The financial crisis, which assumed global proportions in 2008, is, at the time of writing, far from over. In fact, many facets of the crisis are still unfolding, while many of the policy responses are yet to bear fruit and the road to recovery is uncertain. The landscape for the future, beyond the crisis, is sought to be designed by the collective wisdom of the heads of governments of several countries on the basis of lessons learned from the crisis. At this stage, therefore, there is merit in asking the right questions on the global crisis and its implications for India, and exploring the possible answers.

WHAT CAUSED THE CRISIS?

The explanations offered for why the crisis occurred can be broadly divided into those relating to macroeconomic management and those concerning the financial sector, in particular the behaviour of financial markets, although in reality both must have reinforced each other to bring about the distress conditions.

Macro-Economic Explanations

Explanations in terms of macroeconomic management may be summarised as follows:

First, some countries, notably the US, built large current account deficits. Some others, notably in Asia, built significant current account surpluses and lent to or invested in the US. Since these recurring imbalances persisted and increased over the years, correction was warranted by the markets.

Second, in many countries, macroeconomic policies in the recent past resulted in gross inequalities in income and wealth. For example, median wage was constant in real terms despite the growth in output in the US. Consequently, there has been a deficiency in aggregate demand, which did not manifest as long as the illusion of economic activity was maintained by the excessive development of the financial sector. These excesses in the financial sector created an illusion of sustainable activity in the real sector for quite some time, but it could not last. The subprime crisis in the US was only one of the symptoms of the lack of aggregate demand, coupled with excessive financialisation of the economy and excessive leverage (that is, utilising a far larger proportion of borrowed or others’ money relative to one’s own in undertaking risky business).

Third, in view of the underdeveloped nature of financial markets in some developing economies, such as in China and other Asian economies, the domestic savings in those economies could not be fully channelled into the required domestic investments, and hence there was a surplus of savings in these countries.

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Fourth, the monetary policy, especially in the US, was excessively accommodative (that is, allowing the supply of money to be plentiful and interest rates low relative to appropriate levels) for several years, resulting in excess liquidity. This excess liquidity caused investors to search for yield and either under-price risks or take excessive risks. Such excess liquidity found its way into speculative activities, causing asset bubbles. (Large increases in the prices of assets like real estate or equity were based mainly on the belief that such prices will keep increasing in future.)

Fifth, some central bankers were focused exclusively on price stability, and many of them were mandated to focus on this through inflation targeting regimes. In addition, there was no formal mandate to any particular institution to maintain financial stability, hence the relatively low emphasis of such stability in public policy. (Financial stability implies the existence of uninterrupted financial transactions as well as an acceptable level of confidence in the financial system, and an absence of excess volatility that unduly and adversely affects the normal real economic activity.)

Sixth, many central banks were persuaded to be very transparent and provide forward guidance to financial markets on their policy stance, especially on the future course of monetary policy. Such forward guidance provided excessive comfort to financial markets and enabled them to under-price risks.

Seventh, even when some of the central banks perceived the under-pricing of risks, financial market agents asserted that the central banks could not sit in judgment on prices set by a competitive market, and assured policymakers that markets would correct themselves automatically. The central banks were informed by financial market agents time and again that the dangers of policy mistakes were more than the prospect of markets not correcting themselves smoothly. The central banks were obviously persuaded by these arguments, and as a result did not act or intervene.

Eighth, some of the central banks perceived that there were excessive risks in the system, but concluded that due to the emergence of new intermediaries like hedge funds and new derivatives instruments, such risks were dispersed widely, especially among those who could afford to bear them, with no impact on the financial system as a whole, even though the risks did not disappear. Overall, the central banks seem to have ignored the economic imbalances and asset bubbles that were building up, and thus failed to act in a counter-cyclical fashion to moderate, though not eliminate, the boom-bust cycle.

Ninth, multilateral institutions like the IMF, which were charged with the responsibility of surveillance, gave warnings about macroeconomic imbalances. They, however, did not bring out the extent of the vulnerabilities of the global economy in general, and the systemically important economies in particular. The multilateral institutions were constrained partly because they were dominated by select countries that were unwilling to subject their economies to objective surveillance, and which had in fact encouraged the institutions towards an excessively market-oriented ideology.

Finally, there is only one significant reserve currency (that is, a currency in which global reserves can be held), that is, the US dollar. The global economic system was thus subject to the undue influence of the policies of one country. This dependence of the global economy on one currency by itself had the potential for instability, and in any case could have facilitated excessive risk taking by the public policy in the US. This could also partly explain the smooth financing of the twin deficits (in the current account of the balance of payments in the external sector and the fiscal account of the government) of the US by the rest of the world for several years, resulting in a huge build-up of global imbalances.

A critical examination of all the above explanations would indicate that they might be interrelated, and that each of them may at best provide only partial explanations of the macroeconomic factors that could have contributed to the crisis. The imbalances did enable the excesses in the financial sector, which were an important reason for the crisis. It can be argued that there was no deficiency in the aggregate demand but actually a deficiency in aggregate savings, both in the household and government sector in the US, a very relevant country in this context. With regard to the role of central banks, they had allowed excess liquidity and ignored asset bubbles in the system since the central banks were not equipped to conclude ex ante that there was a bubble, and asset prices were not part of the central banks' focus on monetary policy. They had also apparently underestimated the concen-
tration of risks within the financial sector. Multilateral bodies like the IMF pointed out the need to focus on macroeconomic imbalances and the bubbles in the housing sector, but missed diagnosing the extent of vulnerabilities. It has been noted that the US did not subject itself to the Financial Sector Assessment Program (FSAP) of the IMF, although it is a moot point whether it was material, considering the experience of FSAP with Argentina and Iceland. The UNCTAD, in its Trade and Development Reports, has been warning about the vulnerabilities of the financial sector, but these were largely ignored by most of the policymakers. Finally, the continued dependence on the US Dollar as a reserve currency could have imparted some vulnerability to global financial stability.

In sum, while there is no single explanation in the realm of macroeconomic management that could have exclusively contributed to the crisis, there is a common thread that runs through most of the explanations, viz., a serious underestimation of the potential for market failures as it relates to the macro economy in general and the financial sector in particular. Further, the growth and development of the financial sector seems to have acquired a momentum of their own in public policy, without due regard to its links with the growth of the non-financial or real sector.

Regulation of the Financial Sector

A second set of explanations relates to the regulatory environment in which financial markets were functioning. It is well recognised now that the problem of sub-prime lending for housing in the US was only a proximate cause or simply a trigger, and that the problem was far deeper and widespread. The sub-prime lending was also a case of irresponsible lending and ignorant borrowing, rather than a programme of financial inclusion. Moreover, such lending was facilitated by a regulatory environment that was driven by vested interests which benefited from excessive lending in the deregulated financial environment. While there may be differences of opinion on the nature of the sub-prime problem in the US, there is a consensus now that the problem in the financial sector is more fundamental and globally relevant, and essentially related to the functioning of the sector. The explanations most commonly advanced in this regard are summarised here.

i. The regulators in the financial sector did not have the adequate skills to cope with the rapid growth in the variety and complexity of market innovations in financial products.

ii. The principle-based regulation adopted by some of the regulators left too much of discretion to the regulated entities to manage their own risks.

iii. The regulators concentrated on mitigating the entry-level risks in the individual-regulated institutions through micro-prudential regulation, rather than the risks to the system through macro-prudential monitoring and regulation. The regulators did not recognise the need for counter-cyclicality in regulation, thus amplifying the boom and bust cycle (that is, the need to tighten regulation when the economy was experiencing an excessive exuberance and relaxing it during a period of unjustified pessimism).

iv. The liquidity risks in the operations of financial entities were ignored, and this was also not built into the Basel 2 prudential norms. While the prudential norms focused on the quality of assets, they did not take into account the pattern of funding of such assets; for example, there are consequences of funding long-term assets with short-term funds.

v. The off-balance sheet items and investment vehicles and their potential impact on capital adequacy were not fully captured by the regulators.

vi. The regulators focused on regulating commercial banks, ignoring the developments in what has been described as the shadow banking system. Non-bank entities such as investment banks, hedge funds, private equity firms, etc., remained unregulated, and hence turned out to be sources of risk. In other words, the ambit of regulations was not as comprehensive as it should have been.

vii. The regulators relied heavily on ratings assigned by credit rating agencies, particularly in implementing Basel 2. They failed to adequately regulate the Credit Rating Agencies even though they were relying heavily on the ratings. The ratings proved to be unreliable, and possibly motivated by the prevailing framework of incentives and conflicts of interests.

viii. The regulatory structures were inadequate since multiple regulators facilitated regulatory arbitrage by the market participants, and thus exacerbated the risks.

ix. The global framework for cross-border insti-
tutions' regulation and supervision was weak, although the financial markets and institutions were globalised.

x. In a bid to attract the financial services industry to their jurisdictions, regulators in international financial centres such as London and New York adopted a policy of relatively soft regulation, or what has been described as 'light touch regulation'. The eagerness to develop some centres as global financial centres resulted in a race to the minimal regulation.

It is generally accepted that the environment in which market participants operated also contributed to the crisis.

i. The accounting standards were pro-cyclical, especially due to the policy of mark-to-market rules of valuation of assets and liabilities. The mark-to-market rules require that the assets and liabilities be valued from time to time as per the prevailing market values, which tend to give a high valuation when the economy is in a boom and depress values when the economy is in a bust.

ii. The incentive framework, especially in investment banks' hedge funds and private equity funds, etc., encouraged excessive risk taking. The remuneration policies for senior management in particular were set in such a way that gave no incentive to encourage prudent behaviour, since they got hefty bonuses based on short-term performance irrespective of the long-term risks assumed in the process.

iii. The banks developed a business model wherein they originated loans but distributed the credit risks inherent in such loans to others. This led to a manifold increase in the leverage. The securitisation was a convenient tool to avoid additional regulatory capital. These practices were carried to excesses, resulting in a huge increase in the overall leverages in the financial sector.

iv. Greed became an accepted and generally respectable norm of behaviour in the financial sector, resulting in a build-up of excessive risks.

v. Complexity in financial instruments helped profit-seeking by ensuring savings on regulatory capital requirements, and defeated the purpose of transparency prescribed by the regulator.

vi. The global financial system was dominated by a few large financial conglomerates, and these were fully aware that they were too big to fail. Such awareness by itself provided incentives to become big enough and then take up riskier ventures. The crisis originated in large, globally significant financial institutions.

vii. The tax havens and bank secrecy laws provided opportunities for maximising profits through tax avoidance and the avoidance of applicable regulations.

A critical examination of the above explanations indicates that some of them may be more relevant than others, while a few other explanations are not central to the crisis. In analysing the causes of the financial crisis, it is necessary to learn lessons from the countries that were host to serious financial crisis—such as the US and the UK—and those that faced less serious crisis—such as Canada and India.

Most of the explanations apply to the two most significant international financial centres, the US and the UK. Their regulatory philosophy was in recent years characterised by progressive deregulation, greater dependence on markets, eagerness to develop some centres as global financial centres, and erosion of the special status and integrity of traditional commercial banking activity, viz., accepting retail deposits and disbursal of credit to their clients. Many other countries adopted a regulatory philosophy similar to the one described above, though with varying degrees of commitment.

**AN OVERVIEW OF CAUSES**

In view of the above, the critical question is whether there was a regulatory capture that could have led to wrong assessments or inappropriate actions or deliberate inaction by central banks and regulators. A close examination of various events in recent years, such as legal changes, regulatory actions, policy analysis, and even media focus in most economies, especially the advanced economies, may point to the possibility of a regulatory-capture. However, this capture may be of a more comprehensive variety than the typical one described in the literature. The typical one entails the capturing of the regulator by the regulated, essentially based on information asymmetry. The financial markets had developed far more rapidly than the real economy, and in the process fostered considerable linkages with the political economy, made possible by excessive profitability in the financial sector. The financial markets and institu-
tions strongly influenced opinion-making through the media. Many high-profile economic analysts tended to be overly optimistic about the benefits of financial-sector development and the deregulation of the financial sector. All these may have reinforced the traditional regulatory capture. There was a lurking suspicion in some quarters that the performance of central banks and regulators was in fact being significantly judged only by the regulated, viz., the financial markets. In this light, it can be justifiably held that it was significant political economy factors that drove the actions and inactions of both central banks and governments, and that they explain both the excessively accommodative monetary policy and the soft regulation in many economies. (A cynic remarked that under socialism, the government took over the banks, and under capitalism banks took over the governments.)

This line of explanation would consider the failure of both the market and the state as reasons for the crisis. In other words, it may be held that the crisis reflects a failure of governance in both private and public sectors. The failure of governance is also evidenced in the failure of all relevant institutional defences against serious financial instability. Thus, the Board, the management, risk management practices, and internal controls all allowed excesses. The rating agencies, the advisors, the analysts and the auditors failed to alert us to the build-up of risks, possibly due to incentives or counter-party dealings. The financial regulators allowed these excesses to happen. Finally, the market discipline, on which reliance has generally been placed and which may include the media and public opinion, did not prevent these excesses.

There is a view that the failure of governance at all levels is indicative of the failure of the whole economic system, or what some have described as a failure of capitalism. In this view, there is a possibility that the current crisis is not merely a cyclical one that could be easily resolved through the self-regulating character of capitalism. A suitable redesign of international and domestic institutions may aid the process of recovery, but it would still be temporary. In this line of thinking, the current crisis is a product of the hegemony of global finance and is a structural crisis, and hence should lead to what is described as a collapse of capitalism.

There is some merit in viewing the crisis as a significant intellectual failure, in the sense that it was essentially a network crisis caused by a lack of a systemic view of networks. Strong network linkages have developed in the financial sectors, enabled by technological developments and financial deregulation. These network linkages helped to take advantage of economies of scale, obtain capital efficiency, and reduce transaction costs. While these had several beneficial effects through interconnectivity, they also added complexity and risks which were not comprehended by economists or policymakers or finance experts. In sum, it is possible to hold the view that the crisis was caused by several factors which include both moral and intellectual failure in both the private and public sectors.

**HOW UNIVERSAL ARE THE CAUSES**

The explanations for the crisis described above are very broad generalisations, and are not universally applicable to all economies for several reasons. While there maybe excess or deficient savings in an economy or a region, for the global economy as a whole there cannot be excess, since the global economy is a closed economy. Furthermore, many economies like the Euro area and India did not contribute to global imbalances. Moreover, the banking systems in some countries such as Canada, China and most of Asia appear to be relatively well-capitalised. Some economies did take recourse to counter-cyclical monetary and regulatory policies. Hence, the causes for the crisis could vary from country to country. At the same time, the crisis is global in the sense that all economies are affected through contagion. Some of them, especially many developing countries, are affected despite having sound macro-policies and no serious flaws in the functioning of their financial sector.

It is useful to track the evolution of the crisis in terms of origin and contagion. The crisis surfaced with the bursting of the bubble in sub-prime mortgages in the US as reflected in the credit markets, especially due to the explosion of derivatives markets in the US and the proliferation of the originate to distribute model of banking. In view of the deep integration of domestic financial markets and the existence of large conglomerates operating in several segments of financial markets, the stress was transmitted to the various financial products. With significant global financial integration, some of the instruments that later proved toxic in the derivatives market were distributed across several economies. The cumulative effect was a serious cross-
product and cross-border spread of contagion of distress in financial markets and institutions in such globalised economies.

Households and corporates accustomed to high asset values in such globalised economies were adversely affected by the bursting of the asset bubbles, and contributed to sudden and severe contractions in demand and loss of confidence. These developments resulted in drastic reductions in activity in the real sector, a process that is still unfolding at the time of writing (April 2009). Thus, the initial problems in the financial sector were transmitted to the real sector with adverse feedback effects. At the same time, the contagion was felt by many economies that did not have significant financial integration due to contagion through real sectors.

Developing economies were affected through several channels. The transmission channel varied with respect to different developing economies, depending on the nature of their integration with the global economy. The developing economies, which are export-dependent in a significant manner, were more seriously affected by the trade channel through a drastic reduction in earnings from the export of goods and services. There have been spillover effects on invisibles through lower remittances from non-residents and earnings from tourism. The finance channel has been operating both on the current account and the capital account. On the current account, export earnings are also affected by disruptions in trade finance for the export and import of goods, since cross-border banking is essential for trade. On the capital account, the capital is flowing out from the developing to the advanced economies, both because the latter requires additional capital or liquidity and because the investors find safety in mature financial markets, even though some of these are at the epicentre of the crisis. Borrowings in international capital markets have become difficult and expensive. The moderation in capital inflows - and in some cases the net outflows on the capital account - put pressure on the balance of payment and exchange rates. The cumulative effect of the above is on real-sector activity, which in turn may have an adverse impact on the NPAs of banks in the future, and of course on tax revenues. The most seriously affected among developing countries appear to be those with large current account deficits, with limited fiscal maneuverability, and a considerably open capital account. Furthermore, economies with a large share of short-term debt in their external liabilities were also vulnerable. In brief, the crisis has affected all economies, and the explanations encompass dynamic interactions between national and international factors. The contagion spread in several ways and, put simplistically; within the financial sector in the advanced economies, then across financial sectors in the advanced economies; followed by feedback from the financial to the real sectors in such economies. Contagion also spread through the financial and real sectors from the advanced to the developing economies, followed by a feedback from the real to the financial sectors within all the economies.

It is possible to argue that the crisis is essentially that of the US, in terms of both origination and impact. There were enough warning signals about the asset bubble, which were ignored by the US either because of over-confidence or political economy considerations. The US was undoubtedly leading the global boom in economic activity, and naturally in the bust cycle the impact is felt in the rest of the world. It would logically follow that if the problems in the US were to be fixed, recovery will follow soon. It is noteworthy that the US continues to be the leader in the global debate on the measures needed for recovery and the agenda for reforms. In a way, the US has globalised what is essentially its own crisis, and the fundamental flaws in the systems of that country may in the bargain be dealt with in a myopic manner. The Group of Twenty (G-20) seems to have been co-opted in the design of recovery and reform led by the US. In the process, there is a danger that the policies of some of the G-20 countries may be stretched beyond what is required, based on the fundamentals of the said economies. Traditionally, the Group of Seven (G-7) had been brought in line with the thinking of the US, but now attempts are being made to bring EMEs in alignment with the design of recovery and reform led by the US.

In some ways, the crisis and its management may become an excuse for reversing and loosening policies that had been assiduously put in place by some countries. Unlike the US, which is in a unique position to manage its problems, some of the EMEs may face difficulties in managing the long-term consequences of the approach described above. It can be argued that in some cases, the very same policies that contributed to the crisis are being followed aggressively. For instance, some fiscal measures, particularly those aimed at bailing out the banking system, may be justified, but the limits to the extent of
the overall fiscal stimulus in the case of EMEs with a large overhang of public debt must be reckoned with. Similarly, the limits to expansionary monetary policies in the context of vulnerabilities in the external sector of some EMEs cannot be ignored. Recent evidence indicates that the crisis has hit many of those EMEs which had twin deficits.

In brief, there is a view that the crisis originated in the US; there has been a contagion to other countries even though they did not pursue policies similar to those of the US; the design of recovery and reform is also being led by the US; and that the long term consequences of such an approach could be serious for some of the countries unless they remain on constant guard on a continuing basis.

WHY AND HOW DID THE CRISIS HIT INDIA?

It will be useful to explore the relevance of the various causes of the crisis described above for India. On the macroeconomic front, India had, in recent years, experienced a marginal current account deficit. Hence, India did not contribute to the global imbalances. While the income inequalities appear to have increased, in India there has been no evidence of a deficiency in the aggregate demand in the domestic economy. Most of the domestic investment was financed by domestic savings, although the trade and financial linkages between India and the global economy increased significantly. Relative to the trends in many other countries, especially the US, monetary policy in India tended to be counter-cyclical. The RBI defined for itself financial stability as an important consideration, and articulated the same in its various policy statements. Price stability continued to be a priority, but not at the cost of neglecting other considerations consistent with its mandate. The RBI’s communication policies made it clear that it does not provide forward guidance to financial markets, and only shares its analysis with market participants. The build-up of risks in the global financial system had been articulated especially since 2005, and there was recognition of the fact that there was no clear knowledge of where the risks reside. The RBI conceded that it could not take a view on whether there were asset bubbles or not, but it did not the possibility of such a build-up of bubbles in the domestic economy. Consequently, to protect the banking system from a possible adverse impact, countercyclical regulatory measures were undertaken while the monetary policy was leaning against the wind of excessive growth in credit and money supply. The conduct of policy was conscious of the limitations of the global financial architecture, and hence gave importance to self-insurance through the build-up of forex reserves, especially in the light of strong capital inflows, with a dominance of the more volatile portfolio flows. Some moderation of capital inflows was attempted while outflows were liberalised, especially for corporates and households. While it is difficult to pass judgments on whether the policies and actions of the RBI were appropriate, it is possible to hold that they were, broadly in a direction that did not contribute to the current crisis of the global economy, and, in fact, they attempted to minimise the vulnerabilities in the domestic economy.

The regulatory environment in India was counter-cyclical and took both micro and macro prudential measures. The liquidity issues were specifically addressed through the regulation. Banks were encouraged to concentrate on what may be termed traditional retail banking, relative to wholesale or capital market operations. The banking regulation took cognisance of the benefits as well as the complexity of the financial innovations. The extent of the adequacy of skills in the financial system, both in the markets and institutions, was noted, in order to take extensive recourse to such new instruments. The regulatory framework was extended to systemically important financial institutions, and a policy of identifying and regulating conglomerates was adopted during recent years. The operations of overseas NRI corporate bodies as a distinct category were banned in view of their opacity, and concerns were expressed about not only the quantity, but also the quality of such cross-border flows. In brief, the regulatory framework in India did not exhibit many of the weaknesses that are adduced as reasons for the current global crisis.

Despite the policies described above, which should not have allowed any crisis in India, why and how did the global crisis hit the Indian economy? It is essential to explore the reasons behind the phenomenon. It should be noted that India’s integration with the global economy contributed noticeably to India’s accelerated growth while the global economy was prospering. Hence, it is logical that India would feel the impact of adverse developments in the global economy. From this perspective, the issue is whether a calibrated policy of gradual integration with the global economy reduced or minimised the transmission of such risks
to India, and whether domestic policies contributed adversely to global stability.

India is not prominent in the debate on the contribution to global imbalances for four important reasons. First, domestic savings and investments have been broadly in balance, with only marginal deficits. Second, the domestic demand has been leading growth, thus avoiding a possible collapse in aggregate demand due to global developments. Third, the policy has in recent years strengthened the efficiency and resilience of the financial sector, especially banking institutions. Fourth, the infrastructure and trade practices in financial markets were considerably strengthened as a process of gradual deregulation was undertaken. Hence, global factors are primarily responsible for the impact the crisis had on India, while domestic factors did lend some defence against the distress arising from the global factors. The transmission of the global crisis to India has to be viewed in terms of the pace, extent and the nature of its integration with the global economy, on account of trade and finance. With regard to the trade channel, the slump in export demand is very important, although one should not ignore the relief to the economy gained from corrections in commodity prices, especially oil. With regard to invisibles, India is relatively a large net earner of forex, and hence some impact on the export of services or the level of inward remittances is to be expected. It must be noted that with regard to the export of goods, India has relatively diversified the trade basket, while remittances also flow from both the developed and the developing economies. Diversified trade and diverse sources of workers' remittances are not very helpful in moderating the impact when the collapse in demand happens to be universal. The externally induced slump in export demand affects not only the export sector, but also related domestic activity, and thus has the effect of dampening the overall economic activity.

With regard to the finance channel, it is useful to consider both markets and institutions. Equity markets were affected due to the withdrawal of liquidity by FIIIs. The domestic bond markets were affected marginally, since the government securities market and the corporate bond markets were not significantly opened up. They were, however, affected indirectly, since the drying up of bond and credit markets globally made corporates substitute overseas funds with domestic funds. Cumulatively, these impacted the forex markets, warranting the use of forex reserves and the management of liquidity in money markets. It is also important to recognise that there could have been disruption in the availability of trade finance, in view of the virtual temporary collapse of banking in other economies. The domestic credit markets were affected due to the reluctance of banks to lend and the reluctance of borrowers to borrow, because of the considerable uncertainties in the level of economic activity. As regards financial institutions, their direct exposure to global financial markets has been somewhat limited. While the banking system continued to be resilient, there has been an indirect impact on some of the Non-Banking Financial Companies and Mutual Funds, which had significant exposures to highly appreciated domestic assets. The second-order effects of moderation in the real sector, especially export, real estate, and consumer demand on the level of NPAs in the banking system, should not be ignored.

Can the slowdown in real economic activity be attributed solely to the global crisis? It is difficult to ignore the possible domestic factors that could have in any case caused some slowdown in real activity. For example, it is difficult to establish that the growth in physical infrastructure or its quality in recent years has matched the growth in aggregate output, and that hence, autonomous moderation in growth momentum could have taken place quite apart from global influences. It was difficult to sustain the continuing and very high growth in the profitability of corporates, especially large corporates with cross-border presence or linkages, by the growth in the real economy. With respect to some large corporates, the non-operating income was large due to changes in the valuation of forex liabilities and treasury operations, and these were in any case expected to moderate over a period. It is therefore possible to argue that the global forces that dampened the domestic economic activity were to some extent coterminous with a possible downturn in the domestic economic cycle.

WHAT HAVE BEEN POLICY RESPONSES TO THE CRISIS

The initial reaction to the crisis came from select central banks of advanced economies, particularly the US, the Euro, the UK, Switzerland and Japan. The response was in terms of providing liquidity (assured liquidity for an extended period and an expanded menu of collaterals for central bank funding, etc.) through coordinated action. It soon became evident that there might be several issues of insolvency in the
process of restoring normalcy in the functioning of financial markets. Globally significant financial intermediaries lost confidence in each other. Hence, bail out of some of such financial intermediaries became necessary to restore confidence in each other and in the financial system. Refusal to bail out one of the large entities added to the panic. The fiscal implications of large-scale and unprecedented operations of central banks in these advanced economies to revive markets warranted close coordination between fiscal authorities and central banks. There has also been unprecedented growth in the balance sheets of central banks, along with an increase in the riskiness of their assets involving potential fiscal costs. Hence, finance ministries dominated the process of decision-making, although central banks continued to be the front line of defence and often the public face of recovery plans. In fact, the magnitude and nature of the responses of monetary authorities have increasingly blurred the distinction between monetary and fiscal stimulus.

The evolution of the financial crisis into an economic crisis was soon followed by a threat of social unrest. At the same time, the inadequacy of the prevailing arrangements in the global financial architecture came to the fore, while some emerging and developing countries approached the IMF and the World Bank for resources. The global dimensions of the crisis have so far triggered two meetings of the G-20 leading economies that account for over 70 per cent of the global population, income, trade, wealth and financial sector. The membership of G-20 comprises finance ministers and chiefs of central banks of the twenty countries, including the EU. The G-20 met at the level of Heads of Government in November 2008. Several actions as per the Washington Action Plan at the national level, encompassing fiscal, monetary, regulatory and governance issues, were broadly agreed upon. Some actions with regard to multilateral bodies were also recommended. Most countries took simultaneous action on several fronts broadly consistent with the consensus, but with varying emphasis on different components. Protectionism in both trade and finance persisted, especially in advanced economies. As mentioned above, the Heads of Government of G-20 (since expanded to include two more countries) met again in London on 2 April 2009 to review the actions taken and chart out further actions at the national level.

The actions taken thus far are in five broad areas. First, central banks in most countries are reducing policy interest rates and injecting ample liquidity. Second, the central banks are willing to intervene in all financial markets and in almost all products, liquid or not, toxic or otherwise, and domestic or foreign currency. Thus, the central banks and governments have been injecting capital to financial intermediaries, lending to such intermediaries, nationalising banks, providing blanket insurance to depositors and on the whole closely interacting with financial intermediaries to avoid large-scale insolvency and loss of confidence, and restoring normality, especially in credit markets. Fourth, fiscal stimulus has also been provided, albeit in different degrees, through expenditures in terms of support to financial sector and subsidies, reduction in revenues through tax rebates, etc., and guarantees on a large scale. Close interactions between governments and market participants and discretionary fiscal dispensations are being resorted to. Fifth, other related measures to restore confidence are being undertaken, and these are quite varied-ranging from protectionism to changing prudential or accounting standards, or launching innovative ad-hoc institutional structures with an underlying public-private partnership. Sixth, the lendable resources of the IMF have been increased significantly to enable it to provide assistance to the needy developing countries affected by the crisis. The IMF has responded with a new set of conditionality and credit facilities as appropriate to resolve the ongoing crisis. Finally, it is essential to recognise that while the policy responses of each country were varied, most of the responses have been along the lines described above.

Several issues have been debated with regard to the various policy responses, and these may be summarised as follows:

i. The initiatives taken by national authorities, especially in advanced and systemically important economies such as the US, to revive the domestic economy may have consequences for other countries. These externalities could be positive or negative. Furthermore, while concerted and coordinated action may be needed, the extent of the fiscal or monetary stimulus and the measures differ across countries, based on the public policy preferences of the time at the national level, as warranted by country-specific circumstances. Thus, issues of adequacy and the appropriateness of actions of individual economies in a global context remain while considering the appropriate global response. A large number of countries feel left out in the process of multilat-
eral initiatives on managing the crisis for want of representation in the G-20 initiatives. The fundamental issues of adequacy of policy space, particularly for developing economies, in a globalising world dominated by a few advanced economies and with one economy’s currency being the global reserve currency, are very complex and are naturally yet to be addressed. More generally, policy autonomy is needed for national authorities in view of the externalities of the financial sector, and such autonomy has to be reconciled with the global obligations warranted by the rapid globalisation of the financial sector.

ii. The London Summit G-20 communiqué includes a commitment to refrain from raising new barriers to investment or trade in goods and services. In practice, however, this restricts the freedom of the developing countries more than that of the advanced economies. Developing countries have considerable scope to increase their applied tariffs under the WTO regime, since they are lower than the committed tariffs in many cases. The communiqué also commits support for the WTO Doha Round without recognising the fact that some of the proposals on the table are based on the further liberalisation of financial services. The lessons from the crisis with regard to the risks in further liberalising financial services have thus not been taken into account.

iii. Subsidisation of commercial and financial activity in advanced economies in this context places developing economies at a disadvantage, since they cannot subsidise their industry in view of the limited resources available. Thus, the recapitalised entities in advanced economies could undermine the level playing field in global competition. Several Free Trade Agreements have binding provisions among contracting parties on matters relating to cross-border investments, and hence the issue of a level playing field assumes special significance. Indeed, in view of the lessons learnt from the crisis, the provisions relating to financial services in Free Trade Agreements may have to be reviewed.

iv. There are medium-term implications of the short-term actions taken to ensure recovery. In particular, the fiscal stimulus involving a huge debt or contingent liability for the government could have an inflationary potential. In brief, the fiscal sustainability of current actions should be constantly assessed, in terms of their implications for both the national economy and global balances. For example, if significant fiscal stimulus is undertaken by countries which have large fiscal and current account deficits, there could be a cumulative impact. Such an impact may aggravate the existing macroeconomic imbalances over the medium term. Pump priming in general is appropriate if the crisis were only of a cyclical nature; however, if it turns out to be a structural crisis, pump priming may aggravate the misallocation of resources. In any case, pump priming by itself may have the effect of postponing, if not undermining, the required structural changes.

v. The mix of fiscal and monetary measures would depend on several factors, and there could be a temptation to place a disproportionate burden on the central banks. The possible threat to price stability on account of current activity has to be reckoned, and expectations of future actions carefully modulated. Under some circumstances, monetary measures may themselves have an inflationary potential for the future, and could, beyond a point, induce a liquidity trap. A liquidity trap generally implies that the expansion of base money by monetary authorities ceases to have the desired multiplier effect, thus rendering the easy monetary policy significantly ineffective for a prolonged period.

vi. The bail-out strategies may create moral hazards, although during extreme distress moral hazard should not be a compelling consideration. Furthermore, the conditions attached to bail outs are critical, both for achieving the intended purpose and for mobilising public opinion in favour of such bail outs. It is also essential to ensure that the bail out serves the main purpose of restoring normality in the financial sector, and does not merely serve the interests of the management, shareholders and bond holders of the institution concerned. There may be issues about the wisdom of utilising some elements of the financial sector to restore normality, if such elements are perceived as the so-called 'greedy' elements or 'toxic wastes' that caused the problem in the first instance.

iii. In a crisis scenario, public policy generally acquires a larger policy space and greater discretion to manage the crisis and restore normality. Not only should such discretion be given up once the recovery commences, but participants in the financial sector should also cooperate in establishing new rules of the game. This would indeed be the 'exit' problem, and the issue is
whether attention is being paid to an 'exit' strategy while undertaking the actions aimed at restoring normality in a crisis situation. In other words, the danger of a build-up of vested interests in carrying out the measures taken for crisis management should not be ruled out.

WHAT HAS BEEN THE POLICY RESPONSE IN INDIA?

The monetary measures included a reduction in policy rates, reduction in the bank reserves to be deposited with the central bank, and the liberalisation of refinance facilities. Some measures uniquely appropriate to Indian conditions were also undertaken, such as the rupee-US dollar currency swap window for banks, refinance to apex institutions catering to small industries, export and housing, and refinance to banks' lending to mutual funds and non-banking financial companies. In addition, a special arrangement was also made for the non-banking financial companies under stress, whereby liquidity support is provided by the RBI, but the solvency risk is borne by the government. In responding to the stress in financial markets, the RBI had the ability to provide foreign currency from reserves and manage liquidity in money markets through the multiple instruments originally designed to manage volatility in capital inflows. The policy with regard to access to external commercial borrowings, which had emerged as an active instrument for management of capital flows, was relaxed in a counter-cyclical move after the flows started reversing. In fact, the position was more than reversed to one that had existed before the tightening process had started. A small window was opened for NBFCs to avail of foreign currency borrowing from multilateral financial institutions and government owned development financial institutions. Corporates were allowed the flexibility to buy back the Foreign Currency Convertible Bonds (FCCBs) earlier issued by them.

The response of the Indian authorities has been along predictable lines. The central government invoked the emergency provisions of the FRBM Act to seek relaxation from fiscal targets, and launched fiscal stimulus packages from December 2008. These fiscal stimulus packages included additional public spending, government guaranteed funds for infrastructure spending, cuts in indirect taxes, expanded guarantee cover for credit to micro and small enterprises, and additional support to exporters. These packages came on top of an already announced expanded safety net for the rural poor, a farm loan waiver package, and salary increases for government staff, all of which were expected to have stimulated demand.

With respect to prudential measures, India had acquired considerable policy scope, since counter-cyclical measures had already been put in place during the period of excessive growth in credit. Recognising that the sudden and significant turn of events could impair assets down the line, counter-cyclical measures such as higher risk weights and provisioning requirements for certain sectors witnessing very high credit growth, which had been put in place in 2006, were restored to their original levels. In order to preserve the economic and productive value of the assets affected by the sudden and sharp deterioration in external conditions, banks were asked to take action for the quick detection of weaknesses and a careful assessment of viability, and put in place, in a time-bound manner, restructuring packages for viable accounts. As a precaution, it was emphasised that the basic objective of restructuring is to preserve the economic value of units, not the ever-greening of problem accounts. Other measures include relaxation in accounting standards, in relation to the foreign currency obligations of corporates.

WHAT IS THE AGENDA FOR REFORMS?

In view of the intensity and spread of the crisis, there is a widespread and deep interest in undertaking reforms, especially in the financial sector, that would minimise the prospects of such crises in the future, and equip the global community as well as national authorities to manage future threats to financial stability. The academic work on the subject is already extensive, and takes into account the historical background as also the unique features of the current crisis. Multilateral institutions such as the UN, UNCTAD, World Bank, IMF, regional development banks, ILO, OECD, etc., have reported extensively on the implications of the crisis, the immediate response needed, and the reforms that appear appropriate. Ad hoc groups have been constituted by several authorities to render advice on specific issues. In the US, the UK and the Euro area, national authorities, including parliamentary bodies, are making extensive enquiries and proposing comprehensive reforms. Of these, two initiatives are of particular importance. G-20 initiatives represent a consensus at the level of se-
lect governments on the various reforms that are appropriate. These are of considerable operational significance. The draft report of the Commission of Experts of the President of General Assembly on Reforms of International Monetary and Financial System is more comprehensive, and tries to combine measures that are both desirable and feasible. It has the added benefit of inputs from all member countries of the United Nations, and does not suffer from the problem of defending any particular legacy. The Commission has wide representation from policymakers and academicians from different parts of the world.

The set of reforms proposed by all these bodies can be divided into three broad areas, viz., macro-aspects, financial sectors and global issues. With regard to macro-aspects, serious attention had been paid to reviewing and rebalancing competing considerations in public policy. In the financial sector, there is an impressive agreement on the fundamental directions in which reforms are needed. Essentially, it is a review of a philosophy of deregulation in favour of redesigned regulation. On issues relating to global economy, considerable complexities remain, although the main issues have been flagged for discussion and further consideration.

At the macro level, a fundamental review of the role of the state vis-à-vis the market is underway. It is recognised that in the recent past, market failures have been underestimated. There is no longer a presumption that the markets are always right. The mainstream opinion is in favour of continuing with market orientation with a greater role for governments. Furthermore, the realistic roles of the real and financial sectors are being revisited. There is an increasing recognition that the financial sector, though critical for a modern economy, is only a means to an end, and that while the financial sector enables growth, it may not necessarily lead to or sustain growth. This is more akin to the classical view which states that money or finance is only a veil, and that what matter significantly are the real forces operating in the economy. The adverse consequences of inequalities in income and wealth are better recognised, and the stabilising role of social security measures better appreciated. The 'confining of the role of monetary policy to inflation targeting is questioned, although the importance of both price stability and financial stability is recognised. Finally, there are great concerns with regard to governance in both public and private sectors.

As regards the financial sector, there is a reasonable convergence on the fundamental directions in which regulatory reform has to take place. There are, however, differences with regard to the extent to which regulation should be tightened and the extent to which global regulation should take precedence over the national level regulation. There is better recognition of the importance of the stability of the commercial banking system relative to other financial institutions. It is generally recognised that regulation should be counter-cyclical, comprehensive, system-oriented and conscious of liquidity considerations. There is less explicit recognition of the dangers to counter-cyclical regulation, since counter-cyclical regulation should not mean dropping regulatory standards below the desirable norm. While financial innovations may add to efficiency, it is noted that all innovations may not be good for the system, and hence regulators have to carefully maintain the appropriate balance between the safety and usefulness of innovations in the financial sector. Issues of conflict of interests, transparency and governance in all institutions relevant to the financial sector have gained great prominence. The importance of host regulators compared to home regulators is being recognised. The possibility of modifying accounting standards to reduce pro-cyclicality is being debated. Moreover, a developmental focus is sought to be given to the financial sector, in the sense that financial inclusion and other socially desirable objectives should not be ignored in the search for efficiency and stability in the financial sector. The role played by central banks in the financial sector is being reviewed in order to strengthen their authority to discharge the mandate for maintaining financial stability.

The deficiencies in the current global monetary system and global financial architecture have been noted. An important source of the crisis is thought to be macroeconomic imbalances, which is a consequence of the current arrangements making the US dollar the reserve currency. While there is considerable interest in moving to a more stable and yet flexible, while being universally acceptable, reserve currency, there has been no serious formal consideration of this matter in policy circles. While this may reflect the reality of how complex the problem is, and the difficulties in the transition from current arrangements, there is a concern in some circles that perpetuating the existing arrangements may give rise to a crisis again in the future. There is greater recognition of the importance of cooperation at regional levels.
and bilateral swap arrangements among central banks. The importance of even handed surveillance of the external sector, and the financial and broader economic policies and practices of national governments is conceded, but no practical steps are forthcoming. There is better appreciation of the need for capital account management, especially during difficult times. The risk of globalisation of the financial sector relative to trade has been noted in many circles. There is a greater sensitivity to the problems arising from tax havens and the prevalence of bank secrecy in some jurisdictions.

As regards international financial institutions, the Financial Stability Forum has been expanded into the Financial Stability Board with a more formal mandate on all matters relating to global financial stability. It is not clear, however, whether this would make it any more effective than the Financial Stability Forum in predicting or managing crises. The deficiency in governance arrangements in International Financial Institutions has been conceded, and the need for corrective actions accepted. Immediate prospects for a significant change are, however, not apparent, though the beginning of a reform is indicated with regard to the IMF and the World Bank. In the meantime, they have been authorised to operate with additional borrowed funds and possibly IMF-created global liquidity in the near future. Above all, the fundamental issue of policy space needed for national authorities to maintain stability and strengthen globally binding arrangements is yet to be satisfactorily resolved. In particular, developing economies are left with a perception that they have no policy space to withstand the adverse consequences of globally transmitted problems.

There are some structural and fundamental issues being debated, and there is merit in addressing some of them, even as policies are designed to ensure recovery of the economy and bring about institutional reforms. At one end of the spectrum is the contention by a few that this crisis represents the end of capitalism, while most others feel that this is only a problem of policy mistakes and market failures, both of which can be fixed by the reforms under consideration. While a few argue that this is the end of globalisation, most others feel that open trade and investment policies globally should still be the goal. While this may not be the end of financial globalisation, there is considerable discomfort with the financial globalisation and de-regulation. The relevance of policy space for national regulations, and indeed of development finance, is being revisited. On the issue of a regime of global regulation or global coordination of regulatory regimes, lessons need to be drawn from the experience of the Euro area. The multiple fiscal authorities and single monetary authority, viz., the European Central Bank (ECB), has led to severe problems of coordination. In the global environment, there are multiple fiscal and multiple monetary/regulatory authorities that would make significant coordination extremely difficult. Further, the issue of multiple versus a single regulator at the national level remains by and large unresolved.

As explained above, several factors of a policy and structural nature have contributed to this crisis, whose full contours remain to be known. Several policy initiatives have been taken by all the countries to manage the crisis. An international consensus, however weak and broad, is now available for the most part of the immediate course of action. The beginning of 2009 represents a watershed in the process of cooperation at the global level on policy issues relating to the globalisation of finance. A new journey has been initiated. It can only be hoped that the difficult journey will gather strength, and that all sustained efforts will be made not only to ensure recovery, but also to address some of the structural issues that the global crisis has revealed.

**WHAT IS THE POSSIBLE IMPACT OF THE GLOBAL CRISIS ON INDIA?**

At the time of writing this Epilogue, the consequences of the global crisis are being felt in all economies, and the duration as well as the severity of the impact is still uncertain in the rest of the world. Similarly, the policy measures taken in India are yet to fully impact the economy. Hence, the narrative is confined to some significant factors that would determine the overall impact of the crisis on India.

First, the banking system as a whole remains reasonably strong, and is fairly well-poised to generally withstand a possible impairment of their asset quality due to a slowdown in the real economy, and the bursting of asset bubbles. Empirical evidence indicates that resolving a banking crisis takes longer, say two to three years, and is often very burdensome on the tax payer.
Second, the financial markets have shown considerable resilience, and stress has been confined to frictional liquidity for a temporary period. The RBI has at its command multiple instruments, which it has been deploying as and when necessary. The financial markets draw comfort from the commitment of the RBI to moderate excess volatility. This should facilitate recovery in India.

Third, except for a few large corporates with close linkages with non-banking financial companies and mutual funds, other corporates and most households are not excessively leveraged. The balance sheet of the government has insignificant foreign currency exposures, and most of its debt is at fixed rate. Overall, the balance sheets of households, corporate and financial intermediaries are not excessively vulnerable.

Fourth, the external sector derives comfort from the level of reserves and manageable current account deficit, even after the slump in exports and remittances. The strong domestic demand makes India fairly resilient. Moreover, a large part of volatile portfolio flows may have already exited from India.

Fifth, the slowdown is affecting vulnerable workers, particularly in the construction sector. Among the most adversely affected are export-intensive sectors like gem and jewellery, ready-made garments, textiles and ancillaries. More generally, small and medium industries are adversely affected whenever there is a stress in the financial and real sectors. However, depending on the adequacy of sectoral reliefs and stimulus, there may be some relief. There are some safety networks which may mitigate to some extent the serious effect on the unemployment and underemployment that arose from the slowdown in the real sector.

In responding to the crisis, public policy is therefore able to draw on the strengths in the financial and external sectors, but it is essential to resist the temptation to excessively focus on measures recommended by the global fora and ignore the unique features of the Indian economy. While the financial sector and, to some extent the external sector, are sources of strength, financial markets assess the fiscal situation as weak. Moreover, fiscal stimulus, as already announced by the government, may take fiscal deficit as a per cent of GDP to double digits, while the public debt to GDP ratio in India is among the highest in the world. Bottlenecks in infrastructure continue to prevail, and supply management could be critical to the future path of inflation. While the headline inflation could be low, the relevant indicators for purposes of comparison with the policy stances of other economies should be consumer price indices. In this regard, there is a need to respect the underlying inflationary pressures that persist in India, while determining the magnitude of fiscal and monetary stimulus. The prevalence of administered interest rates adds to the rigidities relating to the transmission mechanisms of monetary policy and limits the flexibility available for monetary policy.

In sum, there are some unique strengths and cognizable weaknesses that could determine the impact of the global crisis on India. Indeed, there is some anecdotal evidence to show that the ongoing global crisis has brought to light the resilience of the Indian economy, despite its vulnerabilities. For instance, in its issue dated 17 November 2007, The Economist ranked India along with Turkey and Hungary as the riskiest economies among select leading EMEs. The article states, inter-alia,

Those with current-account deficits are vulnerable to a sudden outflow of capital if global investors become more risk averse. Economies where inflation and credit growth are already high and budget deficits large, such as India, have less room to ease monetary or fiscal policy if the economy weakens (pp. 75-7).

In its issue dated 28 February 2009, India is rated low in financial vulnerability. India comes fourth, after China, Malaysia and Taiwan, in terms of being low in financial vulnerability (p. 75). While being less vulnerable to serious financial or external sector problems, India is likely to continue to clock the second highest growth rates in the world.