

Historically, economic crises/shocks have provided valuable lessons for fiscal-monetary co-ordination. The global financial crisis of 2008 evoked expansionary fiscal and monetary policies in cohesion. A post-crisis evaluation suggests the need to address financial stability as a separate objective besides growth and price stability in the context of fiscal-monetary co-ordination, while associated risks from the financial sector on the real economy would have to be analysed endogenously. Other post-crisis challenges include the primary involvement of central banks in financial stability policy in addition to their core responsibility of price stability, greater proactive interaction between central banks, governments and other authorities to address financial stability issues, risks of negative feedback from sovereign debt-related concerns, calibration of fiscal consolidation to avoid a collapse of aggregate demand and greater fiscal-monetary co-ordination at the international level. In India, while phasing out of automatic monetisation and discontinuance of Reserve Bank's participation in the primary government securities market have reduced the degree of fiscal dominance, the Reserve Bank's open market purchases, though largely guided by the objective of liquidity management, at times, result in de facto monetisation of deficit. In the wake of the post-crisis escalation of fiscal deficits, which has unwound the cushion created during the pre-crisis rule-bound phase in India, returning to a credible path of fiscal consolidation would require addressing the structural constraints in government finances in a durable manner. Going forward, greater fiscal-monetary co-ordination in a frame work where central bank autonomy is not compromised is desirable, particularly in attaining the overarching objectives of growth, price stability and financial stability.

6.1 The analysis of international and Indian experiences shows that fiscal and monetary policies need to co-ordinate at all times to improve macroeconomic welfare, although the form of co-ordination has varied during different episodes of economic crisis/shock. The global financial meltdown of 2008 challenged the prevalent view that monetary policy should be used to stabilise the economy in the short-run, whereas fiscal policy should be used to address income distribution concerns and establish the foundations of long-run growth. The global financial crisis evoked an unprecedented fiscal stimulus together with an accommodative monetary policy. Interest rates were reduced further from their low levels, and several advanced countries resorted to unconventional expansionary measures, as monetary policy operations were constrained by their low interest rate bounds. After the post-global financial crisis, financial stability has emerged as another important policy objective, besides growth and price stability, of monetary policy. Going forward,

the financial stability issue has assumed another dimension with feedback loops emerging from concerns relating to fiscal and sovereign debt sustainability. In India, although the implementation of the FRBM Act, 2003 has reduced fiscal dominance of monetary policy, fiscal constraints continue to occupy a central position on the back of sizeable market borrowing programmes, necessitating open market operations to address liquidity concerns. Against this backdrop, this chapter flags the major policy lessons and challenges that policymakers may face in the area of fiscal-monetary co-ordination at the international level, as well as in the Indian context.

Macroeconomic stability not a sufficient condition to guard against financial instability

6.2 Prior to the global financial crisis, the broad consensus, both in academia and among central banks, was that achieving price and output stability promotes financial stability. Paradoxically, the stable macroeconomic environment prevalent up to 2007

turned out to be a harbinger for under-pricing of risks; it allowed the pursuit of pro-cyclical fiscal and monetary policies and led to the build-up of financial imbalances. This indicated flaws in the pre-crisis policy framework. In particular, monetary and financial policies failed to incorporate fully the implications of rapid pro-cyclical growth on financial leveraging and risk-taking, especially across national borders, while the fiscal policy failed to create sufficient space for policy manoeuvre in the event of a crisis. During the crisis, the explicit pre-crisis assignment of policy instruments to objectives became blurred. The recent experience from the global financial crisis has demonstrated that macroeconomic policymaking is expected to do a fine balancing act to achieve multiple and, at times, conflicting objectives of monetary stability, fiscal stability and financial stability.

6.3 The existing models need to provide for the integration of financial sector more substantively, so as to allow the balance sheet channel of financial intermediaries and risk premia to influence economic outcomes. The substantive incorporation of financial intermediaries would enable these models to predict how asset prices and financial frictions interact with the real sector and, in that process, generate booms/busts endogenously. Policy authorities would have to remain alert to feedback between credit, asset values and binding financial constraints. They have to guard against undesirable macroeconomic outcomes of sustained deviations of asset prices from their fundamentals, whether resulting from co-ordination failures and herding among rational agents or from irrational pricing of risks that generate self-reinforcing waves of optimism and pessimism.

6.4 With the ongoing sovereign debt crisis, the feedback loops between financial and sovereign debt sustainability need to be properly assessed. It emerges that an appropriate mix of fiscal, monetary and macro-prudential policies may have to be used to achieve macroeconomic objectives without adversely affecting financial stability. In the near term, it may be important to support the recovery process, keep inflation low, and pursue internationally co-ordinated financial and structural reforms that would

help enhance financial market resilience and strengthen the prospects for macroeconomic stability. In the medium-term, the policy priority should be to ensure that the overall policy framework is more robust than prior to the crisis, which may require institutional reforms with adequate space for fiscal-monetary policy co-ordination.

Financial stability, although a primary mandate for central banks, necessitates greater co-ordination with fiscal authorities

6.5 After the global financial crisis, it is being held that the central banks' involvement in the formulation and execution of financial stability policy must increase if such a policy is to be effective. Although in the post-crisis period central banks are still grappling with balancing the demands of price stability and financial stability in an uncertain global environment, concerns about fiscal and sovereign debt sustainability seem to have added to their challenges. In this context, the role of the central bank in the prevention, management and resolution of financial crises involves a number of intricate issues. These issues pertain to governance arrangements needed for the effective and sustainable conduct of core monetary policy functions in combination with an explicit mandate to contribute to financial stability, taking into account the impact of growing sovereign debt burdens on the autonomy and governance of central banks.

6.6 In short, the global financial crisis seems to have underscored the need to expand the mandate of central banks from the single objective of price stability to multiple objectives of price stability, financial stability and sovereign debt sustainability. However, achieving these objectives are no less than a trilemma, as there is vast scope for trade-offs between these policy objectives. Central banks may not be able to determine the degree of precision for *inter se* priority to be accorded to each of the three objectives under different sets of circumstances. The recent massive government budget deficits in advanced countries and the reluctance to rein in future entitlements indicate that fiscal dominance may

pose greater challenges for central banks to ensure financial stability. It, therefore, calls for a greater degree of co-ordination between various decision-making authorities to avoid conflicts and achieve optimum macroeconomic outcomes.

Need to lay out a policy co-ordination framework

6.7 Unlike the Great Depression period, the central banks' response to the recent global financial crisis has been multi-dimensional and has proved to be effective. Nonetheless, central banks have taken significant credit risks on their balance sheets through their liquidity management operations and credit enhancement policies. Further, the use of unconventional measures undertaken by the central banks with a fiscal element has diluted the boundaries between the mandates of public debt management and that of monetary policy operations. While the national debt management offices operated more extensively at the short end of the yield curve, central banks became active in the long-term segment of the government bond markets. Many studies (*e.g.*, Blommestein and Turner, 2012) argue that these developments may lead to a situation of fiscal dominance and, thereby, interfere with the conduct of monetary policy. Going forward, therefore, the policy functions and objectives of central banks are likely to have greater interaction with those of fiscal/debt management authorities. In this *milieu*, the policy decisions of various authorities would increasingly become inter-dependent, necessitating close interaction and co-ordination between them, though it does not necessarily mean the loss of independence of central banks. Co-ordination structures may vary across countries and could involve formal advice being provided to the responsible agency by other experts. However, whether financial stability should be an exclusive mandate for central banks or whether a formal body should look into systemic risks and financial stability issues is still debatable. Similarly, there is not yet any consensus on whether 'arm's length' co-ordination or face-to-face discussion should be the main co-ordination mechanism.

6.8 The choice of co-ordination mechanism may also depend on whether fiscal authorities have a

proper understanding of the monetary policy reaction function, and the same applies to the monetary authorities as far as fiscal policy rules are concerned. If this is the case, then each authority can tacitly take account of considerations of the other without going for face-to-face discussions. Such a co-ordination mechanism has worked effectively in normal periods. However, under the current phase of extreme adversity during the post-crisis, as might be characterised by Sargent's "unpleasant monetarist arithmetic", policymakers may have to move towards the extreme situation of joint decision-making. As the interaction between various policies is expected to be complex, the need for new functional arrangements between fiscal authorities/ debt managers and central banks, either temporarily or permanently, has also been flagged in policy circles. The current institutional arrangements for sovereign debt management need to be examined to determine their efficacy in dealing with these co-ordination problems in situations of major shifts in policies and/or policy outcomes (*e.g.*, unconventional measures, high fiscal deficits, *etc.*).

6.9 A well co-ordinated policy approach will ensure that fiscal consolidation being emphasised and pursued at country-level does not hamper the overall growth process. A well-specified co-ordination framework will facilitate policy-makers to rebuild fiscal and monetary policy space and calibrate domestic policies to downplay the downside risks to growth, which continue to exist across the majority of the economies.

Need to insulate financial sector from negative feedback from sovereign debt concerns

6.10 The financial crisis giving way to a sovereign debt crisis in some advanced economies has highlighted the existence of a feedback loop between financial stability and sovereign debt sustainability. In particular, the major challenge emanates from the lingering weakness of the banking sector in the euro area. The vulnerability of the banking sector, in turn, adds to the sovereign risks, as investors perceive member states as an ultimate backstop for vulnerable financial institutions. Such concerns have led to high costs of borrowing for both sovereigns and financial

institutions, which may not be sustainable if such a situation persists for long. Moreover, the public sector may tend to deleverage, whether out of choice or under compulsion, affecting growth prospects that could, in turn, undermine debt sustainability.

6.11 Some of the recent measures in the euro area, such as, move towards a budgetary union in March 2012, towards banking union in December 2012, and strengthening of the European Financial Stability Facility/European Stability Mechanism (EFSF/ESM) are promising efforts to ensure fiscal sustainability and break the adverse loops between banks and sovereigns. Further, 'Outright Monetary Transaction' announced by the ECB on September 6, 2012 should ensure transmission of low policy rates to borrowing costs for countries under macroeconomic adjustment or precautionary programme with EFSF/ESM.

6.12 To sever the link between banking, sovereign and growth problems, policies in the euro area should support individual countries' efforts to repair public and private balance sheets, and implement structural reforms to restore competitiveness. Further, repair of banks' balance sheets through injection of more capital into domestically systemic banks and resolution of non-viable banks seems inevitable. At the same time, it also needs to be ensured that fiscal consolidation is not fully offset by the worsening of private sector balance sheets.

Fiscal Consolidation needed for independent conduct of monetary policy

6.13 Unprecedented escalation of sovereign debt levels after the global financial crisis has made government finances vulnerable in many economies. While fiscal vulnerabilities need to be addressed, fiscal consolidation has to be structured and calibrated to avoid the collapse of aggregate demand. Further, this process needs to be complemented by other policies, which entails a careful assessment of new and complex interactions between sovereign debt management and monetary policies. High sovereign debt levels reduce fiscal space, which, in turn, could constrain the use of monetary policy instruments and also create considerable uncertainty about future interest rates.

6.14 Amid increased uncertainty, fiscal-monetary feedbacks are likely to be stronger when public debt/GDP ratios rise. Further, high debt can adversely affect growth mainly through (i) the high cost of capital, (ii) distortionary taxes, (iii) inflation, and (iv) a lower capital-labour ratio that can lower productivity. Such infirmities arising out of a high debt overhang may also pose an additional burden on other policy options, including monetary policy. In this context, Jordan (2012) argues "central banks must guard against finding themselves in a position where they are forced to take action because of other institutions' inactivity".

6.15 Given the implications of high sovereign debts, early actions that boost the prospects of a credible medium-term fiscal consolidation need to be accelerated across countries afflicted with debt overhang. An explicit link between sovereign debt levels and medium-term fiscal policy objectives could be articulated, which would help anchor fiscal policy expectations. It is also important to fine-tune the process of fiscal consolidation with monetary policy operations. In the initial phase of fiscal consolidation, monetary policy, due to prevailing low policy rates in many countries, may not be able to offer much support for fiscal consolidation. However, as growth recovery begins and monetary policy becomes less constrained by zero lower bound, the pace of fiscal consolidation may be accelerated. Fiscal consolidation should be driven by policy initiatives that facilitate long-term growth and minimise the burden on monetary policy.

Fiscal-monetary co-ordination not only at national level but also at international level

6.16 After the global financial crisis, numerous weaknesses in the global monetary and financial systems have come to the fore. These weaknesses, in turn, lead to faster cross-border transmission of the crisis. Fiscal-monetary co-ordination is, therefore, required not only at the national level, but also at the international level to address these weaknesses. Accordingly, the world's largest economies have to develop a co-ordination mechanism to help guide fundamental economic policies and find greater synergy, especially between fiscal and monetary policies.

6.17 Recognising the high degree of financial interconnectedness at the global level and the potential for seamless spread of any economic/ financial shock across borders almost anywhere and everywhere, attempts are being made to bring about more effective international policy co-ordination through various forums such as the G-20, Financial Stability Board (FSB), Bank for International Settlements (BIS) and the International Monetary Fund (IMF). There is a greater acknowledgement that national policies cannot be taken on a stand-alone basis and that international co-operation is necessary to resolve cross-border financial crises.

6.18 The G-20 framework for strong, sustainable and balanced growth is making progress on steering co-ordinated action at the global level under its mutual assessment plan (MAP) in fiscal, financial, structural, monetary and exchange rate, trade and development policies. While there is agreement that tail risks have diminished, reflecting important policy actions in the euro area and in the US, there is a consensus that the global economy continues to underperform mainly on account of policy uncertainty, public and private deleveraging, inadequate credit intermediation and insufficient progress on rebalancing global demand.

6.19 The G-20's immediate focus would be on creating the conditions for a lasting strengthening of global demand, while at the same time developing and implementing credible and robust medium-term fiscal plans in advanced countries where these do not yet exist. Structural reforms, while in some cases politically difficult, would also be necessary to ensure sustainable growth.

6.20 The IMF has strengthened its financial sector assessment programme, particularly for the 25 systemically important countries. Further, to avoid new systemic risks, the leaders of the G-20 countries in the February 2013 meeting held at Moscow reaffirmed their commitment to full, timely and consistent implementation of financial sector reform

agenda through the Co-ordination Framework for Implementation Monitoring (CFIM) of the FSB. This agenda includes Basel III, II.5¹ and II, the reforms on over-the-counter (OTC) derivatives markets, systemically important financial institutions and shadow banking. Going forward, the activism of these international bodies is expected to continue, as spillover from national policies on international macroeconomic stability need to be minimised through coherent and consistent adjustment efforts across major economies.

Indian experience suggests that fiscal rules, though necessary, are not sufficient in optimising the outcomes of fiscal-monetary co-ordination

6.21 The assessment of fiscal-monetary co-ordination practised in India over the years, against the backdrop of various reform measures undertaken to align the institutional set-up and practices with the evolving policy objectives, shows a move towards reducing the fiscal dominance of monetary policy after the Fiscal Responsibility and Budget Management (FRBM) Act, 2003 was implemented. However, at times, fiscal dominance through high deficits has taken a new form with deficits and inflation feeding on one another and debt-deficit dynamics impacting reserve money creation. Large open market operation (OMO) have been largely in line with the monetary programme, but at times large market borrowings of the government impact liquidity and monetary conditions and can consequently impact the size and timing of OMOs. This can lead to attenuation of monetary policy. Fiscal deficits arising from large subsidies would suppress inflation in the short-run but could turn out to be inflationary in the medium-term. In the Indian context, despite significant countercyclical stimulus imparted during 2008-09 in the wake of global financial crisis, government spending has been found to be pro-cyclical over a long period. This impacts the availability of fiscal space for providing stimulus in cyclical downturn.

¹ The BCBS regulations requiring banks to hold capital against market risks in their trading operations.

Further, the combined debt of the centre and states causes changes in reserve money to the extent it is financed by the Reserve Bank and thus has monetary implications.

6.22 The Indian experience brings forth several key lessons. The evolution from an era of pure fiscal dominance to that of rule-based fiscal discipline clearly depicts the impact of changes in institutional arrangements on the nature and degree of fiscal-monetary co-ordination. Notably, the phasing out of automatic monetisation of fiscal deficits and discontinuation of the Reserve Bank's participation in the primary government securities market have somewhat reduced the degree of fiscal dominance of monetary policy. However, the Reserve Bank has continued to provide temporary accommodation to the government through ways and means advances. Further, the Reserve Bank often purchases government paper in the secondary market, though these operations are generally guided by the objective of providing liquidity support to the financial system. Fiscal deficits in India have, in general, widened since 2008-09. While the government has returned to the path of fiscal consolidation since the second half of 2012-13, it is important to reinforce this trend by taking policy initiatives aimed at addressing the structural constraints in government finances in a durable manner so that the rule-based fiscal discipline becomes effective and credible in the medium-term.

6.23 The persistence of structural imbalances, as seen after 2008-09, necessitates greater recourse to debt resources, thereby constraining monetary policy operations. With fiscal policy having the first-mover advantage and monetary policy being constrained by fiscal dominance, the monetary authorities are left with little option but to react to fiscal policies to avert macroeconomic outcomes that are inferior to ones that would be achieved if they do not take fiscal policies into account. As monetary policy operating procedures evolve towards greater reliance on indirect instruments of monetary control, and fiscal policies become more rule-bound, it is possible to reduce fiscal dominance of monetary policy, though the rules may not be sufficient to ensure monetary

independence. In essence, weak institutional arrangements governing co-ordination between the fiscal and monetary authorities may continue to impact the efficacy of both fiscal and monetary policies.

6.24 Structural impediments also constrain the role of fiscal policy as a counter-cyclical tool. Large fiscal deficits raise inflation in the economy directly if they are financed through reserve money expansion. Otherwise, they impact supply responses through suppressed prices and constrain the effectiveness of monetary policy as a demand management tool. While fiscal policy is intended to be counter-cyclical, in practice it often turns pro-cyclical, thus losing its ability to provide stimulus in situations of economic slowdown and compress aggregate demand in times of boom. Finally, the Indian experience shows that government debt has a long-run relationship with money creation, and debt-financed fiscal expansions, at times, cause pressures on monetary management.

6.25 These lessons assume significance, because challenges for fiscal and monetary management are large in the backdrop of high fiscal deficits and high inflation in India. Going forward, it is important to address these challenges through a series of institutional reforms. On the fiscal side, there is a need for an improved regime of fiscal rules with a focus on structural deficits. The rules could be made flexible to allow adjustment for cyclical factors while ensuring that the embedded flexibility in fiscal rules does not lead to fiscal imprudence in the name of cyclical considerations.

6.26 Cross-country experiences underline the need to frame fiscal rules by taking into account country-specific circumstances. For example, in Singapore, budget deficit rules are based on the principle that the government must have a balanced budget over the term of its office, meaning that any deficit in one year must be balanced by surpluses accumulated in earlier years during the term of its office. The appropriateness of such hard rules for Indian conditions is open to debate, especially as they can also come in the way of counter-cyclical stimulus. First, in the Indian case, it may be difficult to think of

achieving a balanced budget situation in any given year. Second, in a polity that depends on coalitions, defining a term of office can become difficult. Third, there is the problem of how the rule can be implemented if the government requires an expansionary response in the first year it comes into power.

6.27 Against the backdrop of an imminent need to revert to rule-based fiscal discipline, it is important to examine what rules can work in India. A notable lacuna in the FRBM regime has been that there are often deviations from the fiscal rules. FRBM Act explicitly provides for breach of targets in the case of national security need, national calamities and other exceptional circumstances. This leaves a lot of leeway in interpretation. The amendment to the FRBM Act in 2012-13 has re-established the regime of fiscal rules, and introduced a medium-term expenditure framework. Going forward, there is a need to remove a large part of ambiguity about any exceptions to be made, by adding expenditure rules to deficit rules and by adopting broader definition of deficit to cover quasi-fiscal activities.

6.28 The issue regarding the impact of large fiscal deficits on inflation and monetisation of deficits can only be addressed through enduring fiscal consolidation that can withstand the cyclicity test. This would, however, be possible subject to the implementation of far-reaching fiscal reforms that cover both revenue-enhancing and expenditure-cutting measures. On the expenditure side, the move towards reduction in subsidy expenditure in a phased manner would help rebalance public expenditure, from current to capital, to achieve and sustain a higher rate of growth in the medium-term. An improvement in the quality of public expenditures can raise the acceptability of greater tax mobilisation, as is the case with Scandinavian countries. The government's non-tax revenues also need to be stepped up in a more enduring manner through proper public utility pricing and reforms in public sector undertakings.

6.29 On the monetary side, institutional reforms should focus on a better alignment of OMOs with

monetary policy objectives. OMOs need to primarily occur through outright purchase/sales of securities by the Reserve Bank. Liquidity adjustment facility (LAF) should generally be used in line with its intended objective of addressing frictional liquidity mismatches. Outright OMO purchases have increased in recent years. While at the present juncture when capital inflows are moderate, OMOs are not conflicting with overall monetary management as reserve money expansion is below the projected levels; episodically, however, they can impinge upon interest rates and market functioning. In fact, during 2008-09, the sizeable additional market borrowing by the government did create upward pressure on yields at a time when monetary policy supported softer interest rate regime. This could have been market disruptive in the absence of large OMO purchases. With the possibility that the money creation impact of OMOs, at times, come in the way of the conduct of monetary policy operations, the objectives and operational procedures for OMOs need to be better defined and constrained by a meaningful central bank reaction function.

6.30 There is also a need to re-examine the high held-to-maturity (HTM) provision that support public debt financing and *de facto* leads to crowding out of private credit. Further, financial sector reforms to reduce dependence on the statutory liquidity ratio (SLR) need to be carried forward once an improved rule-based fiscal and monetary regime is put in place. Overall, the new regime could be supported through a better co-ordination mechanism for the formulation and implementation of fiscal and monetary policies.

Need for continuance of effective fiscal-monetary coordination and strengthening the Reserve Bank balance sheet in the light of various risks as witnessed during global financial crisis.

6.31 The Reserve Bank's balance sheet has undergone substantial transformation over the years in line with the shifts in the regimes of monetary policy operations and different phases of fiscal-monetary

co-ordination. Some lessons emanate from the analysis of the evolution of the Reserve Bank's balance sheet, particularly in the post-reforms period.

6.32 First, during the post-reform period, the move from *ad hoc* treasury bills to ways and means advances (WMA) and the adoption of the FRBM framework has freed monetary policy and hence, the central bank balance sheet from fiscal deficit's straitjacket. The share of net RBI credit to the Central Government in the overall monetary base declined progressively from 1980s up until the crisis, after which it has seen some rise. In the 2000s, while the dominant role of fiscal expansion in monetary expansion gradually faded, capital flows took centre-stage, keeping the deviations between the projected and actual M_3 growth significant, *albeit* lower than that of the monetary targeting regime of 1980s and 1990s.

6.33 Second, effective fiscal-monetary co-ordination in managing sterilisation issues during the high capital flow regime of early 2000s and liquidity problems during the crisis period have had significant impact on the Reserve Bank's balance sheet. Capital flows to India increased significantly from the mid-2000s until 2007-08. The large excess of capital flows over and above that required to finance the current account deficit had resulted in the accumulation of foreign currency assets. The large build-up of foreign currency assets led to a significant increase in the size of the Reserve Bank's balance sheet between 2001 and 2007. The composition of the balance sheet also underwent transformation in favour of larger net foreign assets in relation to net domestic assets. The introduction of the market stabilisation scheme (MSS) in April 2004, however, had some moderating impact on the increase in the ratio of foreign assets to domestic assets. The introduction of MSS, under which government securities were issued for sterilisation purposes, was an important milestone in the interface between the fiscal and monetary authorities, with the fisc also sharing the cost of sterilisation. During the crisis period also, fiscal-monetary co-ordination was at its

best to manage the liquidity problems. Going forward, such fiscal-monetary co-operation in a framework where central bank autonomy is not compromised is desirable, particularly in increasing the strength and credibility of the central bank balance sheet.

6.34 Third, to hedge against variability in prices of domestic and foreign assets, possible losses on account of policy intervention, external shocks and other unforeseen systemic risk, the Reserve Bank, in line with the suggestion of statutory auditors, has been pursuing a proactive policy of strengthening the reserve and revaluation accounts and accordingly has set an indicative target of 12 per cent of its total assets to be set aside under contingency and asset development reserves. In light of the increasing valuation and systemic risks in today's market-oriented and globalised environment, there is a need to further strengthen the balance sheet of the Reserve Bank which has implications for its surplus transfers to Government. There is a need to enhance some of the revaluation accounts like exchange equalisation account (EEA) keeping in view the likely impact of forward commitments and related exchange rate risks on the balance sheet. This is particularly relevant in the post-crisis scenario that saw several central banks facing problems on the capital front. While interest and credit risks have assumed significance in the central bank balance sheets of advanced countries, the central banks in EMDEs, including India, which hold large foreign currency assets, face the exchange rate risk and the risk of return on foreign assets falling short of the cost of short-term sterilisation bonds, if issued by the central bank or the interest income foregone on domestic assets.

Careful calibration towards reverting to fiscal consolidation and proper assessment of any likely institutional changes in public debt management constitute key imperatives for the outlook of fiscal-monetary debt management co-ordination in India

6.35 The previous chapter set out the outlook for fiscal-monetary co-ordination over the medium-term in India. The empirical exercise described in the

chapter over the post-reforms period indicates that fiscal deficit tends to put upward pressure on the call rate (which is used as a proxy for the monetary policy rate) after a lag, even after controlling for the output gap and inflation gap. This underscores the need for greater co-ordination of fiscal and monetary policies in order to attain the overarching objectives of growth, price stability and financial stability. Indeed, the co-ordination of fiscal and monetary policies taken in the aftermath of the global financial crisis during 2008-09 and 2009-10 met with considerable success in reviving growth and maintaining financial market stability. Developments in the more recent period when both fiscal deficit and inflation remained high and investment and growth slackened also reflected the imperative of co-ordinated policy action. With inflation now showing signs of moderation and the output gap remaining negative, the need to stimulate investment as a means to revert to the trend rate of growth of the economy, is indeed pressing. The revival of investment activity, of course, depends on various structural factors as well as interest rates. Looking ahead, the Twelfth Plan document highlights the significance of an improvement in public sector savings for generating the required resources in order to attain the targeted average rate of growth of 8.0 per cent. The document has also estimated total infrastructure investment during the Plan period at US\$ one trillion, with the share of the public sector placed at over 50 per cent. In this context, an orderly and qualitative fiscal adjustment process, as corroborated by the experience and empirical exercise, would not only facilitate the attainment of the Twelfth Plan objectives but also provide more headroom to monetary policy to address macroeconomic and financial stability, in general, and the growth objective, in particular.

6.36 As far as institutional arrangements for government debt management are concerned, the Paul Fisher Study Group (2011), commissioned by the Committee on the Global Financial System, has underscored the need for closer co-ordination between debt management and monetary management, with each agency maintaining independence and accountability for its respective role. The Group has also cautioned against changes in the extant arrangements, including those in some developing economies where the central bank is responsible for some sovereign debt management (SDM) functions or involved in SDM oversight. The views of the Group have been shaped by the experience from the recent global financial crisis, which revealed that debt management impacts not only monetary management but also the maintenance of financial stability. In India, even as the long record of debt management conducted by the central bank has been impressive, the successful staving off of the indirect adverse effects of the global financial crisis, in the recent period, has been attributed to the close co-ordination between debt, liquidity/ monetary and exchange rate management. The processes in this regard were greatly facilitated because these functions, though separate, remained housed within the same organisation. The persistence of very large borrowings by the government has significant macroeconomic, monetary and financial stability implications – areas where the central bank has an undeniably important, if not unique, role to play. The debt management of all the state governments casts an added and distinct dimension to the issue. Against this backdrop, there is a need to review the content and pace of the proposed shift of the debt management function from the central bank to the government.