Shadow Banks and their Impact on Financial Markets and Institutions

Masterarbeit

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1 Introduction

Even if *'shadow bank'* appears to be a negative term, it is not concerned with illegal activities. Shadow banks are actors on financial markets and provide bank-like services, especially in credit approval processes. Since they are no traditional banks, shadow banks are not subject to regulatory requirements such as banks are (Deutsche Bundesbank, 2014; Rehm, 2016: 8). Hence, *'shadow'* can be derived from acting in the shadow of regulation. But this situation is a source of risks for the whole financial system. This became apparent during the financial crisis beginning in 2007. Facilitated through strong linkages with diverse market participants, difficulties of shadow banks like money market funds had large impacts on the whole financial system (Bankenverband, 2014: 8; Financial Crisis Inquiry Commision: xv et seq., 2011; McCulley, 2009: 257 et seq.). Appropriate monitoring approaches and regulatory policies facilitate a reduction of system risk posed by shadow banks (FSB, 2015: 1).

The relevance of shadow banking regulation becomes even more significant considering transaction volumes in this market. In 2014, global assets of shadow banks amounted to 35.9 trillion USD (Statista.com, 2015b) – nearly 47% of the world's gross domestic product (Luttmer, 2015). From a global perspective, this sector is by now about half of the size of the regular banking system. In Germany, the market share of this sector tripled from 1999 to 2015 to 2.6 trillion Euro (Rehm, 2016: 8). These numbers illustrate the enormous growth of the shadow banking sector of the past few years and the need for a regulation.

Therefore, this master's thesis aims to investigate opportunities and risks of the shadow banking sector and to find adequate regulatory approaches. The research question is *'how and why should shadow banks be regulated?'* Review of significant literature and qualitative research, especially the implementation of expert interviews, facilitate an answering of the research question. Mayring's (2010) qualitative content analysis serves as method of data analysis.

This thesis will be structured as follows: After the introduction, the research background will be presented. In that chapter, a literature overview according to the main concept of Webster & Watson (2002) will be given, which reveals the literature gap. Based on this, the research question is formed. Additionally, the research design is described in the second chapter. Afterwards, background information will be given in the third chapter. For this purpose, shadow banks are defined and important elements of the sector are introduced. Also, the shadow credit intermediation process and an overview of the financial crisis of 2007-2009 are illustrated. To explain the link between shadow banks and the financial crisis, the role of shadow banking entities before and during the crisis is shown. In chapter five, current regulatory measures are presented, which were implemented to reduce systemic risk of non-banks. Afterwards, new shadow banks like crowdfunding platforms or peer-to-peer lendings and their current regulation are described. Chapter seven deals with the qualitative research concept. First of all, the data collection procedure of expert interviews is presented. Then, the actual analysis of the conducted interviews is performed. Mayring's (2010) qualitative content analysis is therefore first defined and then applied to the interview material. Based on the finding, results are presented. In addition, the results are discussed in chapter eight. Findings from literature as well as from expert interviews are taken into account. The derived implications and recommendations are mainly addressed to regulatory authorities. Chapter ten covers the limitations of this thesis. The final section concludes important aspects and gives and outlook.

2 Research Background

2.1 Related Work, Research Gap and Question

In this chapter, an overview will be given about the current state of shadow banking literature. On this basis, the research gap will be derived and the research question is formed from these findings. The literature overview is inspired by Webster & Watson (2002). As the implementation of the complete approach by Webster & Watson could fill a whole master's thesis by itself, only the concept-centric scheme will be applied to structure the related literature. A contribution to synthesize the literature can be achieved.

Webster & Watson (2002: xiii) state that "a review of prior, relevant literature is an essential feature of any academic project." An effective literature review can build up knowledge, helps to develop theory, sheds light on areas where enough research is carried out, and shows where additional research is needed. A review is concept-centric, meaning that the organizing framework of the review is determined by concepts. A concept matrix is proposed to structure the literature (Webster & Watson, 2002: xiii et seq.).

The review of literature was prepared as follows: First of all, literature databases (TIB/UB Online Contents, AiSeL, IEEE Xplore, KIT, JSTOR, ScienceDirect, ACM, EBSCOhost Business Source Premier, SpringerLink), Google and Google Scholar were searched to find adequate literature. Search terms like 'shadow bank(s)', 'shadow banking', 'shadow banking regulation', and 'regulation of shadow bank(s)' were inserted. The main focus was put on articles regarding the definition and regulation of shadow banks. In addition, the financial crisis of 2007-2009 and new shadow banks are relevant for this thesis. According to Webster & Watson (2002), the literature was

11 Conclusions and Outlook

Shadow banks offer several advantages for financial markets and institutions, for example an enhanced pricing mechanism or the supply of alternative funding sources. But systemic risk posed by non-banks can have serious repercussions on the whole financial system. Growing financial assets and permanent innovations of shadow banks motivate the research for this master's thesis. Especially the regulation of the shadow banking sector is the focus of interest. The research question is therefore "How and why should shadow banks be regulated?"

To answer this question, first of all, the shadow banking sector is introduced and the financial crisis of 2007-2009 is linked to it. Then current shadow banking regulatory measures are presented. Additionally, new shadow banks are characterized. Interviews with financial experts are conducted to gain deeper insights in the regulation of shadow banks. The qualitative content analysis by Mayring (2010) is used for the interpretation. The implementation of the analytical steps led to the discovery of five categories, which represent the content of the conducted interviews. After discussing the results, the research question can be answered: A regulation of the shadow banking sector is necessary to prevent a repetition of incidents comparable with these of the financial crisis from 2007-2009 when among others, difficulties of money market funds had devastating effects on the whole market. Due to increasing relevance of shadow banks and the emergence of constant innovations, the importance of regulation will only increase in the future. Systemic risk of these institutions may have serious impacts on financial markets, especially since financial institutions are becoming more and more complex. To reduce the regulatory arbitrage between traditional banks and the shadow banking sector, a regulation of non-banks is important.

Considering how shadow banks should be regulated, a mixture between direct and indirect supervision is advisable. Direct regulation of shadow banking activities is necessary to avoid regulatory arbitrage and to be able to limit significant threats in their infancy. Additional indirect regulation via traditional banks is important to contain risks related to interconnectedness of the sector and to control shadow banks, which are not included in direct regulatory activities. Current approaches are in line with these demands, but improvements are necessary. Regulatory bodies need to become more nimble in order to match the speed of financial innovations in the shadow banking sector. Additionally, more practitioners should be integrated in regulatory processes to enhance the acceptance and effectiveness of measures. To improve the identification of shadow banking activities and entities, precise definitions are necessary. Attainment of maximum transparency should be an overarching goal for regulators.

Looking forward, further growth of the shadow banking sector is likely, which is indicated by steadily increasing transaction volumes. Possible hazards may emerge from the Chinese shadow banking sector, which has been rapidly grown during recent years. It is to be expected that major internet-companies like Amazon, Apple, and Google will become serious competitors for traditional banks when they strengthen their activities on financial markets. Because of their direct connection to customers and the vast amounts of data at their fingertips, these companies should not be underestimated. At some point, these corporations should be considered as shadow banks when they perform classical intermediation functions like maturity transformation. Regulation will then be necessary. But also other non-banking concerns, which enter the financial market while offering intermediation services, might be defined as shadow banks in the future. These could be for instance large automobile manufactures like Volkswagen or companies like Siemens. Additionally, further digitalization of the traditional as well as the shadow banking sector is very likely and the relevance of FinTechs is expected to grow. The increasingly complex financial innovations will very likely lead to even more systemic risk. For instance, the securitization of crowdfunding credits may be a financial innovation that has to be monitored in the near future.

In conclusion, the regulation of the shadow banking sector is an ongoing process that cannot be considered as completed. The interviewees named a multitude of issues that regulators can improve on. Going forward, the potential for innovation and economic growth brought forth by shadow banks should not be stifled, but a proper supervision of these institutions is imperative when trying to reduce systemic risk.