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A Market for the Making

The German Bad Loan Market

Contents

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Introduction

Disposals and trading of German bad loans (impaired loans) commenced in earnest in 2003. A number of transactions, mostly portfolio trades, have taken place since then and interest in the area has grown considerably amongst US and UK investors, German banks and the advisory community. It is by no means clear that this high level of interest is justified and the true size of the opportunity remains uncertain. Two questions are asked again and again by the investor community - "How can we find investment opportunities?" and "When will the market finally take off?"

This report is addressed both to the distressed debt investor, many of US and UK origin, and to German banks - for it is in the interest of both sides to make the distressed debt market work. Germany will need to act quickly to capitalise on this opportunity and avoid being labeled as "the land of the broken promise."

This report will assess the extent of the opportunity offered by the German bad debt market. Drawing upon Kroll's strong German market knowledge and European restructuring capabilities and Mercer Oliver Wyman's strategic insight into the financial services industry we have a unique opportunity to address this issue, going beyond the commonplace answers and recycled facts.

Whilst our analysis and discussions confirm the opportunity is vast, current activity is less than anecdotal evidence would suggest. We believe that while the total volume of German distressed assets is the most significant in Europe, it is only about 50 per cent of the often cited €300bn face value. In fact, today's investors have to focus on a significantly smaller volume available for sale (a mere €75-80bn as opposed to €300bn). The remaining volume is not currently targeted by investors nor is it readily marketable because of structural supply side constraints. As a consequence, there is a sense of frustration amongst investors, especially late-comers, who face a seemingly cramped market place with few available investment opportunities and reduced spreads.

This situation could be alleviated and a further €80bn could become available provided both investors and banks alter their business models. There are some good reasons for both sides to do so and some concrete steps to achieve it.

We hope the readers of this report find our perspectives and insights into the German market for bad loans useful.

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1.

Executive Summary

Two years ago, amongst a setting of low market return expectations for traditional asset classes and excess liquidity in the market, Germany was discovered as a new emerging market for non-performing and sub-performing loan trading by international investors. The transaction volume jumped to approx. €12bn (face value) in 2004, with a large number of these investors having now setup a local presence in the German market.

This report attempts to address a number of misconceptions that exist in the market. Our main findings are:

I. The total value of bad loans in Germany is approximately €160bn. Although this represents the largest potential of all European markets it is significantly lower, almost half, than most current estimates.

II. The bad loan trading market in Germany faces supply constraints. Banks have not overcome the many impediments and prices are still perceived as too low by many suppliers (despite being very close to a fair value). Banks will be at the centre stage to unlocking this supply, as current pricing appears adequate.

III. The highly fragmented nature of the German banking landscape acts as a barrier to further market development. Transaction structures will have to become more standardised and smaller banks will need to start pooling their bad loans. There are a number of approaches that banks can pursue: building improved loan exit mechanisms, utilisation of outsourcing of parts of the value chain and participation in establishing pooling vehicles for bad loans.

IV. Investors face a market in which the legal and cultural environment requires strong local expertise and advice. In particular, local expertise and workout capabilities continue to be a major driver of investor success. The bad loan market in Germany is still at an early stage of development and as the market matures, opportunities for investors will continue to increase.

We expect that the issues highlighted in this report will be addressed and the obstacles facing the German bad debt market will be resolved over time. As a consequence of this, we believe that there will be a further rise in the bad loan transaction volume in 2005 to €20bn face value (partly driven by a number of larger scale deals already in the pipeline). However, from 2007 onwards we expect the market to mature and stabilise leading to a slightly lower annual transaction turnover of approx. €15bn, mainly driven by a larger number of mid-sized deals. This market will source assets across a range of customer segments, including consumer loans and small business lending, and will be driven by players in all banking sectors.

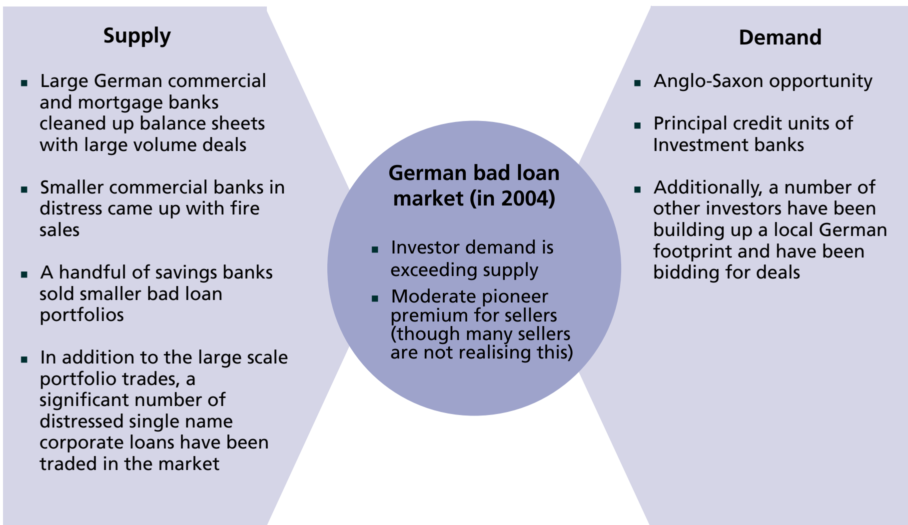
2.

Bad loan trading in Germany - a misunderstood market

Transaction volume of €12 bn in 2004

Bad loans are bank debt to customers that have either defaulted on their commitments or that are very likely to do so (for a precise definition please refer to the box on "Focus of our analysis"). Bad loan trading refers to banks selling these non or sub-performing loans. It is only during the past two years that this business has developed as a thriving new segment in the German credit market. The total transaction volume in face value terms jumped to approx. €12bn in 2004, up from roughly €3bn the year before - driven by a number of large portfolio transactions.

Figure1: Bad loan market Germany in 2004 - supply and demand side



Source: Mercer Oliver Wyman Analysis

Pioneer premium for sellers

Investor demand currently by far exceeds supply leading to a moderate pioneer premium for sellers - a fact that most sellers do not realise. Indeed several banks think that prices are unfavourably low, a perception usually driven by an accounting viewpoint.[1]

[1] Accounting viewpoint in this context refers to banks that are assessing distressed loans in terms of balance sheet value rather than on a "fair value" or net present value basis.

The German market for bad loans is still in a development stage where standard transaction structures and a steady stream of mid-sized transactions have not yet fully evolved. "Business as usual" has yet to be established - standardisation of transaction structures is evolving and a number of smaller banks are currently planning smaller sized transactions.

Contrasting beliefs on the market

We observe a number of contrasting beliefs on the market to exist among players. For example:

- Some investors expect to find a new "El Dorado" and are investing heavily in their domestic infrastructure, whereas others are frustrated at waiting to win their first transaction
- A handful of banks have engaged in large-scale transactions and, on balance, these players have all had positive experiences. In spite of these encouraging examples, the majority of banks remain reluctant to enter the market
- Estimates for the total volume of bad loans in Germany vary widely between €100bn and €300bn

The aim of this report is to shed some light on current practices and future trends. In addition we will examine a number of business opportunities for both the supply and demand sides in this "new frontier" market.

Focus of our analysis

This report focuses on domestic loans of banks in Germany[2]. We have excluded loans to foreign entities of German banks. Also excluded from our analysis are inter-bank lending, loans to public institutions and repurchase agreements. These segments and products default infrequently and are not of interest for bad loan investors. The bad loan volume that was sold up until the end of 2004 is deducted from all total volume figures shown in the report.

Definitions

Our definition of NPL (non-performing loan) is tied to the Basel II default criterion - every loan that is overdue by 90 days or more has to be considered as defaulted. A sub-performing loan has not yet met the Basel II criterion though there is a high probability (at least 10 per cent) that this will happen within one year. Sub-performing loans typically have an internal bank rating of B-, S&P-equivalent or worse (i.e. usually in one of the worst two performing classes of a bank's rating). In the following report we focus our analyses on both types - non-performing and sub-performing loans - and jointly name them "bad loans".

Our approach

The findings of this report are based on a combination of inputs: expert knowledge within both Mercer Oliver Wyman and Kroll's Corporate Advisory & Restructuring Group; interviews with international bad loan investors and German banks in all banking sectors; interviews with rating agencies and analysts; various publicly available data sources; as well as benchmarks from Mercer Oliver Wyman's extensive consulting experience. Estimates on the total size of the market have been calculated using proprietary Mercer Oliver Wyman models.

[2] "Banks in Germany" are defined as financial institutions with a German banking license. This includes German branches of foreign banks, but excludes foreign branches of German banks.

3.

Sizing the market potential

Volume of bad loans

Total of €160bn bad loans

The total volume of German domestic bank loans at the end of 2004 was just under €2,500bn. Based on our segment specific benchmarks for the Probability of Default (PD)[3] and estimates of the "time on book"[4] we calculated the total volume of bad loans on the balance sheets of banks in Germany. We estimate this volume to be in the range of €160bn of which €125bn are NPL, i.e. have actually defaulted, and €35bn are sub-performing loans. A more detailed description of our methodology is provided in the Appendix.

What are we missing?

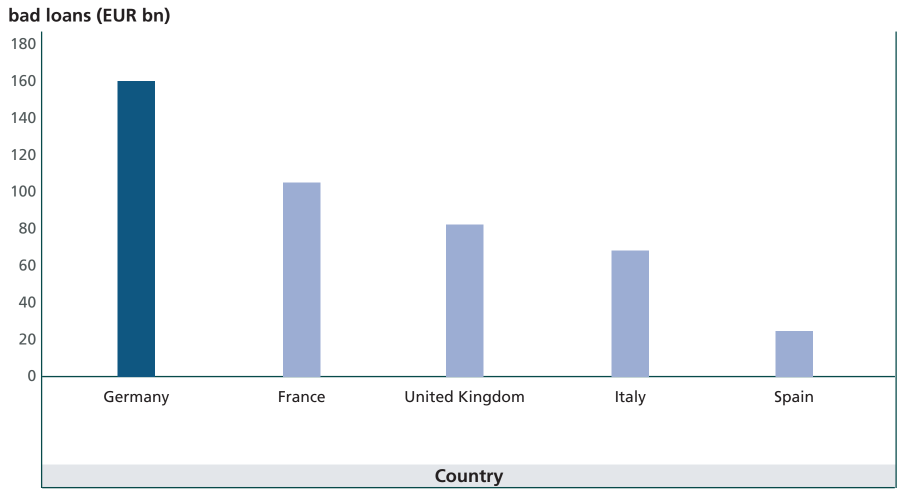
Our estimation of total bad loans may come as a surprise - other studies frequently produce higher estimates for the total volume of bad loans (up to €300bn). We have derived our numbers by detailed top-down analysis (see Appendix), starting with the lending volume by loan and bank type, applying the cycle adjusted probability of default to estimate yearly NPL volume and applying the "time on book" to obtain our measure of NPL (non performing loans) stock. This calculation results in our €160bn NPL number. We can only speculate on how the €300bn number came about. It could be that the figure was derived from a calculation we have seen in the press or from other published reports. These reports base their estimation on the total German lending volume of €3,000bn (which includes among others loans to public institutions that we exclude in our analysis overall €500bn). They then apply a common (but inaccurate) estimate that 10 per cent of this volume is attributed to bad loans.

Second to Japan

Compared to other markets, Germany has the largest stock of bad loans in Europe (see Figure 2) and one of the largest in the world - the Japanese bad loan volume is larger and this has declined to approx. €300bn whereas the US volume is slightly below the German figure. Considering its early stage of development, the German market for bad loan trading has significant potential for the future.

[3] Probabilities of Default for this computation have been adjusted for the economic cycle.
[4] We define "time on book" as the time period from the moment at which a loan defaults to the time the loan is officially booked out.

Figure 2: Total bad loans across European countries (estimated face value), end of 2004



Source: National statistics, Mercer Oliver Wyman Benchmarks and Analysis

Three factors drive bad loans volume

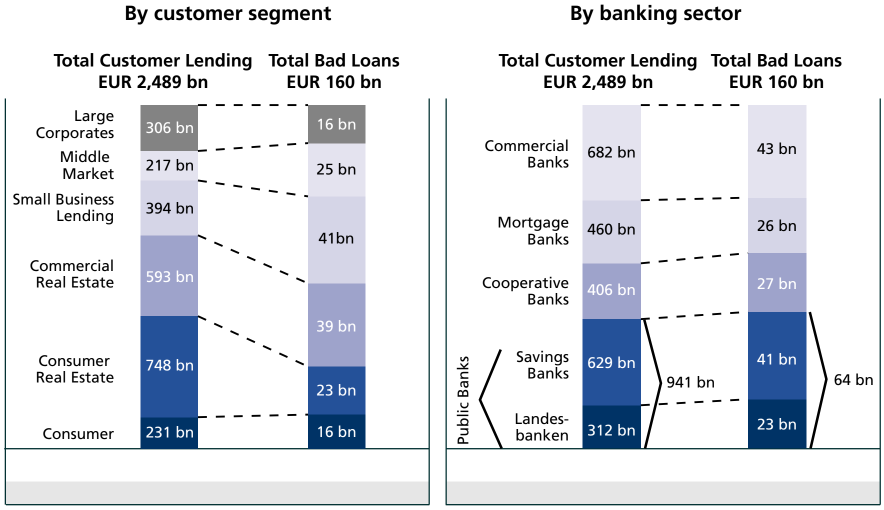
The bad loan volume in different countries is driven by three primary factors:

- The overall lending volume largely dependent on the GDP (gross domestic product) and the "lending culture" of a country
- The Probability of Default for different segments (mainly driven by the overall economic cycle)
- The "time on book" of defaulted loans (depending primarily on the legal environment, workout strategy and policies of banks).

The size of the German bad loan market is mainly a reflection of the first two points, namely the sheer size of the German economy combined with the recent economic crisis.

The break down by customer segment and by banking sector (in Figure 3 below) shows a more detailed picture of the distribution of bad loans still on banks' balance sheets.

Figure 3: Total customer lending and total bad loans volume (estimated face value), end of 2004



Source: Deutsche Bundesbank, VDH, Mercer Oliver Wyman Benchmarks and Analysis

Definition: Customer segments and banking sectors

- Large Corporates: Loans to corporates with revenues of more than €250m per year; excluding real estate lending
- Middle Market: Loans to corporates with revenues between €10m and €250m per year; excluding real estate lending
- Small Business Lending: Loans to corporates with revenues of less than €10m per year and to self-employed persons; excluding real estate lending
- Commercial Real Estate: Commercial financings of residential real estate, offices, retail space and managed real estate
- Consumer Real Estate: Residential real estate loans to consumers
- Consumer: Loans to consumers; excluding consumer real estate lending

- Commercial Banks: The four "big banks" (Deutsche Bank, Dresdner Bank, Commerzbank, HVB), private regional banks
- Mortgage Banks: real estate lenders with German mortgage banking licence
- Cooperative Banks: cooperative banks and cooperative central banks DZ and WGZ
- Public Banks: saving banks and Landesbanken.

About a quarter of the bad debt volume in Germany stems from large corporate and middle market loans - the segments most suitable for single name loan trading. Another quarter is tied up in commercial real estate loans and again one quarter in loans to consumers (including consumer real estate). The final quarter of the volume comes from loans to small corporates - the most illiquid segment so far. This relatively high proportion of SME bad debt reflects the higher default rates seen for smaller companies compared to middle market and large corporates as well as the significantly lower default rates for consumer real estate.

Public banks have biggest overall portfolio

With approx. 40 per cent of the total bad loan volume, public banks represent the largest sub-market in the market for bad loan trading. The cooperative banking sector has accumulated bad loans to a lesser extent (approx. €27bn) moreover, we estimate that approximately €4bn of this volume has already been pooled at BAG Hamm, the 'workout bank' of the sector. Significant bad loan volumes are also held by commercial and mortgage banks: several of these portfolios are of a significant size and trading in 2003 and 2004 was predominantly driven by players from these two segments. These numbers reflect the different business splits of the individual banking sectors - sectors with the highest relative proportion of consumer real estate and large corporate lending benefit the most from the low probability of default within these segments.

In the following chapters we analyse those effects that have an impact on the trading volume in this market and make a projection for trading volume in the future. In order to do this, we will first examine one of the major obstacles currently hampering bad loan trading - the fragmented nature of the German banking landscape.

Fragmentation of the German banking landscape as an impediment to bad loan trading

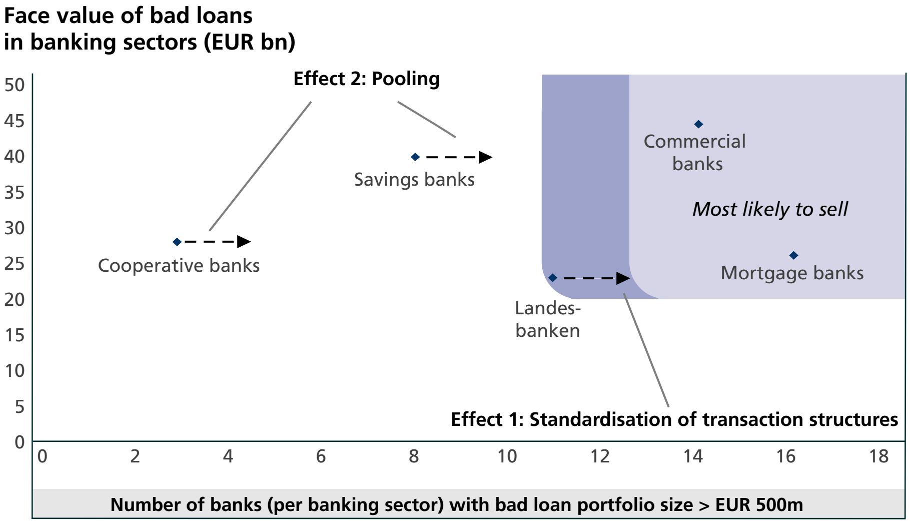
Portfolio deal sizes

The German banking market is the largest and, at the same time, one of the most fragmented in Europe with approx. 2,200 individual banks. In comparison, the UK market, which has a lending volume slightly below Germany, has only 400 banks. Transaction costs are a key driver of profitability in bad loan trading, and as such, a minimum size both for single-name and portfolio transactions is required in order to make the trade viable for the parties involved. On a portfolio level, we estimate that this minimum transaction size is €500m (face value) - only 52 of the approx. 2,200 German banks have bad loan portfolios of that size. This calculation does not consider any limitations due to the divergence of the portfolios. Even those banks with bad loan portfolios of a sufficient size will not necessarily have a homogenous investor offering due to the wide variety of consumer, corporate and real estate loans of all sizes contained within the portfolio.

Looking at portfolio deals, we expect that the 2005 market volume will come largely from commercial and mortgage banks - as was the case in 2004. A transaction is viewed here as the "removal" of a bad loan from the bank's portfolio and transferral to a buyer.

As shown in Figure 4, these are the only two sectors with a significant number of banks with sufficiently large bad loan portfolios. In the other banking sectors, bad loan portfolios tend to be too small to be traded - leaving a vast and untapped potential pool of bad debt that could be accessed once the market develops and smaller trades become economically viable.

Figure 4: Likeliness of bad loan trading by banking sector



Source: Mercer Oliver Wyman Analysis

Name-level deal sizes

A similar picture holds true for single name transactions. Again, the commercial and mortgage banks dominate the market and hold the majority of single name loans with a face value greater than €50m. Given transaction costs, this is the minimum size that can currently be traded profitably. However, in interviews with the market conducted for this report, a number of investors have indicated that they would be interested in tickets as small as €20m. Transactions from the buyer to another investor (e.g. on the secondary market) can, of course, be profitable in significantly smaller sizes. However, the main effort is the liquefaction of the loan, not the secondary trading.

We expect the limiting effect of fragmentation to be overcome as two factors help to unlock trading volume in Germany over the next couple of years: (1) standardisation of transactions, thereby reducing ticket costs as well as (2) pooling of assets in particular sectors of the banking industry. Driven by these factors, we believe that the market will be unlocked from the supply side.

Effect 1: Standardisation of transactions

As the market develops and banks and investors become increasingly experienced at dealing with bad debt transactions we would expect to see increased standardisation of models, procedures and legal frameworks. This will reduce deal complexity and hence reduce the transaction costs of bad loan deals significantly allowing smaller ticket transactions to become profitable:

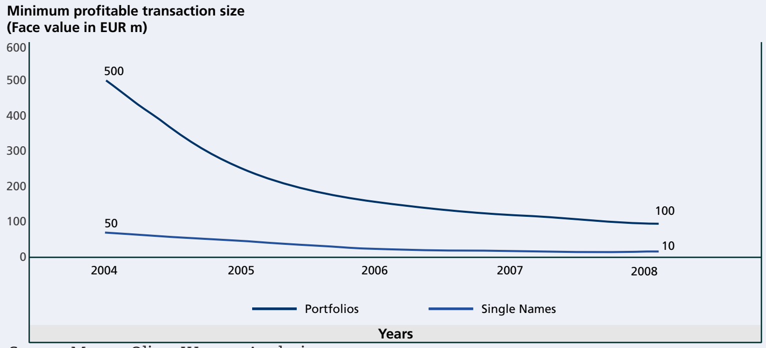
Minimum size for transactions decreases

- We expect the minimum size for portfolio transactions to drop from €500m face value in 2004 to €100m in 2008
- And for single name transactions to drop from €50m face value to €10m during the same time period (see Figure 5)
- Accordingly, we estimate that the number of banks with total bad loan portfolios of a tradable size will increase from 52, in 2004, to over 220, in 2008

Characteristics of transaction standardisation

- Pricing - banks as well as investors are improving their pricing models with each deal. Banks are beginning to follow current investor practices and use a fair value view (as opposed to an accounting viewpoint).
- Procedures - banks currently require at least six months for the preparation of a larger-size portfolio transaction. In the medium term, the length of time will be reduced as banks become more experienced at dealing with these transactions and are better placed to focus on the relevant information. In the long run, the period required for the preparation of a larger size portfolio transaction, could be cut by half to as little as three months as loan documentation becomes more standardised and IT systems 'automatically' become populated with the required information.
- Legal - each successful deal helps to build the framework for legal, tax and accounting issues, thereby reducing advisory costs.

Figure 5: Change in minimum profitable transaction sizes, 2004-2008 (est.)



Source: Mercer Oliver Wyman Analysis

Effect 2: Pooling of bad loan portfolios

As discussed above, the German banking landscape is extremely fragmented. The majority of the hundreds of regional commercial banks, savings banks and cooperative banks in the market are too small to act as players in bad debt transactions. In order to participate they would need to achieve the critical portfolio size required for profitability and to invest in the necessary infrastructure and the appropriate skills. If they wish to achieve this and participate in bad debt transactions, Germany's smaller banks will have to join forces and pool their bad loan portfolios.

Pooling platforms

Cooperative banks have already developed a platform for bad loan pooling - BAG Hamm pools assets from troubled cooperative banks and is beginning to extend its services to healthy cooperative banks. In the public banking sector such a platform is still missing, though initial steps are being taken by some of the Landesbanken. We expect further pooling platforms to be developed within some sectors, although there is potential for a general platform, supporting increased liquidity in the market.

What is required for pooling bad loans?

- Robust transfer pricing framework to set conditions for bad loan transfer into the pool.
- Standard legal framework and guidelines on how to transfer bad loans.
- Capacity and network of staff or servicers that are able to run the workout process.
- Access to capital markets in order to transfer risks and securitise bad loans.

A number of additional supply and demand side drivers are impacting the overall trading volume. These drivers are described in more detail in the following two chapters.

Summary

- The total volume of bad loans in Germany is approx. €160bn. This is significantly less than previous estimates - about half of the number often quoted - but it is still the largest potential market in Europe.
- This total volume is split fairly evenly between large and mid-market loans, small business lending, commercial real estate and loans to consumers (including consumer real estate), with approx. €40bn of bad loans to each segment.
- Only 52 banks have portfolios large enough to produce the current minimum size for portfolio transactions of €500m - for single name deals the current break even is at approx. €50m.
- We believe the obstacle of market fragmentation will be overcome within the next couple of years as transaction structures become more standardised (reducing minimum sizes to €100m for portfolio transaction and €10m for single names respectively) and smaller banks start pooling their bad loans.

4.
The supply side

Around 2,200 German banks make up the supply side of the bad debt market and these vary widely in size and sophistication with the smallest being individual Volksbanken with a balance sheet size of just €20m. To date less than 1 per cent of German banks have sold off parts of their bad loans in portfolio transactions and their apparent reluctance to do so is driven by a number of factors - some economic, some emotional and others based on misunderstandings. We strongly believe that banks can benefit from using the market as an exit channel for bad loans in order to manage their positions more actively.

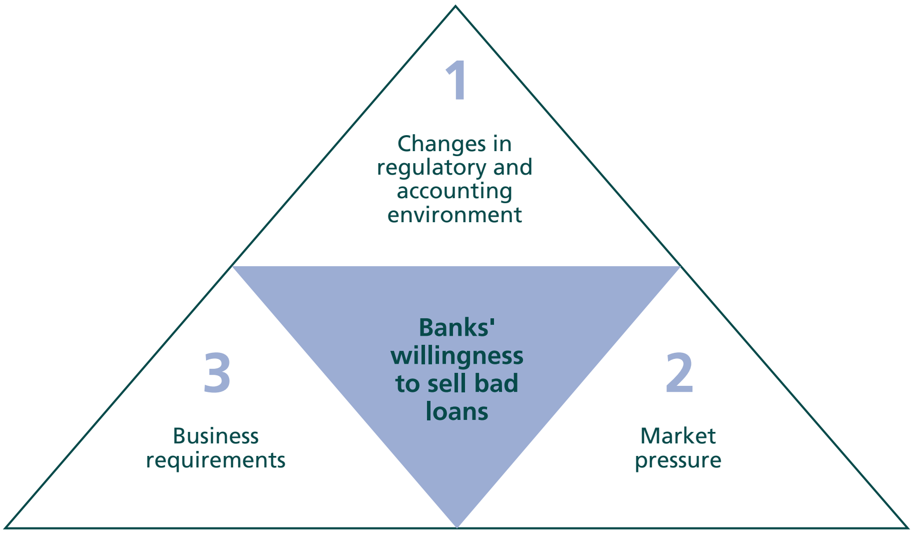
German banks typically consider defaulted loans to be a sign of "management failure", and as such, are reluctant to tackle the issue. However, due to the current economic environment, newly introduced regulatory regimes like Basel II and MaKs[5] and increasing pressure from capital markets to improve risk management and transparency, the topic has moved up their 'to-do' list.

We will demonstrate that this market is supply constrained; therefore understanding the obstacles to the supply side is of the utmost importance to both sellers and buyers.

[5] "Mindestanforderungen an das Kreditgeschäft", minimum requirements for credit businesses

Major drivers - Compelling reasons for banks to participate

Figure 6: Major drivers for banks to sell bad loans



Source: Mercer Oliver Wyman Analysis

There are three major drivers that are encouraging banks to remove bad loans from their portfolios (see Figure 6):

- Changes in the regulatory and accounting environment
- Market pressure
- Business requirements

Changes in regulatory and accounting environment

MaK (minimum requirements for credit businesses)

The German MaK requires a separation of market facing functions and administration (including workout and liquidation) and, as a consequence, regulators will no longer accept the workout function as part of the job of client managers. Increasingly formalised separation helps to increase transparency and is a vital catalyst in a more factual and less emotional approach to bad loans.

Basel II

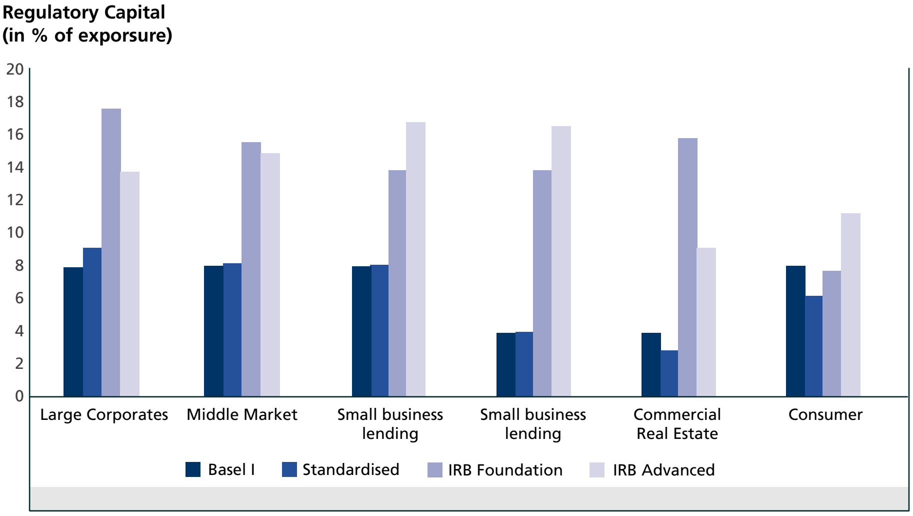
The Basel regulatory accord requires banks to hold capital to match unexpected losses from credit risks. With Basel II coming into effect in 2007, capital requirements will be tied more closely to risk considerations, especially if either the foundation or the advanced IRB Approach (internal rating based approach) is applied.

Capitalisation incentive

Non performing loans: under the Basel I and Basel II Standardised approach, 8 per cent of regulatory capital is required to be held against the unprovisioned part of the defaulted loan. Under both IRB approaches the minimum specific provisions that banks will have to factor in, is determined as the expected loss of a loan[6] - no additional regulatory capital needs be held in excess of that.

[6] For a defaulted loan the Expected Loss is equivalent to its estimated Loss Given Default (LGD). In the IRB-Advanced approach regulators ask to provision up to a "worst case" LGD that is higher than the standard LGDs applied.

Figure 7: Impact of different Basel approaches on regulatory capital for sub-performing loans



Source: Mercer Oliver Wyman Benchmarks and Analysis

Different rules apply to sub-performing loans[7] (see Figure 7).

Given the heavier regulatory capital requirements for non-performing and sub-performing loans, under Basel II banks will have a significant incentive to "remove" these loans from their balance sheets.

IFRS (International Financial Reporting Standards)

The IFRS rules require banks to mark loans closer to a "fair value", the so-called "recoverable amount". In the case of loans becoming sub-performing or even non-performing, this may lead to an immediate write off with a direct effect on the bank's accounting profit. However, tax accounting will still be governed using German HGB rules - IFRS will therefore have no impact on the taxes paid by banks.

Publicly traded major commercial banks are required to switch to IFRS by the end of 2005. Banking groups that have a capital markets "orientation", albeit not publicly traded, will have to apply IFRS internally by 2006 at the latest and publish data from 2007 onwards. This rule is relevant for all banks and savings banks that have issued debt (e.g. bonds or Pfandbriefe) in the capital markets.

Introducing "fair value"

IFRS thus improves balance sheet transparency. This is likely to remove one of the key impediments to bad loan trading - in a "non-fair value" oriented accounting framework, bad loan trades below net present value would lead to the realisation of accounting losses. Given that the majority of German banks are still under-provisioned this is an obstacle for bad loan transactions.

The "fair value" orientation of IFRS will significantly mitigate this adverse impact. Additionally banks starting to apply IFRS in 2006/2007 will have their last chance to carry out sales under the more relaxed HGB rules in 2005 and will therefore start in the IFRS world with a clean balance sheet.

[7] We base our analysis of the capital impact on a loan with a Probability of Default (PD) of 15 per cent (B-/CCC) and a segment specific LGD according to our LGD benchmarks.

Market pressure

Transparency & focused management attention

The overall profitability of German banks is significantly below the European average and they are facing increased pressure from the capital markets as well as from other stakeholders (e.g. the owners of savings banks) to improve returns. Selling bad loans allows increased transparency of the healthy portfolio and helps to focus management attention on building the business. Externally, bad debt transactions can also help to boost investor confidence, improve valuations and so gain stakeholder and shareholder support.

Business requirements

Cost/benefit

Banks are increasingly disciplined in evaluating their value chains on the basis of cost/benefit analysis - only services that can be provided efficiently in-house will be kept. Smaller banks (across all lending segments) and even larger banks in some niche segments will not "produce" a sufficient amount of bad loan volume to justify having their own full scale workout departments. Moreover, regardless of the high personnel costs involved, smaller workout departments are less effective and cannot unlock the full recovery potential as this largely depends on economies of scale or regional and expert knowledge (the disposal of bad loans can be more cost efficient in these cases).

Managing liquidity

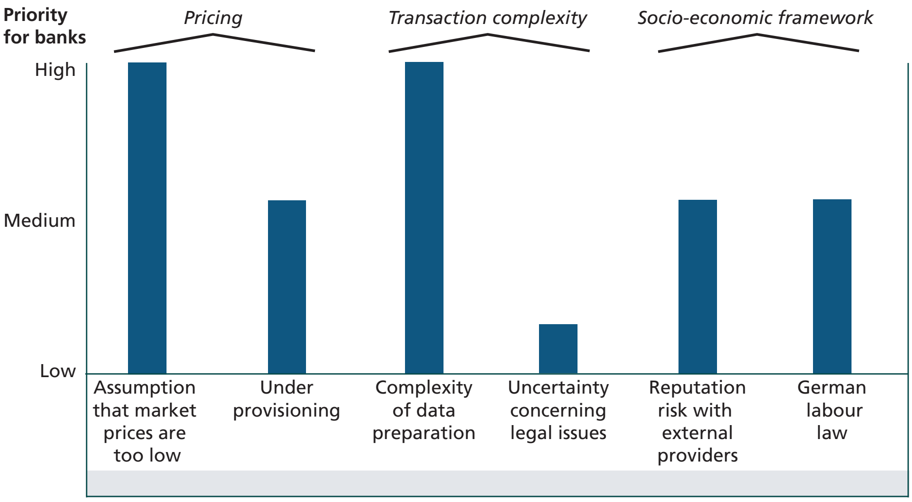
Liquidity pressures are another driver of bad debt transactions. For banks under pressure as well as for some larger savings and cooperative banks, selling their bad loans can be sufficient to close the gap between deposits and lending volumes and to make them less dependent from other funding sources.

Many reports highlight the liquidity pressures faced by the Landesbanken as state guarantees begin to fade away. We believe this point to be overstated and do not expect that this will be a major driver of growth in bad debt transactions. Most public banks have managed to greatly reduce their liquidity pressures by proactively securing a cushion of liquidity under the current favourable refinancing conditions and will only slowly reduce this buffer over the next few years. This effect is also known as "grandfathering".

Perceived impediments - why many banks still hesitate

Banks are frequently putting forward a number of arguments which are causing them to hesitate from selling bad loans. Our interviews have revealed the following points ranked by order of perceived importance:

Figure 8: Impediments to banks in selling off bad loans



Source: Interviews, Mercer Oliver Wyman Analysis

While some of the obstacles are real and partly due to the emerging markets environment, we believe that other points are exaggerated or even irrelevant.

Pricing

Book vs. fair value

Many banks believe that prices offered by potential buyers are below "fair value". The key issue is that several banks still talk (and think) in accounting terms, while investors act in terms of net present value, discounting for time and risk. In fact, where banks' quotes were based on their net-present value perspective, they have come fairly close to investor quotes. However, where investors' quotes were based on an accounting view, it has been difficult or impossible to reconcile these with the investor quotes.

Who is most efficient?

The perception that investors quote low prices is usually combined with the confidence that the bank has better knowledge of its defaulted loans compared to any investor and because of this information asymmetry it can get more value out of the workout. However, experience in Germany as well as in other markets demonstrates that external specialists can often process the workout function more efficiently than banks. This is due to:

- Economies of scale - driven by extreme specialisation, standardised processes and large IT platforms, against which only the largest banks in any given segment can compete.

- Adoption of more flexible workout strategies - investors do not have to adhere to strict "political" guidelines but can try to maximise the net present value from an engagement in all cases. They frequently come up with compromises and use voluntary sales, which are less commonly used by the bank's workout units.
- Attractive incentive systems for staff - most German banks find it difficult to introduce more attractive incentive systems given labour restrictions.

Banks that are under-provisioned face a further problem, namely the gap between the accounting value and market value of their bad loans. We believe that IFRS and other transparency requirements will reduce the effects of hidden gains or losses.

Transaction complexity

Data as the biggest obstacle

We believe that standard transaction structures are evolving to address legal and tax issues. A bigger problem is the complexity of the data preparation prior to a deal as it is not uncommon to have more than 1,500 data points per loan in a portfolio transaction. Clearly this involves an enormous amount of effort on the part of the seller (up to 6 months of preparation) and is a significant source of operational risk. Even minor problems in the integrity of data room data can lead to a 10 per cent discount in investor quotations.

Socio-economic framework

Relationship concerns

Germany's socio-economic framework is unique in the emphasis placed on the protection of lenders' as well as to employees' rights. Several banks are concerned about selling defaulted or sub-performing loans because of the potential impact on long-standing customer relationships and the reputational impact on the bank, although this concern is less prevalent at larger institutions. Similar concerns existed in Japan when this market was in the development stage but they have been addressed and have not ultimately limited market growth.

Impact of labour laws

Labour laws are a major obstacle to getting the German bad loan market up and running. Rigid labour laws and hence high redundancy costs deter some banks from selling their bad loans. This is mainly true for those workout intensive loan segments where a large number of staff is required. In a number of deals banks have therefore moved some of their staff together with the assets into a new entity. Clearly moving staff to the buy-side cannot be the solution in all cases. A potential "solution" to addressing the volatility of bad loan inflow might be installing a smaller workout department with excess bad loans being sold to the market.

Suppliers' evaluation checklist

Banks should conduct a strategic evaluation of the suitability of bad debt transactions for their portfolio. This should be based on an assessment of the strength of the driving factors identified above as well as the extent of the obstacles faced. Assuming the arguments for a sale prevail, banks should dispose suitable sub-portfolios which should fulfil two criteria in order to become a candidate for a bad loan transaction:

- Cost benefit analysis - The prices achievable in a sale should broadly relate to the bank's own NPV (net present value) valuation. A number of costs need to be taken into account: Data preparation/transaction costs, potential costs for releasing or relocating workout staff, costs saved due to the fact that building a larger workout unit is not necessary.
- Transferability[8] - Portfolios or single name loans should meet the required minimum size to ensure that any profits from the deal will not be consumed by the heavy transaction costs involved. The level of data preparation required for a portfolio needs to be feasible - a number of loans will not be transferable (or only at hefty discounts) due to insufficient documentation or overly complex legal structures.

Next steps for suppliers

As discussed above, the bad loan market is largely supply constrained. In order to satisfy and capitalise on significant investor interest, suppliers have to do some homework.

Be prepared and build your exit channel

The ability to optimising workout capacity throughout the economic cycle can be a competitive advantage. To achieve this, banks need to establish their exit channels in advance by investing in tools and processes that will make disposal of bad loans easier in the future. In addition to the introduction of standardised loan documentation and the change of the terms and conditions (in order to facilitate loan sales after the breach of covenants), this would require banks to start tracking their bad loans on an NPV basis. These investments in infrastructure will benefit the in-house workout process as well as preparing for the sale of bad loans.

For banks wishing to test the water, single name trading can be used as a learning process since these transactions are easier to handle and data preparation is much less complex than with full-blown portfolio transactions. More sophisticated banks should discuss establishing conduit schemes, allowing them to pass new bad loans on as soon as they occur.

8 Transferability: the interchangeability of listed options, future contracts, and other instruments dependent upon identical terms.

Explore outsourcing opportunities

Not everything needs to be done in-house. Banks can profit from the trend towards separation of risk taking and workout. A number of intermediary models are currently evolving ready to offer their services to banks. Banks can therefore differentiate their strategy by loan segment: outsource workout, employ advisors, share or completely transfer the risk to a pooling vehicle or an external investor. This will be particularly advantageous for the countless smaller and many mid sized banks currently lacking the capabilities to enter the bad debt market. In all instances, a thorough examination of the economic rationale for outsourcing should drive decisions.

Build your pooling vehicle

We envisage that up to three pools will evolve per banking sector that collect bad loans from smaller banks. Each pool will need capital markets access in order to transfer the risk to the market, whilst keeping an internal workout function or outsourcing it to specialised service providers. These pools will face the challenges of institutionalising and leveraging processes and skills. In addition they will need to establish "fair" transfer pricing mechanisms to enable a constant flow of bad loans from individual banks into their pools.

Summary

- The German bad loan trading market is supply constrained. Banks tend to understate the positive drivers for growth in bad debt transactions while overstating the obstacles facing further market development.
- Key drivers behind the expected growth in bad debt transactions are: the forthcoming changes in the regulatory and accounting environment, pressure from capital markets and other stakeholders, including the banks business considerations (e.g. liquidity and cost saving).
- Key obstacles to the further development of the market are the (perceived) low prices for bad loans, transaction complexity and German-specific cultural and labour law issues (protection of lenders and own workout staff). We expect some of these obstacles to go away as market participants develop a more objective view of the market.
- The opportunities for the sell side are attractive and suppliers will benefit in many ways from actively participating in this market:
  - We recommend that banks identify potential bad loan portfolios or single names suitable for transactions.
  - And conduct an economic evaluation of their options including building an exit channel, utilising outsourcing and engaging in the pooling of bad loans.

5.

The demand side

Alternative market

Low investment returns and high liquidity have made international investors look for global investment opportunities in alternative asset classes such as bad loans. As other emerging distressed debt markets have recently dried up, Germany was identified as an ideal target - it has the highest lending volume of all European countries and is only just recovering from a deep economic crisis that has added a significant amount of bad loans to the bank's portfolios.

Investors have done much of their homework

Investor interest in the German market has expanded considerably in recent years. Since 2003 approximately 10 fund investors have established a local footprint in Germany and another 20 players are currently considering establishing a local presence. In addition, over 50 players - US hedge funds and the principal credit units of investment banks - are actively participating in the market. These investors are hoping to reap above average returns by exploiting the inefficiencies present in the early stages of market development. Experience from other countries (e.g. Goldman Sachs in Japan) has shown that there is a significant first mover advantage due to the long learning process required to build the necessary local expertise.

Operating models - demand side

The buy side is following one of two distinct operating models that can be classified by the nature of involvement in the workout and recovery process:

- "Control" special situation investors
- "Non-control" distressed debt traders

"Control" special situations investors

This investor type seeks active participation in the workout and restructuring of bad loans. The segment primarily comprises of funds focusing on distressed debt and their business model is to buy and restructure loans with a duration of up to three years. They tend to operate with their own workout team and receive their "return" for taking the credit risk, as well as for their restructuring effort. In addition specialist funds and a number of investment banks are active in this segment, buying bad loans in order to potentially repackage and securitise them and place them on the secondary market. Their value proposition lies in the bundling of the loans and in making the assets accessible to the capital markets. Until now there has been no securitisation of a bad loan portfolio - so far investors have exchanged mainly corporate single name loans using the London OTC market ("over the counter" market). However, we believe that the first ABS (asset backed securities) or CLO/CDO (collateralised loan obligations/ collateralised debt obligations) structures may well occur early in 2005.

First ABS expected for 2005

A further sub-segmentation of this particular investor group is possible due to the participants' focus on either portfolios or single names. A snapshot of London based distressed investors shows that more than two thirds of these investors focus on single names rather than on portfolios.

"Non control" distressed debt traders

This investor type consists of distressed debt hedge funds and investment bank trading desks which buy up publicly traded bad loans in the open market (corporate bonds, mezzanine and securitised loans). Restructuring of the bad loan portfolio is not usually the focus of this investor group and they operate with limited in-house workout resources, preferring to purchase outsourced capabilities as required. Currently these investors trade in distressed corporate bonds and bad loans in the London OTC market. Traders in distressed debt earn their return for taking the credit risk or by exploiting the frequent mis-pricing of these instruments.

Major obstacles to greater investor participation - Legal uncertainty and an unwilling supply side

Legal uncertainty

Investors cite legal uncertainties regarding data protection, bank secrecy and taxation as the biggest obstacles to investment. So far these issues have been resolved in most German transactions but only at considerable cost, however we do expect costs to reduce as standardised solutions for these problems emerge in the course of this year. A number of rulings on data security and their interpretation have recently confused market players. For this specific issue please refer to page 23.

Pricing gap

Another major issue of even greater investor interest is pricing. Currently, the supplier perception of "fair price" differs significantly from the buyer perception of "fair price". As bad loan sales are becoming more of a commodity and with the learning process regarding fair value currently underway on the supplier side we expect this "pricing gap" to disappear within the next few years.

Observations on the impact of banking secrecy on the transfer of bad loans

Three recent court rulings relating to Lone Star Fund's purchase of an NPL portfolio from Gontard & Metallbank, an insolvent German bank, have sparked the confusion regarding the acquisition of bad loans. The rulings reflect the current interpretation and application of banking secrecy legislation in secondary bad loan transactions in Germany.

The most prominent of these rulings, the Frankfurt/Main Provincial High Court and Court of Appeal's ("OLG Frankfurt") injunction, dated 25 May 2004, nullified the assignment of bank loans and declared the sale a violation of banking secrecy rules. The judges held that the assignments of debts, the commonly used process of selling bad loans to distressed debt investors in Germany, were invalid as it involved the disclosure of underlying, confidential information about the debtor, which did in turn infringe banking secrecy. As a result, the underlying collateral, in this case shares owned by the clients, could not be collected. In its conclusion, the court assumed that the bank and its clients agreed a ban of assignment despite a ban not having been explicitly agreed. The ruling has been criticised widely, specifically the court's comparison to confidentiality requirements in professional services; services provided by medical doctors, lawyers, tax advisors and similar groups whose breaches of confidentiality also constitute criminal offences under Germany's penal code. This ruling was followed by decisions in the main proceedings by the regional civil court in Frankfurt/Main ("LG Frankfurt"), dated 17 December 2004 and a ruling by the regional civil court of Koblenz dated 25 November 2004 ("LG Koblenz"), both resulting in the support of the stance Lone Star had taken.

The LG Frankfurt judgment includes informative remarks on the validity of transfer of debt and civil damage claims as well as on the economic importance of the secondary bad loan market for Germany. Following the judge's logic, an infraction of banking secrecy would not result in the cancellation of the assignment; it would simply lead to a civil damage claim. In this context the judge did not clarify that the infraction of banking secrecy would usually not cause damage that could be successfully claimed. Furthermore, the court argues that the purchaser of debt legally acquires the right to information related to the assigned debt and that parties are free to agree a non disclosure of underlying information. However, the court does not provide guidance on how debt should be collected under these circumstances. In addition, the ruling suggests that the economic importance of secondary bad loan transactions should limit the extent of banking secrecy; again, not providing additional guidance on the boundaries of this limit.

LG Koblenz' logic and LG Frankfurt's are similar. The courts' key conclusion is that banking secrecy does not automatically constitute a ban of assignment.

While the judges ruled on specific cases, their rulings have a wider application and it is worthwhile to point out specifics. The rulings involved consumer debt, a private bank on the sell-side, and defaulted loans. Secondary non-consumer bad loan transactions, i.e. corporate bad loan transactions, follow a specific procedure as Germany's commercial code explicitly states that breaching a ban of assignment does not invalidate the assignment of debt. Secondly, Germany's penal code foresees specific confidentiality obligations for the public sector, which might apply to public banks and may impact banking secrecy rules in bad loan transactions. While there is legal uncertainty as to which groups of bad debt might be affected - namely defaulted, non-defaulted, consumer and non-consumer debt- current legal practice argues that public banks fall under the same regime as private banks for the purpose of bad loan transactions and should therefore not be treated differently. Germany's highest civil court has not yet ruled whether banking secrecy commonly constitutes a ban of assignment for secondary bad loan transactions, though the majority of lower court decisions and legal literature indicates this is not the case for NPLs. Further, it is commonly understood that both, defaulted and non defaulted loans are traded. Despite the ominous implication of the OLG Frankfurt decision, comments from the legal community indicate that it is considered an exception. Given that the legal structures used for transferring bad loans address uncertainties, adverse effects of OLG Frankfurt's judgment to Germany's secondary bad loan market are not expected.

Market profitability

What is a reasonable return expectation on German bad loans?

When looking at defaulted loans the investor has to earn a return on three distinct risks:

Return on four types of risk

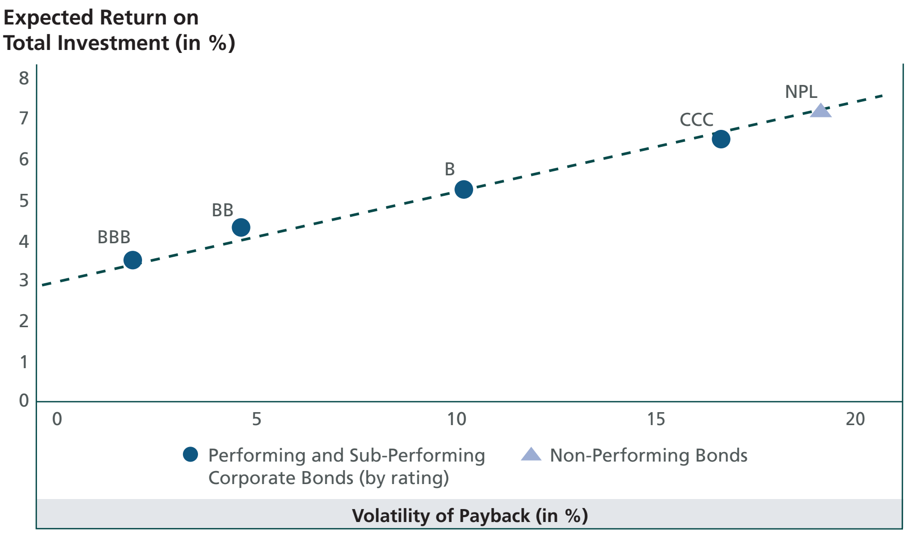
- Recovery risk - the uncertainty inherent in the expected recovery value from restructuring.
- Liquidity risk - the risk that the defaulted loan cannot (directly) be placed on the secondary market.
- Interest rate risk - the change in underlying interest rates leading to a change in the loan net present value.

For sub-performing loans another risk is encountered:

- Default risk - the risk that the loan will default; in the case of default the recovery risk comes into play.

Currently investors can achieve approx. 6.5 per cent expected return on total investment (equivalent to approx. 15 per cent leveraged return[9]) on CCC corporate bonds and approx. 7.2 per cent (18 per cent leveraged return) on already defaulted bonds (see Figure 9)[10]. This is the compensation that investors can expect to receive for taking the recovery, default, interest rate risk and some liquidity risk.

Figure 9: Capital market line for credit risk (Germany), end of year 2004



Source: EMU Corporate Bond Index, Mercer Oliver Wyman Analysis

Given the rather restricted liquidity of bad bank loans, investors will have to achieve a slightly higher expected return compared to corporate bonds of the same rating class. The compensation for this additional liquidity risk will be in the region of 0.25 per cent. This leads to 7.5 per cent non-leveraged return on non performing loans. A more detailed analysis is given on page 25.

9 We assume a leverage of 3:1 (that means 25 per cent equity) and refinancing costs of 3.5 per cent.

10 These figures contain bank base rate as well as the credit spread.

Analysis: Expected return on distressed debt in Germany

As no prices and spreads are quoted in the illiquid bad loan market we refer to the German distressed bond market first to derive a reasonable compensation for default and recovery risks.

The current credit spreads[11] (spread over bank base rate) of German corporate bonds are listed in the following table. These spreads are requested by investors to cover their credit risk, namely the default risk and the subsequent recovery risk.

External Rating Class	BBB	BB	B	CCC
Spread over 1yr Euribor (Yield to Maturity)	0.60%	1.77%	4.59%	6.02%

Using a simulation-based approach we have computed the expected return and the volatility of the bond paybacks over a one year time horizon for each rating class. The capital market line (see figure above) is then a proxy for the premium the market is currently willing to accept on default risk, recovery risk and limited liquidity risk.

We now derive the implicit expected return for a defaulted bond:

External Rating Class	BBB	BB	B	CCC
Spread over 1yr Euribor (Yield to Maturity)	3.5%	4.3%	5.3%	6.5%

The volatility of paybacks of a defaulted bond is mainly driven by the volatility of recoveries. In our case the volatility is slightly below 20 per cent. We now use the capital market line for credit risks and implicitly derive a return expectation for defaulted bonds which is at around 7.2 per cent (18 per cent leveraged return).

We finally adjust return expectations for "illiquid" *loans* (as opposed to bonds):
Sub-performing and non-performing bank loans are only tradable on the London OTC market making them less liquid than a usual corporate bond. Investors therefore require a liquidity spread of another 0.2 per cent - 0.3 per cent[12]. The expected return on a defaulted bank loan for a corporate exposure should therefore be at around 7.5 per cent (20 per cent leveraged return).

External Rating Class	B	CCC	in default
Corporate Bond	9.3%	6.5%	7.2%
Bank Loan	9.6%	6.8%	7.5%

It should be mentioned that corporate loans are the most complex to restructure "learn the German rules of the game". Consequently sub-performing and non-performing loans in other segments like consumer lending will have slightly lower return expectations than the figures for corporates.

11 Source for credit spreads: EMU Corporate Bond Index (yield to maturity), as of 20/12/2004
12 Liquidity spread is based on Mercer Oliver Wyman benchmark for the valuation of bank loans.

But what return is actually achieved in the market?

Investor returns

Investors are currently achieving returns on total investment in excess of 5 per cent (for a sub-performing loan, residential real estate) and up to 8 per cent (for defaulted corporate loans). This is equivalent to a leveraged return between 10 per cent and 22 per cent[13] . This is roughly in line with the return expectations we have derived above. However it does not yield a premium to investors, which are prevented by learning costs in the specific German environment and high transaction costs. The large demand surplus is putting additional pressure on prices. As a reference: distressed debt investors globally achieved a 16 per cent leveraged return in 2004.[14]

Emerging trends - what investors can expect in the future

We see the market evolving into "business as usual" over the next few years. This will be accompanied by an increased number of smaller sized transactions and a growing number of corporate single name deals.

"Business as usual" is evolving

Supply goes up as prices stay stable

Banks and analysts will develop an understanding of the fair valuation of distressed debt (driven by IFRS, and the increasing experience with NPL trades) and will better understand advantages from bad loan sales. As bad loan pooling agreements are established and structures are standardised, the barriers to entry on the supply side will be dramatically lowered.

Securitisation will become the general exit instrument in the market

Germany following US and Japanese model

While the characteristics of emerging loan markets are highly specific to each country, there are a number of development patterns that the different markets have in common. We believe that Germany will follow the US and Japanese model where risk taking is largely separated from workout. In the case of more standard bad loans, the market will evolve into a structure where the workout function is carried out by a third-party entity and the ownership of the bad loans will be entirely separate. This will contribute significantly to liquidity as investor interest can be detached from the need to possess workout capabilities. In less standardised cases, the asset value will remain highly dependent on workout negotiation skills and the market will run as it is today with workout and asset ownership closely linked. The trend towards securitisation and improved transferability will also make bad loans accessible to a large number of hedge funds and other capital markets investors.

[13] Again we assume a leverage of 3:1 (that means 25 per cent equity) and refinancing costs of 3.5 per cent.
[14] CSFB Tremont index: return of distressed debt hedge funds 2004

Cross-border restructuring - some lateral observations

By Neil Cooper, Kroll

Like many progressive approaches towards the preservation of businesses, debt trading had its origins in the United States. The savings and loan crisis of the 1980's provided large quantities of debt capable of being traded and a well established market arose. As the last of the financially troubled savings and loan organisations were dealt with, the market looked east towards the United Kingdom which was then experiencing a recession of its own in the late eighties, early nineties. There was quite palpable frustration that with the exception of less than a dozen groups, there was no appreciable supply of tradable debt at that time. This was for a variety of reasons to do with the financial structures of the businesses being reorganised, the sad fact that many of the concerns were beyond restructuring and the lack of sufficient volume to make a market.

This frustration, however, was quickly forgotten when the Asian crisis of 1997 provided huge quantities of debt in very large financially troubled organisations that simply had to survive because of the numbers of employees, their economic significance or because of political connection with the relevant government. And that was part of the reason that not all of the experiences of the late nineties were happy ones. Large quantities of debt were acquired which subsequently turned out to be virtually worthless. While senior Asian politicians complained loudly about US banks acquiring their assets for 25 cents on the dollar, the truth was that in many cases the debt was worth far less than this and the underlying assets were never being acquired. For example, in Korea, it is common place to group companies under common management rather than by ownership. Balance sheets can therefore seem quite misleading if one expects the assets in the balance sheet to still be there when one of the holding companies gets into major difficulties. That is not to imply that such balance sheets were necessarily fraudulent or deliberately misleading (although there were most certainly such cases) but the purchasers were not conversant with the practices of the local market in which they were investing.

There was also a lively debate amongst senior international bankers in the nineties about the propriety of selling debt. There were serious proposals in the UK that the practice should be regulated and the fear was undoubtedly that anyone buying debt at deeply discounted prices was only interested in asset stripping. Furthermore, the practice of selling distressed bank debt was seen as contrary to the London Approach, that set of rules which more or less dictates that banks act in unison when dealing with the financially troubled borrower and do not try to hold their fellow financiers to ransom. The London Approach was subsequently adopted with more formality in Malaysia, Japan, Indonesia and a number of other states and was embodied in writing in the INSOL International Statement of Principles for a Global Approach to Multi-creditor Workouts, published in 2000 and available at www.INSOL.org.

The Principles were published after consultation with over 150 banks and, in the course of this debate, it was agreed that debt trading was not to be feared: indeed, it could positively facilitate the reorganisation of a group by offering a reluctant lender or even a lender who, for reasons of their own balance sheet, could not invest further in a troubled company, to exit with dignity and without obstructing the restructuring. Some conventions needed to be established - if a bank intended to sell its debt, it was regarded as bad form to use information that was only available to a steering committee, but even then, this is not a matter on which there needs to be legislation.

In the meantime, the last decade has seen the relentless march of the rescue culture. While the legal systems of many countries, including Germany, included provision for the reorganisation of legal entities, many of these were plainly unworkable. The German system of the "Vergleich" was seldom used because of the requirement to pay quite substantial dividends (over 35 per cent) within limited periods of time (a year or 18 months). These minima were abandoned in the 1999 reforms in favour of far more workable procedures and the new German law has been used as a model in a number of other states.

Over the last four years the United Nations Commission for International Trade Law (UNCITRAL) has developed a Legislative Guide for insolvency law which includes a very flexible restructuring procedure. Of interest particularly to debt traders, the Legislative Guide also specifically states that the out of court restructuring system should be facilitated by the economic and legal systems of countries and it is to be hoped that many of the obstacles that have existed in the past will, bit by bit, as systems are reformed, be removed.

The reform process is currently at its busiest in the transition economies of Eastern and Central Europe. At present, insolvency systems of these countries range from modest to very poor, according to the findings of the European Bank for Reconstruction and Development (full details country by country are available on their website). Many of these countries are, however, currently undergoing programs of reform to both the legal structure and the institutional capacity which is required to make systems work.

In summary, there are good reasons to believe that the debt trader is no longer seen as a vulture, but more of a dove or fairy godmother; that their participation in restructuring is to be welcomed and that the environment in which they operate is likely to become more welcoming.

Neil Cooper is a partner of Kroll's Corporate Advisory & Restructuring Group, based in London. He has been involved in assignments in over 30 countries, is a Past President of INSOL International and is considered one of the world's experts in cross-border insolvency.

Our recommendations

Given that the market is currently supply constrained the immediate future of the distressed debt market will depend primarily on the development of the supply side. Nevertheless buyers have a number of ways in which they position themselves to gain first mover advantage in the developing market.

Learn the German rules of the game

Germany differs from other markets in a number of ways. The banks maintain a strong sense of social responsibility towards their staff and their clients - even towards those clients who have defaulted on loans. Some banks will only sell off bad loans if they are confident that there can be no adverse effects for their own staff and that no extreme pressure will be exerted on their debtors. Also, German bankers continue to think in accounting terms instead of NPV and this mindset has to be taken into account in price negotiations where the starting price of the supplier and the investor tend to be far apart; it necessitates a review of the fundamental underlying economics. German corporate structures are often more complex due to German tax regulations - even mid-sized corporates often have structures that are comparable to large corporate structures elsewhere in Europe. Additionally a large number of German corporates are still family-owned which leads to significant complications when trying to take over the management during restructuring. This combination of complex corporate structures and family ownership can dramatically increase workout costs for buyers.

Complex corporate structures

Develop relationships with the banks

The German banking industry is extremely relationship driven and it is not uncommon for bankers to pursue only those bad loan trades where they have a trusted buyer on the other side. Investment in building strong relationships with banks can therefore pay off in improved supply. In addition to this, strong relationships with banks can provide access to a number of further relationships with smaller partners (e.g. with pooling partners of a supplier). This delivers constant streams of bad loans, which will be likely to deliver better economics than the competitive bidding environment surrounding the few large tickets that are available.

Optimise your pricing capabilities

Pricing in Germany has a number of distinct characteristics and complications ranging from thorny legal issues to differences between the Eastern and Western parts of the country in terms of overall market dynamics. Investors should develop and improve their pricing capabilities and tailor them specifically to the German market. Experienced advisors will play an important role in providing pricing and structuring skills during the learning phase.

Workout

Given the specific German legal complexities and the various cultural aspects involved, a domestic workout capability is essential. Investors intending to enter the market at this early stage will have to build their own workout capabilities, and should assess whether they expect to reach critical mass in the market or alternatively if they should team up with skilled local partners. Currently there are a number of smaller restructuring houses, however such partnerships necessitate substantial set-up investments by both parties.

Workout servicers with a banking license

In addition to workout capabilities, previous experience in other NPL markets like Japan has shown that acquiring a bank or, at least, a local banking license, can be a successful strategy. This allows investors to renew credit lines and to grant new loans and can be useful in two ways: Firstly, it can help minimise the involvement of other banks in the restructuring of sub-performing corporates and secondly, it provides an opportunity to act as a lender to those higher risk borrowers that are currently being starved of finance by German banks.

Summary

- Investors were attracted to the German bad loan market in 2003 when global returns were low but liquidity was extremely high.
- Investors face a market with many specific legal and cultural characteristics that require strong local expertise and advice, as well as a number of uncertainties that have not yet been resolved.
- Return expectations on defaulted loans currently are between 7-8 per cent on total investment (18-22 per cent leveraged return). This is roughly in line with what investors are actually achieving and we believe returns will improve in the future as the current imbalance in demand and supply is resolved and further bad loan supply is unlocked.
- The German bad loan market is still at an early stage of development and as the market structure matures, opportunities for investors will continue to arise. In order to benefit fully from these opportunities participants must be aware of the specifics of the German market.

6.

An outlook on bad loan trading

Expected overall trading volume

So far, this report has looked at the potential of the German bad debt market as well as at the key drivers of supply and demand. Combining these views, we project the likely development in German bad loan trading.

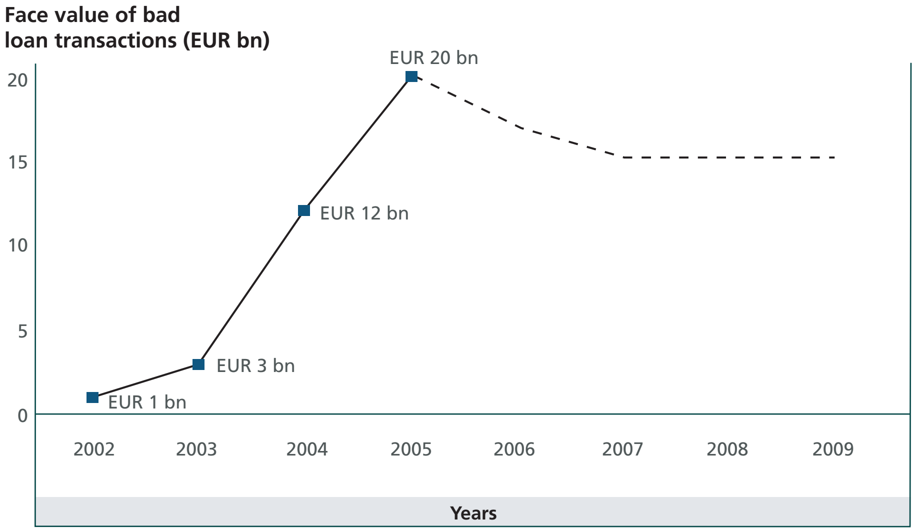
Jump in volume in 2005

We expect a jump in the bad loan transaction volume in 2005 to €20bn face value (portfolio transactions and corporate single name transactions) for the following reasons:

- Banks will continue to clean out the bad loans accumulated during the German recession.
- Continued supply-demand imbalances will keep prices attractive for banks to sell their bad loans (ultimately balancing supply and demand).
- Players will try to profit from the window "opened" by the introduction of IFRS in 2005.

In 2005, we expect to see mainly large deals, as in 2004, and a handful of these are already in the pipeline. We expect that this rise will be followed by a mature and stable market from 2007 onwards, with annual transaction volume remaining slightly below the 2005 figure (see Figure 10). In the long term, transactions will be between €12bn and €18bn and will be characterised by a larger number of smaller transactions. Trading at this volume would mean turning over roughly one third of the annual new bad loan inflow. This is comparable to what we currently see in the mature US market.

Figure 10: Development of total bad loan transaction volume 2002-2009 (est.)



Source: Press research, interviews, Mercer Oliver Wyman analysis

Market outlook by customer segment and banking sector

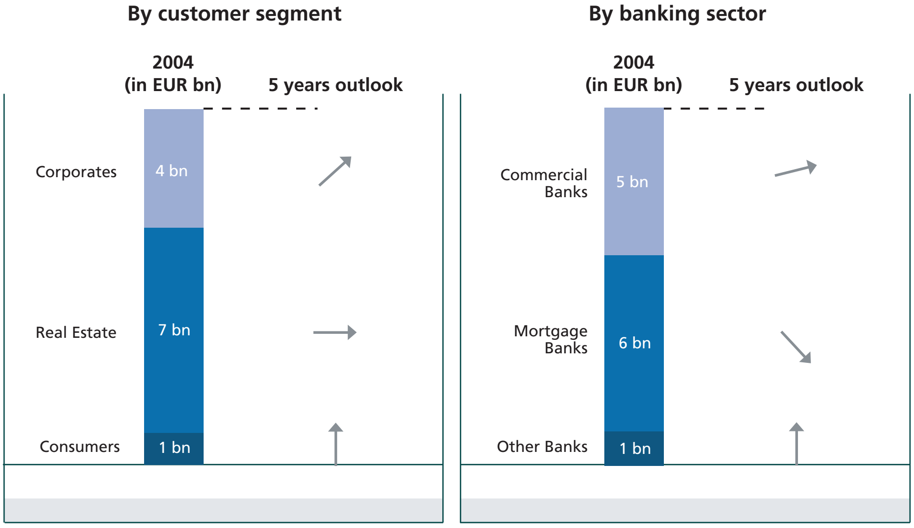
In 2004 the transaction volume was dominated by the corporate and real estate segments and by commercial and mortgage banks. In the next five years we expect bad loan transactions to increase in the consumer and corporate lending segments. Looking at the banking sectors, we expect public and cooperative banks to enter the market as soon as their bad loan portfolios are pooled (Figure 11).

Corporate loans next

Until now, the bad debt market in Germany has focussed on distressed real estate loans. These are highly collateralised, leading to high prices of up to 60 cents per €1 face value, and are easy to recover. We believe that this market has now reached its peak and that the next level in sophistication will be corporate loans. These loans are in most instances only partially collateralised and require a more complicated restructuring process. However, in spite of the higher involvement in the workout process, distressed corporate loans promise significantly higher returns for the buyer. Finally, the consumer bad debt segment is developing - albeit from a much lower starting point. If the market succeeds in establishing standardised workout platforms, this should unlock significant economies of scale within the fragmented consumer banking landscape in Germany. We do expect that such standardised platforms will emerge and therefore predict that the highest growth rates for trading will be in bad consumer loans.

The volume of distressed debt sold by mortgage banks will decrease along with the reduction of real estate loans traded. Corporate banks have reached a sustainable level in bad loan trading whereas we see significant growth potential on the side of the public and cooperative banking sectors. Many of the Landesbanken are now prepared to act although they still seem reluctant to enter the market with a transaction. As outlined above, pooling within both public and cooperative banking sectors needs to take off before volumes will catch up with those in the commercial and mortgage banking sector.

Figure 11: Estimated transaction volume 2004 and outlook by customer segment and by banking sector



Source: Mercer Oliver Wyman Analysis

Solutions to develop the supply side of the market exist and bad loan trading mechanisms in foreign markets should provide good guidance. However, developing and standardising the German market will require close cooperation of suppliers, investors and the regulator.

What can we learn from Japan?

In 1997, more than 6 years after Japan's economy crashed, the first banks started to sporadically sell their bad loans and to clean out the stock of bad loans that they had accumulated. In the following year a special "collecting vehicle" for bad loans, the so called "Resolution and Collection Corporation (RCC)", was established for which public funds were made available. This increased the pressure on Japanese banks and led to an upswing in bad loan trading in Japan. After the crisis in the Japanese financial sector had been overcome, the pressure on banks eased and the supply of bad loans dried up quickly before stabilising. Today the Japanese bad loan market is established as an exit channel and an important tool in the credit portfolio management of banks.

The German bad loan market is often compared to the Japanese market at the end of the 90's. It is clear that the issues currently facing the German banks are very similar to the ones discussed in Japan at that time: The Japanese market at the end of the 90's was supply-constrained. A similar picture is currently seen in Germany, where many banks are still reluctant to sell their problem loans.

On the other hand one has to take some important differences into consideration when comparing today's German bad loan market to the market in Japan in around 1997. While the Japanese banking crisis was triggered by a real estate bubble leading to funding constraints on many financial institutions, the crisis in Germany was mainly driven by excessive corporate profit expectations strengthened by the real estate bubble in eastern Germany. The Japanese bad loan market in this respect was in a more favourable position because it is a lot easier to create a market on distressed real estate loans. These are easier to price than corporate loans and the restructuring effort is mainly based on recovering the asset value (e.g. by a simple asset sale). Furthermore, the estimated volume of total bad loans in Japan was around €1,000bn and therefore much larger than the German total. Even more important is the fact that the Japanese market was strongly pushed by the government, whilst in Germany we see no such support. The establishment of the RCC was an important step in the development of the Japanese bad loan market, as in other markets such as in the US, Italy and Sweden. But unlike in Germany, the majority of Japanese banks selling bad loans were often distressed themselves. Accordingly, pressure on these players to sell their bad loans was much higher.

Other roles to play

In addition to the opportunities described for the supply and demand side, we see a number of potentially profitable roles for other market participants, including:

Opportunities for third parties

- Neutral information provider - a platform belonging to a trusted intermediary that provides buyers with anonymous but standardised data and financial ratios concerning imminent deals - suppliers could enter new bad loans as soon as they occur. Such a platform would reduce market inefficiencies and improve transparency within the market.
- Centralised third-party workout structure - this could be a turnaround fund or even the spin-off from a bank's workout unit. This business model would be based on economies of scale - the key would be to capture as much workout volume as possible.
- (Closed) Fund of loan portfolios - a fund that would keep the workout in-house or could even outsource it. New bad loans could be "filled in" as older ones are readily restructured or liquidated. Such a vehicle could be made available to a wider public and expand investment opportunities further.

Summary

- We expect another rise in bad loan transaction volume to €20bn face value in 2005 (compared to €12bn in 2004), based on a number of large-sized deals.
- We expect the market to mature in 2007 with a stable annual turnover between €12bn and €18bn face value, mainly driven by a larger number of mid-sized deals.
- In 2004 corporate loans (€4bn) and real estate loans (€7bn) were predominantly traded. We believe that in the mid-term the trading volume will rise mainly for consumer and corporate loans.
- In 2004 commercial banks (€5bn) and mortgage banks (€6bn) predominantly participated on the supply side. We expect smaller banks, mainly from the public and cooperative banking sectors, to become equally important players in the course of the next five years.
- We see a number of opportunities for other market players, including neutral information providers, a centralised third-party workout provider and funds of loan portfolios.

Appendix - Model description

Our model estimates the bad loans stock in the books of German banks for 2004 (end of year) and the following years.

We used a top-down approach to estimate total bad loan volume and made bottom-up sanity checks to validate the results. All quantitative analyses are organised by banking sectors and customer segments. The table below shows the banking sectors and customer segments used.

Banking sectors used	Customer segments used
■ Public banks: The saving banks and the "Landesbanken" ■ Cooperative banks ■ Mortgage banks ■ Commercial banks The four big banks (Deutsche Bank, Dresdner Bank, Commerzbank and HVB) and other regional banks	■ Consumers: Consumer loans excluding real estate lending ■ Small business lending: Loans to corporates with a turnover of less than €10m per year and to self-employed persons excluding real estate lending ■ Middle market: Loans to corporates with a turnover between €10m and €250m per year excluding real estate lending ■ Large corporates: Loans to corporates with a turnover of more than €250m per year excluding real estate lending ■ Consumer real estate: Residential real estate loans to consumers ■ Commercial real estate: Commercial financings in residential real estate, offices, retail space and managed real estate

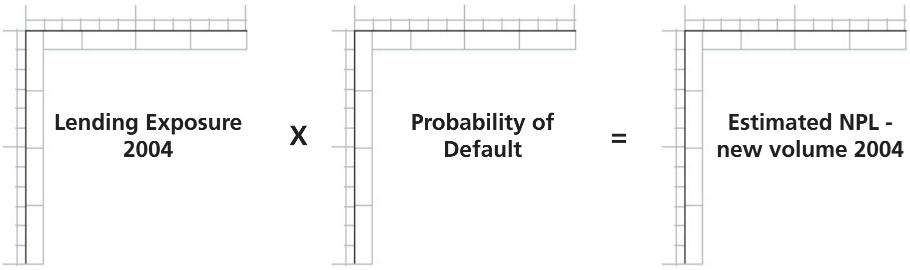
Figure 12: Model structure

	Plain Vanilla Lending				Real Estate	
	Consumers	SME	Middle Market	Large Corporates	Consumer	Commercial
Public Banks						
■ Saving Banks						
■ Landesbanken						
Cooperative Banks						
Mortgage Banks						
Commercial Banks						

Estimation of NPL volume

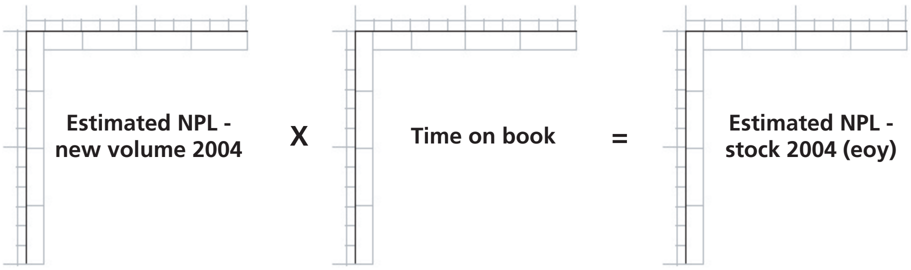
As a first step we estimated the NPL inflow for 2004. For this purpose we multiplied the customer lending volume with Mercer Oliver Wyman PD-benchmarks[15] adjusted for the economic cycle (Figure 13).

Figure 13: Calculation of NPL-new volume 2004



We calculated the current NPL-stock by multiplying NPL-new volume by Mercer Oliver Wyman benchmarks for the time on book of individual NPL[16] by segment and banking sector (Figure 14).

Figur 14: Calculation of NPL-stock 2004 (end of year)



Estimation of sub-performing loan volume

In the final step we estimated today's total volume of problem loans. To achieve this we used Mercer Oliver Wyman rating distribution benchmarks for German banks and calculated the sub-performing loans as a percentage of NPL. This amount was added to the calculated NPL volume.

15 PD = Probability of Default - the probability that loan defaults according to Basel II criteria within one year

16 "Time on book" is defined as the time period between point in time when a loan defaults and the time the loan is cancelled from the book (on average by segment)

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