Austrian Banks' Lending and Loan Pricing Strategies against the Background of Basel II

Johannes Jäger, Vanessa Redak¹ Although the New Basel Capital Accord (Basel II) makes no direct reference to loan pricing and lending terms, it is widely held that Basel II does, in fact, impact on loan pricing. A survey among Austrian banks on loan pricing strategies after Basel II aimed to identify the potential effects of Basel II on loan pricing. This article summarizes and analyzes the results of this survey and their implications for the Austrian lending business. The survey found a significant trend toward risk-adequate pricing. While it is impossible to predict at this point whether banks will eventually successfully implement this strategy, given the competitive environment, it seems that they are in fact resolved to do. Banks' loan pricing and portfolio streamlining plans concern mostly lending to small and medium-sized enterprises (SMEs), which in credit institutions' view offers the largest room for maneuver to adjust lending volumes and prices.

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Introduction

A range of analyses and studies on the implications of the New Basel Capital Accord (Basel II) in the national and international context have been published over the past few years. One of the issues which have so far not been thoroughly analyzed is the question of whether Basel II may bring about changes in loan pricing. Although the new capital adequacy framework does not contain any provisions on lending terms and loan pricing, it has been widely assumed that Basel II may lead not only to a credit crunch but also to more restrictive pricing, which means that loan prices could vary depending on a borrower's risk exposure. After all, Basel II supports the introduction and use of rating models that would provide the basis for such risk-adequate pricing.

If these expectations prove true, banking systems like the Austrian

may see a break with traditional lending strategies. Both the financial system and the structure of the real economy in Austria are characterized by a number of specific features, including a strong reliance on longterm relationship banking, the large number of small and medium-sized enterprises (SMEs) and the - by international standards - important role of bank loans in corporate finance (see Dirschmid and Waschiczek, 2005). In particular, the type of long-term relationship banking strongly established in Austria (and also in countries like Germany and Japan; see Schöning, 2004; Jung and Strohhecker, 2006) seems to some extent not be exactly compatible with ratings-based risk-adequate pricing. One of the key features of long-term relationship banking is that banks usually provide finance to customers over the business cycle, i.e. they give

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out loans also in economically difficult times, when their customers' risk of default is higher. This lending policy has a long tradition in Austria; it is rooted in part in the industry and structural policy role banks played in the post-1945 period (see Wössner, 1969; Tichy, 1975; Beer and Ederer, 1987; Kaufmann, 2001; Valderrama, 2001). On the one hand, it was up to the big banks like Länderbank and Creditanstalt to provide capital to key national companies, often regardless of whether there was real profit in a lending transaction or not. Moreover, not a few banks held participating interests in these companies and thus had a fundamental interest in keeping them operable. On the other hand, smaller credit institutions, such as regional savings banks, were expected to provide households and local businesses, sometimes located in economically disadvantaged regions, with access to finance. Risk assessment did not play a major role in loan pricing for either type of bank.

However, as other parts of the financial market gained relevance (derivatives markets, stock trading, etc.), identifying, measuring and managing risk also became more important, and Austrian banks have embraced this development (see Datschetzky et al., 2003). At the same time, regulators have promoted the use and improvement of – in particular quantitative – risk measurement procedures by providing the appropriate legal framework (Market Risk Directive of 1996, Basel II). Basel II broadly recognizes internal risk measurement methods, allowing banks to use their own rating models under the internal

ratings-based (IRB) approaches to calculate their risk and the resulting regulatory capital requirements. At the same time, banks opting for the standardized approach and using external ratings are encouraged under pillar 2 of the new capital adequacy framework to quantify all relevant risks, which implies that even those banks need to carry out a more accurate assessment of their risk exposure than previously. This paper investigates whether changes in banks' and supervisors' treatment of risk may bring about changes in lending procedures, in particular in lending terms and pricing.

Method and Design of the Survey²

Between December 2005 and February 2006, a total of 25 banks doing business in Austria were surveyed by individual interviews on the basis of a standardized questionnaire. The representative sample was compiled to both reflect the Austrian banking sector's diverse scale and organization as well as to cover as thoroughly as possible the population of all Austrian banks. While this procedure ensures almost full coverage of all larger universal banks and thus the respective market volume, conclusions about the remaining volume must be drawn from sub-samples. In terms of unconsolidated total assets the survey sample covers a total of 61.3% of the Austrian banking sector. The quantitative evaluation of the data was carried out both for the entire sample and for individual size and type categories. A differentiation was made between special-purpose banks, major universal banks as well as medium-sized and

² The complete survey is published at http://basel2.fh-vie.at/publikationen.aspx?catId=4 (see also Jäger, 2006).

small banks. Standardized questioning was preceded by an explorative stage during which depth interviews were conducted with selected banks to identify, in line with the methodological guidelines of interpretative social research (see Froschauer and Lueger, 1992; Lamnek, 2005), questions, issues and interlinkages which would have been impossible to deduce on the basis of the available data and literature alone.

The Status Quo in Loan Pricing: Only Major Banks Apply Refined Calculation Methods

Currently Used Pricing Strategies

The banks surveyed were first questioned about the information and methods they currently use to calculate loan prices. This is a key prerequisite for assessing potentially varying pricing strategies and the possible implications of Basel II.

The large majority of responding banks reported a calculation method which included the calculation of minimum margins for loans. Some banks, all of them small or mediumsized credit institutions, however, apply a very simple calculation scheme.

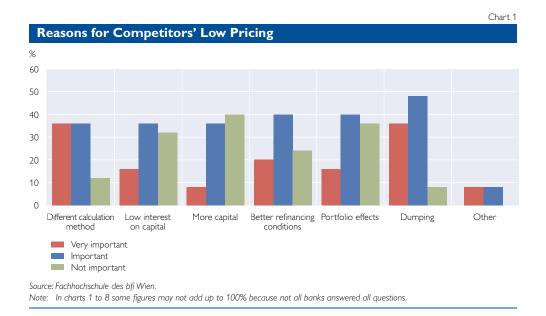
On the basis of the standard models for loan pricing as described in the banking literature (see Rolfes and Bannert, 2001; Schierenbeck, 2003a and 2003b; Schöning, 2004), respondents were asked about the components of their loan cost schemes. The literature usually distinguishes between standard risk costs, cost of capital, liquidity or refinancing costs as well as unit costs.

Basel II may — directly or indirectly — cause changes in particular in the calculation of standard risk costs and cost of capital, since such calculations take into account banks' rating

approach as well as the quality and nature of the model used for assessing customers' creditworthiness. Similarly, these cost components are influenced by the collateral chosen, the recognition of which has been redefined by Basel II.

At present, banks usually calculate standard risk costs in line with the insurance principle on the basis of their past default experience. This procedure involves the calculation of probabilities of default (PDs) derived from the credit institution's own experience that provide the basis for the standard risk costs. PDs calculated on the basis of external prices (e.g. market prices or bond spreads) are virtually never used as the basis for the calculation of standard risk costs. Some banks apply PD mapping, i.e. assigning the calculated PD of individual customers to rating categories, which is a key method for estimating standard risk costs. Usually, banks determine standard risk costs broken down by rating or by rating and maturity. The survey has shown that large or more specialized banks tend to use a more refined approach than small and medium-sized credit institutions.

To assess the possible implications of changes in the cost of capital for lending terms, the banks were also questioned about the return requirements for earmarked capital and for the calculated cost of capital. Most banks reported that they targeted a return on equity (ROE) of 6% to 10% before tax, only large and specialized credit institutions often target a higher ROE. These values, however, should be treated with caution, since the interviews showed that in many cases, margin calculations do not include the total targeted ROE. Still, it has become obvious that the cost of capital plays a key role in cost



accounting, which is also due to the capital requirements as set out in Basel II to a significant extent influencing the amount of capital that banks hold.

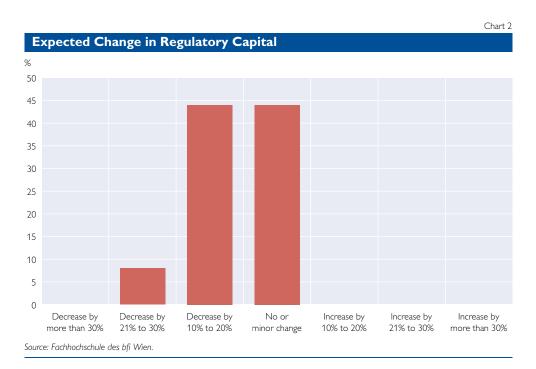
Whether the calculation of standard risk costs and the cost of capital has changed in the course of preparing for Basel II also seems to depend on a bank's size: especially small credit institutions reported that there had been no changes so far.

Cost accounting is an important, but not the only basis for pricing strategies. Therefore, loan prices do not necessarily correspond exactly to lending costs. Other factors, e.g. market conditions, also impact on pricing policies. Asked why competing lenders are able to offer more favorable terms, most banks mentioned different calculation schemes or dumping, whereas more capital is not believed to play a major role (see chart 1).

Overall, the survey has shown that most Austrian banks apply calculation methods that can provide at least some basis for risk-adequate pricing. In addition, a substantial proportion of respondent banks reported considerable changes in cost accounting over the past few years. There are, however, major differences depending on bank size: While several, in particular large credit institutions started to introduce more accurate calculation methods already a few years ago, the majority of small and medium-sized banks has hardly made any changes up to now. Yet, the latter claim to be working on refining their calculation schemes already or plan to do so in the near future. This shows that the implementation of Basel II has prompted many banks to adapt their cost accounting procedures to create or improve the basis for riskadequate pricing strategies.

The Future of Loan Pricing

Before taking a closer look at future loan pricing strategies, the issue of whether the calculation of regulatory capital as set out in Basel II does in fact have an impact on banks' capital needs to be clarified. Capital requirements are a key (restrictive) factor in lending. According to the results of the Quantitative Impact Studies conducted by the Basel Committee on

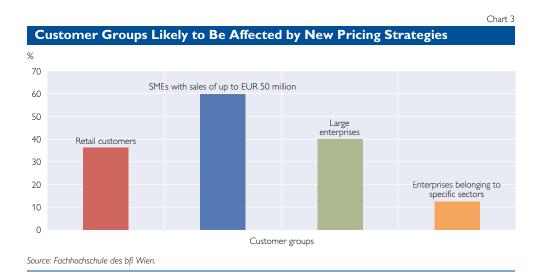


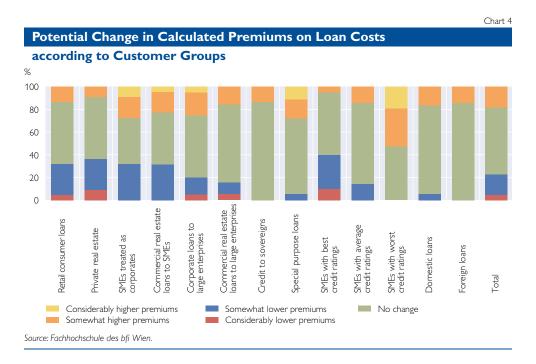
Banking Supervision (BCBS), Basel II should lead to a lower aggregate level of minimum capital requirements compared with Basel I, even if the scaling factor of 1.06 is taken into account, whose application should prevent a sharp drop in minimum capital requirements (see BCBS, 2003; BCBS, 2006). The survey showed that the majority of respondent banks expects aggregate minimum capital requirements after the implementation of Basel II to remain more or less unchanged or to decrease by up to 20% (see chart 2). A disaggregated analysis reveals that large banks tend to anticipate lower capital requirements, whereas small and medium-sized banks assume that there will be no substantial changes.

Banks Plan to Adapt Loan Price Calculations

Regardless of possible changes to minimum capital requirements, the large majority of banks is planning to modify their calculation schemes for standard risk costs and for the cost of capital, giving (at least a little) more weight to expected risk and economic capital. Large banks in particular announced that they would make major adjustments, while small and medium-sized banks intend to implement changes on a smaller scale.

This, in turn, raises the question whether more accurate risk calculation leads to adjustments in pricing. There have been growing signs that in addition to adaptations of price calculations at the micro level, there may also be changes at the aggregate level. The fact that risk premia on riskier loans have increased corresponds to the results of the Oesterreichische Nationalbank's regular bank lending survey of the past few years, which indicate that margins on riskier loans have been tightened somewhat (see Waschiczek, 2006). These changes have affected first and foremost small and medium-sized enterprises with sales of up to EUR 50 million, but also larger enterprises and retail customers (see chart 3). Most banks argue that this development confirms





that pricing strategies have already become more risk-adequate owing to changing market conditions and the upcoming implementation of Basel II.

Accordingly, the majority of banks in the survey indicated that for them risk-adequate pricing will play a (somewhat or considerably) bigger role in the future. Still, a few credit institutions responded that they did not expect risk-adequate pricing to gain in importance, and one bank

even claimed that its role would diminish. All in all, however, there is an ongoing trend toward increasingly risk-adequate pricing

Credit institutions were also asked which groups of borrowers would imply overall higher, unchanged or lower standard risk costs and cost of capital. As chart 4 illustrates, most borrowers will not feel any changes in calculated premiums or discounts on loans. A breakdown of SMEs by credit profile shows that on average, the premiums on risk costs and the cost of capital will remain unchanged or shrink for a majority of businesses. SMEs with low credit ratings, however, will face notably higher premiums.

Implementation of Risk-Adequate Prices Depends Strongly on Market Acceptance

The implementation of risk-adequate pricing requires not only lenders to adjust supply structures but also borrowers to (correspondingly) change their demand behavior. Therefore, the surveyed banks were also questioned about customer acceptance of risk-adequate pricing. Apparently, banks believe that large corporate loan and real estate loan customers as well as those 25% of SMEs with the best credit ratings have some understanding for risk-adjusted prices, whereas retail consumer loan customers and the 25% of SMEs with the worst credit ratings have little tolerance for such a pricing strategy. Among "average" SMEs, there seems

to be a balance between those who have some understanding and those who have no understanding.

There is no agreement among banks as to whether risk-adequate prices will be more readily accepted by new or by existing customers, though a relative majority believes that existing customers may have more objections to such strategies than new customers (see chart 5).

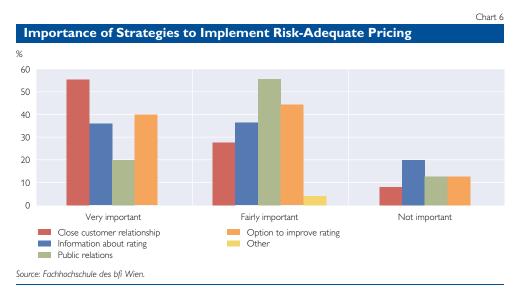
As to the strategies available for introducing risk-adequate prices, banks consider all of them more or less important, in particular maintaining close customer relationships as well as informing customers about their ratings and, accordingly, ways to improve their ratings (see chart 6). This indicates that lenders are willing to provide more information, thus increasing transparency and contributing to higher acceptance by borrowers. Compared with large banks, small and medium-sized credit institutions tend to give more weight to close customer relationships.

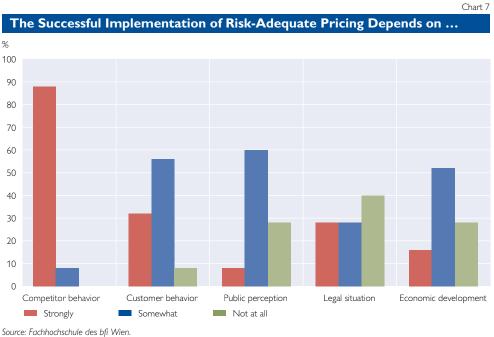
In addition, the banks surveyed believe that whether new pricing

Chart 5

Acceptance of Risk-Adequate Pricing by Existing Customers Compared with New Customers 50 Somewhat less 45 40 35 30 No difference 25 Somewhat more 20 15 10 Considerably less Considerably more 5 Λ Source: Fachhochschule des hfi Wien

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strategies are met with acceptance strongly depends on competing lenders (see chart 7). Other factors, such as customer behavior and economic conditions, also seem to play at least some role. Banks' perception that their strategies are strongly dependent on other lenders, i.e. on market supply behavior, is a sign of competitive structures in banking. Since, however, all lenders broadly agree that risk-adequate pricing will gain in

importance, as the survey discussed here indicates, it can be assumed that the entire market will move in this direction and that market participants will adapt their products and services to meet the new requirements. Competitive pressure may even reduce the ability of individual market participants who do not have risk-adequate prices on their products to compete and may eventually force them to follow the general market trend.

Upgrading of Risk Management and Standardization of Lending

Switching to risk-adequate pricing may also entail some restructuring within banks as individual organizational units sometimes target different objectives. Therefore, the banks participating in the survey were questioned about current processes and procedures as well as changes in decision-making structures within their organization. The working hypothesis applied assumes that Basel II will prompt a reorganization of decisionmaking structures and in particular changes in the intra-institutional relationship between loan management and risk management.

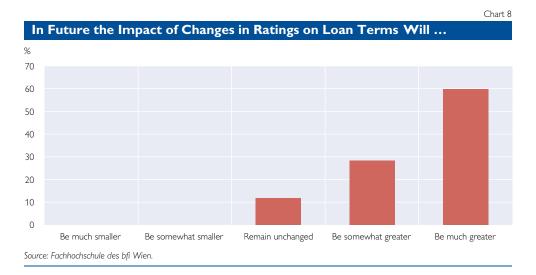
Asked to what extent the role of risk management/controlling will change at their bank, the majority of respondents said that this area would become somewhat more or much more important. While larger banks, already having upgraded risk management over the past few years, expect this area to become only slightly more important, small and medium-sized banks believe that for them, the role of risk management will increase considerably.

This shift may take place at the expense of loan management if lending becomes increasingly standardized and, as a consequence, the individual relationship between the loan manager and the loan customer becomes less important. For this reason banks were asked whether they were planning to move toward greater standardization in lending, i.e. applying uniform guidelines and standards, or toward greater flexibilization, i.e. applying different criteria and assessments depending on individual lending cases. The responses do not provide a clear picture: While the majority presumes that there will be some

or considerably more standardization and only few respondents do not see any changes, some banks indicated that they would pursue both more standardized and more flexible policies. Moreover, the qualitative evaluation of the interviews showed that more standardization is planned especially in areas where margins are comparatively low, for example in retail lending. By contrast, smaller and medium-sized banks said that they would increase flexibility in lending to SMEs. In general, large banks tend to opt for greater standardization, whereas medium-sized banks expect little change and small banks consider that not only standardization but to some extent also flexibilization will become more important.

Similarly, there is broad agreement that new loan contracts will increasingly incorporate clauses enabling the adjustment of lending terms to changes in ratings. 60% of responding banks even said that such clauses would play a much greater role, which highlights banks' intention to modify traditional interaction patterns with borrowers (see chart 8).

connection with possible changes in decision-making structures, the banks surveyed were also asked how important it would be to be able to adjust lending terms in existing loan contracts if a customer's rating should change. There was almost unanimous agreement that this option would become somewhat or considerably more important; no bank expected the opposite. Banks' approaches to how such an adjustment of lending terms might be carried out in practice vary: one group said that it would act more flexibly, whereas the majority indicated that it would rely on more standardized procedures.



All in all, the survey results on this topic do not provide a clear picture. It is impossible to deduce that the decision-making structures identified with the tradition of long-term customer-bank relationships will be abandoned. There are signs, however, that in particular large and some medium-sized banks will take certain measures, including, for instance, the adjustment of lending terms when a borrower's rating changes as well as more standardization, which will reduce flexibility in managing individual customer relationships. Many small banks and banks with a regional focus indicate that they would not traditional relationship abandon banking, arguing that since their business is less geared toward achieving a high ROE - thanks to, e.g., their cooperative structure – they can afford to support regional economic objectives and that maintaining close relationships with their customers is a competitive advantage rather than a one-way strategy. Furthermore, small credit institutions maintain that close and personal customer relationships in the regional context help keep the risk of default low, giving banks the possibility of providing sound assessments of customers' creditworthiness on a broader basis.

Since Basel II closely links the capital requirements under the IRB approach to borrowers' credit ratings, it can be assumed that banks' treatment of borrowers whose creditworthiness deteriorates will change. The majority of the banks surveyed, especially larger banks, in fact indicated that in such cases they would resort to shrinking the proportion of such customers in their portfolios to a larger extent than previously. In particular, small and medium-sized banks reported that they would not only reduce the share of such customers but also strengthen their relationships with the remaining customers, which, they argue, may raise customer loyalty and thus impact positively on profitability in the long run. Besides, these banks apparently see themselves as more committed to regional and corporate responsibility. The majority of large banks, on the other hand, indicated that they would end business relations with customers whose credit ratings deteriorate earlier than now.

Summary and Conclusions

The analysis of the survey results shows that Basel II will bring about substantial changes in loan pricing, loan portfolio compositions and lending terms if banks implement the strategies announced in the survey interviews. Risk costs will increasingly be calculated on the basis of individual borrowers' risk. As a consequence, customers with good credit ratings will obtain loans at lower prices than those with poor ratings. Similarly, almost all banks surveyed announced that they would adjust the terms of existing loans if a borrowers' rating should change. All these measures are part of a trend towards risk-adequate pricing.

However, Basel II does not seem to be the sole reason for banks to modify their pricing strategies; operational considerations, market developments as well as expectations voiced by supervisors and other institutions or organizations (e.g. rating agencies) also contribute to an environment conducive to risk-adequate pricing. Since Basel II supports certain mechanisms in lending, such as the application of new risk measurement methods and ratings consistent with market conditions, it also acts as an accelerator and catalyst of lending strategies based on risk-adequate pricing and risk-based return calculation.

Whether the strategies envisaged by banks can in fact be implemented will depend not least on market conditions. At present, risk-based loan pricing is the exception rather than the rule in the Austrian market. Banks continue to extend some loans at terms that do not reflect total risk costs to be able to keep up with aggressive pricing behavior in a partly highly competitive market. In addition, many small and medium-sized

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banks, which have always factored regional economic policy considerations into their lending and pricing strategies, said they would continue to do so. As a result, the Austrian loan market would continue to meet the heterogeneous demands of the Austrian business community with its predominance of SMEs despite the trend toward standardization supported by Basel II.

It is likely, therefore, that the Austrian lending business will not change all at once. Rather, there are signs that banks are going to pave the way for gradual modifications in the medium term. It remains to be seen whether risk-adequate pricing will be introduced quickly, but the ongoing discourse compels banks at least to some degree to explain to investors and savers, possibly even to supervisors, why their lending terms are not risk-adjusted, just as internationally operating banks will feel increased pressure to optimize their risk-to-return ratios. Furthermore, banks may demand higher collateral from borrowers; this aspect was not part of this analysis, though. The future increased tradability of loans may also impact on pricing strategies. Seeking to optimize the risk-to-return ratio, banks may review their loan portfolios to determine which borrowers do not yield a return that is in line with their riskiness. The threat of sanctions for such "suboptimal" customers would in turn increase pressure on borrowers to present themselves as low-risk customers long before the danger of their loan being removed from the bank's portfolio presents itself. Today, businesses are well aware of the fact that the implementation of Basel II will require them to improve the provision of documentation and information to their banks.

References

- **BCBS Basel Committee on Banking Supervision. 2003.** Quantitative Impact Study 3 Overview of Global Results. Basel.
- **BCBS Basel Committee on Banking Supervision. 2006.** Results of the Fifth Quantitative Impact Study (QIS 5). Basel.
- **Beer, E. and B. Ederer. 1987.** Industriepolitik der österreichischen Banken. In: Wirtschaft und Gesellschaft 3. 353–370.
- **Datschetzky, D., Straka, D. and S. Wukovits. 2003.** Overview of Austrian Banks' Internal Credit Rating Systems. In: Financial Stability Report 5. Oesterreichische Nationalbank. 82–95.
- **Dirschmid, W. and W. Waschiczek. 2005.** Institutional Determinants of Equity Financing in Austria. In: Financial Stability Report 9. Oesterreichische Nationalbank. 77–92.
- **Froschauer, U. and M. Lueger. 1992.** Das qualitative Interview zur Analyse sozialer Systeme. Vienna.
- **Jäger, J. 2006.** Kreditvergabe, Bepreisung und neue Geschäftsfelder der österreichischen Banken vor dem Hintergrund von Basel II. Study of Fachhochschule des bfi Wien. Vienna.
- Jung, T. and J. Strohhecker. 2006. Risk Adjusted Pricing Strategies for the Corporate Loans Business – Do They Really Create Value? In: Conference Proceedings. The 24th International Conference of the System Dynamics Society. July 23–27, 2006. Nijmegen.
- **Kaufmann, S. 2001.** Asymmetries in Bank Lending Behaviour. Austria During the 1990s. ECB Working Paper 97.
- Lamnek, S. 2005. Qualitative Sozialforschung. Basel.
- **Rathgeber, A. and M. Wallmeier. 2005.** Die Eigenmittelunterlegung nach Basel II aus Sicht der Kapitalstrukturtheorie. In: Die Unternehmung. Swiss Journal of Business Research and Practice 59(6): 519–534.
- **Rolfes, B. and T. Bannert. 2001.** Die Kalkulation variabel verzinslicher Bankgeschäfte. In: Schierenbeck, H., B. Rolfes und S. Schüller (eds.). Handbuch Bankcontrolling. Wiesbaden. 281–299.
- Schierenbeck, H. 2003a. Handbuch Bankcontrolling. Wiesbaden.
- **Schierenbeck, H. 2003b.** Ertragsorientiertes Bankmanagement. 2 volumes. 8th edition. Wiesbaden.
- **Schöning, S. 2004.** Kreditangebot, Kreditpreise und das Phantom "Basel II" eine kritische Reflexion. In: Zeitschrift für das gesamte Kreditwesen 3. 130–136.
- **Tichy, B. 1975.** Gemeinwirtschaftliche Funktionen der Kreditunternehmungen. In: Wirtschaft und Gesellschaft 3. 47–57.
- **Valderrama, M. 2001.** Credit Channel and Investment Behaviour in Austria: A Micro-Econometric Approach. ECB Working Paper 108.
- **Waschiczek, W. 2006.** Margen für Unternehmenskredite gesunken. Österreich-Ergebnisse der euroraumweiten Umfrage über das Kreditgeschäft im Oktober 2005. http://www.oenb.at/de/img/stat_2006_q1_analysen_6_tcm14-37726.pdf
- **Wössner, J. 1969.** Die Funktion der Sparkasse. Soziologische Überlegungen zu Bestimmung von Kriterien der Gemeinnützigkeit. In: Quartalshefte der Girozentrale 4. 17–26.