Europe and Central Asia

Sovereign Debt Management in Crisis: a Toolkit for Policy Maker

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Abstract

The global financial crisis of 2008-2009 required most sovereign debt managers to adapt to rapidly changing market circumstances, by changing the mix of borrowing instruments and adopting techniques that minimize the impact of severe market dislocations and increased risk aversion. These actions, allied to prudent macroeconomic and debt management policies implemented by government in the years preceding the crises, were critical in helping countries meet their financing needs without undue strain on the financial markets. This toolkit draws on the approaches taken by a range of countries and provides sovereign debt policy makers with a rich set of potential actions to address crisis periods. A practical illustration on the use of some of these actions is conducted by analyzing the measures taken by Romania, Serbia and Turkey as a response to the recent crises. We draw lessons from these experiences and examine what other measures included in the toolkit could have been used to boost the crisis response impact in these economies, respecting country-specific contexts.
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<td>CB</td>
<td>Central Bank</td>
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<td>CG</td>
<td>Central Government</td>
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<td>CPI</td>
<td>Consumer Price Index</td>
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<td>DMO</td>
<td>Debt Management Office</td>
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<td>ECA</td>
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<td>EMs</td>
<td>Emerging Markets</td>
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<td>FX</td>
<td>Foreign Currency</td>
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<td>IMF SBA</td>
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<td>LX</td>
<td>Local Currency</td>
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<td>NBR</td>
<td>National Bank of Romania</td>
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<td>PD</td>
<td>Primary Dealer</td>
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<td>RON</td>
<td>Romanian Leu</td>
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<td>RSD</td>
<td>Serbian Dinar</td>
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<tr>
<td>TL</td>
<td>Turkish Lira</td>
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<tr>
<td>TSA</td>
<td>Treasury Single Account</td>
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Introduction

1. Neither the global financial crisis nor the strains in the eurozone have resulted so far in a sovereign debt crisis among emerging market countries. Two factors in this outcome are the improved macroeconomic management and public debt management in these countries over the past decade. Governments’ primary balances were mostly positive while monetary policy managed to keep inflation at historically low levels and healthier external accounts reduced the vulnerability to shocks and reversals in capital flows. The result was buoyant growth and a downward trend in debt/GDP ratios. On the back of healthier macroeconomic fundamentals, debt managers engineered a significant transformation of government debt portfolios that brought about significant risk reductions. Exposures to exchange and interest rates were slashed by increased focus on domestic debt financing. The structure of the domestic debt improved as government authorities embarked on market development programs and this progress freed debt managers from choosing between long-term fixed-rate instruments denominated in foreign currency and short-term ones in local currency.¹

2. Stronger macroeconomic fundamentals and more resilient debt portfolios certainly helped to avoid a debt crisis but the challenges posed by the global financial crisis meant that for debt managers there was no longer business as usual. The crisis brought about a deep recession in the larger high-income countries that impacted emerging markets EMs through a dramatic contraction in exports and capital flows. As this happened, severe dislocations in the external and domestic markets severely restricted access to regular funding sources. In this context the crisis forced policy makers to adapt quickly in order to continue funding the government in the midst of a much more difficult environment.

3. This paper lists in a systematic manner the actions taken by the debt managers during the crisis and creates a toolkit that is a practical application of the lessons learnt. Debt managers’ actions covered a wide range of areas from fund raising in both local currency (LX) and foreign currency (FX) to providing price discovery mechanisms in the local market, all making sure of minimizing the impact on the already fragile financial markets. By design the toolkit groups these actions under a few categories that summarize particular goals sought by debt managers. To make it practical, each action/tool in the toolkit comes with a “user’s manual” so debt managers judge the applicability of the kit to their particular situation.

4. **The broader implications of the crisis for fiscal policy and the challenges relating to the implementation of monetary policy are beyond the scope of the paper.** The global financial crisis raised important issues of coordination of macroeconomic policy: the need to implement countercyclical fiscal stimulus, primarily by allowing “automatic stabilizers” to operate, to offset recessionary forces and the use of alternative ways of implementing an expansionary monetary policy when the transmission mechanisms stop working because of extreme risk aversion.

5. **The paper is organized as follows:** the first section presents three categories under which debt managers’ actions are grouped and for each category the actions taken by debt managers during the global financial crisis are analyzed; the second section presents the toolkit which drills down on the use of the actions/tools to achieve defined policy objectives. To this end, the actions/tools are presented with a description of prerequisites, pros, cons and a brief analysis of the context in which the tool can be successfully implemented; the third section presents the crisis response measures adopted in Romania, Serbia, and Turkey and the options that the array of tools described in section 2 would have opened for these countries. These three economies provide a rich and diverse set of experiences that should be useful to a broad range of countries in different stages of sovereign debt market development. Their choice was conditioned by (1) the exemplary illustration of the regional turbulence these markets underwent during the crisis and (2) the diversity between financial market environments in these countries. Finally, the fourth section provides conclusions on crisis response measures covered in the toolkit and the analysis.
Section 1: Crisis response actions based on experience in a range of countries

6. The greatest financial-economic crisis since the great depression tested debt managers’ ability to finance the government in unprecedented turbulent conditions. During the crisis funding conditions in international capital markets deteriorated suddenly and worsened to the point that emerging market external debt issuance stalled for months as a consequence of increased risk aversion and higher borrowing costs. In some countries these difficulties were compounded as deleveraging and risk aversion also caused sell-offs in local markets.

7. At the same time the crisis impacted the fiscal position of most countries, increasing drastically government borrowing requirements. The crisis hit most EMs in 2009 through the contraction of capital inflows and exports. As growth in EMs slowed down from 8.7% in 2007 to 6.1% in 2008 and 2.7% in 2009, government revenues contracted sharply while counter-cyclical policies aimed at smoothing the impact of the crisis left a fiscal gap that widened out in 2009. The size of the gap varied greatly in the EMs with Central and Eastern Europe experiencing a larger gap because of the greater dependency on inflows and economic activity in the EU zone. In particular, the average borrowing requirements in Central and Eastern Europe EMs increased to 12.9% share of GDP in 2009 from 6.8% of GDP in 2007.

8. The debt managers’ response to the crisis can be grouped around three main objectives. Although the specific responses varied from country to country depending on the array of instruments available and their experience to work in a new adverse environment, debt managers across regions pursued the following common objectives:

1. Funding from other sources to reduce pressure on traditional wholesale market borrowing;
2. Adapting the market funding program to shifts in the demand for government paper; and
3. Ensuring minimal functioning of the primary and secondary markets.

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9. Through the first objective, debt managers attempted to reduce the funding pressure on the domestic wholesale market in order to minimize the impact on interest rates and give time for the market to recover. Countries diverted the demand for funding by squeezing the pockets of liquidity available in the public sector, stepping up their borrowing from multilaterals and creating instruments for retail or other specific types of investors.

10. Most governments expedited their access to excess liquidity within the public sector. Liquidity pockets included central government cash buffers (e.g. Uruguay) and cash balances belonging to the rest of the public sector including social security funds, state-owned enterprises and local or regional governments (e.g. Peru). In some countries, central banks (CBs) created additional liquidity in the system by purchasing government bonds (e.g. Egypt, Indonesia, Mexico and Hungary), or, extending outright credit to the government. Another indirect source that strengthened the liquidity position of some governments was the transfer of profits generated by the revaluation of the foreign reserves of the CB that occurred as a result of the devaluation of the local currency (e.g. Brazil).

11. EMs debt managers also stepped up the borrowing from multilaterals. Three different modalities can be distinguished: (i) Higher demand for loans through the regular windows which resulted in a dramatic increase in the lending of these institutions (e.g. IBRD lending tripled from 2008 to 2009); (ii) Exceptional credit packages involving several organizations established to deal with the funding gap resulting from the crisis (e.g. IMF led operations in Hungary and Romania); and (iii) Use of contingent credit lines established specifically for an emergency situation (e.g. IBRD contingent loans to Peru and Indonesia).

12. In addition, debt managers started or expanded retail debt programs or tried new debt instruments in an effort to diversify funding sources and tap segments of investors not explored before. While in EMs this route was marginal compared to the two previous tools, some of the more advanced countries with long standing programs experienced a significant increase in the funding raised by the retail debt channel (e.g. Sweden). Some countries (e.g. Turkey) created new debt instruments in an attempt to tap demand from Islamic investors.

13. In pursuing the second objective, debt managers adapted to the shift in investor demand following the dramatic increase in risk aversion and the need for liquid instruments. Countries experienced a swift withdrawal of demand for all government securities in the international capital

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5 See Turkey’s country case in section 3 for more details.
markets after the sudden stop of capital flows. In most countries, the retrenchment of investor demand extended also to the government domestic fixed-rate securities of medium and long tenors.

14. **As the international capital markets closed, EMs external debt issuance stalled for several months, with Mexico being the first to come back in December 2008.** EMs would then regain investors’ confidence and reach a significant volume of issuance in 2009 after interest rates in large high-income countries dropped to historical lows.

15. **In other circumstances, the domestic market may prove unable to deliver the required financing to government, or at least at a reasonable price and in the desired maturities.** This may be caused by increasing dollarization or euroization, increased inflation expectations, or the exit of non-resident investors. In these circumstances, accessing the international capital markets may produce a superior risk-adjusted outcome.

16. **The supply of LX government securities in many cases shifted to T-Bills and short-term bonds and from fixed to floating-rate securities because of the lack of demand for long duration assets.** This shift happened in most countries but was especially pronounced in Eastern Europe and Central Asia (ECA) and South Africa. In Peru, Brazil and Colombia, pension funds acted as a buffer absorbing part of the excess of supply of medium-long term paper, making the switch to floating/short term securities less pronounced. In Eastern and Central Europe however, even institutional investors shifted their preference to foreign currency, or local currency short duration assets, so banks ended up absorbing most of the excess supply of government securities.

17. **Through the third objective, debt managers attempted to mitigate the impact of the crisis in the functioning of the domestic debt markets.** In the primary market, debt managers’ efforts focused on the placement of government securities in a cost effective manner in an environment where, for many countries, the traditional distribution channels through commercial banks faced unprecedented restrictions given the fragile situation of the banking system. In the secondary market, the main task of debt managers was to provide price information for the few investors willing to trade government securities.

18. **With the drop in liquidity and heightened uncertainty, several countries found the need to adjust auction procedures or to use alternative mechanisms for debt placements.** Even the most developed markets such as the UK and Germany found auctions with poor bid/cover ratios, which had never been seen before. Debt managers, especially in OECD countries, started using syndications to a greater degree to supplement the auctions especially for the long-dated conventional and index-
linked securities and strengthened their contacts with the investor base. The auctions were also modified in size and frequency in most countries faced with unexpectedly high borrowing requirements.6

19. **As liquidity evaporated primary dealers (PDs) were unable to meet their commitments and debt managers had to relax the rules to reflect the new environment.** The new rules reflected a less liquid market with lower standards for volumes and spreads and in some cases moved to best efforts basis. This was particularly true for the crisis countries: Greece (2008-2010), Hungary (2008-2009), Iceland (2008-2009) and Ireland (2008-2009).

20. **In Europe several countries approached the investors directly and found it easier to complete the funding targets without going through the PDs.** While auctions and syndications continue being the main funding placement mechanisms, more countries recurred to direct placements with the institutional investors as a way to address the limitations of PDs during and after the global financial crisis.

21. **Buybacks and exchanges were used in several countries to help stabilize markets.** Buybacks were used in Hungary, Indonesia and Mexico to alleviate sell-off pressures, enhance liquidity and improve pricing of liquid instruments. Poland switched illiquid bonds for more liquid securities. Brazil conducted simultaneous buy and sell auctions at the peak of the crisis to provide price parameters at a time that references in the secondary markets were nonexistent.

22. **In the next section, based on the recent experience, we list and analyze this broad set of crisis respond measures in more detail.**

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6 In 2009, after consultations with market participants, the UK Debt Management Office decided to supplement auctions with syndications to deal with the higher execution risk resulting from reduced primary dealers’ capacity to absorb a rising supply in a more adverse market environment. See Blommestein, Hans J. (2009b), “Responding to the Crisis: Changes in OECD Primary Market Procedures and Portfolio Risk Management”, this issue: OECD Journal: Financial Market Trends, vol.2009/2.
Section 2 – A toolkit for Policy Makers

23. **This section consists of the actual toolkit of potential policy measures.** Based on the empirical findings of section 1, we drill down on the tools debt managers can use when access to usual market financing is curtailed. For each objective an array of tools is presented together with an analysis of the prerequisites, advantage and limitations and the context and considerations for using or avoiding the use of each tool.

**Overview of the Toolkit:**

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<th>Tools</th>
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<td>Funding from other sources to reduce pressure on traditional wholesale market borrowing</td>
<td>(1) Channeling the liquidity available within the public sector</td>
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<td>(2) Use of multilateral and bilateral funding sources</td>
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<td></td>
<td>(3) Market intervention through debt buybacks and exchanges</td>
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</tbody>
</table>
Objective 1: Funding from other sources to reduce pressure on traditional wholesale market borrowing

Tool 1: Channeling the liquidity available within the public sector

Definition:

24. Access liquidity available in the central government and in the rest of the public sector, including saving funds, and excess cash balances of state-owned enterprises and other sub-national governments to reduce funding pressure in the market. The use of central government cash buffers and excess balances and financial savings from other entities in the public sector allows a reduction in the amount of funding that needs to be raised in the market and thus mitigates the impact of higher interest rates and reduces the likelihood of facing refinancing problems.\(^7\)

Prerequisites:

25. Central government cash buffers and cash balances with the CB, or, other financial institutions could normally be used without additional legal permissions. However, the adequacy of a cash buffer hinges upon the existence of a cash management policy ideally linked to clear parameters for managing refinancing risk. This is normally part of a formal strategy for managing the government debt.

26. Access to excess liquidity of the rest of the public sector may require legal and operational frameworks. In some countries the use of the funds deposited in a Treasury single account (TSA), or, in the Treasury accounts is regulated by Law (e.g. Brazil and Romania), thus before using these resources, debt managers may need to verify if they are authorized to do so and under what conditions. “Borrowing” from the rest of the public sector also requires budgeting and accounting procedures including financial systems that support these transactions. Comptrollers and auditors should have signed off on these arrangements to ensure agility in the crisis response and the smooth flow of the transactions.

Pros:

(i) Funds are immediately available.

\(^7\) Use of this tool bears a risk that the government may overuse, default or refuse to reimburse the state-owned enterprise or another public institution from which the funds are sourced. The signaling effect of failing to honor such debt would make matters worse, particularly in future crises when agencies will seek ways of avoiding or delaying such transfers.
(ii) Central Government (CG) has autonomy for defining the interest rate and the repayment schedule of the “temporary loans”.

Cons

(i) Building cash buffers bears a cost of carry equal to the differential between the interest rate paid for funding the buffer and the return on the instruments used to hold the cash buffer.

(ii) Resorting to liquidity of sub-nationals and state-owned enterprises can break the arms-length relation between CG and the public sector giving room for the potential contingent liabilities. These contingent liabilities may arise if the sub-nationals or state-owned enterprises feel that they are “rescuing” the CG and therefore by reciprocity expect CG to intervene if such public sector entities are in trouble.

(iii) Central Government may abuse its power and negatively affect the finances of the “lenders” by setting up sub-market interest rates, overuse this funding channel and in the extreme, default on these loans.

Analysis

27. The establishment of cash buffers requires estimates of the time debt managers would be deprived of market access. This plus the cost of carry will determine the level of the buffer. In general, the cost of carry, even if high, is worth paying to avoid the potential disruption of not being able to refinance an obligation. For those countries where public sector entities sit on pools of liquidity for long periods, which cannot be used because of internal or external limitations, it makes sense to allow the CG to access these funds and later reimburse them since the opportunity cost is close to zero. Debt managers could examine the legal and operational framework regulating the potential transfer of liquidity and ensure that the mechanisms are in place to access to sources if need be.

28. EMs are familiar with the “sudden stops” of the international capital markets behind the debt crisis of the 1990s. For quite a while countries have been using pre-financing and cash buffers to mitigate this exposure. An example of a cash buffer for foreign-currency borrowing is the foreign currency reserves that many EMs have accumulated since the early 2000s. In several cases (e.g. Peru and Philippines) the building of external cushions has been accompanied by the accumulation of large government deposits in local currency with the Central Bank to help sterilize the expansion of international reserves. However, with the exception of Uruguay, there is limited work on the
determination of the size of the cash buffer. In most cases access to liquidity of the public sector is immediate. Brazil, for example, keeps cash buffer at the TSA that serves as a funding insurance, earmarked to debt payments.

**Tool 2: Use of multilateral and bilateral funding sources**

*Definition:*

29. **Access external borrowing from multilateral institutions or bilateral sources.** In general, this borrowing takes place at sub-market rates, i.e. rates lower than a sovereign would pay if it were to borrow externally on market terms in its own name. Multilaterals provide funding through several windows that differ in the degree of concessionality. Lending modalities from multilaterals used in the last crisis included: emergency lending from the IMF and others such as the EU, contingent credit lines and regular lending operations.

*Prerequisites:*

30. **For regular loans, countries need to have credit space with the creditors.** If the credit lines are fully utilized in normal times there is no possibility of using them under an emergency situation. Contingent credit lines on the other hand should be signed beforehand as a crisis prevention mechanism and should be regularly reviewed to ensure their valid status. Finally, access to emergency funds requires compliance by the borrower with the conditions stated in the loan agreement that qualify as an emergency.

*Pros:*

(i) This borrowing is usually denominated in FX and, for most developing countries, tends to be cheaper compared to the market.  

(ii) Contingent credit lines can be quickly disbursed and their use is not attached to policy reforms.

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8 The Independent Evaluation Group (IEG) in its evaluation of the WB Group’s response to the global economic crisis reports that international financial institutions responded strongly to the crisis and posted the largest-ever financial flows to the developing world – with the WB Group registering the largest disbursements. In 2009-2010, the IMF and the WB disbursed US$67 and US$81 billion, respectively. Bilateral development assistance also increased by nearly US$20 billion between 2007 and 2009.

9 Subject to prior assessment and further monitoring of the currency risk of such FX borrowing.
Cons

(i) Since multilateral lending is not designed for crisis lending, but rather long-term development, negotiation and disbursement of new loans tend to be slow, making it a rather rigid mechanism to respond to unexpected funding needs.

(ii) Multi and bilateral loans usually come with attachments related to the project implementation or the adoption of economic or sectorial policies that market instruments don’t have.

(iii) Emergency lending from the IMF may come with strong conditionality normally requiring countries to adopt tight fiscal and monetary policies, which may not be politically easy to implement. These loans tend to have shorter maturities and are less concessional compared to those from other multilaterals.

Analysis

31. Countries access to multilaterals and bilaterals is critical as these creditors are the only providers of FX funding at times when the market is closed. Compared to the market, these creditors are willing to lend at longer terms using smooth repayment structures that adapt better to EMs needs and usually at sub-market interest rates. However, arranging quick disbursing financing from multilateral development banks is difficult: assuming the credit line is not fully used, the process is months, not weeks. In this sense, contingent credit lines are a very effective tool: loans can be quickly disbursed and are cost-effective because countries don’t pay the full cost of carry compared to cash buffers\(^\text{10}\). Also, contingent credit lines are more useful for countries with relatively low financing needs.

Tool 3: Tapping directly and expanding the investor base

Definition:

32. Directly approach investors or tap non-traditional wholesale investor base to avoid the dysfunction in financial intermediation caused by shrinking balance sheets or other capital constraints to PDs ability to finance an inventory of government securities. The use of this tool assumes that there are financial savings available to fund the government that cannot be accessed using regular channels such as auctions, taps and syndication to wholesale investors and/or that there are other investors that could be willing to buy government securities if approached with the right type of debt instruments. The DMO should be wary of the potential risk of the adverse situation

\(^{10}\) Although the IBRD charges a fee while a contingent credit line is undisbursed, this cost is still less than the cost of carry for most governments.
where bank deposits migrate to retail government securities, exacerbating banking sector problems and pushing domestic rates up.

**Prerequisites:**

33. **Debt managers need to know their investor base and have active communication, both with them and intermediaries, to quickly identify if there are problems with the distribution channels or with the type of instruments being offered to wholesale investors.** Regular meetings with investors could help design alternative sale mechanisms or modify debt instruments according to the investors’ needs.

34. **Debt managers should explore in advance the potential of programs directed to retail investors in the country or abroad.** These programs could offer funding alternatives at attractive prices. Retail debt programs are intensively used in several countries in Asia as well as in some high-income countries in Europe and America. Israel and, to some extent, India provide good examples of programs directed at non-resident retail investors, targeting the diaspora.

**Pros:**

(i) Approaching wholesale investors directly could be cost effective and may help governments to maintain the flow of funding in an environment where financial intermediation is severely curtailed.

(ii) Retail investors and “diaspora” programs may provide a cheaper funding source compared to wholesale investors and could have additional benefits of providing healthy competition to the banking sector. Tapping Islamic investors may also reduce the funding pressure from traditional wholesale investors.

**Cons**

(i) Directly approaching institutional investors such as pension funds could be less transparent than auctions and may bring about losses in terms of price discovery.

(ii) Design and implementation of retail debt programs is a lengthy undertaking and can be expensive and ineffective if measured in relation to the funding raised through this channel.

(iii) New instruments may need to be created, which contributes to fragmentation and cannibalization of wholesale instruments. Also, the distribution and back office processing of the new instruments could be costly for the Debt Management Office (DMO).
Analysis

35. **Tapping directly the investor base is a temporary measure that could provide significant relief to the government and to market participants during the crisis.** This alternative may work well when market disturbances affect the traditional channels used for the distribution of government securities. Not only does the success of this alternative channel assist the government in raising the funding required but it also frees PDs from a commitment that is difficult to meet while also attending the investor reinvestment needs. Nonetheless, the debt manager should revert to the PDs as soon as it is practical to avoid undesirable outcomes in the long-run for the well-functioning of markets. In contrast, expanding the investor base to non-traditional segments (retail, Islamic financing) is a measure that could be continued by the DMO and that does not necessarily need to be linked to crisis periods.

36. **DMOs that have fluid and frequent contact with investors will be in a better position to use this tool.** In general, DMOs that are directly responsible for the issuance of the government debt, the relationship with the PDs and that have an investor relation function formally established are more likely to have the timely information on the investors’ needs and the capacity to act when the needs arise. In contrast, DMOs where the issuance and the relationship with PDs is delegated to the CB may find that their front office has limited capacity to engage in a meaningful dialogue with the market participants on a level playing field.

37. **Except in Asia, retail debt programs tend to be a relatively small funding source so they are rather marginal compared to the tools discussed in the first and second objectives.** By itself, retail investors will not take significant pressure off the market, but in some countries this could offer a useful alternative. It is worth noting that developing these programs generally takes a long time, so the program must be in place for this tool to be effective. Islamic financing may also be a promising route in some markets as an alternative source of funding. The degree of development of Islamic financing products is still uneven across countries, with relatively large volumes in some Gulf Cooperation Council countries and Malaysia, for example. A broader set of countries have been looking at this segment more closely and launching (or planning to launch) sukuks (e.g. Turkey).
Objective 2: Adapting the funding program to shifts in the demand for government paper

Tool 1: Adjusting the mix of funding between the international and domestic capital markets

**Definition**

38. **Change the funding program to access domestic capital markets when the international markets are closed or access is seriously curtailed, or vice versa.** However, its usefulness is limited if a government requires foreign-currency financing, for example for debt servicing or to shore up foreign-currency reserves, and is experiencing unexpected currency outflows.

**Prerequisites**

39. **In order to preserve flexibility to access the international markets quickly, the borrower may need to undertake preparatory actions**, such as maintaining regulatory filings, having a credit rating and maintaining ongoing investor relations.

40. **For the domestic market to be a substitute for international bond issuance, the infrastructure for domestic borrowing must be in place** (at a minimum: regulatory framework, primary market channel, registry, clearing and settlement systems).

**Pros**

(i) Enhances the ability of the government to fund cost effectively during a crisis

(ii) Alleviates market stress by reallocating supply to better match demand for particular segments of government securities.

**Cons**

(i) Such a shift in financing represents a departure from the original borrowing plan, and possibly the portfolio guidelines set out in the medium-term debt management strategy. These were developed to ensure fiscal stability over the medium term: if the departure from the strategy persists, then the government could find itself in a vicious cycle of increasing portfolio risk and vulnerability to shocks.

**Analysis**

41. **In weighing up this approach, the debt manager would be trading off one type of risk against another.** For example, if the domestic market has elevated yields and demand only for short-dated securities, the international markets may be attractive in terms of cost and the manage-
interest-rate and rollover risks, but increases the level of currency risk. The ability to implement this measure therefore would be influenced by the level of currency risk before the crisis hits.

42. **The scaling up of domestic borrowing in the event of closure of the international capital markets reinforces the case for developing domestic debt markets.** At the very least, the basic infrastructure should be in place, namely primary distribution channels, and registry, payment and settlement systems. It is also highly desirable to have a minimum core of debt outstanding in the local market, as this ensures that the infrastructure is functioning and at least some investors are familiar with the instruments. Potential crowding out of private sector instruments is also better mitigated in countries with more developed markets capable of absorbing larger volumes of public debt paper without compromising financing to the private sector.

43. **Careful judgment is required as to the extent and duration of this departure from the original borrowing plan.** It should be employed only long enough to ensure financing during periods of market dysfunction and not to the point of jeopardizing long-run fiscal stability. To support such decision-making, when developing a medium-term debt management strategy the debt office should test debt portfolio alternatives that reflect constraints on market access.

**Tool 2: Adjusting the mix of maturities in the domestic market**

*Definition*

44. **Increase the proportion of short-dated securities compared to the original borrowing plan.**

*Prerequisites*

45. **Such changes to the borrowing program are usually easy to implement by publishing an amended borrowing calendar.** The shift towards a greater proportion of short-dated securities is facilitated by the availability (before the crisis) of short-term instruments in minimum volume – it is typically easier and less costly to enhance the volume of issuance of pre-existing instruments than it is to launch new maturities in times of crisis;

*Pros*

(i) Enhances the ability of the government to fund cost effectively during a crisis (risk aversion by investors is reflected in a steeper yield curve).
(ii) Alleviates market stress by reallocating supply to better match demand for particular segments of government securities. In this way, the government is absorbing risk that investors are less able to bear in a dysfunctional market.

(iii) Such adjustments are easy to implement.

**Cons**

(i) Such a shift in financing represents a departure from the original borrowing plan, and possibly the guidelines set out in the medium-term debt management strategy. These were developed to ensure fiscal stability over the medium term: if the departure from the strategy persists, then the government could find itself in a vicious cycle of increasing interest-rate and rollover risks and vulnerability to shocks.

**Analysis**

46. **A government’s ability to implement this measure will in part be shaped by the degree of vulnerability to interest-rate and rollover risk before the crisis hits.** If the debt portfolio had a relatively even maturity profile that extends to 10 years and beyond, then a temporary departure from original borrowing plan could be more easily accommodated than if the profile was bunched and skewed towards shorter maturities. This highlights the benefits of reducing risk in public debt portfolios during benign economic and markets conditions, in order to provide flexibility to adapt to market dysfunction during a crisis.

47. **Careful judgment is required as to the extent and duration of this departure from the original borrowing plan.** It should be employed only long enough to ensure financing during periods of market dysfunction and with an objective of returning to the original portfolio risk parameters as soon as possible.

**Tool 3: Adjusting the mix of types of securities**

**Definition**

48. **Introduce or increase the issuance of different types of securities, in order to better match demand from existing investors or tap new investors.** Examples include the issuance of floating-rate notes, inflation-indexed bonds, FX-denominated or FX-linked securities, Sharia-compliant instruments, revenue-indexed bonds and instruments tailored to retail investors.
Prerequisites

49. The preparation for new instruments should include: (i) obtaining legal authorization; (ii) undertake cost-risk analysis to determine the impact on the projected cost and risk profile of the debt portfolio; (iii) undertake market consultation; and (iv) design and test implementation procedures.

Pros

(i) This approach diversifies the investor base and therefore may allow the government to source more financing on terms better than otherwise would have been the case.

Cons

(i) If the security type has not been issued previously by the borrower, then the preparation process would result in a longer lead time before funding would be available.

(ii) In the longer run, a proliferation of instrument types may undermine efforts to develop liquidity in the secondary market for fixed-rate government bonds, which forms the benchmark for local-currency fixed-income markets.

Analysis

50. Before introducing this approach, debt office officials would need to analyze the impact of the change in instrument mix on the projected cost and risk of the debt portfolio and may need to recommend revisions to the medium-term debt management strategy as a consequence. If the instrument has risk characteristics that are not in the current portfolio, e.g. introducing inflation-linked or other indexed instruments, this implies considerable work. The introduction of new instruments requires a trade-off between catering for the preferences of specific investor groups, on one hand, versus deepening liquidity in the local-currency fixed income markets on the other.

51. Compared to the first two tools in this section, a change in instrument mix was employed less frequently during the global financial crisis, perhaps given the cons noted above, but it nevertheless represents a complementary alternative that is worth exploring.
Objective 3: Ensuring minimal functionality in the primary and secondary markets

Tool 1: Adjusting issuance mechanisms in domestic markets

Definition

52. Adjust issuance mechanisms in domestic markets to reduce execution risk, facilitate funding and price discovery. Typical adjustments include, among others: (i) changes in auction rules and procedures (e.g.: increased flexibility in auction frequency, timing and targeted sizes provided in auction announcements); (ii) greater use of syndications or tap mechanisms (replacing or in combination with auctions).

Prerequisites

53. Changes in auction rules and procedures or the use of tap mechanisms are usually relatively straightforward, but require close consultation with market participants. Market consultation is critical to identify measures with stronger impact for the well-functioning of primary markets and to convey a clear message on the rationale and objective of such changes.

54. Greater use of syndication requires adequate legal framework, selection criteria for syndicate managers and staff capacity in the debt management office. The legal framework includes authorization for syndication placements of government debt, contractual arrangements with syndicate managers and the underlying rules (typically issued by the country’s Capital Market Authority or equivalent) governing syndicate placements in the domestic markets. Selection criteria for syndicate managers are required to enhance transparency and reduce the risk of allegations of illicit preferential treatment by the DMO to the selected managers. Staff capacity to conduct/monitor the different stages of the process, from selection to execution, is required to guarantee syndicate managers align their efforts to effectively meet DMO objectives.

Pros

(i) Flexibility in frequency of auctions and timing for announcements and target sizes (or the use of tap sales) allows for greater adherence to market demand in periods of crisis, reducing the risk of undersubscribed/canceled auctions.

(ii) Syndications allow improved price discovery, placements of larger amounts of debt, broader distribution across segments of the investor base and follow more flexible timing than auctions.
(iii) DMOs can use syndications as an important vehicle to motivate primary dealers, by providing greater weight in the selection criteria for syndicate managers to the best performing primary dealers.

**Cons**

(i) Greater flexibility in frequency of auctions, timing for auction announcements and target sizes adversely affects issuance predictability. Tap sales are less transparent than auctions, and when used in combination with auctions, can affect bidding and price discovery.11

(ii) Syndications may be more costly than auctions after accounting for syndicate fees and usually require more time to be executed than auctions.

**Analysis**

55. **Volatility in asset prices, weak secondary market activity and greater pressure on public budgets are typical elements adversely affecting price discovery and execution risk in primary markets during a crisis.** These abnormal circumstances may require debt managers to deviate from standard practices of announcing auction calendars, types and amount of securities with a significant time in advance of auctions. Greater frequency of auctions may become necessary to allow the placement of larger amounts of debt and to also diversify the risk of auction failures due to frequent changes in market sentiment in a crisis. Tap sales also add flexibility in the context of unpredictable demand and allow debt managers to better time and adjust to demand preferences more quickly than in auctions. These deviations from standard practices need to be closely monitored. While useful in periods of crisis, their prolonged use may affect the development of a liquid secondary market and bear a higher cost of funding in the medium and long-term.

56. **The advantages brought by syndications are especially compelling in times of crisis.** Improved price discovery, placement of larger amounts of debt, broader distribution and flexible timing are all highly valuable ingredients that explain the wider use of syndications not only in crisis but also as a regular mechanism to issue government debt. However, syndications have limitations and usually should not completely replace auctions. The two mechanisms work best in combination. Syndications require greater time for execution and are better suited for the launch of benchmark instruments and instruments that are more difficult to price, such as linkers. Auctions can be conducted more frequently and in smaller amounts, ideal for reopening of benchmark securities and issuance of shorter-term debt.

Tool 2: Adjusting rules for Primary Dealers (PDs)

Definition

57. Adapt PDs rules to abnormal circumstances due to a crisis aiming to: (i) support DMO strategic objectives in primary and secondary markets; (ii) form a set of incentives and obligations to which PDs could realistically commit to.

Prerequisites

58. Credible arrangements with PDs should already be in place ahead of the crisis. This usually takes the form of an agreement (convention) between PDs and the DMO which includes incentives and obligations for primary dealers’ support in primary and secondary markets. DMOs should also set performance evaluation criteria to select or exclude PDs. PD systems may not be recommended in every country. Before launching such a system, it is necessary to conduct an assessment following country specific circumstances (e.g. market size, characteristics of the investor base, etc.).

Pros

(i) Effectiveness of PD systems is enhanced in support of strategic priorities during the crisis (e.g. DMOs may enhance emphasis of PD rules on primary market incentives and obligations to improve funding conditions).

(ii) Reduces the burden on PDs to commit to obligations that may become excessively costly or unrealistic during a crisis (e.g. strict market making obligations).

(iii) Adjusting PD rules to crisis circumstances avoids lack of compliance of PDs and safeguards the credibility of the PD system.

Cons

(i) Relaxation of PD rules, especially in secondary markets, rescues all PDs. This uniform treatment may reduce efforts that some PDs in a stronger position could still employ.

Analysis

59. PD systems may play an important role in support of well-functioning government securities markets. PD rules usually cover incentives (e.g. exclusive or privileged participation in primary

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12 An analysis of pros and cons of PD systems is beyond the scope of this toolkit. For more details please see the World Bank. March 2010. “Primary Dealer Systems”, Gemloc Advisory Draft Background Note
markets, liability management transactions and/or non-competitive subscriptions) and obligations for their participation in: (i) primary markets (e.g. buy a minimum share of debt issuances, active participation in auctions); and (ii) secondary markets (e.g. meet minimum share of trading volume, provide quotes to other PDs and customers).

60. **PD rules may become inadequate during a crisis either due to changes in strategic debt management priorities or because the balance of incentives and obligations is severely affected, compromising the willingness or ability for PD compliance.** It is advisable to adjust rules in these circumstances, aligning them to strategic priorities and to efforts that PDs can commit to even during the crisis. While exact adjustments will depend on the country and nature of the crisis, common adjustments include (i) enhanced weight to incentives and obligations in primary markets; and (ii) relaxation of market making obligations, such as commitments to quote minimum bid/ask spreads. This is usually done by allowing larger minimum spreads; computing spreads on a relative basis across PDs (each PD needs to maintain spreads consistent with the overall average practiced by other dealers), or by temporarily suspending quoting obligations.

**Tool 3: Market intervention through debt buybacks and exchanges**

*Definition*

61. **Conduct debt buyback and exchanges to alleviate pressure in investors’ portfolios, mitigate volatility and reestablish functionality of primary and secondary markets.** These transactions are effectively used to implement adjustments to market demand with respect to debt maturities and types of securities (as explained in Objective 2, Tools 2 and 3).

*Prerequisites*

62. **From a broader debt management strategy perspective, a country should have a sound debt profile that can absorb enhanced risks that are shifted from the market to the public sector as a result of these transactions.** DMO staff should have expertise to (i) analyze consequences of these transactions in terms of relative value of debt bought back/exchanged (e.g. against reference prices provided by a yield curve) and on the existing debt management strategy, including related cost-risk impact. (ii) select among different formats of buybacks and exchanges (e.g. bilateral transactions, reverse auctions or a combination of the two); and (iii) conduct active market consultation to identify operations with greater potential.
63. **Solid cash management practices are also required as buybacks depend on the use of additional cash, while (cash neutral) exchanges tend to impact the maturity profile, possibly increasing refinancing risk (e.g. short-term debt may be issued in exchange for long-term debt).** Auction systems may also need to be adapted, or alternative systems need to be developed, depending on the format of buybacks and exchanges (e.g. if reverse auctions are used).

**Pros**

(i) May enhance liquidity of investors’ portfolio (e.g. illiquid debt is bought back or exchanged for more liquid instruments).

(ii) May reduce investors’ risk to wide FX or interest rate fluctuations (e.g. local currency or longer-duration debt is bought back or exchanged for hard currency, floating-rate or short-term debt).

(iii) May alleviate debt sell-off pressures and related price volatility in times that secondary markets are dysfunctional.

**Cons**

(i) May adversely affect market perceptions of public debt risk, with potential adverse impact on issuing costs and sovereign credit risk.

(ii) May create additional cash pressures, exactly in periods of increased funding needs.

(iii) Prolonged and excessive use of direct interventions through buybacks and exchanges may create dependency on government support and delay the recovery of secondary markets.

**Analysis**

64. **Buybacks and exchanges have been increasingly used in periods of crisis to reestablish the well-functioning of primary and secondary markets.** These transactions allow investors to make faster adjustments in their portfolios to meet their demand for higher liquidity in times of stress. These operations reduce sell-off pressures in secondary markets, helping alleviate volatility in asset prices and the reestablishment of primary and secondary markets. Buybacks and switches may also provide price references in times where secondary market transactions and price discovery is weak.

65. **While buybacks and exchanges are widely used tools to manage refinancing risk and foster market development in normal market environments, their implementation in crisis periods is more challenging.** Buybacks depend on availability of contingent sources of funding (such as those
presented in Objective 1 of this toolkit). Exchanges may be easier to conduct as it requires no cash, but demand for these transactions may be relatively lower than for buybacks and expected impact needs to be carefully assessed. These limitations call for the design and build up of a contingent plan, instruments and tools that would allow DMOs to promptly employ buybacks and exchanges when a crisis hit.
Section 3 – Country Cases (Romania, Serbia and Turkey)

66. This section will provide practical illustrations of crisis response measures adopted by Romania, Serbia and Turkey among a menu of options provided by the toolkit. Since ECA was the region most affected by the market turbulence mainly nested in the Eurozone, these countries provide relevant experiences for debt managers. They provide a broad range of market access and funding sources from a highly restricted environment in Serbia to a wide range of instruments available both in the local and foreign markets as in Turkey.

Romania

Background

67. Romania's economy boomed in conjunction with its EU accession in 2007 and growth rates in excess of 6% for the period 2000-2008 were associated with the build-up of internal and external imbalances. Large capital inflows and a pro-cyclical fiscal policy stimulated domestic demand to unsustainable levels resulting in two digit current account deficits and inflationary pressures. As bank lending outpaced the growth of local deposits it became increasingly dependent on external financing (parents of foreign-owned banks) making the banking sector vulnerable to liquidity risks if inflows from abroad dried up and foreign exchange risks.

68. The global financial crisis confronted Romania with a “sudden stop” of capital inflows prompted by the global deleveraging process and then with a decline in exports following the recession in advanced economies. The first shock resulted in a contraction of GDP of 6.6% in 2009 (largely led by a drop of domestic demand) after 7.3% positive growth in 2008. Financing requirements as a proportion of GDP skyrocketed from 4.4% in 2007 to 6.9% in 2008 and 17.2% in 2009. More importantly, the authorities forecasts of a GDP growth of 2.5% and a fiscal deficit of 2% of GDP at the beginning of 2009 failed to anticipated the magnitude of the downturn of -6.6% and the actual deficit of 7.3% of GDP.

69. Although gross public debt/GDP grew in 2007 and 2008, the ratio was relatively low around 20% in 2008 so there was room to take on the increase of debt/GDP to 29% in 2009. All through the decade preceding the crisis the structure of the debt had improved steadily from a portfolio

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13 Including the refinancing of public debt
14 The budget deficit in cash terms was 7.3% of GDP
15 Romania did not have a formal debt management strategy until August 2008. As the first strategy was drafted before the crisis, the authorities were taken by surprise and the way to confront the crisis diverged from the intended policies, as it will be seen.
dominated by foreign currency loans to a more balanced portfolio with a significantly higher proportion of marketable instruments and more than 50% of the instruments denominated in Romanian Leu (RON). 16

Financing strategy of Romania during the crisis

70. Signs of macroeconomic imbalances in Romania appeared since mid-2007 driven by a capital-inflow-driven absorption boom and complicated by a surge in Consumer Price Index (CPI) inflation in part reflecting the first-round effects of food and energy price shocks. With risk appetite tanking after the mortgage industry problems in the US, a sharp depreciation of the RON 17 led the National Bank of Romania (NBR) to tighten policy rates at the time of a widening of sovereign spreads. By the time the crisis hit both domestic and foreign interest rates were already high.

71. The unexpected widening of the fiscal gap triggered by the crisis was answered initially (last quarter of 2008) by depleting the cash buffer 18. As these resources were limited and the fiscal gap widened in 2009 the government intensified the issuance in the local market 19 and supplemented this with the financial package agreed with IMF, EU and the World Bank. Compared to 2008 when Romania recurred almost exclusively to domestic financing to finance budget deficit, FX borrowing in 2009 increased five times while domestic funding doubled.

72. The crisis period Oct-Dec 2008 not only closed Romania’s access to the international capital markets but it also triggered a further increase in LX interest rates. With demand disappearing for medium-term government securities Romania was forced to rely on 1 and 3 month T-Bills at the beginning of 2009 20 and it had to wait until August, after the support was secured from the international financial institutions (IFIs), to resume the issuance of longer T-Bills and some benchmark bonds.

73. To complement the issuance of T-Bills the authorities issued T-Bonds in EUR in 2009 for 2.7 billion Euros with 1, 3 and 4-year maturities. Buyers were mainly foreign-owned domestic banks

16 The main improvement was the currency composition: the share of LX debt went from 21% in 2002 to 53% in 2007 and the combined share of RON and EUR went from 55% to 84% during the same period (before the crisis, the plan was to join the EU Eurozone in 2014). Similarly, the country was going more to the markets: borrowing from official institutions came down from 41% in 2002 to 21% in 2007.
17 The RON fell 15% between October 2008 and early 2009.
19 Total new issuances in 2009 amounted to RON 76.1 billion, 87% of which were placed in the short end of the curve.
20 RON 20.3 billion, in the first 3 months of 2009.
that requested these securities as a condition for preserving the exposures in line with the European Bank Coordination Initiative signed in Vienna and Brussels.21

74. **Gradually the country recovered access to the international capital markets and since March 2010 has issued in the EUR and USD markets several times.** With investors reluctant to take medium term securities in local currency, the active role played by the IFIs and the access to the capital markets, it made sense to lean more towards FX borrowing, which is what Romania did after 2009: external funding remains broadly at the same levels and increased in 2012, whereas net domestic funding for deficit financing decreased steadily.

75. **The buyers of government securities continued to prefer short-term LX and FX assets, which resulted in little change in the composition of government securities between 2009 and the first half of 2010.** The sustained easing of monetary policy implemented by NBR between February 2009 and May 2010 failed to induce sizable demand for medium and long-term LX securities22. At the end of July 2010, the Ministry of Finance launched a T-Bond in foreign currency in the domestic market in amount of 1.2 billion Euros to capture the liquidity in EUR hanging in the banking system.

76. **The prevalence of FX instruments since 2009 is also related to the replenishment of the cash buffer started as a condition of the IMF to recover reserves and reduce vulnerability.** Starting in 2010, in order to reduce refinancing risk and avoid seasonal pressures of financing the budget deficit and refinancing the debt, the Ministry of Public Finance decided to establish the foreign currency financial buffer – in amount equivalent to the needs of financing the budget deficit and refinancing the public debt over a time period of around four months.

77. **More recently, the country has recovered ample access both the local and foreign currency debt markets.** Liquidity and a better credit rating23 have eased the country’s access to the international capital markets. Recovery of demand in the domestic market reflects lack of demand for bank credit in the background of the economic crisis, the strict capital adequacy requirements for banks and the announcement of the inclusion of Romanian bonds in the local currency indices of JPMorgan and

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21 See “Romania Government Debt Management Strategy: 2011-2013” p. 11. By virtue of this “gentlemen’s agreement” the nine most important banks pledged not to reduce their exposure in Romania during stand-by agreement and to act proactively to increase capitalization according to the NBR requirements.

22 In February 2009, NBR started a 5-step cutting process of the monetary policy interest rate, down to 8% in September 2009. This descending trend continued in the first half of 2010 with NBR interest rate reaching 6.25% in May 2010.

23 Fitch rewarded the progress on the macroeconomic fundamentals and good performance under the IMF SBAs in 2011, when the credit rating of Romania was raised from BB+ to BBB-. 
Barclays. In this context, the latest strategy documents renew the authorities’ intention of increasing the share of LX borrowing, continuing the policy in place before the global financial crisis.

Application of the “crisis toolkit” in Romania

78. The policy response to the crisis in Romania offers a good example of the use of the toolkit for reducing funding pressure on market sources (Objective 1) and adapting to the shift in investor demand (Objective 2). However the tools to ensuring minimal functionality in the primary and secondary markets (Objective 3) were not used because of the relatively underdeveloped domestic debt market.

79. The first line of defense in the face of skyrocketing financing needs and unsettled markets was filling the borrowing requirements by mechanisms other than the market. In a first stage at the end of 2008 the Central Government (CG) of Romania captured the liquidity available in the central government and in the rest of the public sector. This included mainly the sale of FX deposits constituted with revenues from privatizations²⁴ and to a lesser extent balances in LX in Treasury accounts. Both actions mitigated the impact of higher interest rates and the likelihood of refinancing problems.

80. As the impact of the crisis deepened the government recurred to the IFIs that participated under the umbrella of the IMF Standby Agreement (SBA)²⁵. The financing gap was initially filled with the EU and IBRD loans but as the macroeconomic condition deteriorated further, part of the IMF loan was also used to finance the budget deficit and refinance the public debt²⁶. Although a second IMF SBA was signed in 2011 with the IMF in conjunction with a precautionary agreement with the EU, the importance of multilateral funding gradually decreased with Romania regaining access to the international capital markets in 2010. The country did not approach investors directly or try alternatives such as retail debt.

81. To respond to the shift in the demand for government securities, Romania used part of the toolkit described under Objective 2: it sharply reduced the average tenor of the securities offered denominated in local currency; and issued securities denominated in EUR for the domestic market.

²⁴ While revenues from privatizations belong to the Treasury, they are earmarked for specific purposes and are booked in a designated account. In 2008-2009, the Treasury redeemed the FX deposits with NBR, exchanged the proceeds for LX and used these funds to finance the unexpected deficit. The transaction was recorded as “temporary financing” under the understanding that the account they were taken from would be replenished once the conditions allow it.

²⁵ These included the IMF SBA, a loan agreement with the EU and 3 development policy loans with IBRD.

²⁶ Half of the 2009 tranche II – 0.9 billion Euro and of the 2010 tranches III and IV – 1.2 billion Euro were used to finance budget deficit and refinance public debt.
82. **At the bottom of the crisis Romania stopped issuing medium and long-term securities and focused on cash substitutes such as very short-term T-Bills:** RON 20.3 billion were issued in 3 month T-Bills in the first 3 months of 2009, and 6 and 12 month T-Bills were reintroduced only after August 2009. The shift towards short-term T-bills triggered huge refinancing requirements: from RON12.5 billion in 2008 to RON76.1 billion in 2009. As market situation allowed longer tenor securities were launched late in 2009 and 2010.

83. **This action was complemented with the issuance of securities denominated in EUR as a way to capture the liquidity in foreign currency in the banking system.** In 2009 this debt amounted to 3.9 billion Euros with 1, 2, 3 and 4 years maturities. Buyers were mainly foreign-owned domestic banks that agreed to maintain their exposure in line with the European Bank Coordination Initiative signed in Vienna and Brussels\(^{27}\). Over the last two years, the investors have rolled over the maturing securities in similar instruments.

84. **In sum, the policy response to the crisis allowed the government to mitigate certain financial risks it was facing.** The dramatic increase in the borrowing requirements required a departure from the existing government debt management strategy but the funding was obtained without submitting the portfolio to excessive financial risk\(^{28}\). A significant portion came through a financial package delivered by the IFIs which was also instrumental in helping Romania deal with the fiscal imbalance, the weakening financial sector and the threat of inflation posed by the fall of the RON.

85. **Nonetheless a formal debt management strategy with specific guidelines for managing refinancing risk could have included pre-financing, cash buffers, contingent credit lines and an explicit policy for the use of the financing from multilaterals.** This could have reduced the financing gap, increasing the degrees of freedom of the authorities and their bargaining power with the creditors.

86. **On the domestic side, previous consolidation of larger and more liquid benchmark securities and closer relations with the investors could have served as a buffer as some may have preferred to hold on their investments\(^{29}\).** For instance, selling securities directly to institutional investors such as pension funds could have reduced the selloff and the dependence on the demand

\(^{27}\)“Romania Government Debt Management Strategy: 2012-2014” p. 11

\(^{28}\)In fact, some indicators of interest rate and refinancing risk improved after the crisis mainly as a result of the boost in external financing at long maturities. For instance, average time to maturity increased from 3 years in 2008 to 3.7 years in 2009 and 4 years in 2010. However, the foreign currency exposure increased significantly as the proportion of RON denominated debt fell from about 60% in 2008 to 45% in 2010.

\(^{29}\)At the end of 2006 there were 50 bonds with initial maturity between 2-15 years and average volume of RON 62.4 million.
from commercial banks. It is likely that Central Government of Romania would have required implementing liability management operations focused on providing liquidity and price references on those sectors of the curve keeping some activity in the secondary market.

87. **The crisis also brought about a revision of the debt management strategy** that will make it easier for the CG of Romania to react to this type of events in the future.

88. **First, it emphasized the limitations of the domestic market to provide unexpectedly high volumes of funding without taking refinancing exposure to uncomfortable levels.** Such limitations led to reduce the targeted share for RON in the debt stock from 55% in 2008 to 45% in 2011. Going forward the authorities need to carefully reevaluate the cost-risk tradeoffs to decide on the local/foreign currency mix. This decision will be further complicated by the limited funding needs derived from the fiscal consolidation and the minimum volumes that may be required in the funding operations.

89. **Second, the policy of increasing the share of marketable debt to help develop the domestic debt market and provide flexibility to alter the composition of the debt portfolio has been relaxed allowing a more prominent role to multilateral loans as these constitute a cost effective vehicle to lengthening maturity with minimum exposure to refinancing risk.**

90. **Notwithstanding the need for diversification, the authorities are aware that a deeper and more active domestic debt market would have probably given them more room for maneuver.** It might have reduced the package of the IFIs and the corresponding exposure to the risk of a sharp fall of the RON. In this regard, the strategy document for 2012 contains a plan including: (i) revise the Primary Dealer (PD) system; (ii) include Romania in the indices for domestic currency bonds; and (iii) increase size and maturity of benchmark bonds to better suit the needs of the institutional investors.

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30 In 2012, the ceiling is raised to 50% to force more LX funding (“Romania Government Debt Management Strategy: 2012-2014” p. 9).
31 “These [IFI] loans may provide longer maturities with attractive interest rate terms (compared to maturities provided by the foreign capital market) backing the efforts made to reduce the refinancing risk and balance the maturity composition of the debt portfolio” (“Romania Government Debt Management Strategy: 2012-2014” p. 27)
32 On the other hand, in the face of a capital flight triggered by the lack of trust in the government policies it is unclear how much a more developed domestic debt market could have helped.
Serbia

Background

91. **In the years before the global financial crisis Serbia enjoyed reasonably strong GDP growth, averaging 6.3% per annum in the five years ending 2008.** However, growing imbalances in the economy saw a widening current account deficit driven by excess domestic spending and financed through a largely foreign-owned banking system. Inflation remained high (the highest in the region) and inflation expectations were even higher (see Table 1). Deep seated inflation fears resulted in most savings being denominated in euros and banks’ domestic lending business is also largely in euros. The high level of euroization has made it difficult to develop the domestic debt market and extend the yield curve, and there are sizable unhedged foreign-currency exposures across the economy.

92. **Public debt was reduced significantly between 2000 and 2008 from almost 170% GDP to a relatively low 29.2% GDP (including guarantees granted by the Republic) when the global financial crisis hit in 2008.** This reduction in the ratio included debt write-offs by the Paris and London Clubs, budget deficit reduction, privatization receipts, and a rise in GDP. At the end of 2008, the public debt portfolio comprised largely loans from official creditors (53% of public debt) and “old foreign currency savings bonds” (32%), a legacy instrument related to the effective appropriation of residents’ foreign-currency savings during the breakup of the Socialist Federal Republic of Yugoslavia. There were virtually no outstanding treasury bills and government bonds denominated in local currency (less than 3% of public debt was denominated in Serbian Dinar (RSD)). Although issuance of 3 and 6 month bills commenced in 2003, this dropped off after 2005 due to privatization receipts and a broadly balanced primary fiscal position.

Financing strategy of Serbia during the crisis

93. **The crisis has had two broad phases in Serbia:** (i) global financial crisis in late 2008 and early 2009; (ii) the eurozone sovereign debt crisis, which started to impact in 2010 and is on-going.

(i) 2008 - 2009

94. **Serbia was impacted rapidly by the global financial crisis in late 2008 through both the trade and finance channels.** Capital inflows reversed rapidly, households withdrew a sizable proportion of their deposits and exports and imports plunged. Given the reliance on capital inflows and faced with a large projected external financing gap, the authorities implemented a program with three components, supported by an IMF stand-by arrangement:
- **Fiscal adjustment:** according to the IMF, the crisis uncovered a weak structural fiscal position, estimated to be a deficit of 4.5% in 2008. To address this and to support external rebalancing, the government restrained expenditure through freezing wages and pensions in nominal terms and cutting back investment.

- **Innovative private sector support program:** given that foreign-owned banks had filled most of the financing gap before the crisis, their involvement in addressing the impact of the crisis was critical. This included assurances that the parent banks maintained their external exposures to Serbia and keeping their subsidiaries capitalized and liquid.

- **Financing from international financial institutions and bilateral creditors:** This was implemented to close the remaining external gap, although most of this was mobilized in 2010.

95. **This set of actions mitigated the financial impact of the crisis, with capital flows turning positive by February 2009 and deposits returning to the banking system by January and recovering to pre-crisis levels by the end of 2009.** In fact, balance of payments developments were more positive than expected during 2009, with a smaller financing gap and larger capital inflows, resulting in an increase in level of foreign currency reserves. The fall in output was less than some comparator countries in the region, but the decline in domestic demand aggravated already-high levels of unemployment. Government’s net borrowing in 2009, at 3.7% GDP, was almost double that of the previous year.

96. **The government met most of its increased financing need by recommencing borrowing in local currency through the issuance of 3, 6, and 12 month treasury bills.** By the end of 2009, outstanding balances of local currency debt were RSD120.7 billion, or almost 13% of total public debt (up from 2.6% of public debt at the end of 2008). To some extent, the ability of the government to borrow more was supported by a reduction in lending to the private sector. While foreign parent banks generally kept their exposure commitments to Serbia, there was a shift in composition towards short-term government instruments, both treasury bills and central bank repos.

(ii) 2010 - 2012

97. **While the global financial crisis resulted in a contraction in economic activity of 3.5% in 2009, the policy actions implemented by the authorities resulted in a return to growth in 2010.** The depreciation of the RSD and a lack-luster non-tradable sector supported an export-led recovery, with real growth of 1.0%. However, the intensifying eurozone crisis and Serbia’s reliance on exports to
this area created headwinds and growth in 2011 was 1.8%, versus projections (in late 2010) of 3%. Conditions deteriorated markedly in 2012, with the IMF projecting a contraction in real GDP of around 2%. A combination of negative growth, limited fiscal response in 2012 and currency depreciation are projected to push public debt levels to 63.2% of GDP by the end of 2012, above the legal limit of 45% of GDP.

98. The government’s public debt management strategy during the period 2010 to end 2012 has been to meet the greater share of the net financing requirement from the domestic market. The maximum tenor of RSD nominal instruments was lengthened to 18 months in 2010, 3 years in 2011 and 5 years in 2012. However, the high degree of euroization and persistent inflation concerns limited the speed and extent to which the RSD market could be expanded, and some domestic borrowing was denominated in EUR. Furthermore, the government in September 2011 borrowed for the first time in the international capital markets with a USD1 billion 10-year borrowing, which was doubled in size with a reopening in September 2012. A five year USD750 million Eurobond was issued following the re-opening of the first Eurobond, indicating increased expectations for a new program with the IMF.34

Indeed, official sources of financing were not forthcoming as the IMF suspended the precautionary IMF SBA in February 2012 on evidence Serbia was slipping on agreed deficit and debt targets. Without an IMF program, other multilateral institutions such as the World Bank followed suit.

Application of the “crisis toolkit” in Serbia

99. As noted earlier, the main issue facing the country in 2008 was the risk of a sudden stop in capital flows, upon which the economy was heavily reliant. The financing response to the crisis centered around mobilizing official financing, supplemented by private sector participation to maintain credit lines to the Serbian financial system. The other non-market mechanisms (excess liquidity in the public sector and directly tapping the investor base) were not required in the Serbia case. The inability to mobilize official sources of financing in 2012 illustrates that meeting policy conditionality can be challenging, especially in an election year, and is a limitation of this type of financing.

100. As Serbia had very little market-sourced debt when the global financial crisis hit, when markets stabilized in 2009 there was scope to begin tapping this source to finance the expanding fiscal deficit. As 97% of the debt was denominated in foreign currencies and the exchange rate regime was a managed float, there had long been recognition that currency risk was the major issue to

34 In the first 9 months of 2012, the government achieved 60% of its financing in the RSD market, with the balance coming from USD international bond and euro-denominated securities in the local market.
address. Accordingly, the authorities recommenced issuance in the domestic debt market. This process was not easy, given the history of high rates of inflation, and careful calibration of both maturities and instruments was necessary. Steady progress was made, from three instruments in 2009 to nine by 2012, with maturities out to five years in RSD-denominated nominal instruments. This process was facilitated by the fact that the authorities had undertaken measures to develop the domestic debt market before the crisis hit, with support from KfW Bankengruppe and USAID.

101. **However, there were limits around market demand, given high levels of euroization, and borrowing in foreign currencies was undertaken both in the local market and international capital markets.** Specialized instruments were also issued in local currency, to take advantage of the requirements of specific investors, with inflation-indexed instruments (3 and 10 years) and a two-year amortizing bond. The government continued to use auctions for all instruments with the exception of the inflation-indexed bonds, which were private placements.

102. **Given the worsening of the eurozone crisis and significant deterioration in the Serbian economy in 2012, the crisis response could be judged to be a success both in terms of ensuring that the government is financed and in addressing risk in the debt portfolio.** The proportion of debt denominated in foreign currencies has been reduced to 81.1% as of October 2012 from 97% in 2008 and refinancing and rollover risks reduced slightly with maturity extension, although the reopening of the international bond issue has created a maturity spike in 2021.

103. **The ability of the authorities to navigate the crisis has been bolstered by the establishment in 2009 of a dedicated department in the finance ministry to manage debt, the Public Debt Administration (PDA).** The Serbian government produced its first debt management strategy in 2006. The World Bank provided assistance to Serbian PDA in 2011 and a more advanced medium-term strategy was prepared. This was further improved in 2012 with new objectives and improved quantification of risk framework.

104. **While the mobilization of official financing in 2008 was clearly a crisis response, the case is less clear for the actions taken from 2009 onwards.** The government had intended to expand domestic currency borrowing and develop a yield curve well before the crisis, but had no fiscal need during 2005 – 2008. The opportunity to do so arose with the greater borrowing requirement brought about by the crisis.

105. **The Serbia case study illustrates that the crisis response by public debt managers forms one element of a broader policy and financing strategy of the government.** Policy coordination is also
evident in the choice of RSD financing, which supports the government and central bank’s objective to reduce the level of euroization in order to strengthen financial system.

106. It also illustrates that when both the demand for and supply of capital to the private sector declines in a crisis, it may result in greater demand for government securities.

### Table 1: Serbia – selected indicators

<table>
<thead>
<tr>
<th>Year ended</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real GDP growth (% annual change)</td>
<td>3.8</td>
<td>-3.5</td>
<td>1.0</td>
<td>1.8</td>
<td>-2.0</td>
</tr>
<tr>
<td>CPI (% annual change)</td>
<td>12.4</td>
<td>8.1</td>
<td>6.2</td>
<td>11.2</td>
<td>4.1</td>
</tr>
<tr>
<td>Government net lending/borrowing (% GDP)</td>
<td>-2.0</td>
<td>-3.7</td>
<td>-3.6</td>
<td>-4.0</td>
<td>-6.7</td>
</tr>
<tr>
<td>Public debt (% GDP)</td>
<td>29.2</td>
<td>35.5</td>
<td>45.6</td>
<td>50.3</td>
<td>63.2</td>
</tr>
<tr>
<td>Balance of payments (%GDP)</td>
<td>-21.6</td>
<td>-7.1</td>
<td>-7.2</td>
<td>-9.1</td>
<td>-8.6</td>
</tr>
</tbody>
</table>

Turkey

Background

107. The Turkish local currency government bond market has been through remarkable progress over the last decade. While challenges to build a deeper and more liquid market still exist, such as the further lengthening of the yield curve and increased diversification of the investor base, significant progress reached in the years ahead of the crisis, provided the Turkish bond market greater resilience to withstand the severe shock experienced in 2008/09.

108. Sound macroeconomic policies, implemented specially after 2001, provided an enabling environment for developments in Turkish debt markets. Central government debt stock defined by EU standards to GDP was reduced from 67% in 2003 to 39% and 40% in 2007 and 2008 respectively. Similarly, high inflation rates in the 1999-2003 period (65% and 25%) were brought down to 9% and 10% in 2007 and 2008.

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36 GDP 2012: IMF estimates (media release 12/451)
37 International Monetary Fund (IMF). April 2012, “World Economic Outlook: Growth resuming, dangers remain”
38 Id.
39 Net lending/borrowing 2012: Projections of Fiscal Council, Republic of Serbia
41 International Monetary Fund (IMF). April 2012, “World Economic Outlook: Growth resuming, dangers remain”
43 The World Bank, World Development Indicators
Debt management reforms in primary and secondary markets were also introduced helping develop the medium and long-term segments of the yield curve. The process of lengthening maturities started before the crisis. For example, through the launch of 5 year fixed coupon bonds in 2005, continued in the aftermath of the crisis with 7 year bonds in 2009 and 10 year bonds in 2010. These positive developments on the macro and debt management fronts helped improve the sovereign credit rating from B+ in 2000 to BB in 2010. It also enhanced attractiveness of Turkish markets to foreign investors, which as of November 2012 held 23% of the domestic debt, which stands above pre-crisis levels of 13% in 2007.

Financing strategy in Turkey during the crisis

Turkey was not spared from the adverse consequences brought by the crisis and experienced significant impact on its economic activity, labor market and tax revenues. GDP growth of 4.7% in 2007 slowed down to 0.7% in 2008 and further contracted by 4.8% in 2009. Sharp contraction in foreign demand affected the labor market, pushing unemployment rates to historic highs, while total tax revenues dropped by 0.9 percent in the fourth quarter of 2008 (compared to a year earlier), despite the strong tax performance in the first three quarters of 2008. The downward trend in tax collection continued further in 2009 until the third quarter of 2009 when it started growing against the similar quarter of 2008.

The fiscal deficit and debt-to-GDP ratio were also adversely impacted driven by the challenging economic context and higher government spending. The sharp drop in tax revenues and adoption of fiscal stimulus packages caused increases in fiscal deficit and borrowing requirements of the Turkish government. Turkey’s fiscal deficit grew substantially in 2008 and 2009 (from -2.1 percent of GDP in 2007 to -2.9 and -6.2 percent in 2008 and 2009, respectively). The debt-to-GDP ratio increased in 2009 to 46 percent up from 39 percent in 2007.

Yields and volume of trading in the secondary market of government securities showed wide fluctuations during the crisis (see Chart 1). The impact was more noticeable from September to December 2008, following the Lehman Brothers collapse, but increased uncertainty had already been

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46 Id.
47 Calculations are based on the data by the Turkish Ministry of Finance
observed in June and July of 2008. Yields dropped significantly in 2009 against the backdrop of reduced inflationary expectations and cuts in policy rates of 700 basis points in the November 2008-April 2009 period, by the Turkish Central Bank. These also translated into reduced borrowing costs for the Turkish Treasury, and between January and April 2009, the interest rate of Turkish Lira-denominated (TL) government bonds decreased around 4.3 points compared to year 2008 on average.\textsuperscript{50}

Chart 1: Turkey – Yields and trading volumes of government securities\textsuperscript{51}

113. Access to international capital markets was also affected in the last quarter of 2008. In that year the government had 4 Eurobond issues, with the last issue taking place in early September. Due to the difficult environment in international capital markets, total issuances in external markets reached TL 10.9 billion, below the target of TL 15.3 billion that had been announced under the 2008 Financing Program.\textsuperscript{52} The external market for Turkish government bonds reopened in January 2009, when the government issued its first Eurobond, followed by two additional Eurobond issues in May and July of 2009.

\textsuperscript{50} Treasury of the Republic of Turkey, Public Debt Management Report 2009
\textsuperscript{51} Treasury of the Republic of Turkey, Public Debt Management Report No. 54
\textsuperscript{52} The gap was mainly filled through the use of cash reserves and funding in domestic markets.
Application of the “crisis toolkit” in Turkey

114. Valuable insights can be drawn on the application of the “crisis toolkit” in Turkey. Among the tools, the Turkish DMO relied more heavily on those linked to Objective 2: “Adapting the funding program to shifts in the demand for government paper”. Policy makers also resorted in some degree to tools covered under Objective 1 (“funding through alternative mechanisms”) and to a lesser degree to adjustments to enhance the functionality of primary and secondary markets (Objective 3).

115. Government authorities adapted the funding program to shifts in demand mainly by adjusting the mix of types of securities: While fixed rate instruments remained the majority of TL-denominated issuances, the share of floating-rate securities increased from 18.9% in 2007 to 32% in 2008 and 38.7% in 2009. Floating-rate debt issuances includes instruments linked to short-term rates (the majority in both periods) and CPI-indexed securities – which grew substantially from TL 2.2 billion in 2008 to TL 21 billion in 2009. The new mix of instruments proved attractive to banks which increased their share in domestic debt holdings from 51.7% in 2007 to 63.4% in 2009, more than compensating the 4.8% decline in the share of domestic debt holdings by nonresidents (from 13.4% in 2007 to 8.6% 2009).

116. The adjustments in the mix of instruments helped the Turkish DMO address an increased aversion to duration risk without compromising the average time to maturity of the debt. Charts 2 and 3 below show that while the duration of TL-denominated debt stock declined from 10.2 months in 2007 to 7.5 months by the end of 2009, average time to maturity remained relatively stable at approximately 25 months throughout the period. Aversion to duration risk has been affecting the market since the second quarter of 2008 (ahead of the Lehman Brothers collapse in September 2008). Although the change in the instrument mix did not aggravate the interest risk on average, the impact was visible in the performance of the strategic benchmarks – share of debt to be refixed and renewed within 12 months. These indicators worsened from 75.6% and 29.2% in 2008 to 78.3% and 38.7% in 2009, respectively, to resume their downward trend afterwards.

Chart 2: Turkey – Time to maturity of domestic debt stock
The use of a cash buffer (described in Objective 1), especially during the periods of abnormal volatility in secondary markets (e.g. June-July and September-December/2008) was a strategically important crisis response measure. September and December 2008 were the months of greater use of the cash buffer TL 9.3 billion and TL 7.6 billion, respectively. Availability of cash reserves in those extreme circumstances allowed the Turkish DMO to issue less debt and avoid a greater debt burden at the peak of the crisis. By using cash and reducing the overall supply of debt, the DMO also supported market recovery, avoiding additional pressure in yields of government securities.

Another crisis response tool was the launch, since January 2009, of revenue-indexed bonds as a way to diversify financial instruments and broaden the investor base. This tool falls under Objective 1 of the toolkit. The revenue-indexed bonds were not designed as a specific direct response

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Chart 3: Turkey – Duration of TL-denominated domestic debt stock

(1) Excluding non-cash securities and CPI-indexed government bonds

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53 Treasury of the Republic of Turkey, Public Debt Management Reports No. 42 and 54
to funding issues in the crisis. Rather, by tapping savings of a particular investor base and diversifying the set of instruments, they contribute, inter alia, to the crisis response measures set of the DMO. The coupon payments of these bonds were indexed to the transfers of state-owned enterprises to the budget as “Revenue Shares” by Turkish Petroleum Corporation, State Supply Office, State Airport Authority and Coastal safety. In 2009, the Treasury issued TL-denominated and USD-denominated revenue indexed bonds in several tranches with varying maturities and coupon payment frequencies for a total of TL 1.24 billion\textsuperscript{54}. New issues took place in 2010, 2011 and 2012, but their popularity has been dropping especially due to claims that these bonds are not Shariah compliant. Sukuk bonds, called lease certificates, appear to be more promising instruments to expand the reach to Islamic investors. The debut issue of TL 1.6 billion by the Turkish Treasury in 2012 was a success, drawing strong demand from around the world.

119. At first sight, the Turkish DMO did not have to resort to crisis response tools to guarantee minimal functionality of primary and secondary markets (Objective 3 of the toolkit). This is partly explained by the level of resilience and development of the Turkish government securities markets. But these could not be the only reasons. Several countries with similar or more advanced levels of development had to use one or more of the three tools: (i) adjust issuance mechanisms in domestic markets; (ii) adjust primary dealers’ rules; and (iii) implement market interventions through debt buybacks and exchanges. After a closer look at current practices in the Turkish debt market, the following considerations help complement initial explanations:

- Turkey’s auction announcements already contained less detailed information than those generally provided by peer countries. For example, targeted issuances amounts are only informed as a total monthly target, without specifying target amounts per instrument. Therefore adjustments observed in several countries to allow greater flexibility in announcements were not necessary in the case of Turkey.

- Similarly, primary dealer quoting obligations in Turkey were already flexible, linking the size of spreads to the level of rates. This procedure allowed dealers to quote larger spreads in periods of higher yields, alleviating the pressure they faced in times of market stress.

- Debt buy backs and exchanges are used by the Turkish DMO with certain regularity, but not with the main goal of reestablishing the well-functioning of primary and secondary markets during a crisis. Instead, these transactions are being used especially to reduce refinancing risk (a common

\textsuperscript{54} FX rate as of 28.01.2009: 1.618 TL = 1 USD
practice in other countries as well). According to authorities these operations were not really needed during the 2008/09 to support primary and secondary markets. Should the market have suffered more severe selling pressures, buybacks and exchanges could have been additional ammunition to add to the arsenal of crisis response tools used.

120. Turkey’s crisis response case is a solid and rich example of the relevance of building local currency bond markets and sound debt management. In spite of the magnitude of the crisis, the Turkish domestic market was an important anchor to support pro-active countercyclical policies and to absorb higher funding needs. Domestic borrowing increased by 44\% in 2009, from TL 96.3 billion in 2008 to TL 138.9 billion in 2009, and comprised roughly 90\% of total borrowing in the two years. Roll-over ratios (i.e. the ratio between issuances and redemptions) reached 108\% in 2009 against 77\% in 2008, excluding CB instruments. Once the macroeconomic situation improved, interest rate and refinancing risk indicators improved beyond pre-crisis levels. Thus, the duration of the TL-denominated domestic debt stock returned to a pre-crisis upward trend in 2010 and by the end of 2012 the duration reached 15.0 months from 10.2 months in 2007. The average maturity of the domestic debt stock also exceeded the pre-crisis 2007 level of 25.7 months, having increased to 33.6 months by the December 2012.\(^{55}\)

121. The response tools used by the Turkish DMO in the recent crisis were relatively limited to: adjusting the mix of instruments; using cash buffers; and creating new types of securities to tap a broader investor base (Revenue Indexed Bond). While these were effective for dealing with the 2008 - 2009 crisis, the use of a broader set of tools should not be ruled out in the future, as it depends on the nature of future crisis, which is hard to predict, and on market practices, which changes with time. DMOs should ensure that staff is prepared to identify possible tools under different types of crisis and make good judgment on the adequate set of policy responses to use.

\(^{55}\) Treasury of the Republic of Turkey, Public Debt Management Report No. 90
Section 4 – Conclusions

122. The country case studies and analysis provided on each tool demonstrate that some preparedness is necessary or significantly facilitates their use. Therefore, debt managers are advised to consider which tools could be applicable in their countries and determine those areas where it is worth investing time and effort to improve the DMO’s response capacity in the event of a crisis. In a way, the toolkit could be thought of as business continuity and disaster recovery plan that protect the DMO against liquidity and funding risks.

123. Funding from other sources to reduce pressure on traditional wholesale market borrowing requires that debt managers have policies and procedures in place for channeling liquidity in the public sector and instruments to access multilateral funding in an agile manner. Cash buffers are the first line of defense and their effectiveness increases with specific guidelines that define liquidity cushions as a proportion debt servicing flows, or, funding requirements over a given period and with sound cash management practices that reduce the opportunity cost. Tapping pools of liquidity in the public sector requires up-to-date information and legal and operational frameworks in place and these operations should be performed at market terms and only for crisis situations in order to mitigate the moral hazard of public entities considering symmetric arrangements to access government funding when in trouble. Finally, rapid access to multilateral lending depends on having contingent credit lines open and keeping unused credit limit in other traditional windows.

124. The debt manager’s capacity to adjust the funding program depends on how prepared the DMO is to varying its borrowing program. A shift towards FX funding requires having a credit rating and maintaining regulatory filings in the international jurisdictions used by the issuer while stepping up the LX financing necessitates of a functioning primary market and a clearing and settlement infrastructure that works. Changing the maturity profile only requires amending the borrowing program, which in most cases, can be easily done. Introducing new securities on the other hand is a more challenging undertaken, as it needs legal authorization, market consultation as well as design and test implementation procedures. All tools used for achieving the second Objective may imply a temporary departure from the medium-term debt management strategy.

125. A strong Middle Office can help deciding how much and for how long can the DMO depart from the medium-term debt management strategy. While fund raising becomes the primary objective in times of disturbance, there are tradeoffs to be made and room for discretion with regards to the type and timing of the transactions. The Middle Office should not lose track of the medium
term debt management objectives and should take into account the original portfolio exposure and the room for taking additional risk when determining the extent and duration of the departure from the debt management strategy. In so doing, the Middle Office can contribute to the DMO’s flexible response to unforeseen extreme circumstances while minimizing the risk to the stability of the medium-term government finances.

126. **Ensuring minimal functionality in the primary and secondary markets constitutes a higher-level objective, which can be more easily achievable for the more active DMOs.** Adjusting the rules of the auctions, or, moving to syndications or tap issuance requires market consultations and a minimum legal framework establishing the procedures for floating debt in the primary market. Relaxing the rules for the Primary Dealer system requires the existence of agreements determining the obligations and privileges of these market players and a consultation process. Finally, the implementation of buyback and exchanges needs of a robust analysis of the impact of these operations in the overall cost and risk of the portfolio as well as solid cash management practices.

127. **A reasonably developed capacity in the Front Office could facilitate attaining the second and third Objectives and will be particularly useful in the planning and execution of liability management operations.** By keeping in constant communication with market participants the Front Office can help to timely detect a shift in the preferences of investors that affect the government funding activities. An active and effective investor relations function, be it with the Front or the Middle Office, could prove extremely useful when deciding and implementing changes in the funding mix affecting the markets being tapped, or the securities or maturities being issued. Furthermore, capacity for execution is a prerequisite for DMOs to undertake liability management operations including swaps, exchanges and buybacks to provide price signals for key benchmarks and help obtain the funding while minimizing the disruption of fragile financial markets.

128. **EMs responded to the crisis in a reactive manner.** The toolkit compiles the main crisis response measures and provides a framework debt managers could use to think in advance on the actions needed to become more flexible and agile should a crisis hit. Although the challenges for debt managers will be similar, raising unexpectedly high borrowing requirements in a hostile environment, these actions will be different across countries reflecting the degree of domestic debt market development and sophistication of the DMO. The three country cases show diverse responses to the crisis reflecting the different state of development of the debt management function especially the depth and breadth of the domestic debt market. While Serbia relied primarily on the assistance of IFIs and Eurobond issuance, Turkey responded with a set of actions directed to the domestic investors.
Romania used both: it filled most of the funding needs locally but then counted on a decisive support from IFIs until later it was able to regain access to the international capital market.

129. **Nonetheless the applicability of the toolkit will vary depending on the type of crisis.** Some crises are short and with severe consequences, such as the global financial crisis in late 2008, whereas others have a slower onset and intensify over time, such as the eurozone crisis starting in 2010. Increasing the proportion of short-dated borrowing was appropriate in 2008 when the severe market dysfunction lasted for a few months, but may not necessarily work under longer protracted disturbances. If used for longer time periods short-dated borrowing may trap the government in a vicious cycle of increasing interest-rate and roll over risks.

130. **The crisis response measures covered in the toolkit will usually be part of a broader crisis response package involving other stakeholders.** The nature and impact of a crisis that a debt manager is required to manage will vary and usually affect the private sector and/or financial system (e.g. as a consequence of capital outflows). Therefore, the measures adopted by a debt manager will be part of a broader crisis response package, and would need to be closely coordinated with the fiscal and monetary authorities and financial sector regulators.
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