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Stéphanie Marie Stolz* and Michael Wedow**

Government Measures in Support of the Financial Sector in the EU and the United States

In the last issue of *Intereconomics*, a first article by the present authors looked into the measures that central banks have taken in support of the financial sector in an effort to mitigate the effects of the financial crisis. This second article describes the measures taken by governments to contain the impact of the financial crisis and discusses potential exit strategies. Although the focus is on the measures implemented by euro area governments, the article also compares these measures with the ones taken in the United Kingdom and the United States.

The extraordinary remedial action taken by central banks and governments since late 2008 has been successful in restoring confidence in financial systems around the world and in improving their resilience. These measures, together with sizeable monetary and fiscal policy stimuli, have set in motion a process of mutual reinforcement of financial system conditions and real economic performance. This has fostered confidence and led to a fading of systemic risk. However, the measures adopted to support the financial system have increased the risk of distorting competition and creating moral hazard and may even have increased the likelihood of excessive risk-taking, while the dramatic rise in fiscal imbalances is threatening the sustainability of public finances.

This article gives an overview of the remedial action taken by governments in support of the financial system. It first provides general details on the support measures before it elaborates on the individual measures and the options for exit from these measures.

Ad Hoc Measures versus National Schemes

At the outset, although the financial turmoil revealed weaknesses across a wide range of large and complex financial institutions, systemic risks were largely contained. Reflecting the idiosyncratic character of financial system stresses, governments initially responded with largely ad hoc measures tailored to the individual needs of institutions that had suffered large losses. However, as the cri-

sis intensified – with the bankruptcy of Lehman Brothers in October 2008 – and became more systemic in nature, it became clear that interventions had to be extended to a broader range of banks. This called for a more comprehensive approach in the design of support schemes. One of the first comprehensive schemes to be introduced was the US Troubled Assets Relief Program, better known by the acronym TARP.¹ As the crisis deepened, other countries followed suit and began to establish financial sector support schemes. For example, the Financial Market Stabilisation Fund (SoFFin) was established in Germany on 17 October 2008. The distinguishing feature of these schemes was that they established more transparent and predictable procedures through which banks could obtain financial support. More specifically, transparency was enhanced by government announcements regarding the overall financial commitments they were prepared to make in support of their financial systems. Typically, the schemes also entailed specific criteria for eligibility, pricing and the duration of the support measures available under the schemes.

While ad hoc measures can be, and were, implemented rapidly and flexibly, the advantage of national schemes is threefold. First, in comparison with ad hoc measures, national schemes are often more transparent regarding the institutions eligible for support as well as the amount of support, its pricing and its duration.

Second, national schemes are less likely to distort competition within and across countries than ad hoc measures, and therefore they reduce the risk of support measures distorting the level playing field between supported and not

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The authors are particularly indebted to Perttu Korhonen, who started to collect information on bank rescue measures and from whom we took over the data base.

¹ The Emergency Economic Stabilization Act, signed into law in October 2008, created the Troubled Asset Relief Program (TARP), which authorises the US Treasury to purchase or insure up to US\$700 billion of troubled assets.

supported financial institutions, both within a single country and across countries. In addition, the crisis has had a substantial impact on all major economies and has clearly demonstrated the limits of national responses in dealing with the activities of cross-border, systemically important financial institutions, markets and instruments. This has led the international community to acknowledge the importance of strong global coordination to effectively address the issues at stake. As the crisis reached its full global dimension in autumn 2008, the leaders of the Group of Twenty not only committed themselves to enhancing cooperation but also took the lead in defining the reform agenda, adopting a common stance on the policy response needed. Owing to the high degree of financial integration in the EU, international cooperation was further strengthened on the EU level. Hence, to tackle the rapidly worsening crisis, in October 2008 EU countries agreed on a concerted action plan. They committed themselves to adhere to certain principles in their crisis response measures so that “the European Union as a whole can act in a united manner and avoid that national measures adversely affect the functioning of the single market and the other member States.”²

Third, in the European context, the approval of a particular measure by the European Commission may be simpler if it is part of a national scheme. In the European Union, national intervention requires approval by the Commission, which aims to ensure that the measures do not distort competition. Each ad hoc national measure requires individual approval by the Commission, while measures that are part of a scheme are typically subject to approval of the scheme as a whole. This represents a further advantage of explicit schemes over ad hoc measures. Generally, the European Commission assesses the eligibility of institutions, the volume of support and the pricing to ensure a level playing field. Approval by the Commission has typically been rapid. In a number of cases, however, considerable delays have occurred when restructuring requirements have entailed lengthy negotiations with the national authorities. This has been an issue, in particular, in those few cross-border cases in which several governments have provided support to the same institution.

Measures Adopted

In general, the support measures have usually been available to financial institutions operating in a particular country and to foreign subsidiaries with substantial domestic operations in that country. Support has typically been pro-

vided upon request from a financial institution, although, in a number of cases, banks have also been instructed to accept government support (for example in the United States and France). Support measures have usually been accompanied by restrictions on dividend payments, requirements for regular reporting on business developments, restructuring requirements, government participation in the management of banks and restrictions on executive compensation. In addition, government support in some cases was provided with explicit targets for lending growth, with the objective of maintaining the supply of credit to the economy (for example in France, Ireland and the United Kingdom).

Table 1 gives an overview of the support measures that had been adopted by June 2010. The table includes data on all support measures taken by governments in response to the worsening of the crisis after the collapse of Lehman Brothers, mainly since 1 October 2008. Support measures are classified into three main categories: (i) guarantees on bank bonds; (ii) capital injections; and (iii) measures to provide relief from legacy assets.³ Table 1 distinguishes between the amounts that governments have committed themselves to providing (shown in brackets) and the amounts that have already been actually extended to financial institutions.⁴ Table 1 also shows the amounts committed and extended under national schemes and outside such schemes (i.e. ad hoc measures). The total commitment is the sum of the commitments of national schemes across the three categories (or the actual amount spent in the absence of explicit commitments) plus the actual amounts spent outside national schemes.

Regarding the implementation of the measures, some conclusions can be drawn. Although there are differences across the different measures and regions, the amounts involved are significant in the euro area, the United Kingdom and the United States. It should also be noted that there are significant differences across euro area countries (not shown in the table). The take-up rate, i.e. the share of actually extended measures to the overall committed amounts within national schemes, is generally low across all measures, but there are substantial variations: the use of recapitalisation measures has been relatively widespread, while the issuance of bank bonds with government guarantees has been considerably lower. It should be noted that the

2 Declaration of the emergency summit of euro area heads of government in Paris on 12 October 2008. The declaration is available at http://www.eu2008.fr/PFUE/lang/en/accueil/PFUE-10_2008/PFUE-12.10.2008/sommet_pays_zone_euro_declaration_plan_action_concertee.html.

3 Apart from these three categories, governments sometimes also provided bridge loans to individual institutions. As these measures were not used systematically across the euro area, they are not reported in this article.

4 At the time of writing, a number of schemes have already ended and thus the commitments are no longer available. However, the commitments present a potential upper bound of what governments have been ready to provide in support of their financial systems.

Table 1
Government Support Measures Taken Since October 2008

(as a percentage of GDP, as of end-June 2010)

	Capital injections		Liability guarantees		Asset support		Commitment over all measures
	Within schemes	Outside schemes	Within schemes	Outside schemes	Within schemes	Outside schemes	
Euro area	1 (2)	1	5 (19)	2 (-)	1 (3)	1	28
UK	2 (3)	2	10 (19)	0 (-)	0 (-)	14	25
USA	2 (5)	0	2 (4)	0 (5)	0 (11)	1	26

Notes: Numbers are cumulative, from the beginning of the financial crisis, and expressed as a rounded percentage of GDP. Numbers in brackets show the total commitment to each measure. Some of the measures may not have been used despite having been announced. Usage of guarantees includes issued bonds only and not guaranteed interbank loans. Outside schemes are support measures that are taken without the explicit setting up of a scheme, i.e. direct government support. This can, for example, be provided by local governments, as in the case of the support BayernLB has received from the state of Bavaria.

Sources: National authorities, Bloomberg and ECB calculations.

committed volume and use of liability guarantees, in absolute terms, are far higher than the committed volume and use of capital injections.

Furthermore, it seems that the largest part of the financial support has been targeted at a relatively small number of institutions. Indeed, in the euro area about half of the extended support has been absorbed by the three largest recipient institutions.⁵ In the case of each individual support measure, the three largest recipients account for 6-9% of total euro area banking assets.

The subsequent sections provide a more detailed description of the measures in the chronological order in which they have generally been adopted. It should be noted that these measures to support banks have typically been used in combination. However, the actual use of measures has generally followed an observable sequence, whereby support has been provided to banks on the liabilities side of their balance sheets before the assets side has been relieved.

Deposit Insurance

Deposit insurance schemes were among the first measures used to quell the impact of the financial turmoil that intensified after the collapse of Lehman Brothers. In Europe, before the crisis, EU legislation stipulated a minimum level of deposit insurance of €20,000, with an optional coinsurance element of 10%, under which depositors would bear 10% of losses incurred. As this deposit coverage proved insufficient to calm depositor concerns, the limit was raised in October 2008 to a minimum of €50,000 and again

in December 2010 to €100,000.⁶ In addition, EU countries agreed to speed up the process of repayment of guaranteed deposits in case of a default, in an effort to enhance the effectiveness of deposit insurance.

Deposit insurance had already been raised above €50,000 in the majority of EU countries and, in a number of cases, blanket guarantees have been issued for retail deposits (e.g. Germany). In the United States, deposit insurance has temporarily been raised to US\$250,000 and will return to US\$100,000 in January 2014. In addition, the Federal Deposit Insurance Corporation (FDIC) is offering full coverage of non-interest bearing deposit transaction accounts, regardless of their dollar amount, under the Transaction Account Guarantee, which is part of the Temporary Liquidity Guarantee Program (TLGP).

Guarantees on Bank Bonds

Apart from increasing deposit insurance, the provision of government guarantees for bank bonds was among the first measures implemented in support of banks. These programmes enabled banks to issue bonds that were insured by the government against the banks' default. Several countries committed large amounts to guaranteeing bank bond issues. However, the usage of government guarantees was slow to materialise. While a number of debt guarantee schemes were available from early October 2008, issuance had only gained momentum by mid-November 2008. Notably, the euro area and the United Kingdom led the way in this issuance and still account for the majority of all outstanding government-guaranteed debt. In some countries (e.g. Italy), schemes were imple-

5 The three institutions that absorb the largest share of support are not the same for capital injections, liability guarantees and asset protection.

6 Commission decision on 12 July 2010: <http://europa.eu/rapid/press-ReleasesAction.do?reference=IP/10/918&format=HTML&aged=0&language=EN&guiLanguage=en>.

mented, but no bank made use of them. In other countries, few banks applied and the amounts issued were low. In the United States, guarantees on bonds are offered under the Debt Guarantee Program, which is also part of the TLGP managed by the FDIC. Banks could choose to opt out of one or both of the programmes offered under the TLGP.

One major factor limiting the issuance of guaranteed bonds has been the cost entailed. First, the issuing of long-term debt – whether guaranteed or not – has become increasingly expensive *vis-à-vis* short-term funding sources as the yield curve has steepened. Second, with regard to the pricing of guarantees, banks typically pay a market-based fee linked to the bank's credit risk, plus a margin. In line with the ECB recommendations, EU countries have relied on banks' CDS spreads as the basis for their pricing. Given that CDS spreads have been at historically high levels since the onset of the crisis, government-guaranteed bonds can be an expensive funding source. In comparison, in the United States, the duration of the guaranteed bank debt is the sole determinant of the fee. Third, the market also requires a relatively high liquidity premium on guaranteed bank debt over government debt. Finally, the pricing of bonds has been based on the respective government spreads, which have also risen, thereby giving rise to further reasons for the reluctance to use government-guaranteed bank debt. The rise in these spreads has been largely mirrored by government-guaranteed bank bond asset swap spreads and may represent an important cost element for banks located in countries with higher spreads.

Although the uptake of government guarantees by banks has been sluggish, this source of funding represents a significant part of banks' total funding in the securities market. The availability of government guarantees helped banks to roll over their maturing debt.

The declining dependence on government guarantees that is observed in the funding of banks may partly reflect the fact that, since the summer of 2009, banks have been able to substitute guaranteed short-term debt with Eurosystem liquidity. It may also reflect factors such as (i) the gradual but significant improvement in financial market conditions observed in 2009; (ii) the impact of the Eurosystem's covered bond purchases, which helped boost activity in this market segment; and (iii) the improved credit risk outlook for many banks, driven by strengthened capital bases and increased retained earnings.

Capital Injections

As the financial turmoil persisted, write-downs owing to credit-rating downgrades had a severe impact on banks' capital. In addition, as the economic environment deteriorated,

banks also faced losses on their credit portfolios and the risk weights on performing assets increased, putting further pressure on banks' capital positions. As it became clear that the banks were confronted not only with liquidity strains, but also with potential risks to their solvency, several governments began to complement liability guarantee schemes with direct injections of capital into banks. Capital injections have mostly been made through the acquisition of preferred shares or other hybrid instruments which fulfil the conditions for Tier 1 capital.

Capital injections have been less common in the euro area than in the United States. The total volume of US capital injections amounted to 2.6% of GDP at its peak in June 2009, while recapitalisations reached 1.3% of GDP in the euro area. Within the European Union, the UK government injected the largest volume of capital, which peaked at about 5.1% of GDP. A further important aspect is the varying level of government involvement in the banks that have received capital injections. In a number of cases, banks have become *de facto* nationalised, when governments have obtained majority stakes in them, or have been nationalised outright. As a case in point, the German government even organised a shareholder squeeze-out to take full control of Hypo Real Estate, after having granted more than €100 billion in guarantees to the bank.

With respect to the pricing of the capital injections, banks typically pay a significant coupon on their preferred shares. The expensive pricing should encourage an early exit by the banks. This incentive is often further strengthened by step-up and redemption clauses. Overall, the exit arrangements currently in place in the European Union aim to strike a balance between providing incentives for an early exit and paying due regard to banks' individual circumstances.

Asset Support

The uncertainty about the value of some classes of assets held by banks may have resulted in a reluctance to lend in the interbank market. The related write-downs subsequently ate into banks' capital and prevented them from extending credit to the private sector. Therefore, cleaning up balance sheets became a core part of the rescue efforts. However, the problem of pricing these toxic assets correctly also made the task of removing them from balance sheets complex and difficult. Hence, despite the lessons learnt from previous banking crises, namely that cleaning up balance sheets is essential to speed up the recovery process, systematic asset support measures only slowly became part of the policy tool kit in the aftermath of the Lehman Brothers bankruptcy. In contrast, *ad hoc* asset support measures formed part of some of the earliest rescue operations (see below).

In general, asset support schemes may either take the form of asset removal schemes (which transfer the assets to a separate institution, such as a so-called “bad bank”) or asset insurance schemes (which keep the assets on the banks’ balance sheets). Circumstances that favour the asset removal model include (i) a high degree of uncertainty regarding the banks’ future asset quality; (ii) concentration of impaired assets in a few institutions within the financial system; and (iii) those in which a “clean break” for the participating institutions could be deemed most appropriate, despite the higher upfront costs. In contrast, circumstances that favour the asset insurance model are (i) a high incidence of hard-to-value assets, such as asset-backed securities, among the impaired assets; and (ii) those in which consideration of the state of public finances would favour schemes with a cost profile that puts less pressure on the government fiscal position in the short term.

However, the choice between an asset removal scheme and an asset insurance scheme is extremely challenging in a situation where the quality of banks’ assets is likely to deteriorate further. This uncertainty is probably one reason why many schemes combine elements of both types and can thus be categorised as hybrid schemes. Such schemes often involve asset transfers, financed by public sector guaranteed loans, and sophisticated arrangements for risk-sharing between the government and participating banks.

Some countries had implemented asset support measures even before the crisis intensified in October 2008. The earliest instances of this type of support were ad hoc measures forming part of rescue restructurings, such as asset removal and guarantee measures to support several German *Landesbanken*, the back-up facility for ING and the Maiden Lane transaction in the United States.

Recognising the need to offer asset relief in a systematic way, several countries introduced asset protection programmes. Examples are the Public-Private Investment Program (PPIP) in the United States, the National Asset Management Agency (NAMA) in Ireland, the German consolidation scheme targeted at *Landesbanken* and the ring-fencing programme in the United Kingdom. The features of asset schemes vary considerably across countries. For instance, the eligible asset classes vary widely from one scheme to another, as does the nature of participation, which is voluntary in Germany and the United States, but mandatory in Ireland. Furthermore, the pricing mechanisms differ: prices are established by auction in the United States, while they are determined by auditors in Germany and Ireland.

The potential risks are high for the public sector, as the amounts committed to asset relief measures are large (see Table 1). For instance, the United Kingdom has entered

into a risk-sharing agreement with Royal Bank of Scotland, which could cost almost 14% of GDP. However, these losses would only materialise in the unlikely case that the underlying asset pools become worthless. If the assets retain part of their value, the ensuing loss for the public sector will be smaller. Also, if the bank that benefits from the asset relief measures also receives support in the form of capital and/or liability guarantees, the taxpayer would have to pay either for losses on the right-hand side or the left-hand side of the balance sheet, but not for both sides.

Exit from Government Measures

Along with central bank action, the government support measures have been successful in restoring confidence in financial systems around the world and in improving their resilience. However, the various measures to support the financial sector amount to considerable actual and contingent liabilities for governments.⁷ While governments’ budget deficits are not significantly affected in the short run, the impact on government debt depends on the borrowing that will be needed to finance the actual recapitalisation measures. It should be noted that this comes on top of rapidly rising government deficits and debt due to the economic slowdown and discretionary stimulus measures. At the same time, government budgets are currently benefiting from the remuneration of guarantees and capital injections. The contingent liabilities associated with the support for the financial sector represent major risks for government deficits and/or debt in the medium term. In addition, fiscal risks in the form of rapid changes in market sentiment that lead to less favourable refinancing costs are sizeable for all euro area countries with very large fiscal imbalances.

In addition, some of the support measures risk distorting competition (between recipient and non-recipient banks and between banks in different jurisdictions). Furthermore, the support, be it implicit or explicit, is likely to create moral hazard risks that inevitably result from downside protection – including the possibility of excessive risk-taking.

Against this background, a debate has started on exit strategies from public support measures. This debate is currently being conducted simultaneously at the global and the EU level. Given the highly integrated financial system in the European Union, there is agreement to coordinate exit strategies among national authorities. A coordinated approach would help to avoid adverse cross-border spillover effects and to preserve a level playing-field. However, this

⁷ More details on this issue of budgetary effects in the euro area can be found in the article “The impact of government support to the banking sector on euro area public finances” published in the July 2009 issue of the ECB’s Monthly Bulletin.

does not necessarily entail the synchronised implementation of exits. The EU coordinated strategy is based on: (i) adequate incentives to return to a competitive market; (ii) ex ante exchange of information between governments on the intentions to phase out; (iii) transparency towards the public and the financial sector; and (iv) an assessment of the stability of the financial system.

For some banks, especially those that have received state support, fundamental re-structuring will be needed in order to confirm their long-term viability when such support is no longer available. This may entail the shrinking of balance sheets through the shedding of unviable businesses with a view to enhancing their profit-generating capacities. Indeed, such restructuring is already under way for some large banks in the euro area.

Exit from Enhanced Deposit Insurance

In the European Union, the discussion on exit from enhanced deposit guarantees revolves around a coordinated reform of deposit insurance schemes, which would in essence consist of an increase in the insurance limits (compared to the limits before the crisis) but also faster payouts in the event of insolvency. Insurance ceilings have been raised and, in a number of countries, unlimited deposit insurance has been granted. A specific deadline for ending unlimited deposit insurance has not been discussed so far. In the United States, the current deposit insurance limit of US\$250,000 per depositor will expire at the end of 2013, when it will be reduced to US\$100,000.

Exit from Guarantees on Bank Bonds

The potential for a market-based exit is built into schemes with a fixed price for the government guarantee: improving market conditions raise the cost of issuing government-guaranteed bonds relative to non-guaranteed bonds. To this end, in the EU, fees for government guarantees were increased at the end of June 2010.⁸

Examining the data, it seems that euro area banks had already started to replace the issuance of guaranteed bonds by the issuance of non-guaranteed ones, as the issuance of government-guaranteed bonds declined significantly in summer and autumn 2009, while the issuance of non-guaranteed bonds revived. In 2010, however, the issuance of guaranteed bonds has increased again, owing to the renewed financial market tensions. Hence, it is too early to draw the general conclusion that banks have started to regain access to funding markets: while some banks may

have started to regain access to funding markets, others may still face strong challenges.

In the United States, the debt guarantee programme was extended by six months until the end of October 2009. At the same time, the fees were raised for debt issued after 1 April 2009 and for debt with a maturity beyond 30 June 2012.⁹ This effectively initiated the exit from the debt guarantee programme. The programme has been succeeded by a six-month emergency guarantee facility, which expired at the end of April 2010. The fee for debt issued under the emergency facility amounts to at least 300 basis points but can be raised depending on the risks associated with the issuing entity.

Exit from Capital Injections

In broad terms, there are two approaches for the exit from government recapitalisations. First, the government can sell its stake in the private market. Currently, the only case of this has been the sale by the Swiss government of its stake in UBS to institutional investors. Second, the bank can repay the government. There are several alternative and generally complementary options available to raise capital in order to return capital to the government. The main strategy, observed during the repayment initiatives by large banks in France and the United Kingdom, is to raise capital in private markets. This strategy has been complemented by retaining earnings, selling business units, deleveraging and converting the Tier 2-type capital of private investors into ordinary shares.

US banks have clearly led the way by returning capital as early as late March 2009. So far they have repaid 16% of the capital they received. Initially it was mostly smaller US banks that started repaying government capital. Only after the outcome of the stress tests undertaken by the US authorities did larger banks receive permission to reimburse the US Treasury, which explains the repayment wave observed in June 2009.

In the European Union, Lloyds TSB was the first bank to issue new shares in order to be able to return capital (€4.4 billion) to the government, in June 2009. This was followed by the sale of €4 billion of UBS shares held by the Swiss government in August 2009. In autumn 2009 several large French banks announced their intention to repay the capital injections received from the government. These repayments amount to more than half of the total amount of public capital injected into banks in France. These events indicate that exit from government schemes is now also under way in the European Union.

⁸ The recommendations are available at http://www.ecb.int/pub/pdf/other/recommendations_on_guarantees.pdf.

⁹ See <http://www.fdic.gov/regulations/resources/TLGP/faq.html>.

Overall, recent events seem to suggest that the incentives set by governments to induce early repayment have been effective for well-performing banks. However, other banks that have received government support will find it substantially harder to reimburse the government. In fact, the incentive to repay early may prove largely ineffective for banks that cannot raise capital in private markets or retain earnings. For these banks, the options to achieve repayment are more limited and they may need to deleverage and/or sell business units. Ultimately, repayment by these banks will require considerably more time. It should also be noted that banks that finance repayment by deleveraging may reduce their lending activities, thereby contributing to possible credit constraints for the real economy. In addition, the Swiss example shows that governments can also pursue exit proactively through the sale of their stakes. However, this requires a sufficient increase in stock prices to protect the taxpayers' interest and markets that are capable of absorbing the large government stakes.

Exit from Asset Support

Most of the asset support has been granted through ad hoc measures tailored to individual institutions. Schemes are rare and have only been set up in recent months (Ireland, Germany, United States). The implementation of measures in support of individual institutions under these schemes is still ongoing. Normally, an enrolment window is specified during which eligible financial institutions can sign up to the scheme. After the enrolment window has passed, the scheme is closed and cannot be accessed any more.

As asset support is granted for the life of the underlying assets, asset support measures are generally self-liquidating. It should be noted, however, that owing to the long maturity of the underlying assets, asset support measures will be in place for a considerable period of time.

In principle, asset support measures can be terminated prior to the maturity of the underlying assets. In the case of asset removal measures, the asset manager – be it a private investor (e.g. under the PPIP in the United States) or a public agency (e.g. the NAMA in Ireland) – can sell the assets when market prices improve. In the case of asset insurance measures, where the assets are ring-fenced and stay on the financial institution's balance sheet, the financial institution can terminate the guarantee arrangement. An early exit of this kind has not been observed so far, but the measures have only recently been introduced. What has been observed, however, is the withdrawal by some banks from measures that have been announced, but not yet implemented. In the United States, following the release of the results of the Supervisory Capital Assessment Program, Bank of America announced that it did not plan

to move forward with the asset insurance measure agreed earlier with the US Treasury, the Federal Reserve System and the FDIC. Hence, the ring-fencing arrangement was abandoned without having been implemented, and Bank of America paid an exit fee of US\$425 billion to the authorities in September 2009 in return for the implicit protection that had already been provided since the announcement of the asset insurance agreement. In the United Kingdom, in November 2009 Lloyds exited from its March 2009 agreement with the government to share losses on a £260 billion pool of assets since, owing to improved market conditions, it was able to raise enough capital to cover the potential losses on this pool of assets itself. Lloyds paid the government an exit fee of £2.5 billion.

In sum, exit from asset support may be less complex than entry. However, it has not yet entered the current policy debate, as the asset support measures have only recently been introduced or are currently still being put in place.

Conclusion and Outlook

A key element of the management of the crisis has been the extensive public support measures for the financial sector. As regards the measures used, the crisis responses in the European Union have been broadly similar to those in the United States. First, EU and US governments have employed similar tools (government guarantees, capital and liquidity injections and asset protection). Second, apart from the similarity of their scope, the measures have also been similar in size. Like the European Union, the United States has relied on a mix of ad hoc measures for individual institutions and schemes addressing the wider needs of the financial system. However, there are also important differences. A key difference has been the sizeable repayments of capital made so far by US banks. This may be partly attributed to the fact that capital injections were mandatory for large US banks, while in Europe capital support has typically been voluntary. In France, where capital injections were also mandatory, banks have also started to repay significant amounts of capital.

Within the European Union, sizeable differences in crisis responses have emerged. These differences partly reflect the magnitude of the problems faced by each banking system, the degree to which the banking systems are exposed to bad assets and, potentially, public sector budgetary restrictions, which impose constraints on commitments. More specifically, a number of European countries have set up schemes to address the problems in their financial systems, while many others have relied on ad hoc measures for individual institutions. Given the wide range of approaches in Europe, the United States naturally lies somewhere in between. A case in point is the increase in deposit

insurance to US\$250,000 in the United States, which appears high by European standards but is dwarfed by the unlimited insurance granted by some EU countries.

For the future, a number of lessons should be drawn from the experience of public support to the financial sector. These include, first, the fact that, while the EU coordination process has worked effectively overall, there is still room for enhancing public coordination to deal with the solvency problems of cross-border financial institutions. Second, there is a need for more consistency in the tools and approaches used for crisis management and resolution. Third, there is a need to limit any moral hazard behaviour by market participants as a result of the public sector support. On all these issues, work is under way at the international and European levels.

Correction:

In the article “Growth Crisis in the EU – Challenges and Prospects” by Péter Halmai and Viktória Vásáry in *Intereconomics*, Vol. 45, No. 5, September/October 2010, p. 332, we mistakenly printed the wrong version of Table 2. The correct version is:

Table 2

Potential Growth, Current Account and the Investment Ratio in the Country Groups

Country group	Potential growth rate		Current account deficit (as a percentage of GDP)		Investment ratio (as a percentage of potential output)	
	2005	2008	2005	2008	2005	2008
Continental ¹ (BE, DE, FR, LU)	0.8- 1.9 ¹	1.0- 1.7 ¹	2.2- 5.2 ^{1,2}	0.2- 6.6 ¹	18.7- 22.0 ¹	21.2- 23.5 ¹
Reform countries (AT, DK, FI, IE, NL, UK, SE)	1.4- 3.6	1.4- 2.6	3.9- 7.5 ³	2.2- 8.3	17.7- 22.3	18.6- 22.0
Mediterranean (CY, EL, ES, IT, MT, PT)	0.6- 3.3	0.4- 2.6	from -1.2 to -11.0 ⁴	from -3.0 to -13.8	20.3- 28.3	15.7- 28.2
Catch-up (CZ, PL, SK, SL)	3.5- 5.4	3.3- 5.0	from -1.2 to -8.6	from -3.3 to -5.1	18.7- 28.0	22.8- 31.2
Vulnerable (BG, EE, HU, LT, LV, RO)	3.1- 7.0	0.8- 5.1	from -7.1 to -12.5	from -6.6 to -22.9	24.8- 37.0	24.6- 40.0
EU27	1.8	1.5	-0.3	-1.1	20.5	21.8
USA	2.5	1.8	-5.9	-4.9	19.9	18

¹ Without the data for LU; ² except FR; ³ except IE, UK; ⁴ except CY.

Source: own calculations.