# Stabilizing the Banking Sector in the Face of the Financial Crisis

## Introduction

In order for banks to continue normal lending activity, which is necessary for the healthy functioning of the real sector, it is imperative to restructure banks and restore confidence in the banking industry. Governmental financial relief measures have been introduced in many countries in order to precisely achieve this aim. These measures can be roughly divided into those dealing with the asset side of banks' balance sheets, and those dealing with the liabilities side.

## Liabilities side

*Increasing deposit insurance*

Deposit insurance is a measure implemented to protect, in partial or in full, depositors in case the bank into which they have deposited funds becomes unable to pay back the money (due to bankruptcy, etc). Deposits are usually guaranteed only up to a certain figure, or a certain percentage of the total up to a certain figure.

The main argument for having deposit insurance is related to preventing bank runs (Diamond and Dybvig 1983). If depositors sense that a bank is failing, and they have no deposit insurance, they will rush to withdraw their money before all of it is gone, resulting in a bank run. Deposit insurance decreases the chance of a bank run, because depositors know that (at least some of) their money will not be lost even in case of bank failure. When the risk and prevalence of bank failures are quite high, however, it might be necessary to raise deposit insurance in order to keep depositors (especially those who have money stored above the insured level) still confident that their deposits will not be lost.

The problem with high deposit insurance is that depositors have no incentives to monitor the banks' actions, which might lead banks to take unnecessarily high risks during normal operations. Uninsured depositors can put pressure on banks by demanding higher interest rates or withdrawing money to penalize riskier banks (Peria et al. 2001), but when insurance is present depositors tend to be more indifferent to the risks that their banks take.

*Guaranteeing or buying bank debt*

Guaranteeing bank debt is meant to increase liquidity in the banking sector and promote interbank lending. One major goal of banking relief measures is to prevent, or minimize the length of, liquidity and credit problems that lead to insufficient lending to banks and firms. The government can act to guarantee certain types of newly issued debt in order to encourage banks to lend to each other and to firms without fear of defaults (FDIC 2009).

*Capital injections*

Capital injections involve either a financial transaction in which the government acts as a shareholder and injects pure equity into a bank, or a more direct transfer of capital from the government to a bank (Eurostat 2002). A pure equity injection, which counts as Tier 1 capital, allows the government, and thus taxpayers, some control over the bank (to ensure operational restructuring) and enables the government to benefit from the recovery of the bank (Hawkins and Turner 1999). Government bonds are usually used to purchase shares from a bank or to act as vehicles for capital injection in general. Use of subordinate bonds (which have the lowest seniority) as Tier 2 capital injection is a more direct form of capital injection, since the government gains no control over the bank. Still, any type of capital injection usually comes with some conditions (Hawkins and Turner 1999), and thus is not a pure gift.

While there are benefits to taxpayers for using pure equity injection – in terms of gain of control and possible future benefits – banks prefer less controlling injection, because they want to act with limited restrictions. They also want to attract private funds, and if the government pays with subordinated bonds, this is much easier to do (Hawkins and Turner 1999).

## Nationalization

Nationalization occurs when a significant fraction of a bank becomes owned by the government, which can be thought of as capital injection at the limit (Santomero and Hoffman 1998). The government basically gains control over the bank, usually with the intention of making it a private enterprise again. Usually, as a result of nationalization, stockholders' interest is eliminated, while depositors and other creditors are protected (Hoggarth et al. 2004).

The main advantage of nationalization is that the government can freely take any measures it wants to restore the bank, meaning it gets more direct control of the bank, and it (and thus taxpayers) can more easily harness benefits connected to the future performance of the bank (Sanger 2009). However, nationalization is criticized in free market economies for going against principles of efficiency and fair competition. The possibility of capture of the banks by political interests is also a negative aspect.

### Asset side

*Ring fencing and direct buying of assets*

Ring fencing and direct buying of assets are financial techniques that involve isolating the bad or toxic assets of a bank and putting them aside into what are called special-purpose entities or limited-purpose operating entities (Avila Nores 2003). The assets are in this manner effectively removed from the bank's balance sheet and are then subject to treatment different from the rest of the bank's assets. One difference between ring fencing and direct buying of assets is that direct buying of assets involves paying costs for the assets at present time and then isolating them into some kind of special purpose vehicles, while ring fencing involves first isolating and then dealing with the costs at a future time (OECD 2009).

One major problem with direct buying of assets is determining at which price the bad assets should be bought. Since there is either no market price to reference or the market price is deemed inadequate, the right price becomes arbitrary ("Painful Capital Injection" 2008), since it is difficult to decide which method to use to find the present value of these toxic assets. Previous pricing schemes include using a fixed proportion of the book value as well as setting a price that can be adjusted in the future (Hawkins and Turner 1999). Ring fencing poses similar problems because assets will have to be priced at some point in time, and similar difficulties will then emerge.

**Table 1**

**Financial relief measures introduced by OECD country governments since mid-2008**

| | Bank liabilities | | | | Bank assets | |
|---|---|---|---|---|---|---|
| | Increase deposit insurance | Guarantee or buy bank debt | Inject capital[a)] | Nationalize[b)] | Ring-fence bad assets | Plan to purchase toxic assets |
| United States | X | X | X | X | X | X |
| Japan | | X | X | | | |
| *Euro area* | X | | | | | |
| Australia | X | X | | | | |
| Austria | X | X | X | | | |
| Belgium | X | X | X | | | |
| Canada | | X | | | | |
| Czech Republic | | | | | | |
| Denmark | X | X | X | | | |
| Finland | X | X | X | | | |
| France | Already high | X | X | | | |
| Germany | X | X | X | | | X |
| Greece | X | X | X | | | |
| Hungary | X | X | X | | | |
| Iceland | X | | X | X | | |
| Ireland | X | X | X | X | | X |
| Italy | X | | X | | | |
| Korea | | X | | | | X |
| Luxembourg | X | X | X | | | |
| Mexico | | X | | | | |
| Netherlands | X | X | X | X | | |
| New Zealand | X | X | | | | |
| Norway | Already high | X | X | | | |
| Poland | X | | X | | | |
| Portugal | X | X | X | | | |
| Slovak Republic | X | | | | | |
| Spain | X | X | | | | |
| Sweden | X | X | X | | | |
| Switzerland | X | | X | | | |
| Turkey | | | | | | |
| United Kingdom | X | X | X | X | X | |

Note: The coverage of nationalizations and measures to ring-fence bad assets is incomplete.
[a)] Capital has already been injected in banks, or funds have been allocated for future capital injections. The law allows the Japanese government to inject capital into financial corporations, but so far this option has not been used. – [b)] Nationalisation is defined as the government taking control of a substantial share of banking activities (defined in a broad sense). The cell for the United States is ticked to acknowledge the actions taken by the authorities to take control of Fannie Mae and Freddie Mac, and unwind Washington Mutual.

Source: OECD (2009).

**Relief measures in the OECD**

From the Table it can be seen that so far the OECD countries have mainly opted to take measures that affect the liabilities side of their banking sectors. Increase in deposit insurance, buying or guaranteeing of debt and capital injection have been implemented in a vast majority of the countries, with 50 percent employing at least all three measures. This is most likely due to the fact that it is easier to deal with the liabilities side first, because of pricing difficulties on the assets side and time pressure that demands quick action. However, it is imperative to address toxic assets eventually, and six OECD countries have already created plans to deal with the asset side. As stated in the European Central Bank's Guiding Principles for Bank Asset Support Schemes, "…with measures supporting the liability side of banks' balance sheets already partially in place, the focus of public support measures has shifted to initiatives that could cushion the impact on banks of deteriorating asset quality, should the liability side measures prove inadequate," (ECB 2009) suggesting that more countries, especially those in the EU, will put forward asset side initiatives.

It can also be seen that several countries have not implemented any of the discussed measures, suggesting that the financial crisis has not had a severe enough effect on them as of yet. Indeed, Turkey has seen only limited effects of the crisis, with no bank failures or insurance company bankruptcies (Simsek 2009).

**More Specific Trends**

The United States, United Kingdom and Germany have implemented both liability side and asset side measures. The actions that they have taken have been implemented with great, even unprecedented, speed.

Countries outside of Europe, except for the United States and Japan, have not yet implemented any capital injection and/or nationalization measures, and have instead focused on increasing deposit insurance (Australia and Canada) or guaranteeing/buying debt (Mexico, Japan, Korea, Australia, and Canada). The Table suggests that these two measures are the ones employed first in a financial crisis, and are thus critical for immediate and short-term relief of the banking system. Indeed every country that has taken action has implemented at least either increasing deposit insurance or guaranteeing/buying bank debt.

It is interesting to note that in France and Norway deposit insurance is designated as "already high". In Norway, deposit insurance covers up to 2 million NOK (about $310,000 given current exchange rates), while up to 70,000 euros ($98,000 given current exchange rates) are covered in France, which is indeed higher than those of most other EU countries, whose insurance was around 20,000 euros in 2006 (Cesifo 2007). Australia and New Zealand, which used to be the only OECD countries with no deposit insurance (Cesifo 2007) have moved to introduce deposit insurance in light of the financial crisis, showing that the financial crisis has indeed substantially affected Oceania.

Guaranteeing of debt and injection of capital have been implemented in most OECD countries. Outright nationalization has only been implemented by five countries, including the United States and the United Kingdom. While nationalization is a viable option for countries such as the Netherlands, which are used to high government involvement and high taxes, the fact that nationalization was used in the United States, a country which tries to keep government interference minimal, reflects the severity of the development of the financial crisis in the United States.

Programs dealing with the assets of the banks have been put forward in six countries. In Germany, assets are to be bought at 90 percent of the book value and put into special-purpose entities, with banks agreeing to pay if the value of the assets ends up lower than the price at which they were bought. Korea, Switzerland and Ireland also have programs that involve setting up special purpose vehicles or funds to purchase toxic assets with government money, which is as of yet only optional in Ireland. The Public-Private Investment Program (PPIP) in the United States is a program that combines public (government) and private capital in order to purchase toxic assets. The United Kingdom has a ring-fencing program, in which assets that are ring-fenced on a balance sheet are put under different management and governance, with special protection for riskier assets (OECD 2009).

Most schemes try to make sure that the risks and costs of failure, as well as the benefits of recovery, are shared fairly among the banks and the government (taxpayers), but for most it is still true that the majority of the risks are borne by the government, while benefits from recovery are shared.

## Conclusion

Measures to facilitate relief of the banking sector have been implemented in most OECD countries, with most focusing on the liabilities side of the banks' balance sheets so far. The financial crisis has been severe, and the actions taken by governments, though rapid and substantial, are probably not yet sufficient. It is imperative that the banking sectors' problem be resolved, so that lending to the real sector can resume, and the real economy can improve.

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