FINANCIAL STABILITY BOARD

Identifying the Effects of Regulatory Reforms on Emerging Market and Developing Economies: A Review of Potential Unintended Consequences

Report to the

G20 Finance Ministers and Central Bank Governors

Prepared by the Financial Stability Board in coordination with
Staff of the International Monetary Fund and the World Bank
19 June 2012

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Foreword

At the meeting of G20 Finance Ministers and Central Bank Governors on 26 February 2012, the Financial Stability Board (FSB) was asked "*to coordinate, with the IMF and World Bank, a study to identify the extent to which the agreed regulatory reforms may have unintended consequences for EMDEs*" (emerging market and developing economies). This request reflected a recognition of the need to examine the impact of these reforms for a large and diverse group of countries whose financial systems have become increasingly important at the global level over the past decade.

The study focuses primarily on those regulatory reforms that have already been broadly agreed by the G20 and whose implementation may affect EMDEs. It also considers other national or regional reforms that may have cross-border effects on EMDEs. The study does not, however, cover other international regulatory reforms that may also be relevant for EMDEs but whose policy development is still at a relatively early stage. Such reforms include the design of a framework to address the risks arising from domestic systemically important financial institutions, a policy framework for global systemically important insurers, and policy measures to strengthen the oversight and regulation of the shadow banking system.

The study was prepared by the FSB Secretariat in collaboration with staff of the IMF and World Bank and with the input of relevant standard-setting bodies. An FSB Review Group (see Annex IV) comprising FSB members and co-chairs of RCGs provided guidance on the selection and analysis of the issues included in the study as well as on the main messages.

Glossary

AEs	Advanced Economies
BCBS	Basel Committee on Banking Supervision
CCF	Credit Conversion Factor
CCP	Central Counterparty
CEE	Central and Eastern Europe
CMG	Crisis Management Group
CRA	Credit Rating Agency
EBA	European Banking Authority
ECAI	External Credit Assessment Institution
ECB	European Central Bank
EMDEs	Emerging Market and Developing Economies
EU	European Union
FSB	Financial Stability Board
G-SIBs	Global Systemically Important Banks
G-SIFIs	Global Systemically Important Financial Institutions
HQLA	High-Quality Liquid Assets (Basel III liquidity requirements)
IMF	International Monetary Fund
IRB	Internal Ratings-Based (Basel capital framework approach)
LCR	Liquidity Coverage Ratio
NSFR	Net Stable Funding Ratio
OTC	Over-the-Counter
QIS	Quantitative Impact Study
RCG	(FSB) Regional Consultative Group
SMEs	Small and Medium-sized Enterprises

Executive Summary

At the request of the G20 Finance Ministers and Central Bank Governors, the FSB, in collaboration with the IMF and World Bank, has prepared this study to identify the extent to which the agreed regulatory reforms may have unintended consequences for EMDEs. The intent of the study is not to re-open recent internationally agreed reforms but to better understand the possible effects of those reforms in the context of broader post-crisis developments on EMDEs. In so doing, the study should enhance financial stability by facilitating the timely, full and consistent implementation of the reforms.

There is widespread support among EMDEs for the objectives of the agreed reforms, although there is also a broad range of views regarding the extent to which these reforms are having, or expected to have, an impact on their financial systems. This heterogeneity in perspectives can be attributed to the early stage of implementation of these reforms and to the diversity of EMDE financial systems, which give rise to different considerations and concerns. As a result, most of the responses received by national authorities from EMDEs concerning unintended consequences reflect respondents' expectations and concerns regarding potential future effects.

While many EMDEs do not expect significant adverse effects from the implementation of the reforms, those respondents that did identify unintended consequences focused on a few key areas. The main issues raised are as follows:

- ***Basel III capital framework*** – that the risk weighting of assets in the trading book and for securitised products under Basel 2.5, the convertibility of certain capital instruments, differences in the measurement of risk between a parent bank and its subsidiary, capital requirements for certain business activities (such as trade finance) as well as higher overall capital requirements may exacerbate deleveraging and increase the costs of global banks operating in EMDEs, thereby reducing credit and financial market liquidity;
- ***Basel III liquidity framework*** – that the definition of high quality liquid assets and the calibrations used in the calculation of the liquidity ratios do not accurately reflect EMDEs' financial market structures, which may adversely affect the functioning of the domestic financial markets and the lending capacity of banks in EMDEs;
- ***policy measures for global systemically important financial institutions (G-SIFIs)*** – that higher capital requirements imposed by home authorities for G-SIFIs may disproportionately impact their operations in EMDEs and lead to their retrenchment or raise the cost of intermediation, and that host authorities may not always be invited to participate in the crisis management group or resolution planning for those firms even if their operations in the host jurisdiction are systemically important; and
- ***over-the-counter (OTC) derivatives reforms*** – that the various implementation and policy issues being discussed have not enabled EMDEs to determine what derivatives-related infrastructures to establish domestically or how best to regulate cross-border OTC derivatives transactions, and that changes in the market landscape as a result of the reforms underway in major jurisdictions may raise hedging costs for end users in

EMDEs and place domestic central counterparties at a competitive disadvantage vis-à-vis global ones, which may impede the development of domestic derivatives markets.

Some respondents also identified regulatory reforms by other countries as giving rise to spillovers and/or extraterritorial effects that may lead to unintended consequences. The two most cited reforms are the higher capital requirements by the European Banking Authority for large banks in the European Union and the Volcker Rule in the United States.

Several concerns relate to cross-border effects and perceived home bias in the design or implementation of reforms. The effects on EMDEs may be caused by spillovers (e.g. through the activities of foreign financial institutions) or by the extraterritorial nature of some reforms (e.g. because they directly affect the operations of domestic financial institutions with cross-border business). A common concern in many cases is home bias, either in the design of the reforms or in the way that they are implemented in other jurisdictions.

A number of the identified concerns arise from the use of credit ratings in regulation and reinforce the need to reduce reliance on such ratings. Some of these concerns arise from differences in the interpretation or the implementation of international rules guiding the use of credit ratings, while others arise from the perception that these ratings do not accurately reflect the creditworthiness of borrowers and thereby overstate the risks of operating in EMDEs. The findings reinforce the need for standard-setters, national authorities and market participants to implement the FSB principles for reducing reliance on credit ratings and for encouraging market participants to establish stronger internal credit risk assessment practices.

Many of the identified concerns have also been raised by advanced economies (AEs) and are being addressed by relevant international bodies during policy development and implementation. The long phase-in periods, the ongoing implementation monitoring, and in certain cases, the flexibility to adjust rules during the calibration process are intended to address these concerns. Some national authorities are also reviewing their domestic regulations to avoid potentially adverse cross-border effects.

The responses also reflect a number of implementation challenges for EMDEs and raise the issue of clearly identifying intended versus unintended consequences. Many respondents identified potential negative effects that the reforms may have on their jurisdiction, but did not fully differentiate between intended and unintended consequences. It is well understood that the regulatory reforms are designed to strengthen the oversight and change the behaviour of financial sector participants, resulting in a safer and sounder financial system. Some financial institutions based in AEs were over-leveraged prior to the crisis and are currently working to strengthen their balance sheets and adjust their business models. These are intended changes, even if they result in, for example, lower access to credit or higher loan spreads. However, jurisdictions have different views as to whether the pace and location of this adjustment represents an intended consequence.

While it is too early to be able to fully assess the materiality and persistence of the effects of regulatory reforms on EMDEs, it would be useful to monitor them on an ongoing basis as well as to share experiences and implementation lessons. Monitoring and analysis of these effects, including any endogenous market adjustments they create, and promoting the sharing of experiences and lessons will facilitate the mitigation of unintended consequences from the implementation of agreed reforms in EMDEs.

Addressing existing financial sector weaknesses in EMDEs will also help to reduce any negative effects from implementing internationally agreed reforms. Some of those effects may stem from the interaction of reforms with existing financial sector weaknesses (e.g. shallow domestic capital markets and supervisory capacity constraints). In that sense, steps to address those weaknesses will also facilitate the implementation of the reforms.

The findings highlight the importance of ongoing dialogue and cooperative relationships among national authorities from EMDEs, standard-setting bodies and international financial institutions. They underscore the value of the recent expansion of the membership of the standard-setting bodies and provide useful input for their ongoing work, particularly their efforts to assess and take into account the effects of the reforms on different countries. Going forward, more vehicles and processes are needed to ensure that EMDEs are appropriately consulted and that their views are adequately taken into account.

I. Introduction

At the meeting[1] of G20 Finance Ministers and Central Bank Governors in February 2012, the FSB was asked to coordinate, with the IMF and World Bank, a study to identify the extent to which the agreed regulatory reforms may have unintended consequences for emerging market and developing economies (EMDEs).[2] This request reflected a recognition of the need to examine the impact of these reforms for a large and diverse group of countries whose financial systems have become increasingly important at the global level over the past decade. In particular, while there have been a number of studies by international bodies to assess the impact of specific reforms, these have primarily focused on advanced economies (AEs) and those EMDEs that are members of the G20.

The G20 regulatory reform agenda covers a broad range of topics at different stages of policy development and implementation. The agenda includes, among others, policy measures to improve the soundness of the banking system, including the Basel III capital and liquidity framework; reduce the moral hazard posed by systemically important financial institutions via better resolution regimes, more intensive supervision, and the strengthening of core financial market infrastructures; expand and refine the regulatory perimeter, including the regulation and oversight of the shadow banking system; improve over-the-counter (OTC) derivatives and commodities markets; develop macro-prudential frameworks and tools; strengthen and converge accounting standards; strengthen adherence to international financial standards; reduce reliance on credit rating agency (CRA) ratings; and strengthen consumer protection frameworks to promote financial stability. [3]

The focus of the study is primarily on those reforms that have already been broadly agreed and whose implementation may have an impact on EMDEs. The impact, including any unintended consequences, may arise from the implementation of these reforms in EMDEs or from the implementation in other jurisdictions – particularly AEs in the G20 – that has cross-border effects. Those effects may take different forms depending on the timing and form of implementation, the interaction of the reforms with other post-crisis developments, and the specific characteristics of EMDE financial systems.[4]

A number of different sources were used to identify the effects, including possible unintended consequences, of agreed regulatory reforms on EMDEs. In particular, national

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1 See para. 7 of the Communiqué (http://www.g20.org/en/news-room/press-releases/235-communique-meeting-of-finance-ministers-and-central-bank-governors).

2 For the purposes of this study, EMDEs are based on the classification of countries used by the IMF in its World Economic Outlook (http://www.imf.org/external/pubs/ft/weo/2012/01/pdf/text.pdf). According to that definition, 150 economies are classified as EMDEs, including 10 members of the FSB.

3 See http://www.financialstabilityboard.org/publications/r_111104.pdf for more details.

4 In general, financial systems in EMDEs tend to be relatively smaller in size, more concentrated and less complex than systems in AEs. Other prevalent (although not universal) features include greater dependence on foreign capital, weaker institutional frameworks and market infrastructures, important supervisory capacity constraints, a relatively greater involvement of the state in the financial system, and greater use of international currencies for domestic financial transactions. However, many of these characteristics vary as much across EMDEs as between EMDEs and AEs. See the FSB-IMF-World Bank report on "Financial Stability Issues in Emerging Market and Developing Economies" (October 2011, http://www.financialstabilityboard.org/publications/r_111019.pdf).

authorities from 35 EMDEs that are members of the FSB or of an FSB Regional Consultative Group (RCG) submitted responses to a brief questionnaire on this topic (see Annex III).[5] While the sample size is not large compared to the total number of EMDEs, the respondents represent the large majority of financial sector assets in EMDEs and include countries that have more financially-integrated and sophisticated systems. In addition, the study has drawn upon relevant work undertaken by the FSB, IMF, World Bank and standard-setting bodies as well as the input of senior officials from the financial industry representing different regions of the world.

The intent of the study is not to re-open internationally agreed regulatory reforms but to better understand the extent of the potential unintended consequences of those reforms on EMDEs. In so doing, the study should enhance financial stability by deepening our understanding of the causes of these effects and by identifying means to potentially mitigate them, which would facilitate the timely, full and consistent implementation of the reforms. In cases where the relevant reforms are still undergoing an "observation period" or are under review, the findings of this study may also help to inform the work of the relevant standard-setting body.

The rest of the paper is structured as follows. The second section describes recent financial sector developments in EMDEs, as well as their determinants, in order to set the broader context in which the implementation of agreed regulatory reforms is taking place. The third section focuses on those reforms identified by EMDEs as potentially having unintended consequences in their jurisdiction. Five main reform areas are identified and discussed: the Basel 2.5 and III capital framework; the Basel III liquidity framework; policy measures – including resolution frameworks – for global systemically important financial institutions (G-SIFIs); OTC derivatives reforms; and other national or regional regulatory reforms. The final section of the study concludes and summarises the main findings.

[5] These were: Argentina, Bahrain, Barbados, Botswana, Brazil, Cambodia, Chile, China, Colombia, Costa Rica, Egypt, Guatemala, Hungary, India, Indonesia, Kazakhstan, Kenya, Lebanon, Malaysia, Mauritius, Mexico, Morocco, Oman, Pakistan, Paraguay, Peru, Philippines, Poland, Qatar, Saudi Arabia, South Africa, Tanzania, Thailand, Turkey and Vietnam.

II. Recent Financial Sector Developments in EMDEs

Recent indicators point towards a fragile stabilization in overall financial market conditions in EMDEs. The improvement in market sentiment during the first quarter of 2012 was due in significant part to measures by central banks in major AEs to alleviate funding strains in dollar markets and for banks in the euro area. EMDEs in Asia and Latin America have experienced rising capital inflows and appreciating currencies since the start of the year. However, ongoing sovereign debt problems and bank deleveraging in the euro area have continued to constrain capital flows to emerging Europe (see Annex I for more details).

Net capital flows to EMDEs slowed in 2011, before rebounding in 2012. In part, the decline in capital flows to EMDEs in 2011 reflects the deleveraging process in the euro area, which gained momentum in the third quarter of 2011. However, capital has surged back into EMDE bond and equity markets in the early part of 2012, with investors refocusing on some of the structural advantages of these countries, including superior growth prospects and stronger public and private sector balance sheets. The strongest inflow was into equity funds, with emerging Asia and Latin America experiencing the strongest pickup. The renewed optimism has helped prompt some equity markets to rally since end-2011, while dollar funding pressures have eased and bond issuance has rebounded.

Some EMDEs continue to face contagion risk from developments in Europe, but the impact on others has been limited. Although market conditions have generally improved, concerns over developments in Europe, particularly in the context of deleveraging by European banks, remain. Differences in recent market behaviour across EMDEs are based to a large extent upon the "proximity" of those countries to the euro area, with contagion from Europe being primarily experienced by some Central and Eastern European (CEE) countries with underlying vulnerabilities. The impact of European bank deleveraging on EMDEs has been manageable so far, although its continuation may pose challenges for parts of emerging Europe. In other regions of the world, the signs of contagion through regional currencies, yields and equities have been limited.[6] This could change quickly, however, if global economic conditions were to deteriorate further.

Even though debt markets in EMDEs have expanded in size and breadth in recent years, their depth is still substantially below that of AEs. Measured as a percentage both of GDP and of total banking system assets, the size of government and corporate debt markets in EMDEs is lower than in AEs (see Table 1 in Annex II). While this may reflect greater fiscal discipline by governments in those EMDEs, it also indicates a less important role of their debt markets as a funding source for corporates and governments. Because they are generally less developed, liquidity in those markets is more vulnerable to economic and financial sector developments, including those arising from internationally agreed regulatory reforms.

Since 2010, the impact of deleveraging by AE banks on EMDEs has been concentrated in specialty finance lines. Long-term structured credit provision (e.g. aircraft and shipping finance) and project finance appear particularly affected. They are characterized by long

[6] A recent IMF Board Paper on "Liberalizing Capital Flows and Managing Outflows" (March 2012, http://www.imf.org/external/np/pp/eng/2012/031312.pdf) suggests that, based on experience of 48 EMDEs since the onset of the crisis, measures of capital account openness (primarily bank-intermediated flows) were significant predictors of growth declines, as were banks' pre-crisis leverage and credit growth.

maturities, heavy use of syndication, and dependence on long-term dollar funding; these characteristics reflect the comparative advantages of global banks with their specialized knowledge and access to dollar funding. In comparison, short-term trade finance has proved remarkably resilient during the recent market stress in Europe. Euro area banks are also notable lenders in this segment but, where they curtailed exposures to EMDEs, banks from other regions have been able to step in, reflecting the standardised form, short maturity, and comparatively low credit risk of trade finance.

III. Effects of Regulatory Reforms

Most surveyed EMDEs from outside the G20 have only recently begun the process of implementing, or considering the implementation of, internationally agreed reforms. This can be explained by a number of factors, including the fact that some of these reforms are more relevant for certain AEs (e.g. policy measures for OTC derivatives or for G-SIFIs) and are not an immediate priority for many EMDEs given their financial system characteristics and capacity constraints.[7] Some countries also intend to take advantage of the long implementation timetables for some of these reforms (e.g. Basel III) in order to better understand their effects in first-mover AEs and prepare for the impending changes. As a result, most of the responses concerning potential unintended consequences primarily reflect respondents' expectations and concerns regarding potential future effects.

In those cases where implementation is underway, the impact and materiality of the reforms have not yet been analysed extensively. In general, the concerns expressed are qualitative in nature and concrete quantitative evidence (such as an impact assessment study) is not available. It is therefore difficult to assess the materiality and the timeframe over which the impact of reforms will be realised, or to differentiate the consequences of specific reforms from the impact of broader post-crisis developments. The responses also tended to focus on the problems that reforms are perceived to introduce and did not differentiate between intended and unintended consequences (the distinction between these two terms was not defined in the questionnaire and was left at the discretion of the respondent). Relatively few responses described policy measures to mitigate identified unintended consequences.

There is widespread support among respondents for the objectives of the agreed reforms, although there is also a broad range of views regarding the extent to which internationally agreed regulatory reforms are having, or expected to have, an impact on EMDEs. For example, several respondents from less financially developed or internationally integrated EMDEs state that they do not expect significant effects from the implementation of these reforms. On the other hand, most EMDEs with more developed financial systems identify several reforms that might give rise to unintended consequences in their jurisdiction.

Those respondents that did identify unintended consequences from regulatory reforms focused on a few key areas. Despite the differences across EMDEs, the Basel III capital and liquidity framework, policy measures – including resolution frameworks – for G-SIFIs, and OTC derivatives reforms emerge as common themes, with various elements for each of these reforms as being of concern to different EMDEs.[8] The effects stem from the domestic implementation of those reforms or, in most cases, from their implementation in other

[7] As the FSB-IMF-World Bank report on "Financial Stability Issues in Emerging Market and Developing Economies" (ibid) notes, "In EMDEs with limited human and financial resources, the adoption of such [international] standards would need to proceed at a pace consistent with countries' supervisory capacity and level of financial system development". The report also states that "The more financially-integrated EMDEs - especially those that belong to the G20/FSB and participated in the development of this framework - should adopt the [Basel II/III] framework according to the agreed timetable. Other countries, with less internationally integrated financial systems and/or with substantial supervisory capacity constraints, focus on reforms to ensure compliance with the Basel Core Principles".

[8] A few respondents also identified other areas where implementation could give rise to unintended consequences in their jurisdictions. These include regulations concerning compensation practices (e.g. the difficulty and desirability of linking pay to performance for domestic firms that are not publicly listed, such as cooperative banks) and CRAs (e.g. the reforms make it difficult to encourage the creation of domestic CRAs that may be needed to develop capital markets in EMDEs).

jurisdictions that, due to various drivers and transmission channels, also affect EMDEs' domestic financial systems. The most common transmission channel in the latter case involves the presence (via subsidiaries or branches) in EMDEs of foreign financial institutions that are affected by the adoption of those reforms in their home country.

Some respondents also identified national or regional regulatory reforms by other countries that may adversely affect their domestic financial system. While these measures may be appropriate for the jurisdiction that introduced them, some respondents are concerned about spillovers and/or extraterritorial effects that may lead to unintended consequences. In that context, two reforms cited by respondents are higher capital requirements by the European Banking Authority (EBA) for large banks in the European Union (EU) and certain provisions of the Dodd-Frank law in the United States (particularly the so-called Volcker rule).[9]

A. Basel 2.5 and III capital framework

In their responses concerning the Basel capital framework, EMDEs focused on the minimum capital requirements (Pillar 1) and not on the supervisory review process (Pillar 2) or market discipline (Pillar 3). Within Pillar 1, the focus was on the risk weighting of assets for regulatory capital purposes, including the Basel 2.5 requirements, the components of capital, as well as consolidation practices by global banks and the capital requirements for certain business activities such as trade finance.

In response to the crisis, the Basel Committee on Banking Supervision (BCBS) introduced two sets of reforms to the international capital framework for banks. The first package of measures (Basel 2.5)[10] was issued in July 2009 to strengthen the 1996 rules governing the capital treatment of the trading book and to enhance the three pillars of the Basel II framework. The second package (Basel III)[11] was issued in December 2010, and further strengthened the regulatory capital framework by improving the quality and quantity of the regulatory capital base and enhancing the risk coverage of the capital framework. A number of EMDEs participated in the BCBS working groups responsible for developing those standards. The BCBS and FSB have also undertaken a number of studies to ascertain the economic impact of these reforms in its member jurisdictions, which include some EMDEs.[12] While the quantitative impact study (QIS) does not show results for banks in EMDEs as a

[9] A few respondents also identified other national and regional reforms, such as: (1) the Foreign Account Tax Compliance Act in the United States, whose implementation, recordkeeping and reporting requirements are perceived as having high (and unintended) financial and resource costs to banks that operate in some EMDEs; (2) measures taken by the Austrian authorities to encourage greater reliance on local sources of funding by foreign subsidiaries of Austrian banks, which could restrict access to credit in some CEE countries in which these banks represent a large part of the domestic banking system; and (3) the EU's Solvency II proposal for insurance supervision, the implementation of which is cited as requiring close coordination with the Basel III reforms to ensure consistency in regulatory capital requirements.

[10] See http://www.bis.org/publ/bcbs157.pdf.

[11] See http://www.bis.org/publ/bcbs189.pdf.

[12] See "Results of the Basel III monitoring exercise as of 30 June 2011"by the Basel Committee (April 2012, http://www.bis.org/publ/bcbs217.pdf), "An assessment of the long-term economic impact of stronger capital and liquidity requirements" by the Basel Committee (August 2010, http://www.financialstabilityboard.org/publications/r_100818a.pdf), and "Assessing the macroeconomic impact of the transition to stronger capital and liquidity requirements - Interim Report" by the Macroeconomic Assessment Group (August 2010, http://www.financialstabilityboard.org/publications/r_100818b.pdf).

group, their inclusion has influenced the overall results.[13] Since internationally active banks reported their data on a consolidated basis, it is not possible to assess the impact of the regulatory reforms on their subsidiaries or branches operating in EMDEs. However, it is worth noting that the QIS has consistently shown that larger banks are more affected by the reforms and may therefore need to undertake actions that may impact their operations in EMDEs.

Respondents from some EMDEs with a large foreign bank presence identified unintended consequences associated with Basel 2.5's introduction of an incremental risk capital charge to capture default and migration risk, as well as a stressed value-at-risk requirement. The changes introduced to capital requirements in the trading book and for securitised products under Basel 2.5 are very important for some large internationally active banks and, as a consequence, for EMDEs that are host jurisdictions to these banks. Given the typically higher volatility and lower credit ratings in those countries, the cost – in terms of regulatory capital – of holding EMDE exposures for global banks has increased substantially in certain cases, which may encourage those banks to reduce their trading book holdings. Since those banks act as market makers and are major providers of liquidity in some EMDEs, this could have adverse consequences and may ultimately impact the development of domestic financial markets in those countries.

The level and composition of capital in many EMDEs already exceed Basel III requirements.[14] As a result, some respondents stated that their concern is not necessarily with the overall level of capital, but with the complexity of the Basel III rules, the negative effect that it may have on certain types of banking activities (e.g. trade finance) and on the development and functioning of capital markets in their jurisdiction.

Certain elements of the Basel III capital framework were identified as having potential unintended consequences. In their responses, some EMDEs expressed concern about aspects of the leverage ratio and measures to reduce procyclicality that may impact domestic credit and output growth. Other EMDEs were concerned about the potential effects of Basel III on internationally active banks and the resultant retrenchment that may occur in their jurisdiction. Finally, some respondents expressed concerns over the use of global credit ratings and their effects on lending and balance sheet management decisions of internationally active banks when considered on a consolidated basis.

Respondents were particularly concerned that challenging macroeconomic conditions and fragile financial markets may exacerbate pressure on some banks to deleverage and thereby adversely affect their economies. Faced with an unfavourable global economic environment and the need to meet higher market and regulatory standards for capital adequacy, banks in some AEs, especially Europe, are deleveraging (see section 2 and Annex I). Some fear that limited investor interest for new equity issuance and low levels of

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[13] The most recent impact assessment gathered 30 June 2011 data from 212 banks, 41 of which are in EMDEs. For the QIS, banks were divided in two groups. Group 1 banks were those that have Tier 1 capital in excess of €3 billion and are internationally active. All other banks are considered Group 2 banks. The results of the June 2011 exercise showed that the core equity tier 1 capital ratio will decrease by an average of 30.4% for Group 1 banks and 17.8% for Group 2 banks.

[14] Banks in EMDEs generally maintain capital levels in excess of internationally agreed regulatory minimums both because of higher minimum ratios specified by local regulators and also because of the higher degree of macroeconomic volatility and overall risk in these jurisdictions. Notwithstanding the high levels of capital that already exist, an increase in minimum regulatory capital requirements at the international level may cause these banks to increase their overall capital levels in order to maintain this additional domestic capital buffer.

profitability could lead a number of these banks to reduce their risk-weighted assets, to eliminate certain business lines or to focus on "core" markets in order to deleverage. Respondents in some EMDEs noted that international banks could also respond to these regulatory changes by charging higher interest rates, imposing tighter lending requirements or closing their operations.[15]

Deleveraging by over-extended banks is an intended consequence of Basel III, but there are concerns over the speed and location at which it takes place. The high degree of leverage that was evident in banks prior to 2007, particularly those in Europe, has been cited as contributing to the severity of the global financial crisis. While deleveraging needs to take place for reasons other than to meet Basel III capital requirements, EMDEs have expressed concern about the speed and location at which it takes place. While the Basel III framework includes several measures to constrain future leverage in the banking system and to foster an orderly transition, it cannot control in which jurisdictions global banks deleverage, how it is achieved, at what speed they deleverage or how markets respond.

The impact of deleveraging by some global banks may be mitigated over time by the entry of other banks into these activities, but there are potential limits to this substitution. While some of this market-driven substitution has already occurred, the extent to which this process can continue is unclear as it depends on a number of variables (e.g. profitability of market segment, availability of funding in that currency, expertise and capacity of potential market entrants etc.).

Trade finance has been mentioned by some EMDEs as a sector affected by the enhancements to the risk coverage under Basel III. Trade finance continues to play an important role in EMDEs, many of which rely heavily on international trade. The Internal Ratings-Based (IRB) framework in Basel II and the leverage ratio in Basel III were seen by some financial sector participants as imposing excessively restrictive requirements on an otherwise low risk, short-tenor, self-liquidating activity. In response to a request by the G20 Leaders, the BCBS reviewed its capital rules as they relate to trade finance, and in October 2011 made two adjustments which reduced capital requirements for these types of exposures. In spite of these changes, some respondents were concerned that the 100% credit conversion factor (CCF) that is applied to off-balance sheet items (including trade finance exposures) for Basel III leverage ratio purposes, will increase the cost and reduce the demand for trade finance, thereby having an adverse effect on overall trade activity (see Box 1 in Annex II for more details). It is important to note however, that the BCBS has not finalised the leverage ratio and, even after it does so, implementation will not take place until 2018.

The credit-to-GDP guide for activating the Basel III countercyclical capital buffer is perceived by some EMDEs as too mechanistic and not reflective of the realities of their economies, even though the framework is sufficiently flexible to accommodate different metrics. Although the BCBS issued guidance on the operation of the countercyclical capital buffer in Basel III[16] stating that national authorities are free to use other variables as well as qualitative information that they deem appropriate to activate the buffer, concerns remain

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[15] In the case of European banks, assessments undertaken by the EBA thus far indicate that these banks are meeting capital shortfalls primarily through direct capital measures such as the issuance of new capital, retained earnings and the conversion of hybrid instruments into common equity.

[16] See http://www.bis.org/publ/bcbs187.pdf .

among some respondents. For example, authorities note that EMDEs typically experience more volatile GDP growth than AEs and, as such, the credit-to-GDP guide may be misleading in the sense that it does not accurately reflect an excessive credit growth period accompanied by system-wide risk. There are also concerns with the accuracy of data necessary to produce the buffer guide and the limited availability of macro-economic tools and methodologies that could serve as compliments to the credit-to-GDP guide. In order to avoid unintended consequences, EMDEs stressed the importance of using additional quantitative indicators and qualitative judgment as proposed by the BCBS in its guidance on the countercyclical capital framework. More specifically, Malaysia supported the use of other quantitative indicators – as stated in principle 3 of the BCBS countercyclical guidance – such as asset prices, funding spreads, credit condition surveys, and delinquencies. Similarly, Thailand suggested that other metrics (usage of loan-to-value ratios or dynamic provisioning) should also be considered. All of these proposals are acceptable within the existing BCBS guidance.

Some EMDEs that host major international banks raised two concerns about the convertibility of certain capital instruments under Basel III. First, subsidiaries of foreign banks operating in EMDEs may not be able to easily issue convertible debt in the host jurisdiction if there is no market for their equity (since the parent bank generally owns 100% of that equity). As a result, buyers of these convertible instruments may require an interest rate premium to offset the illiquidity, thereby increasing the overall cost of capital.[17] Second, Basel III requires the authorities where such capital instruments will be included in the regulatory capital calculation to determine the conversion trigger. In cases where the bank is a foreign-owned subsidiary, the home regulator must define the trigger if the instrument is to qualify as regulatory capital on a consolidated basis. If the designated home and host jurisdiction triggers are different, however, it may introduce complications in the event that the firm begins to face capital problems. This is not solely an EMDE issue as it will apply to any home-host arrangement (including amongst AEs), and was an acknowledged trade-off when the international regulations were designed. Finally, it was noted that it may not be legally possible to allow a foreign authority to trigger the conversion of debt issued by a bank in a host jurisdiction, although this is not an unintended consequence of Basel III itself.

The Basel capital framework may also contribute to differences in the measurement of risk between a parent bank and its subsidiary. In particular, a parent bank domiciled in a jurisdiction with a high sovereign rating may view the exposures of its subsidiary in a host jurisdiction with a lower rating as having a greater degree of risk (compared to its subsidiary's own risk assessment). This may stem from supervisory guidance in the home jurisdiction relating to the application of the Basel capital framework or may arise as a result of internal risk management practices and the parent firm assigning country risk to its subsidiary's exposures during the process of consolidation. Other things being equal, the end result may be higher loan spreads used in the host jurisdiction by the subsidiary because the parent bank requires additional capital for the higher degree of risk ascribed to its subsidiary's exposures.

Respondents expressed concerns about overreliance in the Basel framework on credit ratings, particularly those that rely on a global (as opposed to local) scale. In their risk management framework, international banks sometimes rely on global ratings when

[17] The Basel III requirements allow the conversion of such instruments into equity in the parent bank or for them to be simply written-off. However, these alternatives may not be satisfactory for some host jurisdictions since they protect the shareholders of foreign subsidiaries from dilution compared to (in similar circumstances) the shareholders of local banks.

measuring risk and assigning capital for their foreign operations. These global ratings do not typically allow a local borrower to have a rating higher than that of its sovereign, regardless of the creditworthiness of that borrower. Subsidiaries of international banks can use a domestic rating scale in which the sovereign is often rated AAA/Aaa. However, in the process of consolidation, the parent bank typically relies on the global rating scale and therefore requires more capital for the same exposure than is required by the host jurisdiction for its subsidiary or by other banks operating in the host jurisdiction, irrespective of whether that exposure is denominated and funded locally.[18] As a result, a number of EMDEs perceive global credit ratings as not always accurately reflecting creditworthiness and therefore as overstating the risks of operating in their jurisdiction. The consequence of such treatment – through higher interest spreads – will be passed on to the EMDE subsidiary and ultimately the borrower.

B. Basel III liquidity framework

Some respondents identified potential adverse affects arising from the future implementation of the Basel III liquidity framework. Two liquidity standards have been developed by the BCBS to improve liquidity risk management and promote resilience over a longer time horizon: the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR).[19] These liquidity standards were developed in response to the difficulties many banks experienced, primarily due to shortcomings in their liquidity management, during the early stage of the financial crisis that began in 2007. The proposed standards will come into force in 2015 (LCR) and 2018 (NSFR).

The concerns relate primarily to the lack of high quality liquid assets (HQLA) due to the characteristics of financial markets in EMDEs. The Basel III liquidity framework is specific and prescriptive about the characteristics of HQLA. The most widely acknowledged HQLA is governments bonds. However, for some EMDEs (and AEs), the availability of government bonds to meet the LCR may be limited owing to low levels of government debt. For corporate bonds to qualify as HQLA, they should have a credit rating from a recognized external credit assessment institution (ECAI) of at least AA-.[20] The concerns of some respondents arise from the fact that capital markets in EMDEs tend to be thinner, less liquid and have a smaller range of instruments compared with AEs. As a result, there are fewer instruments that meet the market-related characteristics of HQLA (e.g. maximum decline of price or increase in haircuts of no more than 10% over a 30-day period during a relevant period of significant liquidity stress) or have high ratings, which would make it more difficult for banks in those jurisdictions to satisfy the Basel III liquidity requirements (see Box 2 in Appendix II). A few EMDEs that have Islamic banks in their jurisdiction also indicated that Shariah-compliant banks have more limited access to HQLA since they are not allowed to

[18] For example, the EU permits a 0% risk weight to be assigned to all member state sovereign and central bank exposures that are funded in the same currency as the exposure.

[19] The LCR has been designed to require global banks to have sufficient high-quality liquid assets to withstand a stressed 30-day funding scenario specified by supervisors. The LCR numerator consists of a stock of unencumbered, high quality liquid assets that must be available to cover any net outflow, while the denominator is comprised of cash outflows less cash inflows (subject to a cap at 75% of outflows) that are expected to occur in a severe stress scenario. The NSFR is a longer-term structural ratio to address liquidity mismatches and provide incentives for banks to use stable sources to fund their activities (see http://www.bis.org/publ/bcbs188.pdf).

[20] As in the Basel II rules text, the external credit assessments notations follow the Standard & Poor's methodology as an example. Those of other ECAIs could equally well be used.

invest in interest-bearing securities. Finally, respondents from EMDEs with a large foreign bank presence were concerned that the consolidated treatment of liquidity at the group level may adversely affect host subsidiaries or financial markets.[21] Some of these concerns arise not because of the Basel III liquidity standard per se, but because of possible differences in the interpretation or in the implementation of the standard across national jurisdictions.

EMDEs with sovereign credit ratings lower than AA- might also face a limited supply of qualifying corporate bonds. This is because, where a rating is issued by a global CRA, the sovereign rating normally places a ceiling on the ratings of domestically issued corporate bonds. The Basel III liquidity framework requires that the rating of corporate bonds that qualify as HQLA be issued by an ECAI. However, national supervisors may recognize any CRA (including a domestic one) as an ECAI provided that the eligibility criteria set out in Basel II are met[22]: those criteria do not require an ECAI to be a global rating agency. A corporate bond that is rated at least AA- by a recognized ECAI would qualify as HQLA regardless of the rating of the sovereign.

Some EMDEs indicated that the calibrations used in the calculation of the liquidity standards do not accurately reflect their financial market structures. For example, Saudi Arabia and South Africa indicated that deposits by public sector entities and wholesale funding respectively are among the most stable funding sources in their domestic banking systems. However, both are considered less stable sources of funding under the Basel III liquidity framework and thus subject to a high run-off or cash outflow rate, which may not accurately reflect the banks' empirical experience in some EMDEs.

For the reasons described above, a number of respondents believe that the implementation of the two Basel III liquidity standards as proposed may adversely affect their domestic financial markets and have negative effects on overall credit growth and economic activity. This concern stems from the following factors:

- Obliging banks in EMDEs to hold large quantities of debt instruments that are in limited supply in order to comply with the liquidity standards may reduce turnover and liquidity in domestic bond markets (e.g. due to hoarding of government and other eligible securities), resulting in more volatile prices and larger liquidity premia.
- Complying with the liquidity ratios may affect the lending capacity of banks (which tend to dominate financial intermediation in EMDEs), which may be a particular concern for high-growth economies. In particular, some banks may substitute growth-supportive longer-term lending activities, such as investment financing, with shorter-term lending. Small specialized financial institutions, which are mainly oriented to microfinance and retail lending, could also be affected.

[21] If the liquidity is managed at the consolidated group level, the subsidiary banks may be exposed to risk of liquidity shortage in time of stress. The possible differences in the definition of liquid assets between the home and host jurisdiction may lead to a disproportionate treatment of liquid assets (e.g. the shedding of assets considered liquid by the host but not by the home authority) and thus adversely affect the subsidiary and its financial market.

[22] Basel II provides the eligibility criteria (objectivity, independence, international access/transparency, disclosure, resources and credibility) and the mapping process in recognizing an ECAI. Annex 2 of Basel II provides further guidance on the mapping process - see http://www.bis.org/publ/bcbs128.pdf

- The liquidity ratios may increase the foreign currency risk for some banks in EMDEs if, in order to meet those standards, banks hold greater amounts of foreign currency liquid assets which do not match the currency of the associated liquidity risk.

In response to some of these concerns, which apply in some AEs as well, the BCBS has proposed three options to mitigate the problems arising from insufficient supply of HQLA in some jurisdictions.[23] Option 1 allows banks to access contractual committed liquidity facilities provided by the relevant central bank for a fee. Option 2 gives supervisors the discretion to allow banks to hold liquid assets in a currency that does not match the currency of the associated liquidity risk, provided that the resulting currency mismatch positions are justifiable and controlled within limits agreed by the supervisor. Option 3 permits supervisors to allow banks to hold additional Level 2 assets, subject to higher haircuts, up to a limit to be determined by the BCBS.

Some authorities in EMDEs have adopted one of the BCBS options or are considering other measures to mitigate the potential effects on their financial system. For example, Saudi Arabia has established a committed central bank liquidity facility to domestic banks in order to help them overcome the shortage of HQLA that qualify for the LCR, while South Africa has recently announced the introduction of such a facility. Peru is considering the establishment of a longer phase-in period or providing an exemption from liquidity measures for small, specialized banks under specific conditions. Malaysia is encouraging the development of deeper capital markets and also exploring the introduction of stable funding instruments, such as non-callable term funding instruments and covered bonds.

It is important to note that both liquidity standards are currently subject to an observation period that includes a review clause to address unintended consequences. This observation period runs in BCBS member countries until the respective implementation dates of the two standards, i.e. 1 January 2015 for the LCR and 1 January 2018 for the NSFR.[24] The BCBS is now in the process of reviewing the LCR. Some of the specific issues under consideration include the treatment of liquidity lines to non-financial corporates, the alternative quantitative and qualitative criteria for Level 2 asset eligibility, as well as the treatment of non-financial deposits. After reviewing the LCR, the BCBS will examine the NSFR as well.

C. Policy measures for G-SIFIs

Respondents in countries where G-SIFIs play an important financial role identified potentially adverse effects arising from the implementation of internationally agreed policy measures for SIFIs. These measures are designed to address the systemic and moral hazard risks associated with SIFIs, which give rise to the "too-big-to-fail" problem.[25] They include a new international standard for national resolution regimes[26], resolution planning and

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[23] See http://www.bis.org/publ/bcbs188.pdf.

[24] "(I)n order to address unintended consequences, the Committee is prepared to make revisions to specific components of the standards if this proves necessary in light of the analyses conducted and the data collected during the observation period" (see http://www.bis.org/publ/bcbs188.pdf)

[25] See "Reducing the moral hazard posed by systemically important financial institutions" by the FSB (20 October 2010, http://www.financialstabilityboard.org/publications/r_101111a.pdf).

[26] See "Key Attributes of Effective Resolution Regimes for Financial Institutions" by the FSB (October 2011, http://www.financialstabilityboard.org/publications/r_111104cc.pdf).

higher loss absorbency requirements for G-SIFIs, and more intensive supervision of all SIFIs. The concerns expressed by respondents relate to the potential impact of capital and resolution-related measures for SIFIs that operate in their jurisdiction.[27]

The concerns about higher loss absorbency requirements for globally systemically important banks (G-SIBs) are largely similar to those expressed for Basel III. The main concern is that higher capital requirements imposed by home authorities for these firms may lead to their retrenchment from some markets, which could restrict financial intermediation (in terms of both volumes and spreads) and economic growth in those EMDEs where G-SIBs have a large presence.[28] A separate concern is the perceived disproportionate impact on host jurisdictions stemming from the fact that the cost of higher capital will be borne by the entire banking group while the benefit (in terms of higher loss absorbing capacity) will accrue primarily to the parent bank in which the additional capital is held.[29]

The concerns about the resolution framework stem primarily from the nature and extent of cross-border cooperation and information exchange arrangements. Host authorities of a G-SIB in EMDEs are concerned that they may not always be involved in the crisis management group or resolution planning for that firm and will therefore not be able to share information with the home authority of the G-SIB, even if the firm's operations in the host jurisdiction are systemically important. This may affect the financial stability interests of host jurisdictions, particularly if the group resolution plan does not adequately reflect the host authorities' policy framework or does not clearly specify how problems originating in the parent (which could adversely affect the firm's operations in host jurisdictions) are resolved.

These concerns, which are not unique to EMDEs, have been considered in the development of the policy framework and will continue to be monitored as the framework is implemented. The FSB's resolution standard, the Key Attributes for Effective Resolution Regimes for Financial Institutions, acknowledges the role of host jurisdictions (whether from AEs or EMDEs) in the resolution framework, encourages convergence in attributes of national resolution regimes to facilitate cross-border cooperation and coordination, and calls on national resolution authorities to consider the impact of any discretionary action on financial stability in other jurisdictions (see Box 3 in Annex II).[30] In terms of timelines, the additional loss absorbency requirements will be phased in starting in January 2016 (with full implementation by January 2019) to allow sufficient time for the adjustment by relevant firms to take place. The adoption of these measures is still at an early stage and much will depend on the way in which they are implemented by home authorities of

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[27] An initial group of 29 G-SIBs has been identified by the FSB and the Basel Committee, and will be updated annually; see "Policy Measures to Address Systemically Important Financial Institutions" by the FSB (4 November 2011, http://www.financialstabilityboard.org/publications/r_111104bb.pdf).

[28] The Macroeconomic Assessment Group investigated the macroeconomic effects of these policy measures and found only a modest negative impact on economic growth that is outweighed by the benefits to financial stability; however, only 3 EMDEs participated in that exercise. See "Assessment of the macroeconomic impact of higher loss absorbency for global systemically important banks" (10 October 2011, http://www.financialstabilityboard.org/publications/r_111010.pdf).

[29] On the other hand, a well-capitalised parent bank can represent a source of strength for its foreign subsidiaries and may reduce their local funding costs as well as enhance their ability to support credit provision.

[30] The October 2011 FSB-IMF-World Bank report on financial stability issues in EMDEs (ibid) also recognised the issue of cross-border supervisory cooperation and information-sharing and recommended that "home supervisors for large international banks should provide host supervisors, particularly when those banks are systemically important in the host jurisdiction, with timely, accurate and comprehensive information on the parent bank via supervisory colleges and crisis management groups and/or via enhanced bilateral relationships".

G-SIBs, particularly the extent to which those authorities engage with host jurisdictions to ensure consistent group-wide capital treatment and resolution planning. The FSB will continue to monitor implementation progress in this area in order to ensure the full, consistent and timely implementation of these policy measures.[31]

D. OTC derivatives market reforms

Respondents from larger, middle-income EMDEs expressed some concerns about unintended consequences arising from the implementation by G20 members of OTC derivatives market reforms. These reforms aim to improve transparency in OTC derivatives markets, mitigate systemic risk, and protect against market abuse. They comprise a multifaceted and cross-sectoral package of measures covering standardisation, central clearing, exchange and electronic platform trading, capital requirements, and reporting to trade repositories.[32] Since these reforms involve financial instruments that are only available in more developed capital markets, their effects are currently relevant primarily for EMDEs that are larger, more financially integrated and with more sophisticated financial systems.

Implementation of OTC derivatives market reforms is ongoing and there are several outstanding issues under discussion. International policy development work is currently running in parallel with implementation work by national authorities in order to meet the end-2012 deadline set by the G20. Implementation and policy issues being discussed include the scope and application of central clearing requirements and exemptions; regulation of market infrastructures; central counterparty (CCP) location requirements; frameworks for organised platform trading; transparency requirements; the nature of reporting and access to trade repositories; and capital and margining requirements for non-centrally-cleared vs. centrally-cleared contracts. Because the OTC derivatives market is global in scope, any comprehensive regulatory framework – such as the ones being developed by the US and EU – will have cross-border impacts. A number of FSB member jurisdictions had been waiting until recently for international standards to be further developed and for the US and EU frameworks to be finalised before developing their own frameworks to avoid the risks of inconsistencies and cross-border impacts. [33]

The specific concerns expressed by EMDEs relate primarily to facilitating a level playing field and adequate home-host coordination. Respondents acknowledge the important contribution of OTC derivatives reforms to global financial stability and the benefits that they will have in areas such as data availability.[34] However, some respondents (such as Malaysia) note that the number of pending issues relating to OTC derivatives reforms have not enabled them to determine what derivatives-related infrastructures to create

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[31] The policy framework for G-SIFIs has been highlighted as a priority area under the FSB's "Coordination Framework for Monitoring the Implementation of Agreed G20/FSB Financial Reforms" (18 October 2011, http://www.financialstabilityboard.org/publications/r_111017.pdf), and it will undergo intensive monitoring and detailed reporting via periodic implementation progress reports and thematic peer reviews.

[32] See "Implementing OTC Derivatives Market Reforms" by the FSB (25 October 2010, http://www.financialstabilityboard.org/publications/r_101025.pdf).

[33] See "OTC Derivatives Market Reforms - Progress Report on Implementation" by the FSB (11 October 2011, available at http://www.financialstabilityboard.org/publications/r_111011b.pdf).

[34] The report on "OTC Markets and Derivatives Trading in Emerging Markets" by the IOSCO Emerging Markets Committee (July 2010, http://www.iosco.org/library/pubdocs/pdf/IOSCOPD330.pdf) notes that "the most important implication of the survey is the data problem of the jurisdictions for OTC transactions."

domestically (e.g. CCPs and trade repositories) or how best to regulate cross-border OTC derivatives transactions. Moreover, changes in the market landscape as a result of the reforms in major jurisdictions may raise hedging costs for end users in EMDEs (because of mandatory clearing requirements) and may place domestic CCPs at a competitive disadvantage vis-à-vis global CCPs, which may impede the development of domestic derivatives markets.[35] Finally, it is too early to assess whether oversight and information sharing arrangements for global CCPs, which are still under discussion, adequately address the concerns of some host jurisdictions – for example, Poland notes that its currency is mostly traded offshore via OTC derivatives (such as foreign exchange swaps) and identified the need for the supervisory college of a global CCP to include the Polish authorities if that CCP ends up clearing most of the Zloty transactions.

These concerns are not unique to EMDEs and are being addressed via several workstreams at the international level. For example, concerns about oversight and information sharing arrangements as well as fair and open access to CCPs for market participants are concerns of AEs that are not major financial centres as well as of EMDEs. In order to facilitate consistency as well as to address overlaps and gaps in implementation, a number of initiatives are ongoing at the international level, including the issuance of new standards and safeguards.[36] The EU and US frameworks are now either finalised or sufficiently well advanced in many of the key areas to allow other jurisdictions, including EMDEs, to make informed decisions on their appropriate legislative and regulatory frameworks.[37] However, since implementation is ongoing, it is still too early to determine the overall impact of these measures on the financial systems of relevant EMDEs.

E. Other national and regional reforms

Some respondents identified actual or potential negative effects from other regional and national regulatory measures, adopted mainly in Europe and in the US, which go beyond the financial reforms agreed to by the G20. These measures were taken in order to strengthen or restore stability in the banking sector and reduce the consequent economic vulnerabilities, although they may also have undesirable cross-border effects on EMDEs. Two measures, in particular, have been identified by respondents: the EBA requirements and the Volcker Rule.

EBA requirements

In October 2011, the EBA announced measures to restore confidence to the banking sector by strengthening the capital position of large EU banks. The measures involved the building up a temporary capital buffer such that the Core Tier 1 capital ratio of those banks

[35] These could arise in a number of ways: higher cost of clearing transactions for smaller domestic CCPs; change in the business models of major OTC derivatives broker-dealers away from domestic CCPs towards global CCPs (especially if they own them); and an increase in the volume of intra-group transactions (if they are exempt from mandatory clearing) by the subsidiaries of foreign banks in EMDEs, thereby releasing them from the need to use the domestic CCP.

[36] For example, the CPSS-IOSCO issued *Principles for Financial Market Infrastructures* (April 2012, available at http://www.bis.org/publ/cpss101a.pdf) that provide a sound basis for central clearing of standardised derivatives. Within the FSB, four safeguards for a global framework for CCPs have been identified to help authorities to make informed decisions on the appropriate form of CCPs to meet the G-20 commitment (see http://www.financialstabilityboard.org/publications/r_120420a.pdf).

[37] See "OTC Derivatives Market Reforms - Third Progress Report on Implementation" by the FSB (forthcoming).

reaches 9% by the end of June 2012. This buffer was calculated through a capital exercise published in December 2011[38], considering sovereign debt exposures and their market prices. European banks which recorded a capital shortfall in the results have EUR 1.35 trillion outstanding in credit to EMDEs (about 8.3% of their total loans).

Respondents from countries where EU banks play a major role expressed concerns about the cross-border effects of these measures. In particular, the tight deadline for meeting the higher capital requirements is perceived by some EMDEs to have exacerbated the retrenchment of those banks in their jurisdictions, which could have negative effects on economic growth. Some countries of the CEE region are particularly exposed to deleveraging as foreign banks have a significant market share (see Annex I for more details).

A number of measures have already been taken in order to avoid a disorderly deleveraging process in Europe – in particular:

- The EBA explicitly discouraged banks from shedding assets by requiring that banks cover the shortfall mainly through direct capital measures such as the issuance of new capital, retained earnings and conversion of hybrid instruments into common equity. According to EBA's preliminary assessment[39], 96% of the capital shortfalls are expected to be met through those measures.
- European officials, International Financial Institutions and private banks met in March 2012 and agreed on a set of principles – the so-called Vienna 2.0 Initiative – to reduce the CEE region's vulnerability to parent bank retrenchment.[40]

Volcker Rule

The Dodd-Frank Act, enacted in 2011, has brought the most significant changes to financial regulation in the United States since the Great Depression. The Act seeks to promote financial stability by improving accountability and transparency in the domestic financial system, including policies to address the risks arising from SIFIs. In particular, the Volcker Rule prohibits regulated and insured depositories from undertaking proprietary trading, and also seeks to reduce systemic risk by prohibiting these firms from investing in private equity and hedge funds. The Rule applies with full force to covered banks (see Table 1 in Annex II) and prohibits them from engaging in securities and derivatives markets transactions that put their own capital at risk to derive profits from short-term price movements. However, the Rule also includes exempt activities and securities that serve important economic functions. As a result, covered banks are required to submit evidence supporting a claim that transactions do not involve prohibited activities.

National authorities from both EMDEs and AEs have expressed some concerns about the cross-border effects of the Volcker Rule. These effects arise, for example, from the prohibition on affiliates of U.S. banks in other countries to engage in proprietary trading of those countries' government securities, and from the restriction on non-U.S. banks' ability to

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[38] See http://stress-test.eba.europa.eu/capitalexercise/EBA%20BS%202011%20173%20Recommendation%20FINAL.pdf.

[39] See communication by the EBA (09 February 2012, http://www.eba.europa.eu/News--Communications/Year/2012/The-EBAs-Board-of-Supervisors-makes-its-first-agg.aspx).

[40] See the 13 March 2012 press release by the European Bank for Reconstruction and Development (http://www.ebrd.com/english/pages/news/press/2012/120313.shtml).

execute or clear proprietary trading on U.S. financial infrastructures. As a result, depending upon how U.S. authorities implement the Rule,[41] there may be cross-border effects on the liquidity of government, corporate securities and derivatives markets in other countries that may, in turn, hamper those governments' ability to manage the budget and hedge financial risks, hindering local banks' liquidity and risk management as well as the development of domestic financial markets in those countries (see Table 2 in Annex II). In addition, some authorities are of the view that the Rule, as had been proposed to be implemented, may require foreign affiliates of covered U.S. and non-U.S. banks to establish a wide array of programs, policies, procedures, and information structures for compliance purposes in order to justify the application of statutory exceptions in the rule.

While the Volcker Rule is still in the rule-making process and thus any interpretation of its potential impact must be extremely cautious, clarity regarding its supervisory interpretation will be required for foreign authorities, firms and investors to make key strategic decisions. As indicated by the respondents, the Rule, as had been proposed to be implemented, may have a potential impact on the offshore operations of U.S. banks. In EMDEs where affiliates of U.S. banks are systemically important and provide investment banking services, liquidity in the domestic sovereign bond markets could suffer if trading – for both proprietary and market making positions – is critical to enhancing liquidity. While market making is exempt from the rule, some banks argue that they may need to take proprietary positions in order to set bid-ask spreads to support this, and distinguishing between the two activities may be onerous and thus detrimental to market making. Moreover, while stand-alone investment banks may substitute for the gap in service provision due to the rule's impact on trading by covered banks, this may not happen in the near term particularly in EMDEs where covered banks are the dominant players and are important providers of liquidity in the government bond market.

[41] In October 2011, U.S. authorities solicited public comments on proposed regulations to implement the Rule and are now considering the over 18,000 comments received, including from foreign authorities, in developing a final regulation.

IV. Conclusions

The heterogeneity in the responses by EMDEs can be attributed to the early stage of implementation of internationally agreed reforms and to the diversity of their financial systems, which give rise to different considerations and concerns. It is worth bearing in mind that most of the internationally agreed reforms have only recently been agreed upon by the G20 and have long implementation timetables. Moreover, as the 2011 FSB-IMF-World Bank report on financial stability issues in EMDEs notes, these countries differ substantially in terms of economic size, level of development, legal and institutional frameworks, and other factors that affect their reform priorities and the ways in which their financial systems are affected. Factors that determine those effects include:

- the importance of foreign firms in the domestic financial system and their business model (e.g. branches vs. subsidiaries, domestic vs. offshore funding);
- the degree and means by which international capital flows are intermediated domestically (e.g. foreign direct investment vs. financial markets vs. banks);
- the dependence on sectors and instruments that are most affected by the reforms (e.g. bank-centric financial systems, trade finance);
- the level of domestic financial system development (since some reforms are more relevant for sophisticated financial markets); and
- idiosyncratic market characteristics (e.g. presence of financial institutions such as Islamic banks).

Several concerns relate to cross-border effects and perceived home bias in the design or implementation of reforms. These concerns stem from the way that implementation – both of agreed reforms and of other national and regional measures – takes place in other jurisdictions (typically AEs). Cross-border effects of reforms may be caused by spillovers (e.g. through the international activities of foreign financial institutions) or by the extraterritorial nature of some reforms (e.g. because they directly affect the operations of domestic financial institutions with cross-border business). A common concern by EMDEs in many cases is home bias, either in the design of the reforms or in the way that they are implemented in other jurisdictions, which could particularly affect EMDEs whose financial systems are more open and financially integrated. Their concerns are particularly relevant in those cases where the host authorities were not consulted or where an assessment that included cross-border effects was not factored into the relevant regulation.

A number of concerns arise from the use of credit ratings in regulation and reinforce the need to reduce reliance on such ratings. The dependence on credit ratings can be found in a number of different regulations, including the Basel III capital and liquidity standards. Some of the concerns arise from the difference in the interpretation or the implementation of the rules guiding the use of credit ratings, while others arise from the perception that credit ratings do not accurately reflect the creditworthiness of sovereigns and firms and thereby overstate the risks of operating in EMDEs. The findings reinforce the need for standard-setters, national authorities and market participants to implement the FSB principles for reducing reliance on credit ratings in standards, laws and regulations and for encouraging market participants to establish stronger internal credit risk assessment practices.[42]

Many of the identified concerns have also been raised by AEs and are being addressed by relevant international bodies during policy development and implementation. Their concerns are often similar to those expressed by EMDEs for some internationally agreed reforms (e.g. Basel III capital and liquidity rules or OTC derivatives) or national policy measures (e.g. the Volcker Rule). The long phase-in periods, the ongoing implementation monitoring and, in certain cases, the flexibility to adjust rules during the calibration process are intended to address these concerns. Some national authorities are also reviewing their domestic regulations to avoid potentially adverse cross-border effects.

The responses also reflect a number of implementation challenges for EMDEs and raise the issue of clearly identifying intended versus unintended consequences. Regulatory reforms are designed to strengthen oversight and change the behaviour of financial sector participants, resulting in a safer and sounder financial system. As such, some consequences are clearly intended even if they result in, for example, lower access to credit or higher loan spreads. This is particularly the case for some financial institutions based in AEs that were over-leveraged prior to the crisis and are currently working to strengthen their balance sheets and adjust their business models. Jurisdictions, however, have different views as to whether the pace and location of this adjustment represents an intended consequence with respect to their economy and financial system. For example, some EMDEs may perceive the effects of deleveraging by an internationally active bank as unfairly affecting their own jurisdiction compared to the home jurisdiction of that bank, particularly since their lower level of financial development can magnify the growth impact brought about by deleveraging.

While it is too early to fully assess the materiality and persistence of the effects of regulatory reforms on EMDEs, it would be useful to monitor them on an ongoing basis as well as to share experiences and implementation lessons. The qualitative nature of most responses indicates that detailed impact assessments are still not widely available. At this early stage, it is difficult to separate the effects of regulatory reforms from broader post-crisis developments affecting financial systems in EMDEs, to distinguish intended from unintended consequences, to weigh short-term costs against long-term benefits, or to assess endogenous market adjustments in response to these reforms. A more in-depth analysis of these effects would require the improved availability of financial sector data (particularly regarding cross-border flows); better understanding of interconnectedness and spillovers; the identification of relevant implementation challenges; and the development of an analytical framework that compares short-term adjustment costs with longer-term benefits resulting from enhanced financial stability and carefully distinguishes intended effects from unintended consequences. Such a framework would also need to consider endogenous market adjustments in response to the reforms and, in particular, the ability and willingness of other financial institutions to replace exiting firms. Monitoring the effects of regulatory reforms on an ongoing basis and promoting the sharing of experiences and implementation lessons will facilitate the mitigation of unintended consequences from the implementation of agreed reforms in EMDEs.

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[42] See "Principles for Reducing Reliance on CRA Ratings" by the FSB (27 October 2010, http://www.financialstabilityboard.org/publications/r_101027.pdf).

Addressing existing financial sector weaknesses in EMDEs may also help to reduce some negative effects from the implementation of agreed reforms. Some of those effects may stem from the interaction of the internationally agreed reforms with existing financial sector weaknesses (e.g. shallow domestic capital markets, incomplete legal frameworks and supervisory capacity constraints). In that sense, and as the 2011 FSB-IMF-World Bank report on financial stability issues in EMDEs notes, steps to address weaknesses in the financial sectors of EMDEs can also facilitate the implementation of the reforms.

The findings highlight the importance of the ongoing dialogue and cooperative relationships among EMDE national authorities and international financial institutions and standard-setting bodies. In particular, the findings underscore the value of the recent expansion of the membership of the standard-setting bodies and provide useful input for their ongoing work, particularly their efforts to assess and take into account the effects of the reforms in different countries. International financial institutions and the FSB can play an important role in facilitating this dialogue. A number of initiatives have already been taking place in this area. For example, the FSB has established regional consultative groups to bring together financial sector authorities from member and non-member jurisdictions in order to broaden the circle of countries engaged in the work to promote international financial stability. The BCBS intends to use the Basel Consultative Group to monitor the effects from the implementation of Basel III so that they can feed these into the Committee's policy development process, while IOSCO has recently restructured its governance to align it with its broad membership (both AEs and EMDEs). The IMF and the World Bank will also continue to monitor and follow up on the implementation efforts of their members through the Financial Sector Assessment Program and other bilateral and multilateral surveillance instruments; assist in building capacity for implementation; and provide feedback to the standard setters on any unintended effects arising from implementation of those reforms in both AEs and EMDEs. Going forward, more vehicles and processes are needed to ensure that EMDEs are appropriately consulted and that their views are adequately taken into account.

Annex I: Deleveraging in EMDEs

Several AE banks, particularly from Europe, are in the process of deleveraging. [43] The steps by these banks to deleverage have triggered various degrees of concern in EMDEs about a possible credit crunch with global spillover effects. While some adjustment was necessary, particularly in Europe where banks' leverage was relatively high, excessive and disorderly deleveraging is the main cause of concern since it could trigger interlinked, vicious spirals.

Thus far, the impact of European bank retrenchment has had relatively little impact in EMDEs, although its continuation may pose challenges for parts of CEE. As deleveraging pressures today are largely confined to euro area banks, non-euro area banks are in a better position to step in and cushion the impact on overall credit provision. Moreover, local and regional banks in Asia and Latin America have stepped in to support some lending segments where gaps have been left by European banks, although the longer-term impact of these changes on intermediation costs and competition have not been ascertained.

A number of different factors are contributing to the deleveraging process. Banks with a combination of risky sovereign exposures, excessive leverage and high reliance on wholesale funding are being forced by investors and funding counterparties to strengthen their balance sheets. Weakening market and economic conditions, including declining profitability are other important factors. Finally, certain regulatory policy measures are perceived in certain cases to be a driver of deleveraging, particularly in Europe where the EBA and some national authorities have increased minimum capital requirements in an accelerated fashion as a way to restore confidence in the banking sector.

Deleveraging has taken different forms, including the reduction of activities with high risk weights and asset sales. In the wake of the EBA decision to increase the core Tier 1 capital ratio for large European banks to 9 percent by end-June 2012, several of these banks have announced plans to meet the new capital requirements through a combination of various policies.[44] However, the magnitude of deleveraging is difficult to estimate because of rapidly evolving policy and market conditions.[45]

Among EMDEs, CEE is the most vulnerable to euro area bank deleveraging as a result not only of its large economic and financial linkages with Western Europe but also of its external financing needs. In that context, due to the large presence of euro area banks in those countries, emerging Europe would be heavily affected by a pullout in funding. Recent data show that banks in central and south-eastern Europe continued to reduce their cross-border funding through the fourth quarter of 2011.

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[43] Deleveraging can be defined as the process of unwinding excessive "leverage" - essentially the ratio of a bank's assets, or loans, to its equity.

[44] For example, (i) retained earnings, (ii) management of risk-weighted assets, including cutting activities with high risk weights, (iii) engaging in asset-liability management; and (iv) shrinking balance sheets, including by divesting noncore operations in various jurisdictions to focus on core markets and cutting jobs in certain locations and business units.

[45] A World Bank estimate, taking into account the information contained in banks' submitted capital plans, suggests that a fall of EUR 11-27 billion (1-2 % of bank credit) may occur and that the fall would be concentrated mainly in CEE since the Latin American subsidiaries of these banks rely less on parent funding and are therefore less likely to be affected. See "European Bank Deleveraging: Implications for Emerging Countries" by Feyen, Kibuuka and Otker-Robe (World Bank Economic Premise No. 79, April 2012, http://siteresources.worldbank.org/EXTPREMNET/Resources/EP79.pdf).

Some of the sectors most exposed to the retrenchment process are specialty finance lines, particularly infrastructure finance and loans to small and medium-sized enterprises (SMEs). The latest European Central Bank (ECB) lending survey suggests that SMEs are facing difficulties in accessing bank credit across Europe, particularly in CEE and Central Asia. Project finance is characterized by long maturities, heavy use of syndication, and dependence on long-term dollar funding that make it – like other specialty finance lines such as aircraft and shipping finance – particularly exposed to deleveraging. Anecdotal evidence also suggests that trade finance experienced declines in some regions in end-2011, although short-term trade finance has proved remarkably resilient in Europe during the recent market stress.

Despite recent policy measures, the deleveraging process warrants further attention. Policy measures taken by AE central banks in recent months (especially by the ECB) have improve funding conditions and helped avoid an aggravation of the retrenchment.[46] However, concerns about potential "disorderly" euro bank deleveraging have been expressed by the G-20 Finance Ministers and Governors during their last meeting in April 2012.[47] Going forward, the challenge is to manage the current deleveraging process in order to avoid a massive and disorderly lending retrenchment.

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[46] The ECB's two three-year Long-Term Refinancing Operations provided more than €1 trillion of gross loans to banks in the region, and are believed to have averted an extreme fire sale scenario (or a disorderly shedding of assets) and a subsequent credit crunch in Europe by improving bank funding conditions, boosting market confidence, and jumpstarting lending activity in the interbank market.

[47] *"(…) the tail risks facing the global economy only months ago have started to recede (…) deleveraging is constraining consumption and investment growth, volatility remains high partly reflecting financial market pressures in Europe and downside risks still persist"*: Communiqué at the G20 Finance Ministers and Central Bank Governors Meeting.

Annex II: Additional Information

Table 1. Size of Debt Markets in EMDEs (2010)

	EMDE Debt 1/			
	Government		Corporate	
	% GDP	% Total banking system assets	% GDP	% Total banking system assets
Advanced Economies				
Germany	49.8	19.3	10.6	4.1
Japan	195.0	114.4	15.4	9.0
United Kingdom	55.9	14.4	1.0	0.2
United States	75.8	77.7	21.2	21.8
Emerging Market and Developing Economies				
Argentina	12.9	41.3	1.9	6.0
Brazil	41.9	44.7	0.5	0.5
Chile	15.4	14.3	14.1	13.0
China	26.2	16.8	7.4	4.8
Colombia	22.6	37.3	0.5	0.8
Hungary	51.6	47.0	0.3	0.2
India	34.9	37.8	1.4	1.5
Indonesia	12.6	37.3	0.8	2.4
Korea	44.4	30.9	34.0	23.7
Lebanon	78.2	-	-	-
Malaysia	44.8	19.6	30.6	13.4
Mexico	22.1	56.9	3.1	8.0
Pakistan	29.4	70.7	-	-
Peru	12.6	28.8	2.6	5.8
Philippines	28.8	41.9	1.0	1.5
Portugal	46.6	16.3	20.1	7.0
Russia	3.9	7.2	-	-
Slovak Republic	26.8	31.0	-	-
Slovenia	11.1	-	1.4	-
South Africa	29.7	23.7	7.0	5.6
Thailand	45.7	41.3	17.2	15.5
Turkey	30.6	36.4	0.2	0.2
Venezuela	28.7	75.2	1.8	4.6

Source: BIS Quarterly Review, IMF World Economic Outlook, and Economic Intelligence Unit

Note:

1/ Period average.

Box 1. Treatment of trade finance in regulatory capital

Trade finance has historically been an engine of growth in world commerce and an important source of growth in EMDEs. By some estimates, 80% to 90% of world trade relies on some form of trade finance (e.g. trade credit and insurance/guarantees).[1] Most trade finance is considered by market participants to be a relatively low-risk asset class characterised by fully collateralised transactions with short tenors and low defaults.[2]

Owing to the global financial crisis, trade flows have declined significantly from their pre-crisis levels. Although they have recently recovered somewhat, they remain lower in some parts of the world (such as in Europe) due to ongoing deleveraging by banks and lower demand for trade. Some EMDEs, on the other hand, are seeing an increase in the demand for trade finance products. In Asia, where the increase in demand is significant, the withdrawal by European banks from this activity is rapidly being replaced by Asian lenders.

In response to a call from G20 Leaders[3], the BCBS reviewed the capital requirements for trade finance, particularly as they relate to confirmed letters of credit. It considered four main issues: (1) the 100% CCF when calculating the leverage ratio for contingent trade finance exposures; (2) the 20% CCF under the risk-based standardised and foundation IRB approach; (3) the one-year maturity floor for trade finance under the advanced internal ratings-based approach; and (4) other ways of addressing the impact of capital requirements on low income countries.

Following discussions with the World Bank, World Trade Organisation, and International Chamber of Commerce, the BCBS decided in October 2011[4] to waive the one-year maturity floor for certain trade finance instruments under the advanced internal ratings-based approach[5] and to waive the sovereign floor for certain trade finance related claims on banks using the standardised approach for credit risk.

In spite of these changes, some respondents from EMDEs noted that the requirements around trade finance may still have a negative impact on trade in the short-term and economic growth over the longer term. They specifically mentioned the 100% CCF applied to contingent trade finance products in the context of the Basel III leverage ratio, asserting that it will impair banks' ability to provide affordable trade financing.

The BCBS did not change the methodology for calculating the leverage ratio in its review of trade finance because the leverage ratio is intended to be simple and not risk-sensitive. The Basel Committee noted that government bonds, despite their typically low level of risk, are included in the leverage ratio calculation at face value. Given this, and the desire to have the leverage ratio serve as a supplement to the risk-based requirement, the BCBS is of the view that it would be inappropriate to apply a risk weight of other than 100%. Nevertheless, the BCBS is continuing to monitor banks' leverage data in order to assess cyclicality over a business cycle and the effects on different types of business models.

[1] See http://www.cepr.org/pubs/PolicyInsights/PolicyInsight35.pdf.

[2] See http://www.iccwbo.org/uploadedFiles/ICC-Register_Report_26_October_2011.pdf.

[3] In the 12 November 2010 Seoul Summit Document, the G20 Leaders stated that "We also agree to monitor and assess trade finance programs in support of developing countries…**and to evaluate the impact of regulatory regimes on trade finance**"[emphasis added].

[4] See http://www.bis.org/publ/bcbs205.pdf.

[5] At national discretion, the same methodology may be applied to banks using the foundation IRB approach.

Box 2. Basel III liquidity requirements

The LCR standard is designed to promote short-term resilience by requiring sufficient high-quality liquid assets to survive acute stress lasting for 30 calendar days.

$$\text{Liquidity Coverage Ratio} = \frac{\text{Stock of high-quality liquid assets}}{\text{Total net cash outflow over 30-day period}} \geq 100\%$$

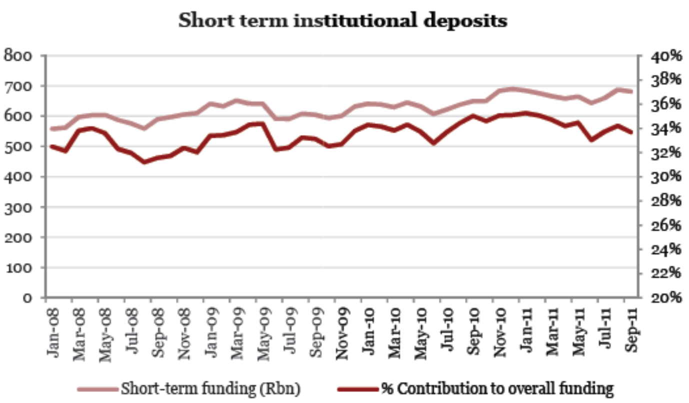
There are two categories of assets that can qualify as HQLA: "Level 1" and "Level 2" assets:

- Level 1 assets are limited to cash, central bank reserves and marketable securities that are assigned a 0% risk-weight under the Basel II Standardized Approach (mainly government bonds).
- Level 2 assets are limited to marketable securities that are assigned a 20% risk-weight under the Basel II Standardized Approach and corporate bonds and covered bonds that have credit rating of at least AA- by an ECAI. (Level 2 assets are caped to comprise up to 40% of the overall stock of HQLA).

In order to qualify, securities and bonds also need to have a proven record as a reliable source of liquidity in the market even during stressed market conditions.

Total expected cash outflows are calculated by multiplying the outstanding balance of various categories or types of liabilities (deposits or other funding sources) by the rate at which they are expected to run off or be drawn down.

In the case of South Africa, the supply of government bonds (Level 1 assets) domestically is insufficient to meet the expected demand from South African banks. In addition, the ratings of most corporate bonds (Level 2 assets) fall below the HQLA Level 2 floor of AA-. The authorities also point out that wholesale funding is one of the most stable funding sources for domestic banks. Short-term institutional funding – which, according to Basel III, is classified as very unstable – has remained steady, even during the financial crisis (see graph below).



Source: South African Reserve Bank and National Treasury.

The Hungarian authorities have been assessing the potential effects of the Basel III liquidity standards by conducting impact studies on a quarterly basis since 2010. According to these studies, the Hungarian banking system – similar to other European peers - shall make efforts to comply with the Basel III minimum liquidity requirements, especially regarding the LCR requirement. The Hungarian authorities are concerned that complying with the LCR requirements might adversely affect the banking sector in supporting the overall economic recovery.

Box 3. Treatment of host jurisdictions in the Key Attributes

The FSB's *Key Attributes for Effective Resolution Regimes* standard, which was issued in October 2011, sets out core elements that should allow national authorities to resolve financial institutions in an orderly manner without taxpayer exposure to loss from solvency support, while maintaining continuity of their vital economic functions.

The *Key Attributes* standard recognises the need for coordinated resolution of firms that are active in multiple countries. Jurisdictions are asked to seek convergence of their resolution regimes through the legislative changes needed to incorporate the tools and powers set out in the *Key Attributes*. In addition, the document includes the following requirements concerning host jurisdictions:

- In applying resolution powers to individual components of a financial group located in its jurisdiction, the resolution authority should take into account the impact on the group as a whole and on financial stability in other affected jurisdictions, and undertake best efforts to avoid taking actions that could reasonably trigger instability elsewhere in the group on in the financial system.
- The statutory mandate of a resolution authority should empower and strongly encourage the authority wherever possible to act to achieve a cooperative solution with foreign resolution authorities.
- Where a resolution authority takes discretionary national action, it should consider the impact on financial stability in other jurisdictions.
- National laws and regulations should not discriminate against creditors based on their nationality, the location of their claim or the jurisdiction where it is payable.
- Jurisdictions should provide for transparent and expedited processes to give effect to foreign resolution measures, either by way of mutual recognition or by taking measures under the domestic resolution regime that support and are consistent with the resolution measures taken by the foreign home resolution authority.
- The resolution authority should have the capacity in law... to share information... pertaining to the group as a whole or to individual subsidiaries or branches, with relevant foreign authorities where sharing is necessary for recovery and resolution planning or for implementing a coordinated resolution.
- Crisis management groups (CMGs) should include the [relevant authorities] responsible for guarantee schemes of jurisdictions that are home or host to entities of the group that are material to its resolution, and should cooperate closely with authorities in other jurisdictions where firms have a systemic presence.
- For all G-SIFIs, at a minimum, institution-specific cooperation agreements [whose essential elements are specified in the *Key Attributes* document] should be in place between the home and relevant host authorities that need to be involved in the planning and crisis resolution stages.
- Group resolvability assessments should be conducted by the home authority of the G-SIFI and coordinated within the firm's CMG taking into account national assessments by host authorities.
- At least for G-SIFIs, the home resolution authority should lead the development of the group resolution plan in coordination with all members of the firm's CMG. Host authorities that are involved in the CMG or are the authorities of jurisdictions where the firm has a systemic presence should be given access to RRPs and the information and measures that would have an impact on their jurisdiction.

Work is currently ongoing at both the national level and at the FSB to operationalise this standard.

Table 2. Covered Banks and Activities under the Volcker Rule

Nature of prohibition or requirement	Type of financial institution	Covered activities	Exempt activities
Proprietary Trading 1/	U.S. licensed depositories affiliates, parents, holding companies, wherever located; U.S. branches/subsidiaries of non-U.S. banks.	Short-term buy-to-resell or arbitrage Transactions subject to market-risk capital charge Broker-dealer desks transactions.	Market making; Underwriting; Risk hedging, including liquidity management; Repo, reverse repo, and securities lending; Client facing transactions; Trading of U.S. government, state, municipal, federal agency, and GSE debt.
	Non-U.S. banking units of non-U.S. banks.	Any of the above, if transacted with U.S. residents, using U.S. personnel, or on U.S. execution facilities.	All of the above, plus all proprietary trading if not transacted with U.S residents, not using U.S. personnel nor U.S. execution facilities.

Source: U.S. Treasury (2011).
Notes:
1/ All transactions of covered banks' broker-dealer desks are prohibited, except for direct trading of loans and spot market transactions in commodities and foreign exchange.

Table 3. Potential Effects of the Volcker Rule on EMDEs (as detailed in the responses)

What is affected	Who is affected	Where is the direct impact	Where are the other indirect impacts
Proprietary trading of EMDE sovereign and corporate debt	Covered U.S. banks	Liquidity in EMDE sovereign and corporate debt markets	Funding costs of EMDE sovereigns and corporates
Curtailing of activities arising from restrictions on their dealings with U.S. counterparties	Covered non-U.S. banks	Liquidity in EMDE sovereign and corporate debt markets	Funding costs of EMDE sovereigns and corporates
Proprietary trading of EMDE government securities	EMDE affiliates of covered U.S. and non-U.S. banks	Liquidity in local EMDE government securities markets	EMDE financial system EMDE banks' liquidity, treasury, and risk management EMDE governments' ability to manage its budget EMDE insurance companies, mutual and pension funds
Restriction on the ability to execute or clear proprietary trading on U.S. infrastructure.	Covered non-U.S. banks	Execution of international trades moving away from the United States	
Market making inadvertedly affected	Covered U.S. and non-U.S. banks	Liquidity in EMDE capital markets	
Stringent requirements on payments and settlements	Covered U.S. and non-U.S. banks as counterparties	Limited access to covered banks by EMDE banks	Increases EMDE banks' costs
Failure to prove trading activities as market making activities	Covered affiliates of U.S. and non-U.S. banks	Principal dealer status in EMDEs	
Differentiation between market making and proprietary trading	Covered U.S. and non-U.S. banks	Reporting requirements for EMDE affiliates	
Reporting compliance	Covered U.S. and non-U.S. banks	Establishment of a wide array of programs, policies, procedures, and information structures for compliance purposes Exemptions for market-making and hedging activities leading to misreporting	Increase in IT and administrative costs in EMDE banks Underestimation of proprietary trading activities in EMDE government securities

Annex III: Questionnaire Used to Collect Information From EMDEs

Study of effect of regulatory reforms on emerging market and developing economies (EMDEs)

Questionnaire

Name of jurisdiction: ….……………………………………………………………………

Name of institution: ………………………………………………………………………...

Primary contact person to follow-up with regarding your response to this questionnaire

Name: ……………………………………………………………………………………..

Title: ………………………………………………………………………………………

Email address: ……………………………………………………………………………

Telephone number: ………………………………………………………………………

1. Unintended consequences arising from the domestic implementation of internationally agreed regulatory reforms

Referring to post-crisis internationally agreed regulatory reforms, please answer the following questions, where relevant. In so doing, it would helpful if you can provide the results of any relevant studies, research or reports to elaborate upon your response.

a. Please briefly describe post-crisis regulatory reforms that your jurisdiction has already implemented.

   With regard to each reform, please further describe:

   - The effects, both intended and unintended, that these reforms have had in your jurisdiction.
   - What are the nature, scale and principal drivers of any unintended consequences? Please provide any analysis that you have undertaken to quantify their impact.
   - Are there specificities of your financial system that can explain those unintended consequences?

- Have you taken, or do you intend to take, any measures to mitigate the effects of these unintended consequences, without undermining the objectives of the reform itself?

b. Please briefly describe post-crisis regulatory reforms that your jurisdiction is in the process of transposing into domestic legislation and/or regulation.

With regard to each reform, please further describe:

- The effects that implementation of these reforms is expected to have in your jurisdiction. Have you identified any unintended consequences?
- What are the nature, scale and principal drivers of any potential unintended consequences? Please provide any analysis that you have undertaken to quantify their impact.
- Are there specificities of your financial system that can explain those unintended consequences?
- Have you taken, or do you intend to take, any measures to mitigate the effects of these unintended consequences, without undermining the objectives of the reform itself?

c. Please briefly describe post-crisis regulatory reforms that your jurisdiction intends to implement in the future.

With regard to each planned reform, please further describe:

- The effects that implementation of these reforms may have in your jurisdiction. Do you expect or foresee any unintended consequences?
- What are the nature, scale and principal drivers of these potential unintended consequences?
- Have you taken, or do you intend to take, any measures to mitigate the effects of these unintended consequences, without undermining the objectives of the reform itself?

2. Unintended consequences arising from the implementation of internationally agreed regulatory reforms by other jurisdictions

Have you experienced, or do you foresee, potential unintended consequences affecting your financial system from the implementation of internationally agreed regulatory reforms in other jurisdictions? If so, besides your replies to the questions below, it would helpful if you can provide the results of any relevant studies, research or reports that elaborate upon your replies.

- From the perspective of your jurisdiction, which of these reforms, and involving which other jurisdiction(s), have you identified as having unintended consequences in your financial system?
- What are the nature, scale and principal drivers of these unintended consequences, either experienced or potential? Please provide any analysis that you have undertaken to quantify their impact.

- Are there specificities of your financial system that can explain those unintended consequences?
- Have you raised the issues identified with the other jurisdictions involved?
- Do you intend to take any measures to mitigate the effects of these unintended consequences? If yes, please describe.

3. Impacts of other post-crisis developments on domestic financial systems and cross-border financial intermediation

What other post-crisis effects have you observed in your financial system and in cross-border financial intermediation? These effects may have been prompted by factors such as changes across EMDEs and advanced economies in funding markets, financial firms' business models, the rise in sovereign debt concerns, the process of deleveraging, and other national/regional financial policy and regulatory measures that may have cross-border reach. Have you assessed the determinants and impact of these changes? If so, please provide the results of any relevant assessment or study.

- What are the nature, scale and principal drivers of other post-crisis developments that have affected your jurisdiction? Please provide a description of each development and any interaction you see with the effects of the internationally agreed-upon financial regulatory reforms.
- Have you taken, or do you intend to take, any measures to mitigate their effects?

Annex IV: Members of the EMDEs Review Group

Co-chairs	**Lawrence Schembri** Advisor Bank of Canada
	Pascual O'Dogherty Director General, Financial Stability Department Banco de México
Australia	**Maryanne Mrakovcic** Chief Adviser, International Department Australian Treasury
Brazil	**Cleofas Salviano Júnior** Deputy Head of the Department of Financial System Regulation Department Banco Central do Brasil
Chile	**Kevin Cowan** Division Director, Financial Policy Central Bank of Chile
Germany	**Thomas Schmitz-Lippert** Executive Director for International Policy/Affairs BaFin
Hong Kong	**Peter Pang** Deputy Chief Executive Hong Kong Monetary Authority
India	**V.S. Das** Executive Director, Financial Stability Reserve Bank of India
Indonesia	**Sukarela Batunanggar** Director, Department of Banking Research and Regulation Bank Indonesia
Japan	**Toshio Oya** Assistant Commissioner for International Affairs Financial Services Agency

Korea	**Sangche Lee** Commissioner Financial Services Commission
Luxembourg	**Serge Kolb** Member of the Executive Board Central Bank of Luxembourg
Malaysia	**Zeti Akhtar Aziz** Governor Central Bank of Malaysia
Russia	**Vladimir Chistyukhin** Director of the Financial Stability Department The Bank of Russia
Saudi Arabia	**Abdulrahman Al-Hamidy** Vice Governor Saudi Arabian Monetary Authority
South Africa	**Ismail Momoniat** Deputy Director-General National Treasury
Spain	**José María Roldán** General Director, Banking Regulation Bank of Spain
Turkey	**Mehmet Yörükoğlu** Deputy Governor Central Bank of the Republic of Turkey
USA	**Sherman Boone** Counsellor, Office of International Affairs Securities and Exchange Commission
	Susan Quill Senior International Advisor, International Banking Supervision Office of the Comptroller of the Currency

IMF	**Jonathan L Fiechter** Special Advisor Monetary and Capital Markets Department
	Jodi Scarlata Deputy Division Chief Monetary and Capital Markets Department
World Bank	**Tunc Uyanik** Director Financial Systems Practice
	Pierre-Laurent Chatain Lead Financial Sector Specialist, Prudential Oversight Unit Financial Systems Practice
European Commission	**Dominique Thienpont** Deputy Head of Banking
Basel Committee on Banking Supervision (BCBS)	**Wayne Byres** Secretary General
International Association of Insurance Supervisors (IAIS)	**George Brady** Deputy Secretary General
International Organisation of Securities Commissions (IOSCO)	**Tajinder Singh** Deputy Secretary General
FSB Secretariat	**Svein Andresen** **Jason George** **Jin Soo Lee** **Costas Stephanou**