible debt. Guarantees were voluntary and had to be requested by the financial institution. Once a request was approved, the government charged a market-based fee.

The guarantee scheme funded by SoFFin was approved by the European Commission (EC) in accordance with State Aid rules. Persistent liquidity shortages in the interbank market caused the German government to extend the scheme multiple times, before the issuance window for new guarantees finally closed on December 31, 2010. The total volume of guarantees peaked at €174 billion in the third quarter of 2010, and the take up rate for the program was relatively high compared to programs in other countries. No guarantee was ever triggered in connection with this version of the scheme and the German government collected €2 billion in fees. By the end of 2013, there were no guarantees outstanding from this initial guarantee scheme, however, the German government reactivated SoFFin and allowed new guarantees beginning in 2012 in response to the sovereign debt crisis.

Summary Evaluation

Assessments of SoFFin as a whole generally agree that a systematic framework was necessary, and that the program was successful in maintaining financial stability in Germany. Some critics argue that the German government should have been more decisive in setting a hard end date for the program and cap on the maturity for guaranteed liabilities in order to avoid dependence on government support.

Summary of Key Terms

Purpose:	To restore confidence and access to liquidity amongst German lenders.
Announcement Date	October 13, 2008
Operational Date	October 27, 2008
Date of First Guaranteed Loan Issuance	
Issuance Window Expiration Date	Originally until December 31, 2009; extended until December 31, 2010.
Program Size	€400 billion
Usage	Peaked at €174 billion
Outcomes	€2 billion in fees collected. A substantial amount of the guarantees was provided to Hypo Real Estate, which was nationalized in 2009.
Notable Features	Part of a single fund for granting guarantees, providing recapitalizations and making asset purchases

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I. Overview

Background

In late 2007 and early 2008, German financial institutions began to struggle as a result of their exposure to the US subprime mortgage market. During this period, the government provided substantial support on an ad hoc basis to four banks: one medium-sized private bank and three state-owned Landesbanken.² This support took the form of capital injections, credit lines and guarantees (Hüfner 2010).

Throughout late 2007 and 2008, the interbank lending market faced increasing pressure. The collapse of Lehman Brothers in September 2008 caused interbank markets to dry up and banks across Europe faced liquidity crises. To address this, Euro area countries convened at an emergency summit on October 12, 2008. The summit resulted in a joint action plan calling in part for national governments to “improve market functioning over longer term maturities” through the introduction of guarantee programs for bank senior debt issuance (Summit of the Euro Areas Countries 2008).

In Germany, the collapse of the interbank market caused Hypo Real Estate Group to run into liquidity problems and the government began to worry that Hypo might fail. As a result, the government provided €50 billion in guarantees to Hypo in early October 2008 (Bleuel 2009). At this point, the German government recognized the severity of the crisis in the interbank market and the limitations of providing support on an ad hoc basis and moved to create a systematic framework for bank support (Bleuel 2009).

Program Description

On October 18, 2008 the German Parliament passed the Financial Market Stabilisation Fund Act (Finanzmarktstabilisierungsfondsgesetz, “FMStFG”), which introduced a new framework for financial stability. FMStFG established a Financial Market Stabilization Fund (Sonderfonds Finanzmarktstabilisierung, “SoFFin”) which would be administered by the newly created Federal Agency for Financial Market Stabilization (Bundesanstalt für Finanzmarktstabilisierung, “FMSA”) (Pleister 2011).

FMStFG allowed for three stabilization measures under SoFFin: guarantees, recapitalizations, and asset purchases. FMStFG capped the total volume of guarantees under SoFFin at €400 billion, and at €80 billion for capital support and asset purchases combined (International Monetary Fund 2011). German financial institutions, subsidiaries of foreign institutions, and special purpose vehicles were eligible to receive guarantees. Eligible institutions had to specifically request guarantees, which could be issued for

² IKB, WestLB, BayernLB and SachsenLB

interbank loans or bank-issued debt. In order to be eligible, debt instruments were required to have a maturity of 36 months or less, though this was later extended to 60 months by an amendment to the law (Petrovic and Tutsch 2009). The government does not appear to have established minimum maturity requirements for eligible debt. FMStFG required that the German government charge a fee for guarantees. The base fee was 50 basis points, and liabilities with a maturity greater than one year were charged an additional fee based on the issuing institution's CDS spread for senior debt issuance (European Commission 2008b). These fees were increased towards the end of the guarantee scheme (European Commission 2010).

Every participating institution was required to submit a business model for approval to the German government. Upon review, SoFFin could stipulate that risky lines of business be abandoned or curtailed (European Commission 2008b). In addition, the German government had the ability to limit remuneration and compensation of management, and institutions were prohibited from advertising participation in the guarantee scheme in order to avoid distorting competition with other banks (Petrovic and Tutsch 2009).

FMStFV, the statute detailing SoFFin, further stipulated that guarantees could only be provided to solvent financial institutions. In practice, the German government restricted participation to institutions with a Tier-1 ratio of at least 7%. Exceptions could be made only if the institution in question committed to reaching the 7% threshold within three months (European Commission 2008b).

The European Commission approved the SoFFin stabilization measures, ruling that though they constituted State Aid, they were permitted under Article 87(3)(b) of the EC, which permits State Aid that remedies a serious disturbance in a Member State's economy (European Commission 2008a).³

Outcomes

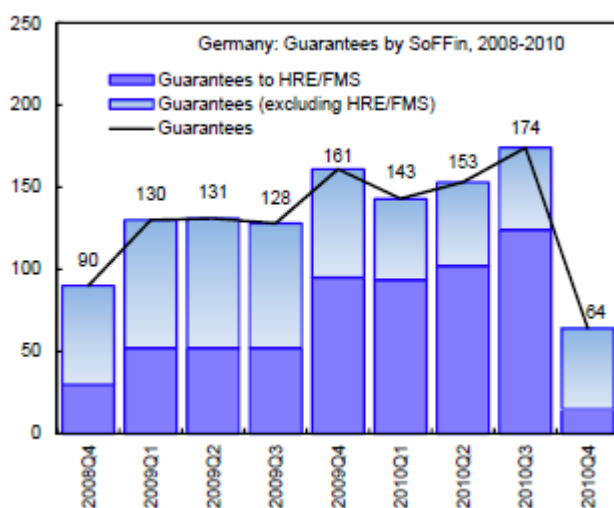
Both FMSA and SoFFin were intended to be temporary. The authority to issue guarantees under SoFFin was supposed to expire by December 31, 2009, presuming the crisis lasted that long (European Commission 2008a). As German banks continued to face difficulties accessing funding on the capital markets, Germany applied to the EC to extend the SoFFin rescue measures multiple times. The EC approved these extensions, with appropriate changes, until finally the window for issuing guarantees under SoFFin closed on December 31, 2010 (European Commission 2010).

FMStFG capped the total volume of guarantees through SoFFin at €400 billion, and over the course of its existence the total volume peaked at €174 billion in the third quarter of 2010

³ Note that once the treaty was renamed the Treaty on the Functioning of the European Union (TFEU) on December 1, 2009, the relevant state aid provision was renumbered to Article 107(3)(b). Later decisions on extensions regarding SoFFin referenced the new article numbers.

(International Monetary Fund 2011). The total volume of guarantees over time can be seen in Figure 1 below. A substantial amount of the guarantees was provided to Hypo Real Estate, which was nationalized in 2009 (represented in Figure 1 as “Guarantees to HRE/FMS”). Assessments of the guarantee scheme characterize the take up as large. In their assessment of government guarantees for bank bonds, Levy and Schich point out that Germany’s take up rate of 46% was on the high side compared to other countries with similar schemes (2010). The guarantees reached around 40% of the cap by December 2009 (International Monetary Fund 2010).

Figure 1: Guarantees by SoFFin, 2008-2010



Source: International Monetary Fund 2011

When the window for issuing guarantees closed at the end of 2010, only €64 billion of guarantees remained (International Monetary Fund 2011). By the end of 2013, there were no guarantees outstanding and none had been triggered. Over the course of the scheme, the German government collected €2 billion in fees for guarantees under SoFFin (Detzer and Hein 2016). In early 2012, the German government reactivated SoFFin in response to the sovereign debt crisis (Thomas 2012). This iteration of SoFFin ended in 2015; from an IMF report published in 2016 it appears that SoFFin was primarily utilized during this period to provide aid (in the form of capital injections, risk shields, and guarantees) during restructurings.

II. Key Design Decisions

- 1. The SoFFin guarantee scheme was part of a package passed by the German government in response to the financial crisis.**

The German government passed a package of crisis response measures, which entered into force on October 18, 2008. The backbone of the package was SoFFin, which was permitted to assume guarantees, inject capital, and temporarily acquire assets (FMStFG 2008).

2. The Financial Market Stabilisation Fund Act created a new fund to provide guarantees.

The Financial Market Stabilisation Fund Act (Finanzmarktstabilisierungsfondsgesetz, FMStFG) established the Financial Market Stabilization Fund (Sonderfonds Finanzmarktstabilisierung, “SoFFin”) on October 17, 2008. Section 6 of FMStFG specifically authorized SoFFin to provide guarantees (FMStFG 2008).

3. The European Commission approved the SoFFin guarantee scheme under Article 87(3)(b) of the EC Treaty.

On October 27, 2008, the European Commission (EC) ruled that guarantees provided by SoFFin were allowed under Article 87(3)(b) of the EC Treaty, which permits state aid to “remedy a serious disturbance in the economy of a Member State” (European Commission 2008a). Following a number of early amendments to the scheme, most of which concerned the recapitalization scheme, the German government re-notified the EC of the scheme and a new decision was announced on December 12, 2008, which replaced the initial approval. The new decision also permitted the guarantees under Article 87(3)(b) (European Commission 2008b).

4. SoFFin was managed by the Federal Agency for Financial Market Stabilization.

FMStFG also established the Federal Agency for Financial Market Stabilization (Bundesanstalt für Finanzmarktstabilisierung, “FMSA”) to manage SoFFin. When FMStFG was passed, the FMSA was established as a legally dependent institution at Germany’s Central Bank, Deutsche Bundesbank. In July 2009, the FMSA became an independent institution under the Federal Ministry of Finance (FMSA n.d.). According to the IMF, though the FMSA is now an independent organization, decisions are subject to scrutiny by the Federal Ministry of Finance (BMF) and the BMF reports the FMSA’s activity to the German parliament (International Monetary Fund 2011).

5. FMStFG capped the volume of guarantees SoFFin could provide at €400 billion.

According to FMStFG, the total volume of guarantees SoFFin could provide was capped at €400 billion. This amount was specifically separated from the cap for SoFFin’s recapitalization measures and asset purchases, which was set at €80 billion for both measures combined (FMStFG 2008).

6. German financial institutions, German subsidiaries of foreign institutions, and special purpose vehicles were allowed to obtain guarantees through SoFFin.

FMStFG permitted FMSA and SoFFin to provide guarantees to German financial institutions and German subsidiaries of foreign financial institutions, and to special purpose vehicles that had assumed the risk positions of an eligible institution (FMStFG 2008). Stolz and Wedow suggest that the ability to transfer securities to a special purpose vehicle (SPV) in

exchange for bonds issued by the SPV and guaranteed by SoFFin would allow an institution to hold government-guaranteed bonds instead of volatile assets on its balance sheet, reducing capital requirements. They conclude that this scheme would serve two purposes: providing institutions with collateral that could in turn be used to access central bank liquidity and freeing up capital (2010).⁴

FMStFV, the statute detailing SoFFin, further stipulated that guarantees could only be provided to solvent financial institutions. In practice, the German government restricted participation to institutions with a Tier-1 ratio of at least 7%. Exceptions could be made only if the institution in question committed to reaching the 7% threshold within three months (European Commission 2008b).

In order to receive a guarantee through SoFFin, an eligible institution had to request stabilization measures. Section 4 of FMStFG stipulated that there was “no legal entitlement to benefits of the fund,” and that stabilization measures, including guarantees, would only be approved once the Federal Ministry for Finance assessed “the significance of the respective financial-sector enterprise covered by the stabilisation measure to financial-market stability, the urgency and the principle of the most effective and economical deployment of Fund resources possible” (FMStFG 2008).

7. SoFFin could provide guarantees for newly issued debt instruments

Under the SoFFin framework, the German government could provide guarantees for new bonds and liabilities, including debt capital and non-Tier 1 and -Tier 2 capital (European Commission 2008b).

8. Initially, the maturity for eligible liabilities was capped at 36 months.

When the guarantee scheme began, eligible liabilities were required to have a maturity of 36 months or less (European Commission 2008b). The Financial Markets Stabilisation Amendment Act (Finanzmarktstabilisierungsergänzungsgesetz, “FMStErgG”), passed in April 2009, lengthened this maturity limit and allowed SoFFin to guarantee liabilities with a maturity of up to 60 months (FMSA n.d.). According to the amended act, guarantees could be granted for liabilities with a maturity of over 36 months, “only in justified, exceptional cases and for a maximum of one third of the guarantees granted to an enterprise,” (FMStFG 2008). The government does not appear to have established minimum maturity requirements for eligible debt.

9. There does not appear to have been any mention of restrictions on the currency of eligible liabilities in any program documents.

10. There does not appear to have been a participation limit imposed on financial institutions.

⁴ No guarantees were ever provided to special purpose vehicles (Pleister 2011); for more information on the rules governing guarantees to special purpose vehicles, see Stolz and Wedow 2010.

11. Participants were charged a fee for guarantees based on maturity of debt and creditworthiness.

FMStFG stipulated that a fee would be charged for guarantees, and FMStV enumerated the fee structure, which aligned with ECB recommendations issued on October 20, 2008. The base annual fee was 50 basis points; liabilities with a term of over a year were charged a risk premium that corresponded to the participating institution's CDS spread for senior debt, which cannot be less than the median of the financial institution's five-year credit default swap spread between 1 January 2007 and 31 August 2008 (European Commission 2008b). In other words, the fees would be calculated as follows:

$$\text{Fee Payable} = \text{Guaranteed Liabilities} \times (\text{Base Annual Fee} + \text{Long Term Maturation Fee})$$

Where base both base annual fees and long-term fees are in basis points (1bp = 0.01%).

As conditions improved, Germany increased these fees in order to incentivize banks to scale back and ultimately end their participation in the scheme. Fees were increased by 20 basis points for banks with a rating of A+ or A, 30 basis points for banks rated A-, and 40 basis points for banks rated below A- (European Commission 2010). This met a stipulation by the EC that no extensions to guarantee schemes would be approved beyond June 30, 2010 unless the fees were increased above the 2008 guidelines (Stolz and Wedow 2010).

12. Participating institutions had to agree to a number of conditions, including oversight by German authorities and restrictions on compensation and marketing.

By participating in the SoFFin guarantee scheme, institutions agreed to a number of conditions. Every participating institution was required to submit a business model for approval to the German government. Upon review, SoFFin could stipulate that risky lines of business be abandoned or curtailed (European Commission 2008b). In addition, the German government could limit remuneration and compensation of management, and institutions were prohibited from advertising participation in the guarantee scheme in order to avoid distorting competition with other banks (Petrovic and Tutsch 2009).

13. The issuance window was initially slated to close on December 31, 2009 but was ultimately extended until December 31, 2010.

According to FMStFG, guarantees could only be issued until December 31, 2009. However, that end date was conditional on the crisis lasting that long and the German government retained the power to close the issuance window early (European Commission 2008b).

Though the German government was hopeful that improved conditions in the interbank market would render the guarantee scheme unnecessary by the end of 2009, FMStFG recognized that any prolongations of the scheme would need to be approved in accordance with State Aid rules. The EC required that they be notified 6 months before any extension of the scheme (European Commission 2008b). In fact, the scheme, with amendments, was extended and approved by the EC three times before the issuance window closed on December 31, 2010.

III. Evaluation

Although not focused on the guarantee scheme specifically, assessments of the FMSA and SoFFin are generally positive and argue that the stabilization measures were effective at maintaining financial stability in Germany. Pleister argues that the concerted State assistance framework, as opposed to the earlier ad hoc interventions, was successful in rescuing German banks and “buttressed system stability over the short term,” (2011). In a technical note assessing Germany’s crisis management arrangements, the IMF similarly noted that the availability of guarantees through SoFFin and FMSA successfully relieved funding constraints on the interbank market (2011).

Criticisms of the program have largely argued that it would be unsustainable in the long term. For example, Bleuel argues that the amendment that extended the maturity eligibility cap to 60 months could potentially result in “floodgates [being] opened for ongoing political support and interference in the financial markets.”

IV. References

Bleuel, Hans-H. 2009. “The German banking system and the global financial crisis: causes, developments and policy responses.” Düsseldorf Working Papers in Applied Management and Economics. <http://ssrn.com/abstract=1365813>

Detzer, Daniel and Eckhard Hein. 2016. “Financialisation and the crises in the export-led mercantilist German economy.” In *Financialisation and the Financial and Economic Crises: Country Studies* edited by Eckhard Hein, Daniel Detzer and Nina Dodig, 163-191. Cheltenham: Edward Elgar Publishing.

European Commission. 2008a. “C(2008) 6422: State aid scheme No N 512/2008 – Germany Rescue package for credit institutions in Germany.” http://ec.europa.eu/competition/state_aid/cases/227880/227880_882424_41_1.pdf

European Commission. 2008b. “C(2008) 8629 fin: State aid N 625/2008 – Germany Rescue package for financial institutions in Germany.” http://ec.europa.eu/competition/state_aid/cases/228814/228814_961037_27_1.pdf

European Commission. 2010. “C(2010)4261 final: State Aid N 222/2010 – Germany Third extension of the German rescue package for credit institutions in Germany.” http://ec.europa.eu/competition/state_aid/cases/236503/236503_1111002_31_2.pdf

FMSA. n.d. “History.” Accessed May 30, 2018. <https://www.fmsa.de/en/history/>

FMStFG. 2008. https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Aufsichtsrecht/Gesetz/FMStFG_en.html;jsessionid=617DB172EFDC63042FA4A7AF5BAED6D0.2_cid298?nn=8379954#doc7863566bodyText1

Hüfner, Felix. 2010. "The German Banking System: Lessons from the Financial Crisis." OECD Economics Department Working Papers, No. 788. doi: 10.1787/5kmbm80pjkd6-en

International Monetary Fund. 2010. "Germany: 2010 Article IV Consultation-Staff Report; Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director for Germany."

https://books.google.com/books?id=7AXrMIC6BT4C&dq=germany+soffin&source=gbs_navlinks_s

International Monetary Fund. 2011. "Germany: Technical Note on Crisis Management Arrangements." <https://www.imf.org/external/pubs/ft/scr/2011/cr11368.pdf>

International Monetary Fund. 2016. "Germany: Technical Note on Crisis Preparedness, Bank Resolution and Crisis Management Frameworks."

<https://www.imf.org/en/Publications/CR/Issues/2016/12/31/Germany-Financial-Sector-Assessment-Program-Crisis-Preparedness-Bank-Resolution-and-Crisis-44018>

Levy, Aviram and Sebastian Schich. 2010. "The Design of Government Guarantees for Bank Bonds: Lessons for the Recent Financial Crisis." *OECD Journal: Financial Market Trends* 2010, issue 1. <https://www.oecd.org/finance/financial-markets/45636972.pdf>

Petrovic, Ana and Ralph Tutsch. 2009. "National Measures in Response to the Current Financial Crisis." European Central Bank Legal Working Paper Series, no. 8.

http://ssrn.com/abstract_id=1430489

Pleister, Christopher. 2011. "The Federal Agency for Financial Market Stabilisation in Germany: from Rescuing to Restructuring." *OECD Journal: Financial Market Trends* 2011, issue 2. <https://www.oecd.org/finance/financial-markets/48989210.pdf>

Stolz, Stéphanie Marie and Michael Wedow. 2010. "Extraordinary measures in extraordinary times – public measures in support of the financial sector in the EU and the United States." Deutsche Bundesbank Discussion Paper Series 1: Economic Studies No 13/2010. <https://ssrn.com/abstract=2785377>

Summit of the Euro Area Countries. 2008. "Declaration on a Concerted European Action Plan of the Euro Area Countries."

http://ec.europa.eu/economy_finance/publications/pages/publication13260_en.pdf

Thomas, Andrea. 2012. "Germany Approves Bank Bailout Bill." *Wall Street Journal*, January 26, 2012.

<https://www.wsj.com/articles/SB10001424052970204573704577184362262410868>

V. Key Program Documents

Summary of Program

- Act on the Establishment of a Financial-Market Stabilisation Fund – *English translation of FMStFG, legislation authorizing SoFFin*
- National Rescue Measures in Response to the Current Financial Crisis– *ECB Legal Working Paper describing various guarantee programs in Europe (see pages 35-41 for Germany)*

Legal/Regulatory Guidance

- European Commission Decision October 27, 2008 (C(2008) 6422) – *EC initial approval of SoFFin*
- European Commission Decision December 12, 2008 (C(2008) 8629 fin) – *EC approval of amended SoFFin*
- European Commission Decision June 23, 2010 (C(2010)4261 final) – *final EC approval of extension of SoFFin until December 31, 2010*

Press Releases/Announcements

- Fund for the Stabilization of the Financial Market starts its operations in Germany – *press release announcing that SoFFin has commenced operation*
- Archive of press releases related to SoFFin from 2008-2017
<https://www.fmsa.de/en/press/>

Key Academic Papers

- The German banking system and the global financial crisis: causes, developments and policy responses (Bleuel 2009)– *paper providing context for financial crisis in Germany and analyzing policy responses, including SoFFin* <http://ssrn.com/abstract=1365813>
- The Federal Agency for Financial Market Stabilisation in Germany: from Rescuing to Restructuring (Pleister 2011) – *paper examining the creation of FMSA and its role during the crisis* <https://www.oecd.org/finance/financial-markets/48989210.pdf>
- Financialisation and the crises in the export-led mercantilist German economy (Detzer and Hein 2016) – *paper examining German financial sector and crisis; see in particular section 4*
- The Design of Government Guarantees for Bank Bonds: Lessons for the Recent Financial Crisis (Levy and Schich 2010) – *comparative study of guarantee programs during the crisis* <https://www.oecd.org/finance/financial-markets/45636972.pdf>

Reports/Assessments

- Germany: Technical Note on Crisis Management Arrangements – *IMF assessment of Germany's response to the financial crisis and new preventative measures implemented in the wake of the crisis* <https://www.imf.org/external/pubs/ft/scr/2011/cr11368.pdf>

- Extraordinary measures in extraordinary times – public measures in support of the financial sector in the EU and the United States – *discussion paper published by German central bank comparing responses to the crisis in the EU (with a particular focus on Germany) and responses in the US and their effectiveness*
<https://ssrn.com/abstract=2785377>