“Reshaping the Credit Business”, Prof. Dr. Mark Wahrenburg, Dr. Andreas Hackethal

1 Project summary

The German banking industry is in the middle of a sweeping structural change. Just some weeks ago, the two presidents of the two largest German banking associations, Breuer and Hoppenstedt, acknowledged that the situation has never been more difficult for the last 50 years and that the consolidation of banks and branches will surely continue. It is far from clear, however, how the surviving, successful institutions will look like five or ten years from now. Many experts from financial services firms, consultancies and academia expect that banks will follow the lead of the automotive industry towards a vertical disintegration and a concentration on core competencies. Hardly any banking organization could any longer afford “to raise the cattle for the leather seats”. Given the disappointing performance of most banks’ investment banking and capital market business in the wake of recent market downturns and given the challenges posed by Basel 2, the traditional core business of German banks, i.e. lending to non-financial institutions, offers to be a particularly interesting and relevant field for research in this context. We will approach the core question “Who shall perform what function in an efficient value chain for the credit business?” by consecutively completing four work packages. Work packages A through C analyze the reshaping of specific elements of a generic value chain, i.e. credit risk management, bad-loan work out and relationship management, whereas work package D investigates the governance issues that arise when banks outsource particular activities. We aim to derive positive as well as normative assessments on the likely developments in the credit business by building upon prior own research and by means of reviewing the literature, expert interviews, theoretical model design and empirical analysis. Ultimately, managers shall get an understanding of how exactly and to what extent value will be created in a reshaped credit business.

2 Research agenda

2.1 Motivation

Back in the early 1990s “breaking up the bank” used to be a popular slogan among many commentators on major trends in banking. Although the technological means to unbundle the highly vertically integrated credit business were already available at this time, it took yet another decade until German banks started to actively search for new ways to restructure and reorganize their lending function. Extraordinary positive effects had obscured what many have been viewing as a structural crisis that is due to inefficient processes and excessive branch networks: The re-unification stimulated the loan demand and, in addition, the booming equity markets in combination with the internet economy propped up the banks’ fee business. Not only have these positive effects vanished - other negative effects such as the Year-2000- and the Euro-conversion, write-offs and follow-on costs of enormous internet technology investments as well as the general economic downturn have dramatically increased the pressure on banks. Hence, we now observe a situation in which sophisticated IT solutions and far-reaching progress in risk management coincide with the accepted need to radically rethink the way banks operate their credit business. As evidenced by recent transactions by major players, banks indeed start to concentrate on their core competencies and to outsource non-core activities.

In our project we attempt to answer the seemingly simple question “Who will do what?” in ten years from now. A reference to Adam Smith – the founder of modern economics - makes clear that this is indeed an important and also complex question. His famous example on the evolution of the needle production showed that degree of specialization is a main determinant of overall welfare and industry competitiveness. As the banking market comprises of rather heterogeneous market segments such as credit card lending, retail consumer lending, residential mortgages, commercial mortgage, project finance, and corporate lending, the optimal degree of specialization may differ strongly between these areas. Shall banks specialize around customer segments, product areas, or value chain elements?

Except for some pioneering work from the early and mid-nineties, hardly any theoretical literature exists on that topic. This void in combination with the relevance of the topic for practitioners and regulators motivated us to thoroughly reconsider the “breaking up” or reshaping of the credit business in cluster 4.

2.2 Objectives

Our overall goal over the next three years is to develop clear-cut scenarios of how the European credit business will evolve in the future. The focus will be on the German banking market. By analyzing specific elements of the value chain we ultimately aim to devise ways for different types of banks to enhance value creation in this area.

In 2003, we lay the foundation for achieving the overall goal by screening existing work for at least two of the four work packages, by doing primary empirical research, by conducting interviews with experts from sponsor firms and from external institutions and by theoretical reasoning. At the end of the first year, we want to have published 2-3 working papers (which shall be submitted for publication in an international journal) and want to participate in an international conference presenting our results.

We aim to strongly involve representatives from tier-1 sponsors into insight derivation through joint workshops and jours fixes and through the supervision of dissertations of external PhD students from these very firms.

Regarding contents, we aim to get a better understanding on the following aspects.

Theoretical goals:

- the efficient boundaries of the banking firm, i.e. the optimal degree of vertical integration
- the core competencies of banks as we know them (banking theory is still in its infancy, with new models only capable of explaining the joint production of loans and deposits)
- the convergence or divergence of the roles of banks in different financial systems
- the changing logic of financial system architecture (markets and financial intermediaries as substitutes or complements)

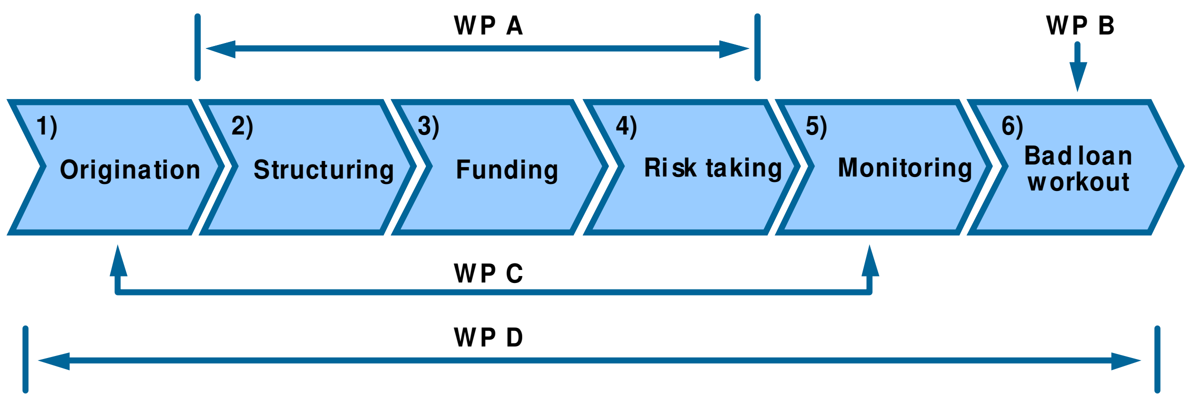
Practical goals:

- the business opportunities and risks inherent in the reshaping of the credit business
- sustainable future industry structures and the size of profit pools therein
- the likely winners and losers in a changing industry
- optimal organization strategies for banks from different groups
- the incentive-compatible pricing of credit pools

2.3 Work packages

The overall project is organized along a generic value chain of the credit business (see Figure below). Accordingly, we broke down the over-arching question of the project, namely "Who shall perform what function in an efficient value chain?" into four work packages (WP A-D). Work packages A) to C) each focus on a particular part of the value chain. Package A investigates the likely impact of loan securitization on the reshaping of value chain elements 2) to 4), whereas package B focuses exclusively on the outsourcing of element 6). Package C concentrates on elements 1) and 5) and elaborates on an often cited obstacle to outsourcing, namely the potential damage to the customer relationship. Work package D) analyses optimal incentives and governance schemes for the entities that are involved in the future value chain as we envision it. It hence deals with the 'dark side' of specialization across all elements of the value chain: the costs of running and operating co-operative relationships between banks and their suppliers.

Figure: Simplified generic value chain for the credit business



1. **Origination**

   Actions: Provision of information, approaching the customer, advising, negotiation, …

   Actors: Bank branch, internet, point of sale (e.g. car dealer), insurance broker (life insurance financing of mortgage credit), other banks (e.g. mortgage banks using affiliated banks for origination)

2. **Structuring the contract**

   Actions: Choice of maturity, schedule of payments, rating the customer and pricing credit risk, covenant agreements, collateral agreements

   Actors: Originator, other bank, rating agency, seller (car factory), etc.

3. **Funding**

   Actions: Internal funding by savings accounts, external funding by the interbank market or through traded securities (bonds, credit linked notes)

   Actors: Originator, other banks, institutional and retail investors

4. **Risk Taking**

   Actions: Allocation of default risk, recovery rate risk, downgrade risk, prepayment risk

   Actors: Originator, syndicate of banks, third party insurance, owner of pledged collateral, capital market investors, etc.

5. **Monitoring**

   Actions: Surveillance of payments, action triggers, advising the customer to change behavior,

   Actors: originator, credit factories, leasing companies, etc.

6. **Bad loan work out**

   Actions: Seizing and liquefying assets, debt restructurings, initiating bankruptcy proceedings, negotiating with debtor and other lenders

   Actors: Originator, specialized collection agents, specialized 'bad loan banks', specialized entities such as law firms, insolvency specialists

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Work package A: Outsourcing of credit risk taking: Securitization & credit risk trading

The growing market for asset backed securities and credit derivatives allows banks to unbundle the origination business from the risk taking business. Some commentators question whether and to what extent credit risk taking should be performed by banks at all. If credit risk markets function smoothly, so a theoretical argument, all credit risk pertaining to individual borrowers, regions/industries and to the economy at large could be placed into investor portfolios. This would be efficiency enhancing especially for those banks that would otherwise have to bear bulk risks due to their regional focus. Securitization, or the reallocation of credit risks in general, raises a number of research questions, that we aim to answer in this working package:

- What are the costs and benefits to securitisation for banks of different size and business focus?
- Why are some bank assets usually termed "non securitizable"?
- How will Basle 2 affect securitisation (e.g. through harmonizing internal rating systems and thereby enabling new pricing mechanisms based on rating pools)?
- To what extent should credit risk be borne by the originating bank? What are the determinants and what are the optimal incentive schemes?
- What elements of the generic value chain in the Figure above are actually outsourced through securitization, for banks often retain a large part of credit risk even after securitizing a credit portfolio?

Work package B: Outsourcing of the bad-loan-workout function

Many small banks recognize that they lack the necessary expertise and resources to maximize the value of bad loans. While retailers have been employing specialized collection agents for a long time already, some large banks just recently began to specialize in acquiring and managing bad loans of corporate customers. Some German banks specialize in forming and managing the syndicate of lending banks in financial distress situations. In other countries, regulatory action has already led to the foundation of bad loan banks specializing in the liquidation and workout of bad loans. Work package B will analyze this increasingly important yet for the most part neglected niche of the credit value chain.

- What are the experiences with bad loan banks abroad?
- What are the legal ramifications (banking laws, privacy laws)?
- Does Basle 2 and internal rating systems encourage banks to specialize along the work out dimension?
- Is there a market for bad-loan banks in Germany/Europe? Who are the likely players and how large are the potential efficiency gains?
- What are the implications for the banking market and its structure?

Work package C: Modern Relationship Banking and outsourcing

There has been a long debate in the literature whether the celebrated notion of the German Hausbank-relationship is anything more than a theoretical artefact. In their famous book from 1994 on the German financial system, Edward and Fischer doubt that the relationship between German banks and their firm-borrowers has ever been unique in any important respect and that German banks have engaged more in relationship banking than their peers from other countries. More recent empirical research (e.g. Elsas/Krahnen (1998), Hackethal (2001)), however, provides strong evidence for the existence of Hausbank relationships, especially with German SMEs. Now, that most banks can no longer benefit from large profits from their capital-market oriented business lines, many observers expect a renaissance of relationship banking with non-financial corporate clients. Working package C investigates whether and how such a "modern" form of relationship banking can be reconciled with the "breaking up of the bank", with the conduct of non-core activities outside the boundaries of the bank. Instead of posing the usual question of what and how specific functions should be outsourced, we hence focus on the limits to outsourcing that emerge from the specific nature of a customer relationship to a bank. If banks have a special relationship and want to manage the value of this relationship, they must be very concerned with the likely impact of actions taken by third party after outsourcing specific credit functions.

- What is the nature of "modern" relationship banking?
- How can banks optimise the trade off between outsourcing benefits and controlling the customer relationship?
- Which elements of the generic value chain can be outsourced without jeopardizing customer relationships?
- What are the implications on the banks' information systems infrastructures (ISIS) ?

Work package D: Corporate governance and cooperation models for outsourced functions

Outsourcing implies that the traditional hierarchical coordination by senior management is replaced by a 'market mode' coordination. A rich body of theoretical and empirical research from other industries concludes that some common drivers explain which governance mode are best suited for specific coordination problems. Examples are relation specific investments made by the partners, the opportunity to opportunistically expropriate a counterparty, and incentive problems resulting from information flows. If two entities specialize in different elements of the value chain, a need to cooperate hence arises in order to satisfy customer needs and to jointly reap the benefits from specialization. In general, this can be done by means of transaction-oriented short term contracts, complex long term contracts between the two or by unilateral or bilateral ownership structures. In fact, German banks that sell credit related products of other banks or buy back-office services from other banks, traditionally typically held equity stakes in the other bank or were affiliated to the same banking group as the other bank.

In order to understand the potential of outsourcing and to make any projections about the optimal ownership and organization of e.g. credit factories, one has to fully understand the origins and economic drivers of these complex organizational structures. Referring again to the analogy between the automotive and the banking industry, we are interested in the dynamics that led Porsche to produce only 20% of its final product and to rely on specialized component-contractors for the rest. We thus expect working package 4 to generate important insights with regard to the optimal boundaries of the bank and to generate answers to questions as diverse as the following.

- What is the optimal design of a contract between a credit factory and its bank clients?
- How should co-operations (e.g. to join forces in the areas of clearing and settlement) be governed?
- How must the internal organization of banks and the current performance measurement/incentive systems within banks adapt to new governance modes?
- How do equity markets react to bank divestitures, spin offs and carve outs?

2.4 Relevant existing work

Over the recent past the Finance Department of Frankfurt University has been conducting research projects that are highly relevant for cluster 4. The results provide a solid foundation for most of the four work packages. For example, the team around Prof. Krahnen has gained important insights on the nature of relationships between German banks and their corporate customers and is now focusing on asset securitization. The team of Prof. Schmidt examined European financial systems, focusing on the (changing roles) of banks. Seminars on bank strategies (one with J. Ackermann in July 2003) and numerous relevant diploma complement their research program. The team around Prof. Wahrenburg concentrates on theoretical aspects of credit risk management and their practical implications.

In addition to their research activities, both, Mark Wahrenburg and Andreas Hackethal have over the last years worked for consultant firms in the field of bank strategies and credit risk management.