

Risk Disclosures Related to Credit Derivative Use by U.S. and German Corporate Bond Funds between 2004 and 2010 – An Evaluation*

Dominika P. Gałkiewicz¹

Received: June 21, 2023 Revised: October 25, 2023 Accepted: January 28, 2024 Published: March 16, 2024

Keywords:

Fund; Derivative; Credit default swap; Reporting; Disclosure; Leverage

Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-Non-Commercial 4.0 License (https://creative-commons.org/licenses/by-nc/4.0/) which permits non-commercial use, reproduction and distribution of the work without further permission.

Abstract: This study aims to investigate whether the comments made by funds regarding their use of CDS in periodic fund reports are consistent with their disclosed CDS holdings. For several funds in the U.S., the potential losses that may arise from selling CDS protection are almost as high as their net assets and in Germany, this potential can be even higher. The results of the study suggest that the comments provided by funds about their use of CDS in periodic reports are often vague and sometimes misleading. For instance, in Germany, funds that use more short than long CDS often claim that they only use long CDS for hedging purposes. This means that investors may need to analyze portfolio holdings to learn about the true investment behavior of funds. Based on the results, it is advisable for regulators in both countries to strengthen their monitoring activity and implement more standardized disclosure policies.

1. INTRODUCTION

How accurate is the information funds provide to investors about their derivative use? During the global financial crisis of 2007-2009, many regulated market participants, including mutual funds, suffered significant losses due to their exposure to risky derivatives. Corporate bond funds in the United States and Germany that sold more credit default swaps (CDS) protection than they bought often suffered severe losses compared to those that predominantly bought CDS protection between 2004 and 2010 (Galkiewicz, 2016). This was due to the fact that CDS were used not only for hedging but also for implementing risky investment strategies, which could result in high returns or losses. For example, when a fund sells protection through CDS, it effectively increases its portfolio's leverage, as it is exposed to the notional amount of the swaps beyond its total net assets. The Oppenheimer Champion Income Fund almost collapsed in 2008 due to speculative investments in CDS and faced lawsuits² for insufficient disclosure.

The study examines the disclosure practices of mutual funds in both countries regarding their CDS investments during the 2007-2009 financial crisis period and around this time. The primary

See Recovering Oppenheimer Champion Fund Losses, http://www.oppenheimerfundfraud.com/id3.html and Oppenheimer Champion Income Fund Lawsuits, http://www.youhavealawyer.com/blog/2009/04/16/ oppenheimer-champion-income-fund-lawsuits



^{*} Paper contains unpublished research presented in the working paper Galkiewicz, D. P., (2014b), Loss Potential and Disclosures Related to Credit Derivatives: A Cross-country Comparison of Corporate Bond Funds under US and German Regulation, SFB/TR 15 Discussion Paper, No. 494, Sonderforschungsbereich/Transregio 15 - Governance and the Efficiency of Economic Systems (GESY), München.

Humboldt University Berlin, Germany; University of Applied Sciences Kufstein Tirol, Finance, Accounting & Auditing, Andreas Hofer-Str. 7, 6330 Kufstein, Austria

objective of this analysis is to determine whether investors in the U.S. and Germany should be concerned about the possibility of mutual funds taking excessive risks through derivatives and misleading the public about their investments. Though mutual funds are subject to strict regulation in both countries, they can still engage in speculative strategies, such as selling CDS, which can undermine the effectiveness of the regulatory framework established to protect investors. In Europe, the study focuses on mutual funds that are distributed in Germany since they are regulated by EU-wide legislation³ and have been authorized to use credit derivatives since 2004. The study aims to investigate the accuracy of the information provided by funds to investors regarding their CDS policies. Although there are numerous rules related to the use of derivatives, funds have a great deal of flexibility when developing their investment strategies under both U.S. and German regulations. According to Galkiewicz (2014a), U.S. and German funds can increase their derivative investments to the point where they might default solely due to derivatives. Therefore, losses incurred by the Oppenheimer Champion Income Fund in 2008, which were predominantly due to its CDS positions and amounted to almost 80% of its value, were within the existing regulatory limits on derivative use.

Given the high regulatory flexibility, it is interesting to empirically investigate the actual CDS holdings and disclosures of mutual funds. The 30 largest U.S. and German corporate bond funds (as determined by total net asset value (TNA) in 2004) included in the CRSP and BVI databases as they have the widest investor base were analyzed.⁴ Annual and semi-annual U.S. filings are obtained from the SEC, while German reports are directly provided by the funds. From these reports, I collect data on the fund's net assets as well as the notional and market values of CDS.

In the following, section 2 provides the background on CDS strategies and related risk reporting literature, while section 3 describes the data and methodology. The discussion of the empirical results follows in section 4 and section 5 concludes the paper.

2. BACKGROUND ON CDS STRATEGIES AND LITERATURE

CDS Strategies. The CDS are a main representative of credit derivatives and can be viewed as default insurance on loans/bonds or as a speculative tool (Duffie, 1999; Oehmke & Zawadowski, 2017). Thus, from the viewpoint of investors, it is important to distinguish hedging strategies protecting the capital from non-hedging (i.e. investment or/and speculation) strategies potentially leading to large losses.

- **Hedging strategy**: having the underlying (e.g. bond) in the portfolio and buying CDS protection on it.
- **Investment strategy**: selling CDS protection and investing the notional amount into Treasuries allows to synthesize a bond or buying and selling CDS to close/offset existing CDS positions.
- **Speculative strategies** contain selling CDS protection without simultaneously increasing Treasuries (the latter creates a levered bond position that is riskier than a typical unlevered bond position and generates high implicit leverage at low costs/premium), using naked long CDS, negative basis trading, and credit market timing trading.

German regulation is based on the UCITS Directive 85/611/EEC, which applies to all public investment funds in the EU.

I thank Lehmann and Stehle (2013) for kindly providing me with the data on TNA for German funds.

Market participants buy as well as sell various types of CDS that can be classified as single- or multi-name CDS and these should be commented on in annual and semi-annual reports. The CDS market developed fast – from 2004 on when its market size was 6 trillion USD before it reached an impressive 58 trillion USD and finally arrived in 2020 at around 10 trillion USD.

Literature. The studies by Hodder et al. (2001), Beretta and Bozzolan (2004), and Lajili and Zeghal (2005), along with the latest CFA Reports (2011, 2013), reveal that the disclosure of risk by public companies is often unhelpful to shareholders due to the lack of consistency, clarity, and quantification. The quality of disclosures is not only determined by the quantity but also by the content. Horing and Grundl (2011) found that there are still significant variations in risk disclosure among insurers and cultures, while Malafronte et al. (2013) discovered that the annual reports of insurers are hard to comprehend. The SEC's letter to the General Counsel of the Investment Company Institute (SEC Letter to the GCotICI, 2010) highlights that there is a wide range of derivative disclosures, ranging from very brief to lengthy, highly technical descriptions that are of limited use to readers. Furthermore, the SEC emphasizes that funds' risks should be clarified concerning the respective derivative strategies. The descriptions often give an impression of high exposure that a fund does not actually face, and vice versa. For instance, the Oppenheimer Champion Income Fund was criticized by the public for its generic, boilerplate disclosure. Given the differences in disclosure regulations between both countries, the study compares annual and semi-annual fund reports' comments on applied CDS strategies with disclosed CDS holdings between 2004 and 2010 for the first time. Thus, the primary research question to answer is: Are the provided text comments on CDS use consistent with the disclosed CDS positions by mutual funds in the U.S. and Germany?

3. DATA AND METHODOLOGY

Data. It was investigated whether the potential risks associated with the use of CDS are properly reflected in the information provided to investors in the annual and semi-annual reports of the 30 largest funds in the U.S. and Germany (as measured by TNA on June 30, 2004) between 2004 and 2010 – Galkiewicz (2016) explains the sample in bigger detail. Generally, CDS use was extensive and increased over time for both U.S. and German funds between 2004 and 2010. It was observable that although less experienced in using CDS, German funds had higher and more varying CDS positions on the individual fund level since 2007. Especially noticeable is the fact that U.S. and German funds stayed net short and kept the highest levels of CDS selling protection during the global crisis. Finally, CDS-related risk reporting is observable 298 times:

- 19 out of the 30 U.S. funds report using CDS 192 times,
- 19 out of the 30 German funds report using CDS 106 times.

Methodological Approach. First, the level of short CDS use reflecting the potential for realizing losses via CDS for U.S. and German corporate bond funds under current regulation was analyzed. Second, the information funds provide to investors about their CDS policies in both countries was analyzed. All U.S. funds are required to comment on their holding positions (mandatory reporting), while EU/German funds voluntarily comment on their CDS strategies.

4. RESULTS

The Nature of CDS-Related Comments Disclosed by U.S. Funds. US funds are required to provide details on their holding positions, including derivative positions, in the notes section of their reports. A majority of funds (12 out of 19) that use CDS did not regularly indicate the

use of derivatives and associated risks in the section of the report that contains a short discussion of fund performance. However, for the purpose of this study, the focus will be only on the comments on CDS use in the report notes. From 2004 to 2007, the notes were shorter than from 2008 to 2010. During this period, funds always provided a short technical definition of CDS, some comments on valuation (mark to market), and brief remarks on the strategies behind CDS use. Starting in 2008, the notes became more informative with more explanatory notes on the technical functioning of different CDS types and various risks associated with CDS use. Additionally, the notes often provided more detailed information regarding a fund's CDS strategies, the amount at risk, and triggering events. This change was due to an amendment to the FASB 133⁵ which requires more extensive disclosure. The amendment requires funds to state the nature and terms of derivatives, give reasons for entering into those instruments, specify events that require the seller to perform under a contract and describe the current status of the payment and performance risk with regard to the contract. Moreover, funds must post information about the highest potential amount that the fund could be liable for as a contract seller, the fair value of the contract, and the nature of any recourse provisions or assets held either as collateral or by third parties.

In section 2, we discussed how funds use long CDS and short CDS for various purposes. These purposes go beyond offsetting existing long CDS positions. Funds may use CDS selling protection to gain exposure to risk by timing credit markets and creating levered or unlevered bond positions. Additionally, they may use CDS buying protection to perform negative basis trades or to time credit markets. All 19 funds that use CDS commented on their holdings in 192 halfyears, and these comments were in line with their disclosed CDS holdings. Almost all of the funds stated that they entered into CDS contracts to buy or sell protection on an underlying position – this general comment formulation justifies every CDS strategy applied by a fund for any purpose. However, they rarely made concrete and specific statements about their CDS-related strategies. In particular, the 13 funds that did not have long CDS, i.e., they pursued short CDS strategies for non-hedging purposes, stated to buy and sell CDS for a wider range of purposes in 53 out of 192 half-years (not reported). Only two funds were stated and actually only used short CDS in 17 half-years. Surprisingly, while not having short CDS, i.e., pursuing long CDS strategies, 4 out of the 19 funds that used CDS stated to buy and sell CDS for a wider range of purposes in 7 out of 192 half-years. Only one fund stated and actually only used long CDS in 2 half-years. The CDS comments of funds belonging to one fund family, such as PIMCO, Fidelity, and Vanguard, were close to identical. The SEC has observed that comments are often prepared for a particular fund family and not for a specific fund (SEC Letter to the GCotICI, 2010). Thus, US funds could have been more specific about their CDS strategies in 60 out of 192 halfyears. The findings indicate that funds only pursuing short CDS strategies, which are associated with non-hedging activities, give the impression of using long and short CDS for a wider range of purposes. However, it remains unclear whether they do this intentionally or unintentionally.

As mentioned before, the amount of information provided in the notes has increased since 2008. For instance, both PIMCO and Vanguard funds increased the content of their notes in 2008. This is mainly because of the inclusion of more explanatory notes on the technicalities of

See FASB Staff Position No. FAS 133-1 and FIN 45-4, "Disclosures about Credit Derivatives and Certain Guarantees: An Amendment of FASB Statement No. 133 and FASB Interpretation No. 45." The amendment extends the interpretation of FASB Statement No. 133 ("FAS 133"), "Accounting for Derivative Instruments and Hedging Activities", and the FASB Interpretation No. 45 ("FIN 45"), "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others." See FASB, 2009.

different types of CDS (such as those based on corporate or sovereign bonds, indices, and asset-backed securities) and on the fund's CDS strategies. Unfortunately, there are no new insights provided regarding the strategic use of CDS, which was previously criticized by the SEC. Furthermore, it is often directly or indirectly stated that CDS are priced according to the mark-to-market standard, although the potential obligations amount to the notional value for sold CDS. Funds can mention this information in the footnotes of the respective portfolio holdings or the notes, without necessarily giving the overall notional amount of short CDS. For example, Fidelity funds have mentioned since 2009 that the notional amount describes the highest potential loss that can occur due to sold CDS, and they also provide an absolute amount and a fraction of the net asset value put at risk during a specific period. The figures were consistent with disclosed CDS notional amounts observed in the data. Since the second half of 2009, Fidelity funds have also given the exact amount of net collateral pledged, as well as the amount that should be paid beyond that point (assuming all contracts are triggered). This last piece of information is only provided by some funds within the notes, while other funds usually mention the amount of collateral pledged for the respective positions in the footnotes of the holdings.

Based on previous analyses, it seems that fund comments could be improved for the benefit of investors. For instance, it would be useful for funds to provide information about derivative use and its potential consequences within the performance discussion at the beginning of reports, in addition to the notes section. Standardizing and reducing the extensive CDS related comments, such as those regarding the details of the functioning of CDS from contract initiation to termination, could also prove beneficial. Investors would benefit from avoiding the use of vague statements about a fund's CDS-related strategies. For example, funds only pursuing short CDS strategies (for non-hedging purposes) often – intentionally or unintentionally – report to use of long and short CDS for a wider range of purposes. Additionally, including the highest aggregate notional amount that could be due in a specific period due to sold CDS (as a fraction of the TNA), as well as the precise amount of net collateral pledged and additional necessary payments if all contracts are triggered within the notes, could help potential investors. The existence and mandatory application of a compact and standardized template for CDS-related text, which incorporates the aforementioned features that are partially required by law, could increase understanding and the value of information for investors.

Altogether, these results confirm many former SEC findings (SEC Letter to the GCotICI, 2010) with regard to the lengthy, highly technical, and unspecific disclosure policies of mutual funds. They further highlight that the disclosures of U.S. funds and public companies (e.g., Beretta & Bozzolan, 2004; Lajili & Zeghal, 2005; CFA, 2011, 2013) similarly lack uniformity, clarity, and overemphasize quantity over quality of reporting. Although there is a lot of information given, the value of this information for the reader should be evaluated by further research and regulators.

The Nature of CDS Related Comments Disclosed by German Funds. German funds' public reports provide basic information about their investment strategies during specific periods. Occasionally, they mention whether they use CDS for "hedging" and/or "investment purposes" such as synthesizing a bond or speculation. Investors require truthful information about funds that voluntarily comment on their CDS holdings. In the sample of German funds, only 9 out of 19 that used CDS directly commented on CDS use in 25 out of 106 half-years (23.58%). The number of funds commenting on CDS use increased from one fund in the second half of 2006 to six funds in 2010. Four funds that used CDS claim that they never used credit derivatives. During the reporting period, German funds that commented on CDS use had higher CDS

holdings than funds that did not comment on CDS. As a result, these funds provided more information to investors who were more exposed to risk. However, it was found that their comments were not always consistent with their disclosed CDS holdings. Out of 9 funds, 3 funds suggested hedging with CDS in 8 out of 25 (32%) half-years, while pursuing both long and short CDS strategies for a wider range of purposes. In all of these cases, short CDS positions were always high and, in 6 cases, significantly outweighed long CDS positions at the respective period ends (Galkiewicz, 2014b). This indicates a heightened fund exposure to risk, whereas the funds reported to hedge with CDS. It is possible that these funds intentionally misled investors. Upon further analysis of the comments around the highlighted periods, it was found that they differed from those identified as misleading statements. Although these 3 funds stopped commenting on CDS use, they did not stop using CDS. Two of the 3 funds also used CDS before they started to comment on them.

By contrast, U.S. funds that did not use long CDS often reported buying and selling CDS for a wider range of purposes in 53 out of 192 half-years. In Germany, only 2 out of the 9 funds that did not use long CDS stated to buy and sell CDS for a wider range of purposes in 2 out of 25 half-years. For funds that did not have short CDS, i.e., pursued long CDS strategies, 2 out of 9 stated to buy and sell CDS in 3 out of 25 half-years for a wider range of purposes (in the U.S., in 7 out of 192 half-years). Moreover, one fund stated to only use short CDS associated with non-hedging purposes even though it used long CDS positions for 2 half-years (only one fund stated and actually used long CDS in 2 half-years).

Overall, German funds have made 8 misleading statements and have been less specific about their CDS strategies in an additional 7 cases. In comparison, in the US, unspecific comments occurred in 60 out of 192 half-years. The comments in the extended prospectuses, and terms of the contract, were either very general or strictly followed the wording of the law. Based on the report's comments on derivatives, investors would have only guessed about the way funds distributed in Germany used financial instruments during this period. Therefore, proposals for improvements to US fund disclosure policies should be considered by regulators for EU-wide fund disclosure policies. Although different levels of transparency with respect to the information provided to investors are observable in both countries, analyses performed for US and German corporate bond funds show the high level of flexibility that funds have when commenting on their derivative strategies, which may misguide investors.

5. CONCLUSION

This study compares the level of potential losses from CDS holdings at U.S. and German corporate bond funds together with the CDS-related disclosures around the financial crisis of 2007-2009 under the regulation existing at that time. The investigation focuses on assessing whether the potential risks associated with the use of CDS are accurately disclosed to investors in the annual and semi-annual reports of investment funds in the United States and Germany. The main objective is to determine if investors need to be concerned about the possibility of funds taking excessive risks through the use of CDS and providing misleading information about their CDS policies. Investors need to carefully scrutinize the portfolio holdings of funds in order to understand their true investment behavior. This is because the comments made in connection to CDS are frequently vague and sometimes misleading. For example, in Germany, funds that sold more CDS protection than they purchased often claimed to have bought CDS for hedging purposes only. To protect the interests of investors worldwide, particularly those who are less

experienced, it is recommended that U.S. and German/EU regulators conduct more thorough monitoring of the disclosure methods employed by mutual funds. To minimize potential negative effects on investors, as seen during the financial crisis, it is advisable for regulators in both countries to tighten the rules on the speculative use of derivatives by funds to an appropriate level, and to introduce more standardized disclosure policies. These findings have significant importance for both regulators and investors. Further research on mutual funds' portfolio holdings is needed to evaluate the adequacy of reporting.

Acknowledgment

The author gratefully acknowledges financial support from the Deutsche Forschungsgemeinschaft (German Science Foundation) through SFB 649 "Economic Risk" and SFB-TR15 "Governance and the Efficiency Economic Systems".

References

- Beretta, S., & Bozzolan, S. (2004). A framework for the analysis of firm risk communication. *The International Journal of Accounting*, 39(3), 265-288. https://doi.org/10.1016/j.intacc.2004.06.006
- CFA. (2011). User Perspectives on Financial Instrument Risk Disclosures under International Financial Reporting Standards (IFRS) (Volume 1), October. http://www.cfainstitute.org/ethics/documents/financial instruments risk disclosure report volume 1.pdf
- CFA. (2013). User Perspectives on Financial Instrument Risk Disclosures under International Financial Reporting Standards: Derivatives and Hedging Activities Disclosures (Volume 2), January.
- Duffie, D. (1999). Credit Swap Valuation. *Financial Analysts Journal*, 55(1), 73-87. https://doi.org/10.2469/faj.v55.n1.2243
- FASB. (2009). ASC 815-10: Derivatives and Hedging ("Topic 815").
- Galkiewicz, D. P. (2014a). Similarities and Differences between U.S. and German Regulation of the Use of Derivatives and Leverage by Mutual Funds What Can Regulators Learn from Each Other? Working Paper.
- Galkiewicz, D. P. (2014b). Loss Potential and Disclosures Related to Credit Derivatives: A Cross-country Comparison of Corporate Bond Funds under US and German Regulation. SFB/TR 15 Discussion Paper, No. 494, Sonderforschungsbereich/Transregio 15 Governance and the Efficiency of Economic Systems (GESY), München.
- Galkiewicz, D. P. (2016). Loss Potential from Credit Derivative Use by Corporate Bond Funds under U.S. and German Regulation A Cross Country Comparison. Credit and Capital Markets *Kredit und Kapital*, 49(2), 245-298.
- Hodder, L., Koonce, L., & McAnally, M. L. (2001). SEC Market Risk Disclosures: Implications for Judgment and Decision Making. *Accounting Horizons*, *15*(1), 49-70. https://doi.org/10.2308/acch.2001.15.1.49
- Horing, D., & Grundl, H. (2011). Investigating Risk Disclosure Practices in the European Insurance Industry. *The Geneva Papers on Risk and Insurance Issues and Practice*, 36(3), 380-413. https://doi.org/10.1057/gpp.2011.13
- Lajili, K., & Zeghal, D. (2005). A Content Analysis of Risk Management Disclosures in Canadian Annual Reports. *Canadian Journal of Administrative Sciences / Revue Canadianne des Sciences de l'Administration, 22*(2), 125-142. https://doi.org/10.1111/j.1936-4490.2005. tb00714.x

- Malafronte, I., Porzio, C., & Starita, M. G. (2013). Disclosure Practices and Financial Crisis: Empirical Evidences in the European Insurance Industry. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.2374688
- Oehmke, M., & Zawadowski, A. (2017). The Anatomy of the CDS Market. Review of Financial Studies, 30(1), 80-119. https://doi.org/10.1093/rfs/hhw068
- Oppenheimer Champion Income Fund Lawsuits. http://www.youhavealawyer.com/blog/2009/04/16/oppenheimer-champion-income-fund-lawsuits/, visited on September 8, 2012.
- Recovering Oppenheimer Champion Fund Losses, http://www.oppenheimerfundfraud.com/id3.html, visited on September 8, 2012.
- SEC Letter to the GCotICI. (2010). SEC, Letter to the General Counsel of the Investment Company Institute: Derivatives-Related Disclosures by Investment Companies.
- UCITS Directive 2009/65/EC/OGAW-Richtlinie 2009/65/EG: Richtlinie zur Koordinierung der Rechts und Verwaltungsvorschriften betreffend bestimmte Organismen für gemeinsame Anlagen in Wertpapieren (OGAW) (Neufassung), i.d.F. vom 13. Juli 2009, Amtsblatt der Europäischen Union L302/32-302/96.