

McKinsey Working Papers on Risk

# Bad banks: finding the right exit from the financial crisis

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Luca Martini  
Uwe Stegemann  
Eckart Windhagen

Matthias Heuser  
Sebastian Schneider,  
Thomas Poppensieker

Martin Fest  
Gabriel Brenna



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# *Bad banks: finding the right exit from the financial crisis*

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# *Introduction*

The concept of “bad banks” has become a central element in the current debate on potential solutions to the financial crisis. In order to better predict the effectiveness of the different kinds of bad banks, this paper explores the various design elements and goals that banks and governments are working with in setting up bad-bank structures.

Banks should consider five core design topics when setting up bad banks.

1. Define the asset scope
2. Establish the legal framework, especially deciding, a) whether to use an on- or an off-balance-sheet setup, and b) whether to pursue a structured solution or establish a separate banking entity
3. Evaluate the business case
4. Define the portfolio business strategy: whether to employ a passive rundown, transactions, or work-offs on the balance sheet
5. Define the operating model and processes.

Governments, on the other hand, need to establish both internal clarity and transparency with the public around the reasons for government intervention. Governments must furthermore concretely define the plans they intend to apply, while ever keeping in mind the need to minimize the cost to the public from the bad-bank solution. Looking ahead, governments should act in concert with regulators and central banks to minimize the risk of any further shocks to the financial system.

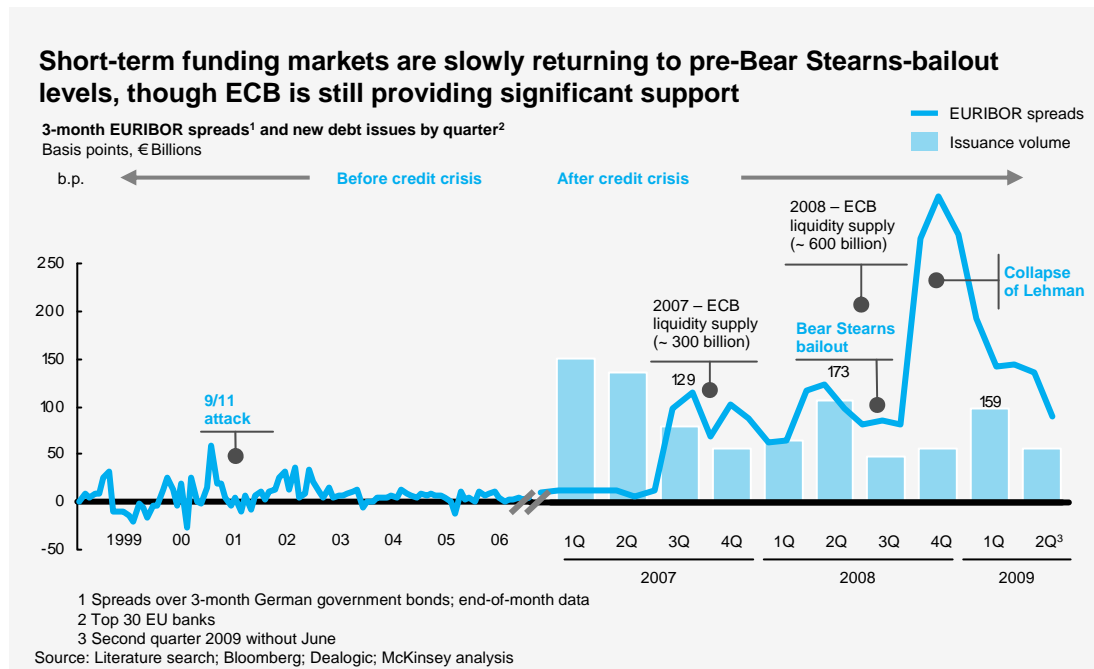
# 1. Status of the financial crisis and the need for bad banks

The financial and credit crisis began nearly 2 years ago in the U.S. subprime mortgage arena. It then quickly spilled over into global credit and liquidity markets, eventually hitting the real economy. By May 20, 2009, global aggregated write-downs at banks totaled about U.S. \$1 trillion, stemming mainly from structured credit products and large one-off events, such as the collapse of Lehman Brothers and the Icelandic banks. In a third wave of the crisis, the world economy is being hit by a global recession. Meanwhile, corporate default rates are only beginning to rise, a trend that will likely continue, triggering further write-offs.

The crisis in its current state is exerting pressure on the banking sector from four directions: funding pressure, access to equity capital markets, regulation, and government intervention. These issues define the current context of banks' lending capabilities and the subsequent need for "bad banks."

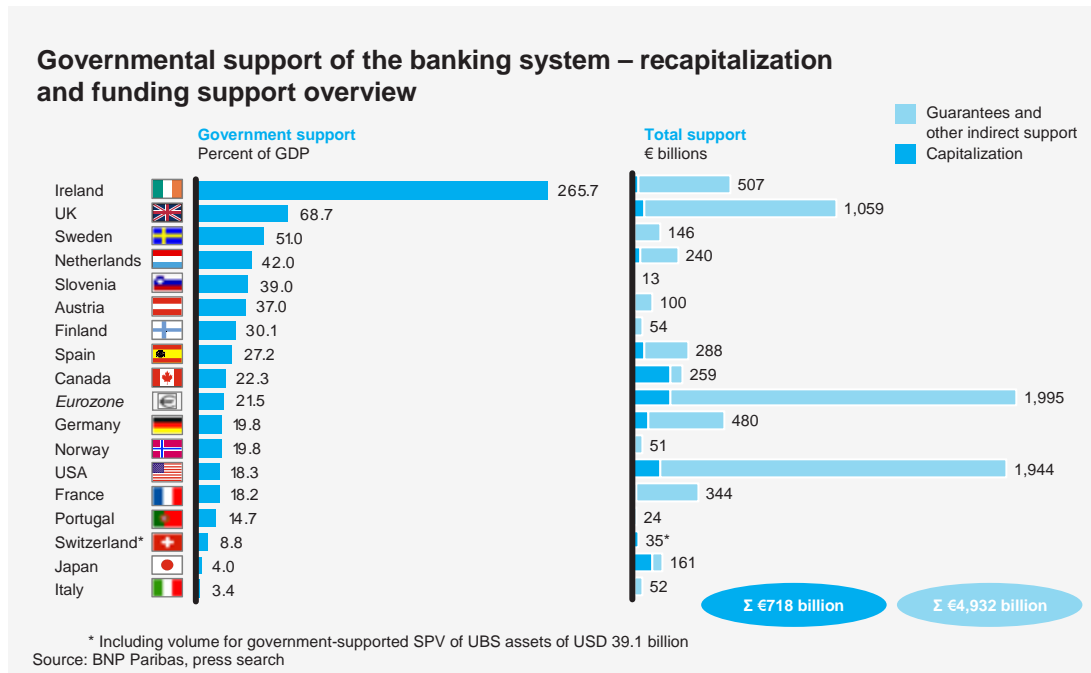
In funding, short-term spreads especially took a hammering following the bailout of Bear Stearns in Q3 2008, rising from 60 b.p. to a peak of 250 b.p. by the end of the year. The spreads are now slowly returning to previous levels but are still well in excess of where they were in the early 2000s, despite the still-significant support coming from the central banks (Exhibit 1).

Exhibit 1



With the freezing of the credit markets, governments have been forced into action and together with shareholders, have already injected huge sums of capital in order to rescue banks. Some €7.5 trillion has been allocated in the United States and Europe – about 10 percent in the form of real re-capitalization and the rest in state guarantees. The level of total support has varied considerably in both absolute and relative terms – ranging from €507 billion in Ireland (a staggering 270 percent of GDP) to €1.9 trillion in the United States, representing just over 18 percent of GDP. In almost all markets, the government has been the main contributor of support (see Exhibit 2 on the following page).

## Exhibit 2



The government and shareholder actions have caused the banking sector to react with massive business restructurings. Banks are characteristically returning to a domestic focus, and getting out of capital-intensive and structured businesses, while dramatically overhauling their risk functions. Despite such vigorous moves, however, the banking system is still struggling in the global recession, especially in the face of increasing capital requirements.

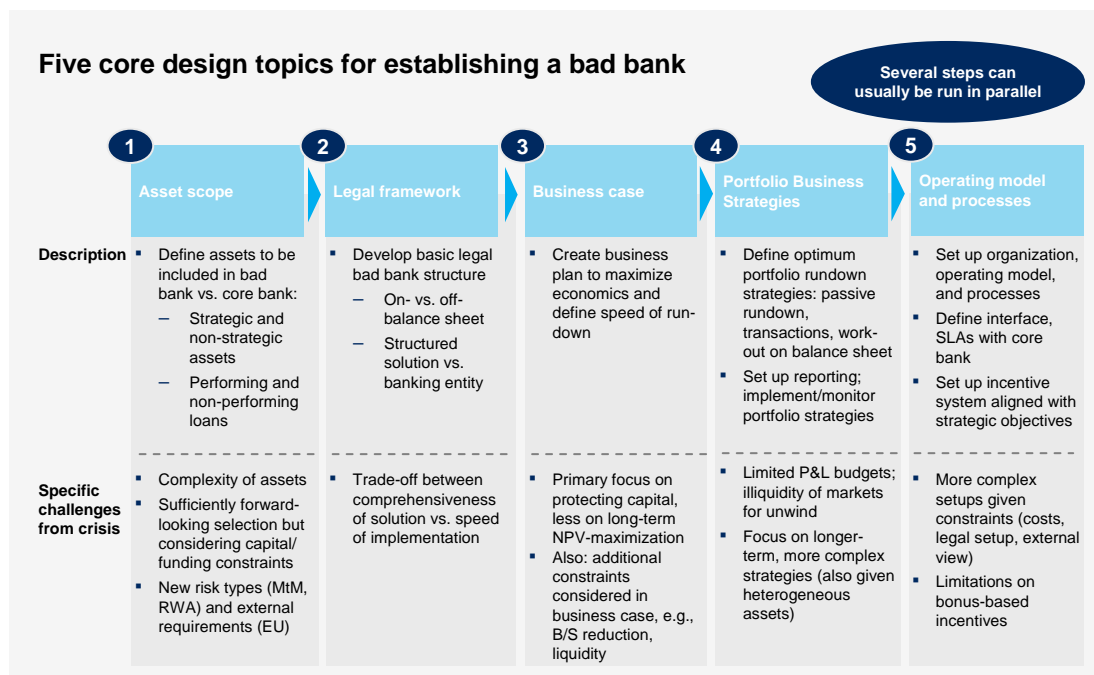
The concept of “bad banks,” which originated as a special responsive measure, has attracted such significant support lately and is now widely viewed as a major component in rescuing the banking system. But is it the cure-all solution to the financial crisis that some are viewing it as?

## 2. Individual bad banks – what banks have been doing

The bad-bank idea is not new; it was applied in past banking crises, and for some time now, individual banks have been setting up such structures. In doing so these banks have been trying to achieve four things: clean up their balance sheets, protect their P&L (and especially maximize the value from NPLs), detach management responsibility for losses, and leverage specific incentives. In actions taken during previous crises, the main objectives were aimed at improving economics through a better incentive system and a more focused, efficient management of the run-down assets. In this current crisis, much of the focus is on rebuilding trust with equity and debt investors and rating agencies by clearly separating the assets and providing transparency of the core bank's performance. To restore capital adequacy, banks need to consider not only the P&L impact, but even more importantly, the capital implications overall.

The fundamental aim still is – and will remain – improving the bank's overall economics. In setting up a bad bank no matter in what form, banks need to consider five core aspects of design (Exhibit 3).

Exhibit 3



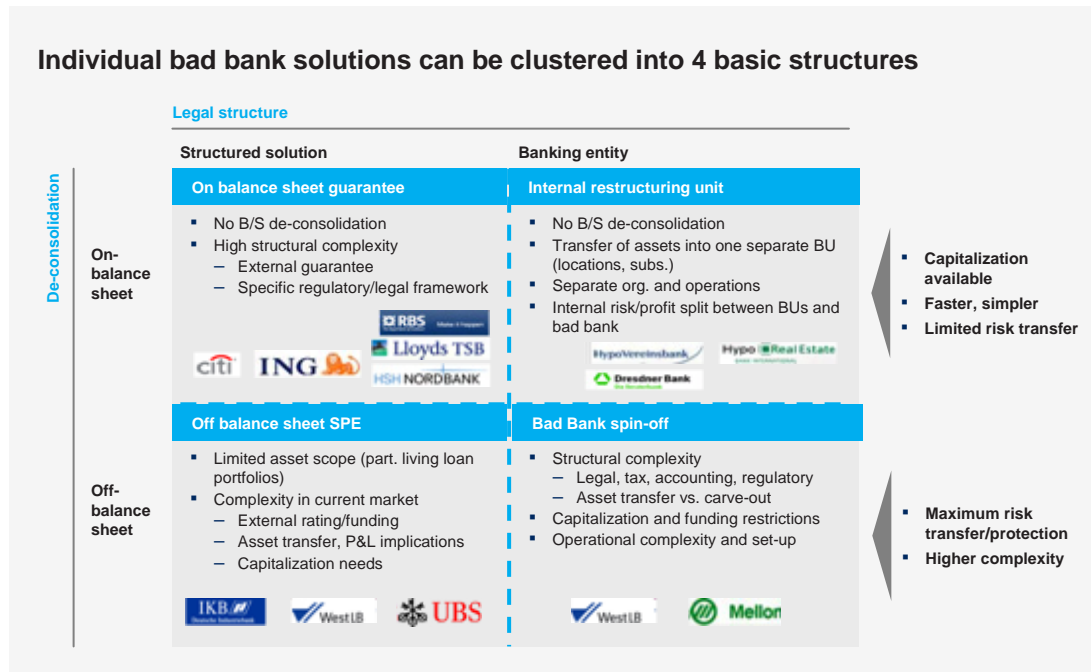
### Asset scope

Banks need to address two broad categories of assets during the crisis. At the center of the discussion are toxic assets with a high risk of default or mark-to-market risk. Today's definition focuses on structured credit and related asset classes that are under strain in the current crisis. Increasingly, loan portfolios subject to higher default rates in the current recession are included in the discussion. The second category, non-strategic assets, includes anything the bank wants to dispose of in order to de-leverage or re-size its business model, which could be entire business lines or regional operations. Banks need to stress-test their portfolios and then take a forward-looking approach in determining what shall constitute their strategic business focus and what should be regarded as a risky asset.

## Legal framework and transferability

There are four basic structures for creating an individual bad bank or work-out unit. These are determined by the legal structure, which can be either a structured solution or a banking entity, and the degree of balance-sheet consolidation, which can take place on or off the balance sheet. While internal structures are simpler to set up, they lack clear legal separations in terms of a clean balance sheet separation and de-consolidation of risks (Exhibit 4).

Exhibit 4



- On-balance sheet guarantee.** Under this structured solution, the bank protects part of its portfolio against losses, typically with a second loss guarantee from the government. This alternative to re-capitalization can be implemented quickly and minimizes the need for upfront capital, but results in only limited risk transfer. The lack of balance sheet de-consolidation and clear asset separation thus limits the attractiveness to (new) outside investors, to whom the core bank's performance is not transparent. The approach might also be used as a first step to stabilizing the bank, buying enough time to develop a more comprehensive solution, as was the case at Citibank and RBS.
- Internal restructuring unit.** Building up an internal bad bank or restructuring unit becomes attractive when the toxic and non-strategic assets account for a sizeable share of the overall balance sheet (e.g., 20 percent or more). In this scheme, the bank centralizes the restructuring or work-out of the assets in a separate unit, which ensures management focus, efficiency, and clear incentives. As an example, Dresdner Bank established an internal restructuring unit in 2003 and dedicated about 400 FTEs to the asset restructuring and work-out of a €35 billion portfolio. The unit shut down ahead of schedule in 2005. While this on-balance sheet solution still lacks efficient risk transfer, it provides a clear signal to the market and increases transparency of the core bank's performance – particularly if the results are reported separately. Any bank creating a legally separated bad bank is likely to go through this first step.
- Off-balance sheet SPE.** In this structured solution, the bank offloads part of its portfolio into a special purpose entity (SPE), usually government-sponsored, which is then ideally removed



from its balance sheet. An example is UBS, which may transfer up to U.S. \$60 billion of illiquid securities to an off-balance sheet SPE funded by the Swiss National Bank. This solution works best for a small, homogeneous set of assets. Structuring credit assets into an SPE is a very complex move. It is in many instances not feasible today, due to the heterogeneity of assets involved and the lack of funding that results from conservative ratings being placed upon structured credit transactions by the rating agencies, and by the general lack of investors for these types of assets currently.

- **Bad bank spin-off.** The most effective bad-bank solution is to dispose of the assets into a legally separated entity. Such an external bad bank ensures maximum risk transfer, increases the core bank's strategic flexibility (e.g., in terms of M&A transactions), and is a prerequisite for attracting outside investors. However, the complexity and cost of the transaction and operation are also very high due to the often required banking license (typically from the transfer of customers with performing loans). There are complexities surrounding asset valuation and transfer, funding may not be readily available, and there is no ready legal or accounting framework for off-balance sheet separation into bad-bank entities. Therefore, this solution is a last resort, taken after other measures prove insufficient in efficiently managing all toxic and non-strategic assets. The challenges of a bad-bank spin-off would have to be surmounted with governments playing a key role, especially in creating a common legal and regulatory framework, and supporting bad banks through funding or loss guarantees.

### *Business case*

Each of the potential structural solutions must be evaluated against a clear set of pre-defined criteria, including those relating to solvency and the balance sheet criteria (capital and RWA relief, mark-to-market volatility, expected losses), cost (transfer costs, funding costs, guarantee and capital costs, operating costs), and legal, regulatory, and accounting issues. Such a thorough evaluation would result in a comprehensive business case that accounts for the potential impact of the structure on capital availability and P&L. In today's environment, the focus will be more on balance-sheet reduction, liquidity, and capital protection rather than on long-term NPV maximization.

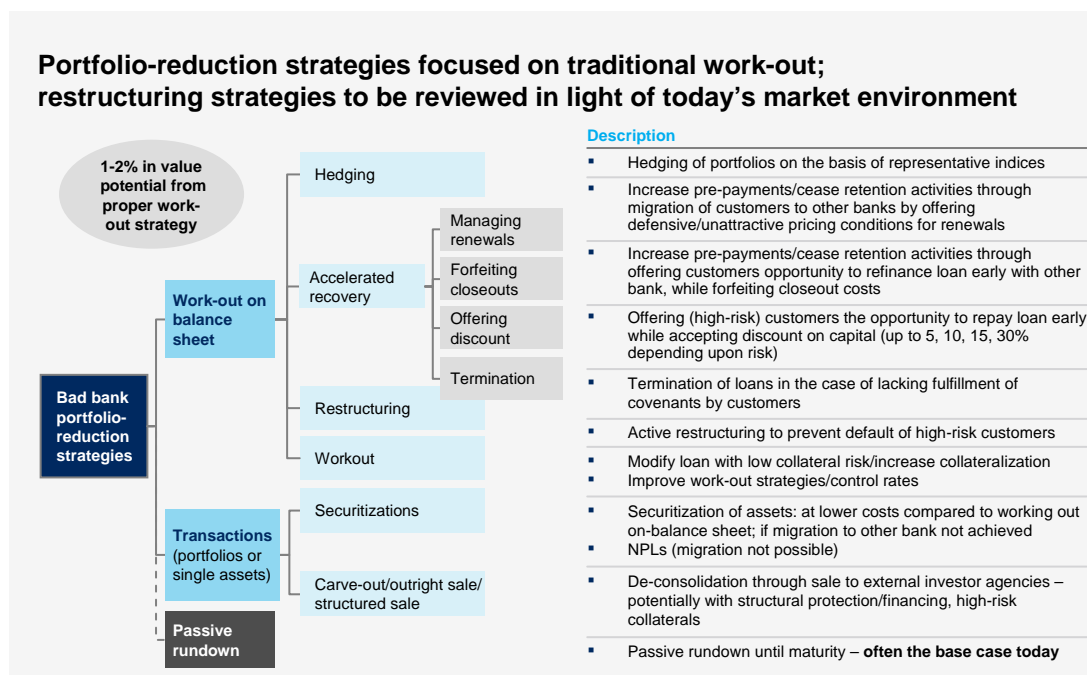
### *Portfolio business strategies*

Whatever structural solution is chosen, identifying and pursuing optimal portfolio run-down strategies will be key in maximizing value from the corresponding assets. Given that some proposed bad-bank portfolios are very large, up to €100 billion in size, an improvement of a portfolio's return by only few percentage points will create enormous value for the bank.

Any exit strategy should be based upon a consistent and high-quality set of portfolio data. There are three main options for extracting value from the assets (see Exhibit 5 on the following page).

- **Passive rundown.** The bank monitors the assets and acts only if the risk rises above a pre-defined threshold. In today's environment, this threshold represents a "base case" for many assets, particularly structured credit assets that cannot be sold without incurring significant costs
- **Transactions.** This option includes securitization or sale of selected assets, whole portfolios, or entire businesses. It is especially effective for divesting non-strategic businesses or low-risk portfolios for which an adequate price can still be achieved, as well as situations where the portfolios or businesses can easily be separated.

Exhibit 5



- Work-out on balance sheet.** Besides hedging the risk, the bank can also try to accelerate recovery by actively managing down the assets by forfeiting close-outs, offering discounts or contract termination, e.g., if covenants have been broken. Other options include restructuring high-risk assets to prevent defaults or, if already defaulted, a standard work-out process. While a balance-sheet work-out has been a key strategy in the past, its efficacy in the current environment would be more limited, given the lending restrictions many banks apply due to capital constraints. Nevertheless, individual strategies, such as early repayments, may still be relevant to particular lending transactions.

To derive the optimal strategies, all assets and portfolios should be analyzed along economic and strategic dimensions, such as NPV calculations, P&L impact, funding, and risk implications. Most banks will find it necessary to balance the need for quick disposal of assets with potential losses resulting from selling them below book value.

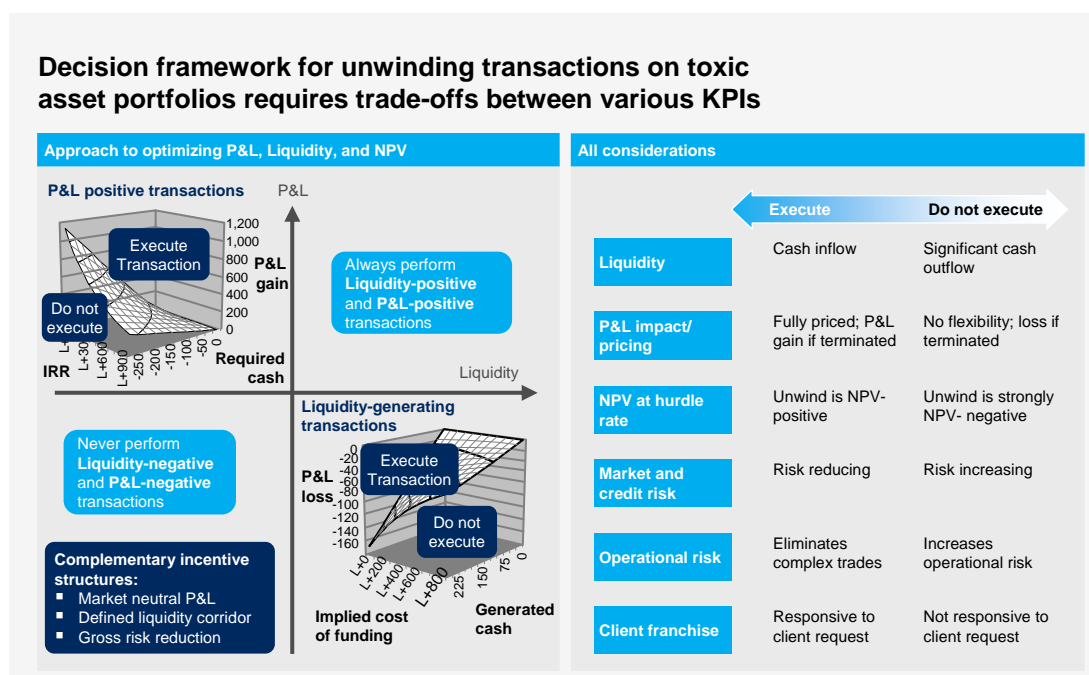
### *Operating model and processes*

Setting up a proper organization, operating model, and processes for the internal or external restructuring work-out unit are necessary steps to achieving the potential value from a more focused management of the assets.

Defining the objectives can be a challenge, but clarity over the unit's goals is essential. In traditional bad-bank approaches, the focus was clearly one-dimensional on the P&L or – at best – capital. In today's environment, liquidity, collateral, and gross risk reduction must be considered also for structured credit assets. Targets must be set and the trade-offs clearly understood (Exhibit 6).

The operating model will be determined by the size of the portfolio, the type of assets, geographies, and other factors. The work-out will require its own top-level management; it can be considered a separated market unit or part of a CRO or CFO organization. The unit crucially needs both top-quality leadership and highly skilled specialist (work-out) skills reflecting a sense of entrepreneurship. In many cases, it should have its own functional support and operate more or less like a stand-alone bank, or be entirely market focused, drawing upon the core bank for support. Similar to the work-out and portfolio managers in the bad-bank unit, the support functions must also be specialized so they can provide structuring advice from a risk, accounting, and funding perspective.

Exhibit 6



Finally, internal processes need to be strengthened and the incentive system aligned with the bank's strategic objectives. Incentives should appropriately consider time versus P&L effects as in the past. In addition, however, particularly for structured credit assets, the P&L needs to be neutralized for market movements (in both directions) and must also consider additional constraints. While uncapped bonuses awarded on an NPV basis (as in the past) may be still adequate for traditional work-out, in many instances, the new guidelines for investment banks need to be considered. As the portfolios shrink over time, special attention should be given to non-monetary incentives, such as the right to return to the core bank at a later date or special training to qualify for a new position once the assets have been worked out.

## 3. *State-supported bad-bank plans*

Many banks are struggling in their efforts to set up proper bad banks, particularly of the off-balance-sheet variety, given the current economic, legal, and regulatory constraints. Government intervention on an increasingly large scale is thus being widely required. For governments, if supporting individual bank schemes is proving insufficient in surmounting the challenges of the crisis, then a more systematic approach may be indicated. Creating a national bad-bank scheme can expedite the clean-up of banks' balance sheets, providing short-term stability and minimizing the effects of the banking crisis on the overall economy.

Governments should answer three specific questions when debating national bad-bank schemes:

- When should the government create a bad-bank plan?
- Which concrete scheme should be applied?
- How can the costs to the public be minimized?

### *When should the government create a bad-bank plan?*

In supporting and reviving the national economy, the government's overarching goal must be to stabilize the financial system, since stable lending plays a crucial role in the overall economic cycle of any country. A nationwide plan sends a clear positive signal to the market, helping to restore trust in the sector. By strengthening banks' capitalization, furthermore, a national bad-bank plan can ensure sufficient credit flows into the economy. A national plan can also be enacted more quickly than multiple individual structures, and it can draw upon greater regulatory flexibility in order to establish the most efficient structure.

The key challenge for governments is in determining the extent of intervention that is needed sufficiently to ease bank lending to the greater economy. Discerning the levels and causes of lending constraint can be difficult. Some contraction in lending is necessary in a downturn to minimize additional losses to the banking system; but further tightening can occur because of banks' own limited funding situation and part of their de-leveraging. Only in the latter situation – a real credit crunch – should the government consider a nationwide bad-bank scheme.

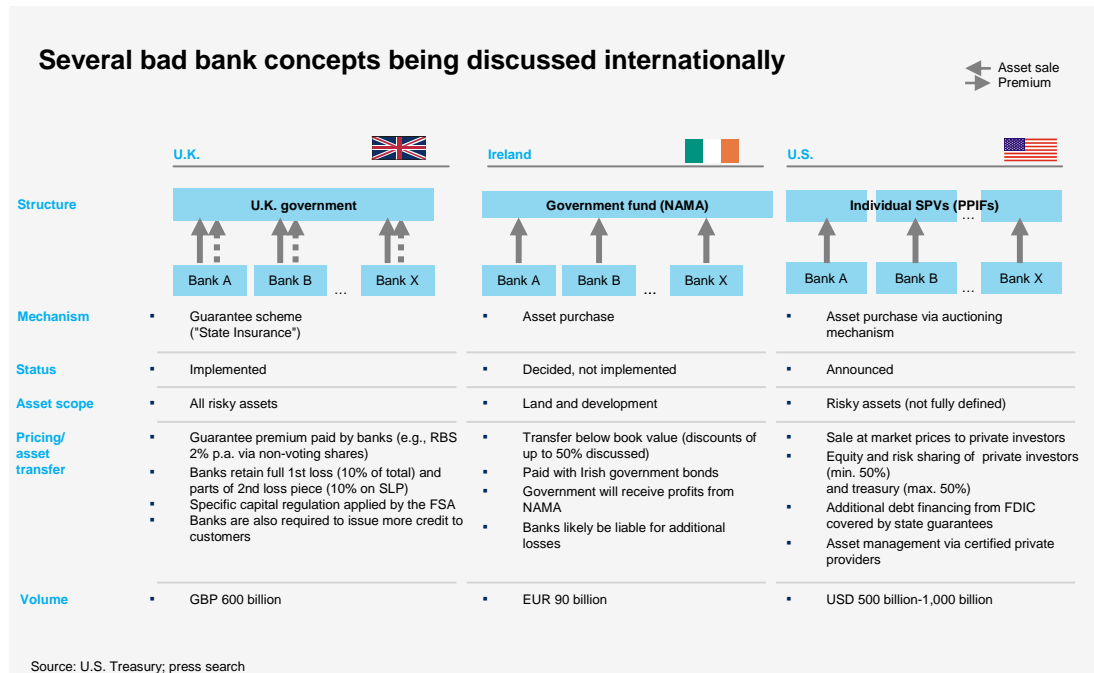
### *Which concrete scheme should be applied?*

The national bad-bank plans so far proposed by different governments are all customized to deal with the specific problems of each country and span a wide range of potential solutions (Exhibit 7).

#### **The U.K.: state guarantee scheme**

The most basic nationwide scheme involves setting up a regulatory framework for individual bad banks. The UK chose this option, since its banks were hit severely by the crisis and a quick solution to avoid a run on the banks was one of the government's priorities. The U.K. plan resembles the approach taken in the United States of extending support to individual banks on a case-by-case basis. The U.K. plan is large, totaling about £600 billion, and covers – all types of assets. Participating banks pay a premium to the government (e.g., RBS pays 2 percent p.a. in the form of

## Exhibit 7



non-voting rights) and are typically liable for the first portion of the loss (set at 6 percent for RBS, for example). They then pay a percentage of the remainder of the losses (10 percent for RBS), with the government guaranteeing the rest.

The scheme is simple, quick to implement, and limits the amount of capital the government needs to provide upfront. Consequently, the U.K. plan was copied by most of the European countries as a first step in October 2008. Depending upon the share of losses, the government is able to tailor it to individual institutions and their issues. However, as the banks are still holding a significant share of the risks, the plan provides only limited support for funding and liquidity. If a bank's business model is not sound and it needs to de-leverage by disposing of parts of its business lines, this scheme will not provide the required support.

### Ireland: state-run bank/asset purchase

The most extreme nationwide bad-bank plan involves establishing a state-run bank. This is appropriate when the majority of banks have serious problems and need to dispose of large volumes of assets or assets of a fairly homogenous character. If too many asset classes are involved, however, the scheme can become too complex for central government to run efficiently.

In Ireland, the problem is primarily with local real estate credits. As these are mostly long-term assets, taking them off the banks' balance sheet is a favorable solution to revive lending. Real estate assets will be transferred at discounts to book value of up to 50 percent and individual banks may still be liable for additional losses. Opting into the scheme relieves funding pressures and allows banks to clean up their balance sheets. The program is being funded by Irish government bonds and is expected to reach €90 billion. The main problem with the Irish plan has been its large size relative to the country's economic resources.

### United States: Auction mechanism/asset purchase

The U.S. government's focus so far has been on guaranteed structures and re-capitalizations. A national regulatory framework is also being established, within which individual banks can request support. Each bank parks the relevant assets in separate special purpose vehicles (SPVs) that take the form of public-private investment funds. The plan, which is not been fully defined, suggests that assets will be sold at market prices to private investors, and the government and private investors

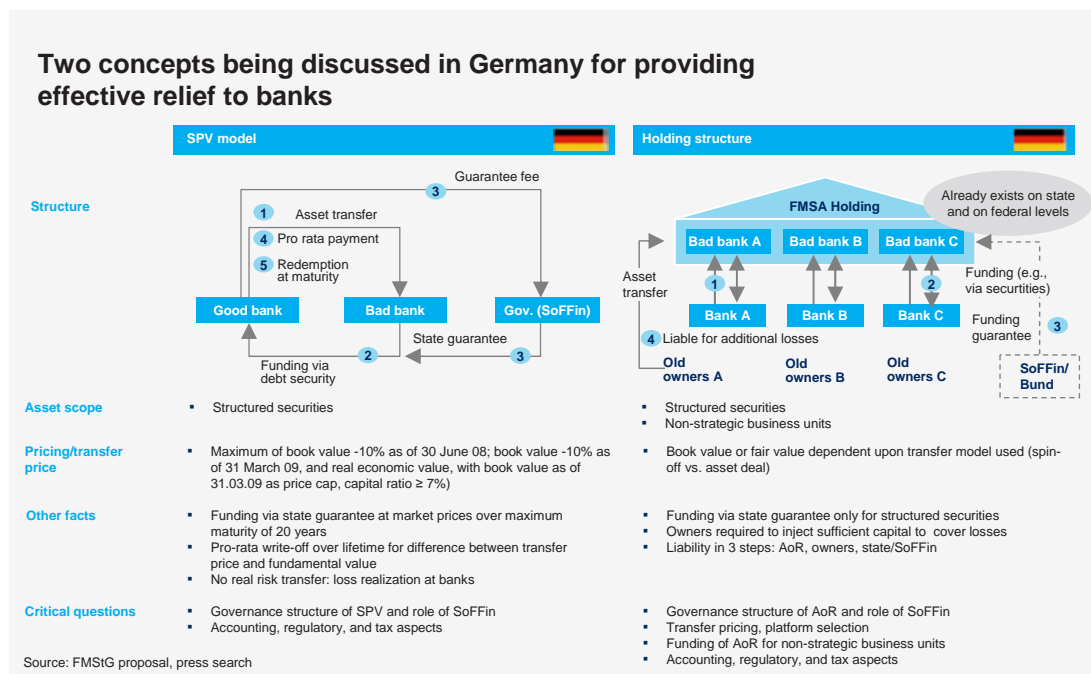
will share the risk (up to a maximum of 50 percent for the government). Additional debt financing from the Federal Deposit Insurance Corporation will be covered by state guarantees and asset management will be carried out by certified third parties.

The proposed scheme has not been put into action yet. Private investors require an economic value from the transaction, which must come at least partly from the off-loading bank or the government. As the government has not yet enacted the law, it may consider this scheme too costly.

### Germany: SPVs or holding structure

Germany is enacting two legal concepts in order to provide effective relief for its private and state-owned banks. The state-owned banks (Landesbanken) have been especially harmed in the crisis, and much more than the country's largest commercial banks have had to deal with toxic assets and re-size their balance sheets significantly (Exhibit 8).

#### Exhibit 8



- SPV model.** The first option on the table is an SPV scheme, whereby banks would be permitted to transfer only structured credit assets to the bad bank. The core bank will have to pay a guarantee fee to the government out of its dividends to shareholders. This fee will enable the bank to fund the assets by offering a state guarantee. No risk is transferred and the core banks are still liable for all future losses. The assets are transferred at a maximum discounts of 10 percent of book value as of June 2008, 10 percent of book value as of March 2009, and of real economic value. This rule is only suspended when the capitalization of the respective bank is below 7 percent or the book values as of March 2009 are below the discount.
  - The assets are furthermore subject to a pro-rata write-off over their lifetime, for the difference between the transfer price and market value. If at maturity the portfolio shows a gain, however, the bank will be eligible for it. The state-owned banks (Landesbanken) that have already implemented individual rescue schemes are especially unlikely to use this solution.

- **Holding structure.** The alternative bad-bank solution offered by the German government is the holding structure scheme. This sets up an entity in which banks can park their total toxic or also non-strategic assets outside the IFRS and banking regulation under German local Gaap. No losses are covered by the government, however, and the owners of the bad bank are directly liable for the future losses (and not the core bank). Unlike the guarantee scheme, the holding structure offers investors clarity around the remaining parts of the core bank and supports the re-sizing of the business models. This also opens the door to additional core bank support from the government, which is conditioned on the clear separation of assets. The legal and regulatory framework put in place can offer significant relief in order more easily to separate and later run the bad bank, especially in that there are no regulatory capital requirements, no mark-to-market valuation, and no consolidation with the core bank.
  - To participate in the holding structure, however, the state-owned banks are expected to undertake some degree of consolidation, a direction in which the government has long been pushing. Potential questions may arise from the IFRS treatment and accordance with European competition directives.

A comparison of the two models suggests that the holding structure is more favorable toward the state-owned banks, since it enables a real risk transfer and thus the needed re-sizing of their balance sheets. The holding structure could, however, come with too high of a price in terms of consolidation or EU requirements, and the banks or their respective owners may not be willing or able to pay it at this time. In contrast, the SPV model seems to meet the needs of the private banks, which, while most in need of disposing of toxic assets, still have an overall solid business model.

### *How can the costs to the public be minimized?*

Before considering using a bad-bank scheme to support or revive the financial system, any government must establish whether the sharing of risk between the financial institution and the state genuinely limits the potential damage to the financial system without imposing unduly onerous costs on the taxpayer. Governments should avoid providing unnecessary or overly generous support to banks, since this could actually encourage risky behavior. With their institution shielded by the government from the worst effects of severe losses, bank managers might take undue risks in search of large profits and the large personal bonuses they entail. Cognizant of this dynamic, governments will likely seek to limit the size of supported banks.

Governments will further need to establish the right incentives for bank management; bluntly put, the support should hurt, but not kill the bank. Government incentive schemes have typically limited management compensation or have included fair-value pricing on any type of government support. Attaching these fees only to actual future profits of the core bank enables governments to limit the burden while the bank is in distress, but make clear that the bank and its management are responsible for paying back the taxpayer whenever they can afford to.

## 4. Outlook

The severity of the financial crisis and the effects on banks around the world have hit both management and governments without warning. The good news is that existing instruments to deal with the crisis can effectively stabilize the banking system even in the face of expected further write-offs.

Bad banks can help stricken institutions carve out their core business models and keep them separate from restructured portfolios. The ability to separate the core allows the banks to de-risk and de-leverage as a first step towards creating sound business models for the future. A more efficient and focused management with clear incentives for portfolio reduction maximizes the value of the run-down assets. Setting up bad banks can also help banks regain the trust of investors, by providing more transparency and lower “monitoring costs” around the core business.

The success of bad-bank schemes depends on a few critical factors. First, an appropriate level of government support is needed to overcome the specific constraints within each country while maintaining a clear perspective on the extent of state-assumed risk. Second, there needs to be a clear, quickly applicable means of segregating critical assets and consolidating around core businesses, while taking a forward-looking view on risks, e.g., through stress-testing. Third, sensible changes to capital regulation and accounting standards are needed to ensure the future stability of the financial system.

In general, nationwide bad-bank schemes enable governments to support their financial system and their economies more widely. The appropriate scheme must be carefully decided upon, and the supported banks and their management closely monitored to avoid or minimize any potential disincentives. Using the crisis to achieve political goals (e.g., consolidation of the Landesbanken in Germany) is questionable from an economic standpoint.

Looking ahead, governments must act in concert with regulators and central banks to minimize the risk of any further shocks to the financial system, so that funding markets stabilize, and equity and credit markets start to return to health.

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**Luca Martini** is a director in McKinsey’s Madrid office, **Uwe Stegemann** is a director in the Cologne office, **Eckart Windhagen** is a director in the Frankfurt office, **Matthias Heuser** is a principal and **Martin Fest** a senior associate in the Hamburg office, **Sebastian Schneider** and **Thomas Poppensieker** are principals in the Munich office, and **Gabriel Brenna** is an associate principal in the Zurich office.

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