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**Global Financial Crisis:  
Evaluation of Policy Response from Japan, China and India**

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**Abstract:** *The first financial crisis of the 21st century has made the economic and financial environment a very difficult epoch for the world economy. The fall out of the current global financial crisis has many consequences for the Asian countries of Japan, China and India. It is, therefore, very important that we review the current crisis accurately so that one can then find, first, whether appropriate immediate crisis resolution measures and mechanisms were applied by countries; second, understand the differences among countries on how they are handling the policy decisions; and, finally, think of the longer term implications for monetary policy and financial regulatory mechanisms in these countries. This paper, therefore, evaluates the response of the policy actions of Japan, China and India in tackling the global financial crisis.*

*The global financial crisis has slowed world economic output and growth to lowest levels since World War II. Instability has surged from sector to sector, first from housing into banking and other financial markets, and then on into all parts of the real economy. The impact of the crisis can be seen to impact on both the financial sector and the real economy across the world sparing no country. Although extensive research is churned out covering the policy responses of US, UK, Europe and other western countries, the research on Asian countries of Japan, China and India will throw light on the under researched area of policy response in Asia. For both China and India, this crisis has resulted in a slowdown of enviable growth rates in the present global environment. For Japan, the recovery from recession is crucial especially having lost a decade after the 1997 Asian financial crisis.*

**Keywords:** *financial crisis, Japan, China, India, stimulus package, monetary policy, fiscal policy*

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## **Introduction**

The subprime crisis broke out in August 2007 and until September 2008, the crisis was viewed as a crisis restricted to developed countries such as US, UK and other G7 countries. The crisis metastasized into a global financial crisis in September 2008 when the largest bankruptcy filing in the US history applied by Lehman Brothers. Therefore, the financial crisis of developed markets outspread into a global recession, following which world output fell first in over six decades and so did international trade.

The present crisis is more global than any other time of financial mayhem in world history except for the Great Depression of 1930's and World War II. This crisis is unique, not only in terms of its depth but also in the extent of its global reach: virtually no economy has remained unaffected. Global industrial production, trade and GDP growth have dipped down to historic low levels. The world economy dived into a recession causing widespread business contraction, increase in unemployment, and attenuation of government revenues. Investors plugged out capital from countries, even those with minimum risk, and resulting in stocks value and domestic currencies to sink. Slumping of exports and commodity prices have added to the woes and pushed economies worldwide either into recession or into a phase of slower economic growth. The adverse feedback loop between the real and financial sectors is taking its toll on the growth of the global economy. This crisis presents the obvious case of what extent countries across the world have become interdependent, therefore making it difficult for the countries to “decouple” from the global economic crisis, especially as the initial shock originated in the largest economy (US) and stunned the world.

The global crisis among the developed nations resulted in growth contraction to unprecedented levels. The economic recovery with the help of fiscal and monetary stimulus along with improving financial conditions is setting with a slow pace. The crisis among developing economies has resulted in a slowdown as opposed to a full-blown recession in developed countries.

## **Origins of the Global Financial Crisis**

The origins of the global financial crisis lie in the US sub-prime lending.<sup>1</sup> Faced with strong investor demand for higher yielding assets, banks saw an opportunity to expand mortgage lending and then to repackage and sell the underlying credit risk as securities with different levels of risk and return i.e. packaging of loans into securities<sup>2</sup>. As lower costs of capital, wider access to credit and myriad choices for investors were attributes of financial innovation, sharp increase in securitized mortgages had repercussions.

The underlying principle for subprime lending was based on the verity that even if borrowers fail to make the mortgage payments, they could refinance or sell the house to pay the mortgage. Overly aggressive mortgage lenders, compliant appraisers, and complacent borrowers proliferated to feed the housing. Therefore financial institutions no longer felt the consequences if the mortgages were not repaid whereby eligibility criteria for mortgages were relaxed. Many borrowers didn't have adequate income to make the payments and investors didn't perform due diligence of their own, but only

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1 Some have argued that monetary policy contributed significantly to the bubble in housing prices, which in turn was a trigger of the crisis. The US Federal Open Market Committee brought short-term interest rates to a very low level during and following the 2001 recession, in response to persistent sluggishness in the labor market and what at the time was perceived as a potential risk of deflation.

The views expressed by Ben Barnanke claims that actions were in accord with US Congress to promote maximum employment and price stability; indeed, the labor market recovered from that episode and price stability was maintained. It is frankly quite difficult to determine the causes of booms and busts in asset prices; psychological phenomena are no doubt important. However, studies of the empirical linkage between monetary policy and house prices have generally found that that that linkage is much weaker than would be needed to explain the behavior of house prices. Cross-national evidence also does not favor this hypothesis. For example, as documented by the International Monetary Fund, even though some countries other than the United States had substantial booms in house prices, there was little correlation across industrial countries between measures of monetary tightness or ease and changes in house prices. For example, the United Kingdom also experienced a major boom and bust in house prices during the 2000s, but the Bank of England's policy rate went below 4 percent for only a few months in 2003.

<sup>2</sup> Angel Gurría, OECD Secretary-General on Global Financial Crisis addressing New Zealand Institute of International Affairs

relied on credit ratings. Rising defaults in the US subprime residential mortgages. Investors were at risk and eventually markets froze which then led to the drying up of short-term funding for securities and the plunging prices. As there was asymmetric information regarding the banks which held the damaged assets, even lending between banks stopped. As a result, there was no more liquidity to help markets function. While the subprime mortgage problem is largely limited to the United States, the repackaging practices were international, so banks outside the US, especially in Europe, were also drawn in to the unfolding crisis.

The US housing boom began to deflate in 2005, yet asset prices continued to rise even as sales dropped. By end of 2006-2007, according to the Case Schiller home price index, prices fell by more than 25% and steadily onto a downward spiral.<sup>3</sup> The current crisis was spurred by this massive asset market correction that destroyed more than \$13 trillion of household wealth.<sup>4</sup> U.S household net worth fell from \$64 trillion in mid 2007 to \$50 trillion by end of the first quarter of 2009 as a result of falling home and stock prices (See figure 1). As the asset prices fell, with rising defaults, the exposure to low-quality mortgage backed securities led to myriad financial failures in the US and UK. Apart from housing, the crisis has bled over to other sectors such as credit card and automobile industry. The loan defaults have been ominously increasing. The nationalization of mortgage lenders Fannie Mae and Freddie Mac, followed by the fall of Lehman Brothers and the bailout of AIG, added financial markets all over the world.

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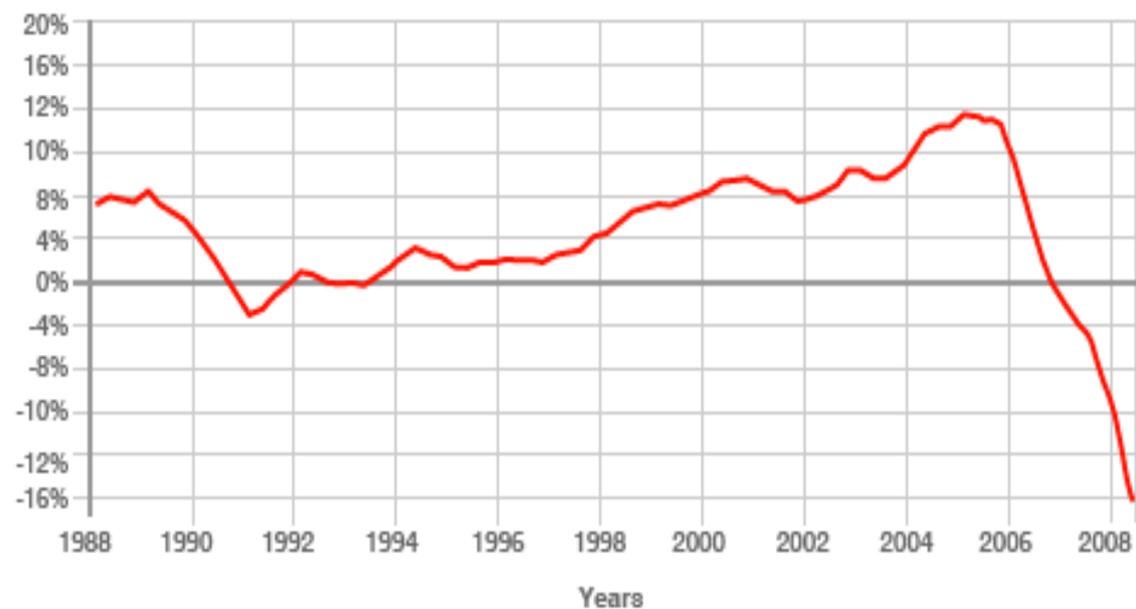
<sup>3</sup> Krugman, Paul (2008), "The Return of Depression Economics and the Crisis of 2008", W.W.Norton: New York. Also see Reinhart and Rogoff (2008), "The Aftermath of Financial Crises", American Economic Review, American Economic Association, vol. 99(2), pages 466-72. According to them, the index went down to 28% already more than twice that registered in the U.S. during the Great Depression.

<sup>4</sup> Sebastian Mallaby and Peter Tilman, "Prospects for Recovery", Council on Foreign Relations, Japan Economic Currents, No.74, September 2009.

**Figure 1: US House Price Trends, 1988-2008**

**US HOUSE PRICE TRENDS, 1988-2008**

Per cent change, year ago



SOURCE: S&P/Case-Shiller

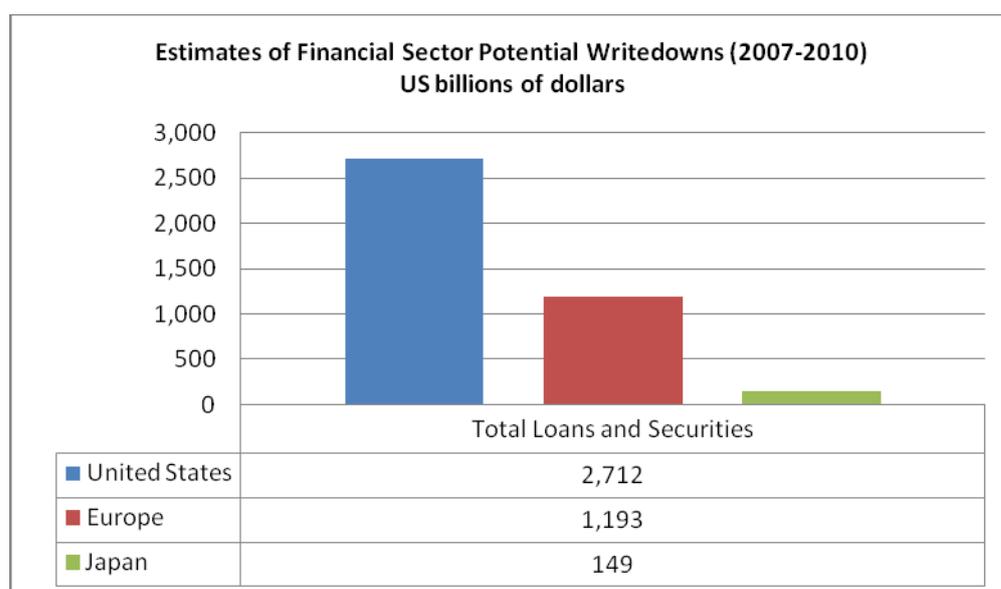
Most of the losses were because of subprime mortgage debt, excessive leveraging of investments and inadequate insurance against defaults and bankruptcy. <sup>5</sup>The IMF's projection indicates global losses at roughly \$2.8 trillion but it has now fallen to \$2.3 trillion as per April 2010 Report. <sup>6</sup> The estimated financial sector potential write-downs are segregated country wise the following figure.

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<sup>5</sup> The first explanation sees the crisis as rooted in inadequate regulation and distorted incentives in financial markets. The second sees it as the result of a global savings glut that fueled an unsustainable credit boom in the United States.

<sup>6</sup> This estimate is lower than the earlier estimate of \$ 4 trillion in the April 2009 GFSR report due to rising security values.

**Figure 2: Estimates of Financial Sector Potential Writedowns (2007-2010)**



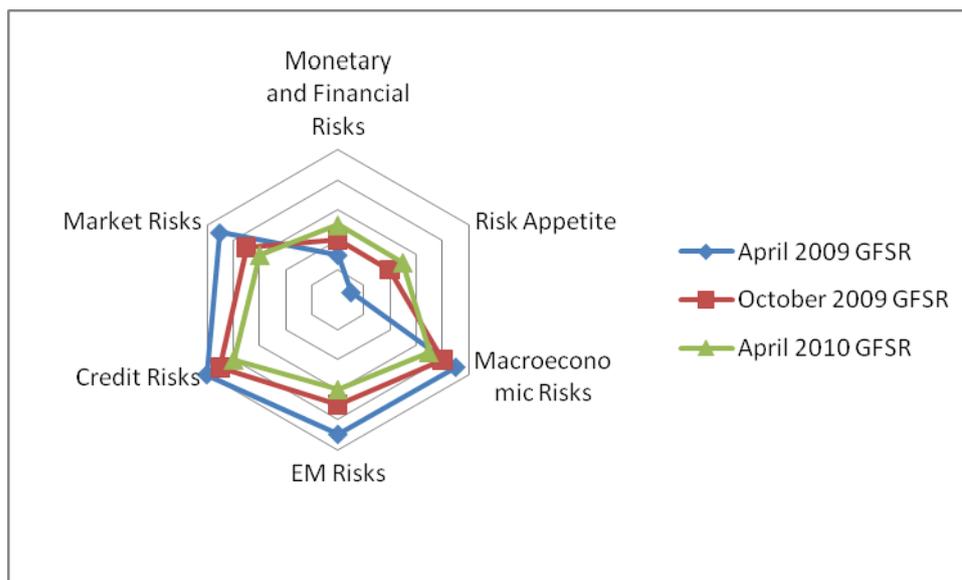
Source: IMF, *Global Financial Stability Report 2009-10*

In understanding the severity of the crisis and its impact, Reinhart and Rogoff (2008) presented a historical analysis comparing the run-up to the U.S. subprime financial crisis with the antecedents of other banking crises in advanced economies since World War II. They showed that standard indicators for the United States, such as asset price inflation, rising leverage, large sustained current account deficits, and a slowing trajectory of economic growth, exhibited virtually all the signs of a country on the verge of a severe financial crisis.<sup>7</sup>

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<sup>7</sup> They explain the aftermath and severity of the financial crises as follows: **First**, asset market collapses are deep and prolonged. Real housing price declines average 35 percent stretched out over six years, while equity price collapses average 55 percent over a downturn of about three and a half years. **Second**, the aftermath of banking crises is associated with profound declines in output and employment. The unemployment rate rises an average of 7 percentage points over the down phase of the cycle, which lasts on average over four years. Output falls (from peak to trough) an average of over 9 percent, although the duration of the downturn, averaging roughly two years, is considerably shorter than for unemployment. **Third**, the real value of government debt tends to explode, rising an average of 86 percent in the major post-World War II episodes.

**Figure 3: Global Financial Stability Map**



Source: *Global Financial Stability Report 2010 (EM Risks- Emerging Markets Risks)*.

Macroeconomic risks have ebbed out considerably as economic recovery sets in , comforted by policy stimulus, the turn in the inventory cycle, and improvements in investor confidence. The projections in the World Economic Outlook (WEO) for global growth in 2010 has been raised significantly since October 2009, following a sharp rebound in production, trade, and other indicators. As per the global financial stability report, ‘the recovery is expected to be multi-speed and fragile, with many advanced economies that are coping with structural challenges recovering more slowly than emerging markets’. The world economy expanded at an annual rate of about 5¼ percent during the first half of 2010—about ½ percent higher than in the July 2010 World Economic Outlook (WEO) Update.

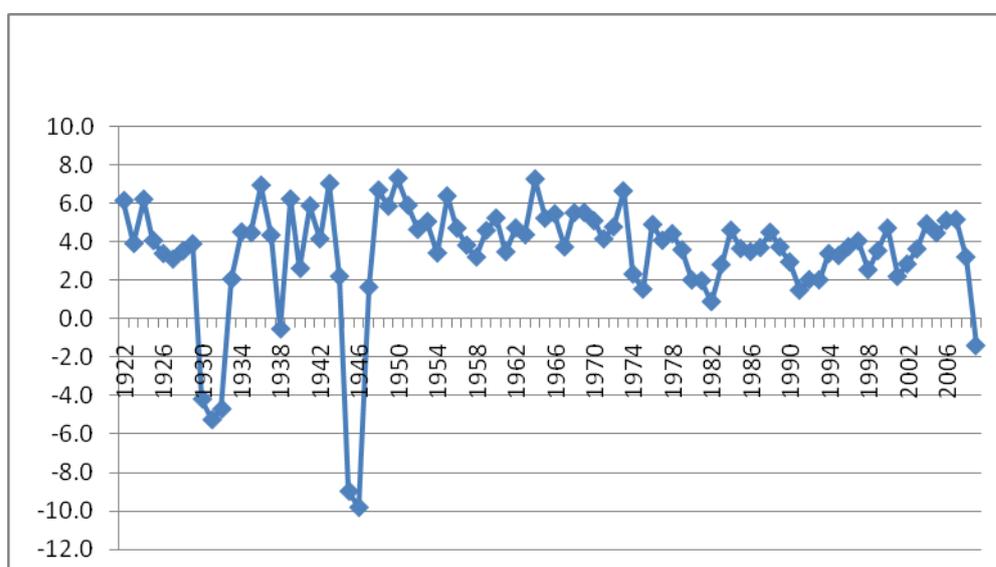
### **Impact of Global Financial Crisis**

On hindsight while this is apparent, no one could predict a possible financial crisis when it hit Asian region neither in 1997 nor in 2008 when it struck US. Even though many countries had already slumped into recession by mid-2008, the month of September in 2008 overtops the rest. While the effects of the financial crisis ripple across the globe, for Asian countries such as Japan, China and India, this reflected a

confluence of global credit crunch and weaker external demand.

Signs of a rapid decline in the global economy were evident in 2008-09 as world trade flows stooped low and production fell flat, initially in the developed economies and then spread onto developing countries. World trade has gone down drastically, three times since the World War II but this crisis has plunged global trade to record low levels.

**Figure 4: Long Run World GDP Growth**



Source: ADB Asian Development Outlook Update October 2009

The previous drops in global trade occurred during the oil shock recession of 1974-75, the inflation-defeating recession of 1982-83 and the dot com crisis of 2001-2002<sup>8</sup>. Although world trade grew by 2% in volume terms for the year 2008, it tapered off in the last six months of the year and was well down on the 6 per cent volume increase posted in 2007. World output measured by real gross domestic product (GDP) declined for historic low levels since post war era<sup>9</sup>. The first annual contraction since

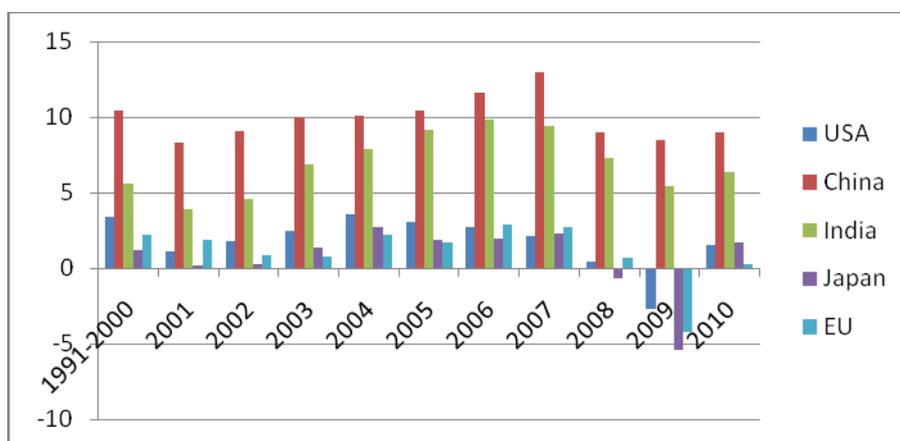
<sup>8</sup> Richard Baldwin, *The Great Trade Collapse: What Caused it and What Does it mean?*, VOXEU Publication, December 2009.

<sup>9</sup> According to the some observers, even before the problems in financial markets turned into a fullblown crisis in September 2008, the growth of gross domestic product (GDP) had halted in most developed countries. The bursting of the housing bubble in a number of countries, the subprime

World War II, the world GDP contracted according to the IMF World Economic Outlook Forecast by an estimated 1.4% in July 2009 and with modest revision thereafter in October 2009 to 1.1. % from the previous year's growth of 3.5% in 2008. Recently, as per the October 2010, IMF WEO, the world economy expanded at an annual rate of about 5¼ percent during the first half of 2010—about ½ percent higher than in the July 2010 World Economic Outlook (WEO) Update.

According to the IMF, these improved forecasts are dependent on the full implementation of announced stimulus measures. The global financial crisis has had a profound impact on the Asian economies such as Japan, China and India. As a result, the Asian region's aggregate growth clambered down to 3.9% in 2009 from 9.8% in 2007. The following figure explains the steep decline in real GDP in comparison to US and the EU.

**Figure 5: Gross Domestic Product: Selected Economies 1991-2010**



Source: IMF World Economic Outlook Update October 2009

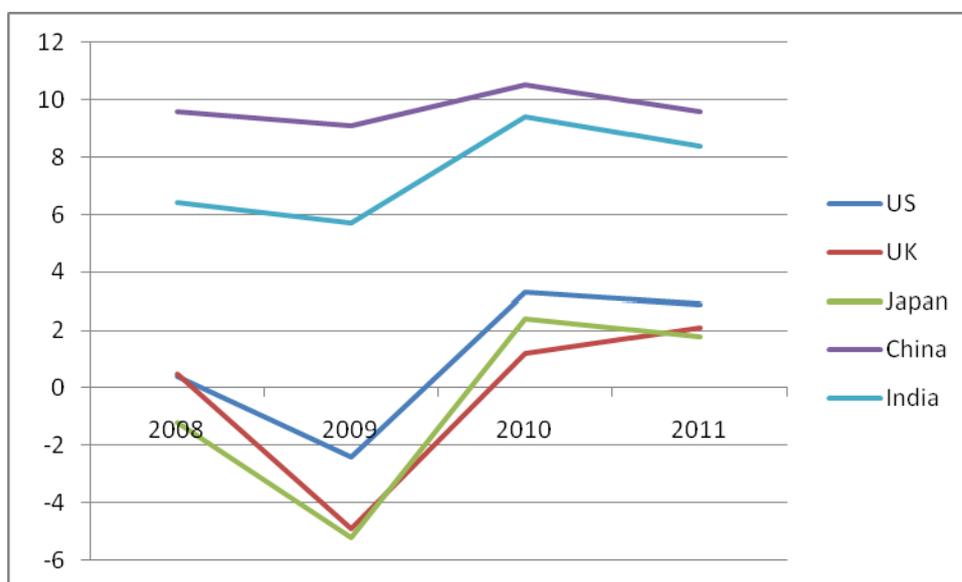
Japan's fall is steeper than the economies of EU and US due to its reliance on exports. Japan's GDP fell by -1.2% in 2008 in comparison to US GDP to 0.4% and the next year in 2009, Japan's GDP fell by -5.2% in 2009 more than US GDP, which was

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financial crisis in the United States, rising commodity prices, and in several countries, restrictive monetary policies led the global economy to the recession.

-2.4%.<sup>10</sup> China and India faced a slowdown of their economy from 13 and 9 percent in 2007 to 9.6% and 6.4% in 2008 respectively.<sup>11</sup> IMF has revised the world economy's medium term prospects for October 2010. The emerging markets are coping with the crisis in a resilient manner. The developing countries are leading the rest of the world out of recession with global production and general economic activity slowly gathering momentum. For specific countries, such as China and India grew at 9.1% and 5.7% for the annual year 2009, the outlook appears positive whereas for Japan, having come down a ladder to become the third largest economy, it grew at -5.2 and therefore recovery is to be sluggish for the medium term scenario.

**Figure 6: Selected Economies: Gross Domestic Product**



Source: World Economic Outlook July 2010 Update

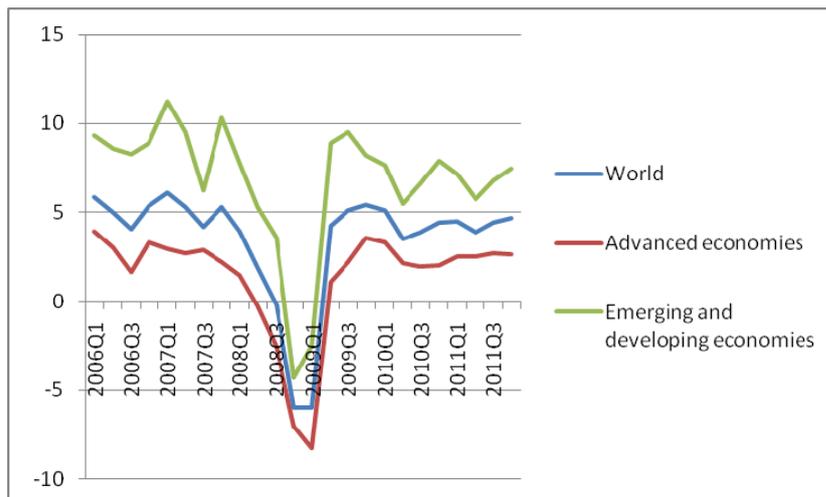
The recent October 2010, World Economic Outlook published by IMF has the world economy expanded at an annual rate of about 5¼ percent during the first half of 2010— about ½ percent higher than in the July 2010 *World Economic Outlook (WEO) Update*. The revised update of the World Economic Outlook (WEO) in July 2010 had the world growth projected at about 4½ percent in 2010 and 4¼ percent in 2011. Relative to the April 2010 World Economic Outlook (WEO), this represents an

<sup>10</sup> Ruyhei Wakasugi Why was Japan's trade hit so much harder?

<sup>11</sup> World Economic Outlook July 2010 Update

upward revision of about ½ percentage point in 2010, reflecting stronger activity during first half of 2010 mostly due to the robust growth in emerging Asia. But, the forecast for 2011 remains unchanged. The recovery in world trade began in the second half of 2009 and appears quite strong: the annualized growth in world real imports in the last two quarters of 2009 and the first quarter of 2010 was over 20 percent. So has trade fully recovered? Unfortunately, it has not, and the extent of the recovery differs substantially across economies and across products. An important distinction across economies seems to be whether an economy recently went through a banking crisis. In economies that avoided a crisis, imports are just slightly below the precrisis peak reached in the second quarter of 2008, although this still leaves them almost 15 percent below a simple extrapolation of the 2001–07 pre crisis trend. In contrast, imports in the crisis economies remain more than 20 percent below their precrisis levels and almost 40 percent below their precrisis trend. Because the crisis economies include the United States and much of western Europe which account for a sizable portion of global import demand, exports remain substantially below trend for crisis and noncrisis economies alike. In both sets of economies, exports remain about 25 to 30 percent below pre crisis trends.

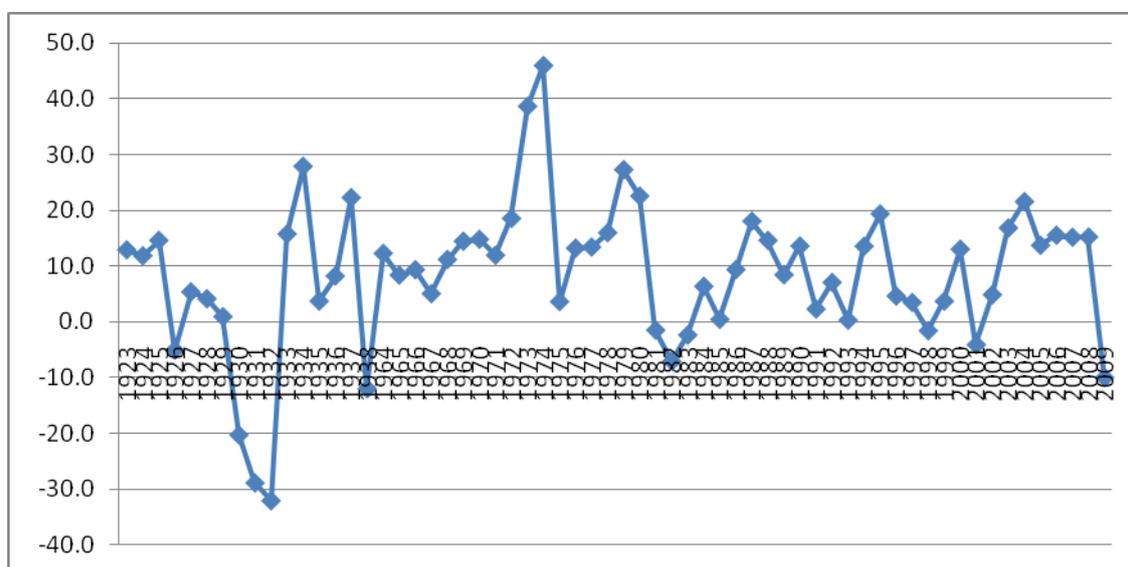
**Figure 7: Global GDP (Percent, quarter-over-quarter, annualized)**



Source: World Economic Outlook July 2010

World trade had been hit adversely by the financial crisis sparring no country. The slowdown started in 2008 and has been shrinking since September 2008 in particular, in both volume and trade. Trade deceleration began in the United States and spread to all other countries (See figure below). The 1981 and 2001 drops in global trade were moderate with growth from the previous year's quarter reaching -5% at minimum level.<sup>12</sup> The 1970s oil shock was twice that size with growth dropping to -11%. In 2008-09, the current collapse in trade occurred between the third quarter of 2008 and the second quarter of 2009.<sup>13</sup>

**Figure 8: Long Run World Merchandise Trade Growth**



Source: International Merchandise Trade Statistics, World Trade Organization.

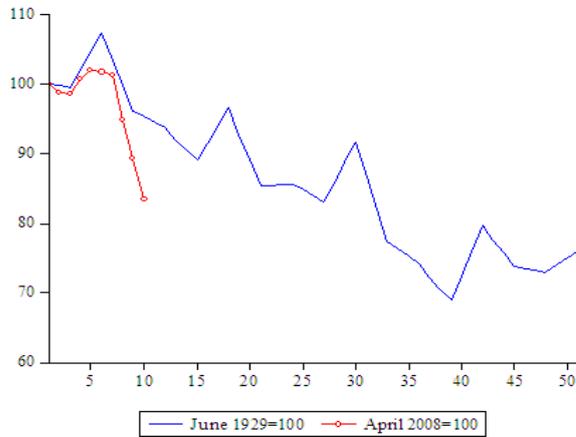
The great trade collapse of 2008-2009 is not as large as compared to the great depression, but it is much steeper. Evidence from study done by Richard Baldwin shows it took 24 months during great depression for the world trade to fall as far it fell in the 9 months from November 2008.

<sup>12</sup> Richard Baldwin, The Great Trade Collapse: What Caused it and What Does it mean?, VOXEU Publication, December 2009.

<sup>13</sup> Ibid

**Figure 9: The Volume of World Trade,**

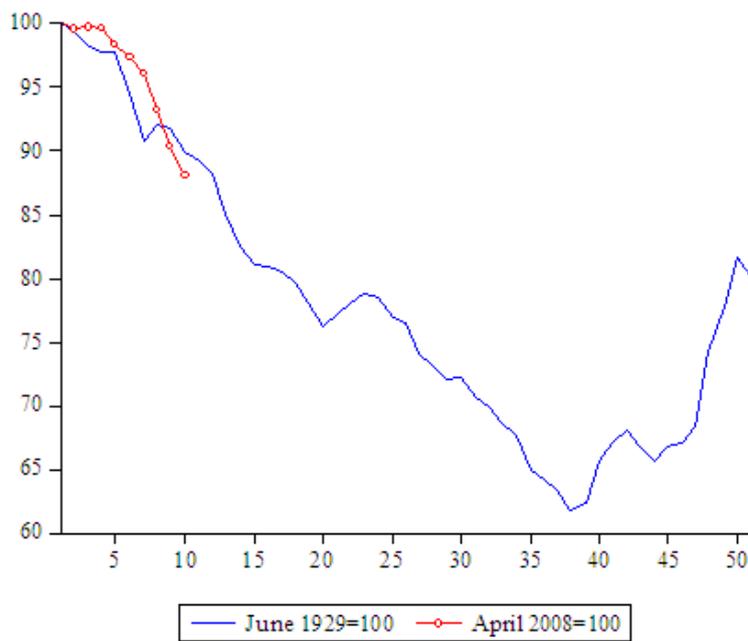
**Great Depression versus Global Financial Crisis**



Source: Eichengreen and O'Rourke (2009)<sup>14</sup>

The study also makes a comparison of the fall in production between the great economic depression in 1929 and the global financial crisis in 2008.

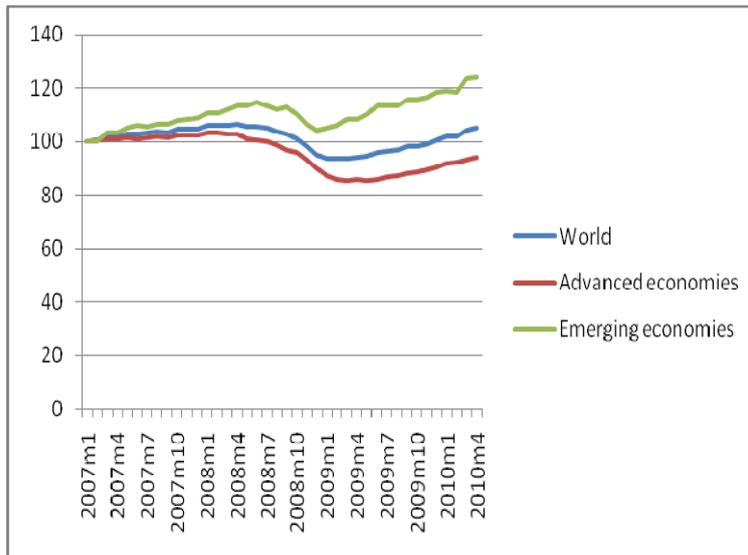
**Figure 10: Global Industrial Production**



The world economic outlook released in July 2010 shows the revival in the global production scenario and in merchandise exports.

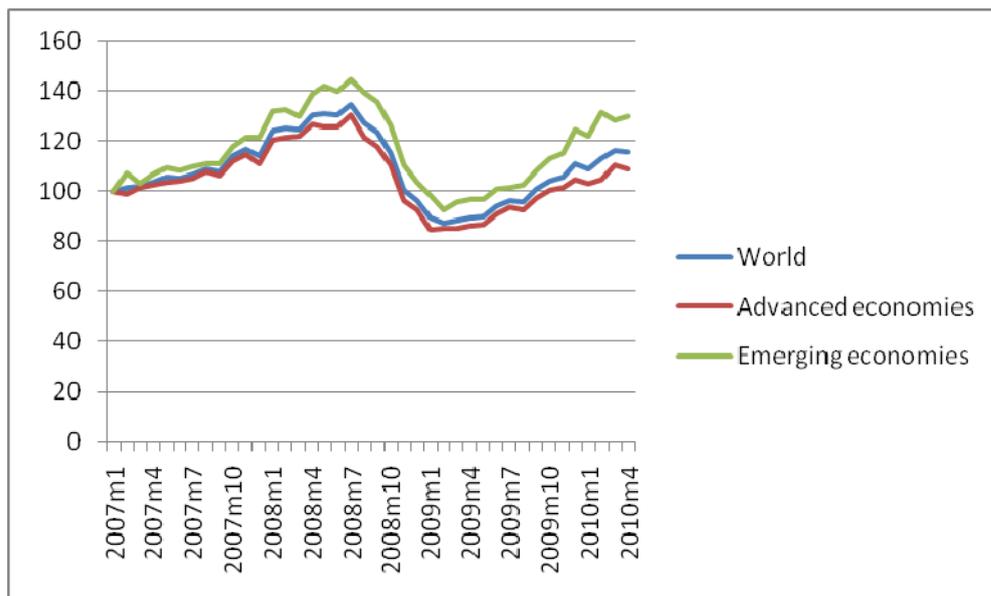
<sup>14</sup> Eichengreen and O'Rourke (2009), *The Tale of Two Depressions*, Voxeu Publication.

**Figure 11: Global Production: Medium Term Scenario**



Source: World Economic Outlook July 2010

**Figure 12: Merchandise Exports**



Source: World Economic Outlook July 2010

### **Global Policy Response**

The global financial crisis triggered by the subprime lending poses serious policy challenges. The need for an immediate policy response in order to stabilize financial markets and international capital flows, halt economic decline and initiate recovery was noticed. Major economies such US, UK, China, Japan, EU and others announced

fiscal stimulus packages and loose monetary measures to tackle the recession and bring back recovery. The total value of financial rescue packages so far is \$2.75 trillion, including \$700 billion in the US (not including AIG), \$680 billion in the UK and \$1.37 trillion in the eurozone. In addition, since October 2009, the G20 nations have announced about \$2 trillion worth of fiscal stimulus measures, including \$790 billion for the US, about \$260 billion for the EU and \$260 billion for Japan. Apart from these measures, bailout operations through infusion of capital into weakened financial institutions and industrial firms and government guarantees for impaired financial assets and bank deposits have also been tunneled into economies severely hit by the crisis.

The US Treasury has set up a public-private partnership scheme to buy “toxic” assets and non-performing loans from the financial sector, although the program has yet to make significant headway. In the US, many stimulus measures were plugged into one act as the American Recovery and Reinvestment Act (2009) for a fiscal stimulus package worth \$787 billion. The Act includes federal tax cuts, expansion of unemployment benefits, other social welfare provisions, and domestic spending in education, health care, and infrastructure, including the energy sector. The expenditure tally will be \$184.9 billion to be spent in 2009, and \$399.4 billion to be spent in 2010 with the remainder of the bill's appropriations spread over the rest of the decade.

The European Union passed a 200 billion euro plan with member countries developing their own national plans, worth 170bn to 200bn euro in total, and an EU-wide plan of 30bn euro coming from EU funding. In the UK, fiscal measures were introduced in November 2008 including a £145 tax cut for basic rate (below £34,800 pa earnings) tax payers, a temporary 2.5% cut in Value Added Tax (Sales Tax), £3 billion worth of investment spending brought forward from 2010 and a variety of other measures such as a £20 billion Small Enterprise Loan Guarantee Scheme. Further limited measures worth £5 billion were unveiled in the 2009 budget

including training help for the young unemployed and a "car scrappage" scheme. Australia in 2009 announced \$47 billion (US\$27bn) stimulus package including A\$29bn (US\$18.85bn) for infrastructure projects such as public housing and school construction, and A\$13bn (US\$8.45bn) in cash handouts to low to middle-income groups. This package follows a A\$10.4bn (US\$6.76bn) October 2008 stimulus of cash payments to low & middle income Australians

According to Edwin M. Truman,<sup>15</sup> serious financial crises go through seven distinct phases. First stage is the precrisis phase in which the authorities should be, and sometimes are, practicing crisis prevention. Too often, the crisis may be brewing, but the authorities are either in ignorance, or in denial, of that fact. Second is the outbreak of the crisis, which in retrospect is linked to a particular event, such as an action by a French financial institution to freeze access to funds it is administering. The action itself is irrelevant except for its use in dating the start of the crisis, which by that time was probably inevitable. Third is the crisis management phase, in which authorities and institutions grapple with an ongoing cascade of events with little time to chart their next move or to ponder the implications of their moves. Anna Gelpern has recently written about the fourth phase, which she calls "crisis containment."<sup>1</sup> This is a phase in only the most crises like the present one, in which the rulebook is thrown away and the overriding objective is to stop the bleeding. Ultimately, the bleeding does stop and the fifth phase begins, the "mopping up" phase. In the sixth phase of a crisis lessons are, or are not, learned. Seventh and finally, preparations are made to prevent or minimize the virulence of the next crisis. Generally, lessons are only partially learned and incompletely applied. At present, we are somewhere between the containment and the mopping-up phases of the crisis of 2009–10. Consequently, it may well be premature to think that now is the time to learn and to apply the lessons of this crisis.

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<sup>15</sup> Remarks presented at the Ninth Annual International Seminar, on "Policy Challenges for the Financial Sector Emerging from the Crisis: Building a Stronger International Financial System," Board of Governors of the Federal Reserve System, World Bank, and International Monetary Fund June 3, 2009

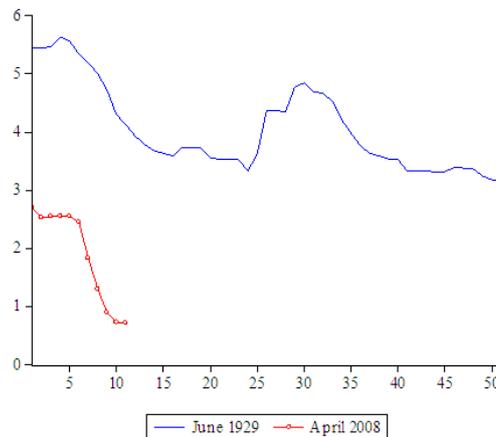
The policymakers across countries reflecting the need for a coordinated monetary response have loosened monetary policies and are slowly tightening the policy rates albeit slowly to avoid inflation and further bubble bursts. The monetary policy response has been substantial across countries. The US Federal Reserve has lowered rates to zero, has more than doubled the size of its balance sheet to over \$2 trillion, and has greatly increased the types of assets it buys from the private sector. The Bank of England and the ECB have also cut rates dramatically and expanded the types of assets they purchase. The Bank of England has formally adopted quantitative easing" as well.

**Table 1: Interest rates in selected economies, July 2007–May 2009**

Countries	July 2007	July 2008	December 2008	May 2009
United States	5.25	2.00	0.0-0.25	0-0.25
United Kingdom	5.75	2.00	0-0.25	0-0.25
China	3.33	4.14	2.79	2.79
India	6.00	6.00	5.00	3.25
Japan	0.50	0.50	0.10	0.10
Russia	10.00	11.00	13.00	12.00
Euro Area	4.00	4.25	2.50	1.00
Brazil	11.25	13.00	13.75	10.25
Canada	4.50	3.00	1.50	0.25
Korea	4.75	5.00	3.00	2.00
Saudi Arabia	5.06	3.82	2.55	0.85
Singapore	2.56	1.00	1.00	0.69
Malaysia	3.60	3.70	3.37	2.13
Indonesia	8.25	8.75	9.25	7.25
Sweden	3.50	4.50	2.00	0.50

Source: IFS, UNCTAD Trade and Development Report October 2009 and National Sources.

**Figure 13: Central Bank Rate Cuts (1929 vs 2008-09)**



Source: Eichengreen and O'Rourke<sup>16</sup>, 2009

In Feb 2010, the Federal Reserve, the European Central Bank, the Bank of England, the Bank of Japan, and the Swiss National Bank jointly put an end to the currency swap arrangements they had put in place during the financial crisis. With the deepening of the European sovereign debt crisis, later in May 2010 the swap arrangements were reestablished. On February 2010, the Federal Reserve raised the discount rate to 0.75 percent, the first interest rate adjustment since December 2008.<sup>17</sup>

Apart from these national measures, as a coordinated global response, Group of twenty has evolved as a premier forum for international economic and financial cooperation. The global financial crisis has brought into prominence the role of G-20 as the premier forum for international economic cooperation as indicated in the recent Toronto Summit (2010), Pittsburgh Summit (2009) and London Summit (2008). Despite coordination on various economic issues such as sustainable, balanced growth, financial sector reforms, reform of IFI's etc.. there still exists some significant differences of priorities amongst the G20 developed and developing countries. Positions taken by developed countries are relatively well established, but so far developing countries have had fewer opportunities to express their views and to

<sup>16</sup> Eichengreen and O'Rourke (2009), *The Tale of Two Depressions*, Voxeu Publication

<sup>17</sup> In July 2010, Chairman Bernanke presented the Semiannual Monetary Policy Report to the Committee on Financial Services of House of Representatives, and pointed out that the Fed anticipated that economic conditions were likely to warrant exceptionally low levels of the federal funds rate for an extended period.

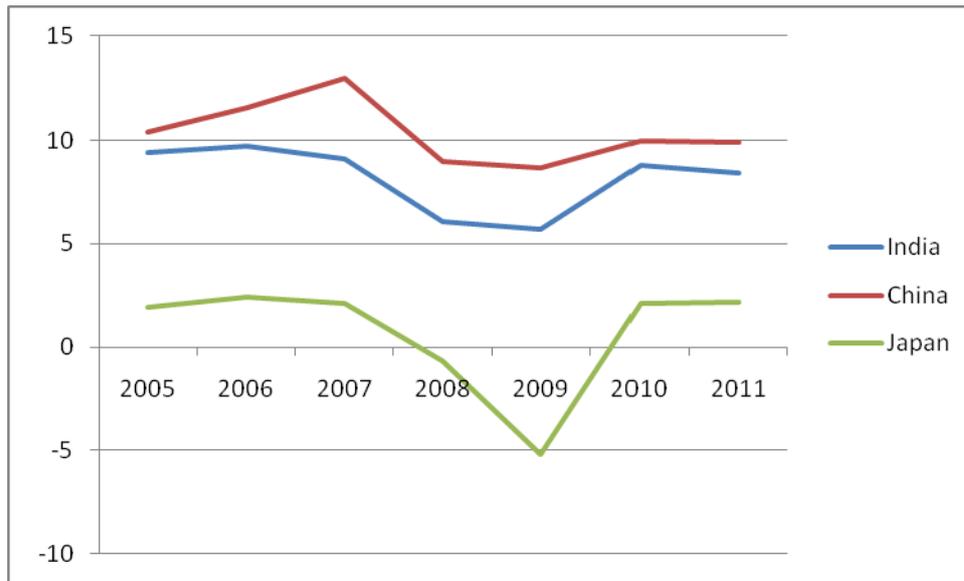
promote their own expertise at the international level. The forthcoming G-20 summit in Korea will focus on how the different countries can strategize the recovery in the post crisis scenario.

### **Asian Policy Response**

When the subprime crisis hit the US by the end of 2007, the existing assumptions were the countries in Asia can probably be decoupled. These assumptions have been proven wrong judging by the extent of the impact on trade in Asia. The channel of transmission to Asia was through the real economy and not through the financial sector as was the case with US, UK and EU. In Asia, looking at the selected economies of Japan and China, their export dependent economies were affected by the fall in external demand. Japan, China and India announced fiscal stimulus packages and loosened monetary conditions to revive their economies. Japan's GDP fell very sharply compared to US, UK and EU countries and has come out of recession in the second quarter of 2009. India and China face an economic slowdown and not a recession as their economies were growing at 9% and 13% in 2007 respectively.

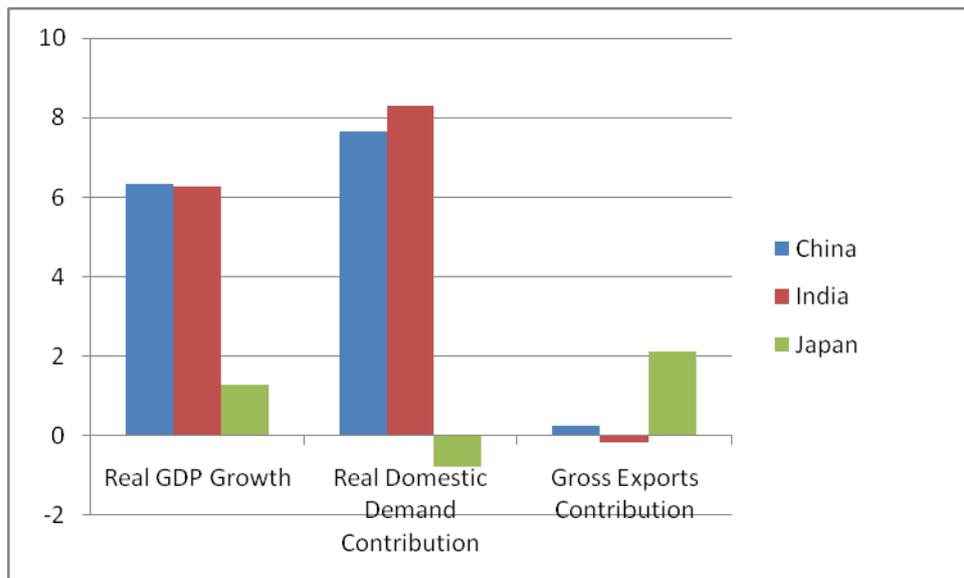
Asian economies benefited tremendously from export-led growth centered on the US and Europe in recent decades. This model can no longer be relied upon to sustain the region's growth in an inclusive manner through and beyond the crisis. Consumer spending in the US reached an unsustainable level of 72% of GDP in 2007, and I expect that it will gradually fall back to its long-term average of 66-67% of GDP, implying a considerable period of sluggish growth of US imports (Figure 6). Consumer spending in Europe is likely to remain weak for an extended period as well. The key issue for the sustainability of Asia's growth is the extent to which it can adapt to this more difficult environment and shift to greater reliance on domestic and regional demand. Despite these setbacks, according to the World Economic Outlook (April 2010), overall Asia is staging a vigorous and balanced recovery than US, UK and Europe.

**Figure 14: GDP Growth: Year-on-year (percentage)**



Source: World Development Indicators 2009, Regional Economic Outlook- April 2010 (2010 and 2011 data are IMF projections)

**Figure 15: Contributions to Growth: India, China and Japan**



Source: World Economic Outlook Rebalancing Growth, April 2010

### **Japan**

Regardless of its limited direct exposure to the global financial crisis, Japanese economy had fallen into one of its deepest recession since World War II due to its dependence on exports. The output growth in Japan contracted at 5.2% in 2009, reflecting a plunge in exports and tight financial conditions. The Democratic Party of

Japan soundly defeated the Liberal Democratic Party, which has been in power for virtually all of the past 54 years, and now faces severe problems centered on rebuilding the world's second-largest economy and dealing with record-high unemployment. Japan's Prime Minister Naoto Kan, after his re-election as president of the ruling Democratic Party of Japan (DPJ) has avoided the change in the prime ministers for the third time.

### **Monetary Policy**

The Bank of Japan announced an assortment of policy actions since the crisis spread to Japan in 2008. These include reductions in the policy interest rate, measures to ensure stability in the financial markets and means to facilitate corporate financing. According to the OECD Survey of Japan 2009 and as per the Bank of Japan announcement the following actions were promulgated:

- i)* Short-term loans at the policy interest rate to banks amounting to 7.5 trillion yen (1.5% of GDP) by June 2009 to facilitate corporate financing;
- ii)* Purchases of up to 3 trillion yen of commercial paper and 1 trillion yen of corporate bonds by December 2009;
- iii)* Increased outright purchases of government bonds; and
- iv)* Purchases of up to 1 trillion yen in shares of investment-grade firms held by eligible banks by April 2010
- v)* Central bank lowered its policy interest rate from 0.5% to 0.3% in October 2008 and further to 0.1% in December. These measures have improved credit conditions.

In December 2009, Bank of Japan announced extremely low and fixed interest rate of 0.1% for duration of three months outlining new funds supplying operation. In order for Japan's economy to overcome deflation and return to a sustainable growth path with price stability, during the past decade, the Bank of Japan has raised the policy interest rate thrice as result of its assessment of economic and inflation prospects

taking into account when underlying inflation was in negative territory. The latter two hikes occurred following the introduction of a new monetary policy framework in March 2006, which stated that inflation in the 0 to 2% range is the Policy Board understands of price stability<sup>18</sup>.

According to the OECD Japan Report, Bank of Japan justifies its understanding of price stability because “Japan experienced a prolonged period of low rates of inflation since the 1990s”. Indeed, the average annual growth rate of the CPI since 1991 has been 0.4% in Japan, as against 2.0% in Germany and 2.8% in the United States. As economic decisions have been based on low inflation expectations, the Bank argues that a significantly higher inflation target could have a negative economic impact.

In the first half of 2010, the Bank of Japan decided at its various regular meetings to keep the policy rate unchanged at 0.1 percent. On several occasions the Bank of Japan noted that Japan faces the critical challenge of overcoming deflation and returning to a sustainable growth path with price stability and the in the conduct of monetary policy, the Bank of Japan will aim to maintain an extremely accommodative financial environment. In June 2010, the Bank of Japan<sup>19</sup> announced that, in accordance with the fund-provisioning measure, it would provide up to 3 trillion yen to financial institutions. The Bank of Japan expects that financial institutions will utilize the fund-provisioning measure appropriately and effectively, taking it as an opportunity to expand lending and investment to businesses that will contribute to raising productivity or creating new demand.

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<sup>18</sup> Bank of Japan

<sup>19</sup> On January 28, with improvements in financial market functioning, the Bank of Japan confirmed the expiration of its temporary liquidity swap line with the Federal Reserve, effective February 1, 2010. On March 17, the Bank of Japan decided to expand the measures that were introduced in December 2009 to encourage a decline in longer-term interest rates by substantially increasing the amount of funds to be provided through the fixed-rate operation, and increased the volume of money available to banks under the fixed-rate fund supply operation from 10 trillion yen to 20 trillion yen. On May 10, the Bank of Japan announced to reopen the U.S. dollar swap line with the Federal Reserve.

## **Fiscal Policy**

To grapple with the crisis, Japan announced a series of stimulus packages at various stages: two supplementary budgets in 2008, followed by additional stimulus in the regular 2009 budget and the supplementary budget in May 2009. The fiscal stimulus package announced by Ex-Prime Minister Yasuo Fukuda in August 2008 amounted to 11.5 trillion yen and later on Ex-Prime Minister Taro Aso announced three more stimulus packages in October & December 2008 and April 2009, which amounted to 120.7 trillion yen. The previous Prime Minister Yukio Hatoyama announced the fifth stimulus package amounting to 7.2 trillion yen<sup>20</sup> citing fears of sliding back into recession as deflation decelerates on growth and a strong yen against the dollar undermines exports.<sup>21</sup> The total stimulus plan announced so far from 2008-09 is a whopping 132.2 trillion yen. Taken together, this stimulus amounted to 4.7% of GDP in 2008, the largest among the G7 countries after the United States. The OECD puts the stimulus package for 2008-09 at 13.4% of the GDP expecting to bring back the economy on its feet.

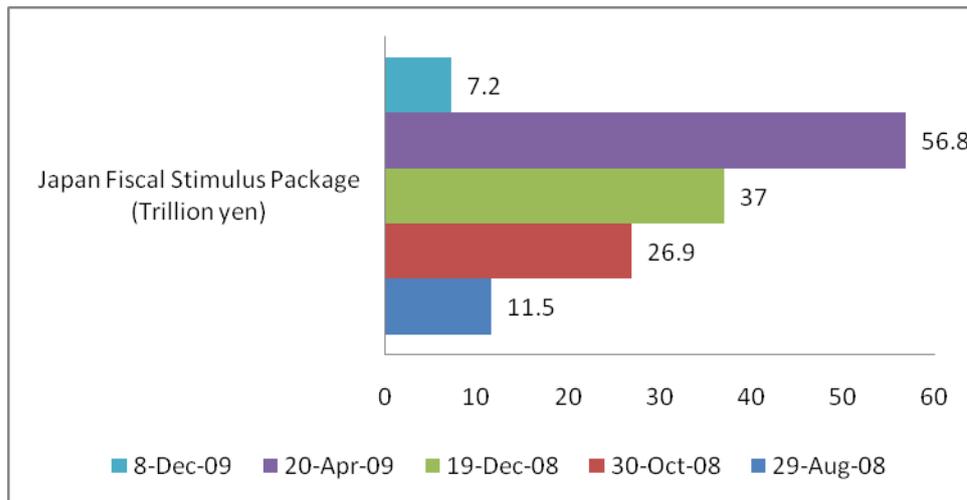
According to the Japanese government, the stimulus packages announced in 2008 would append 1% to GDP in 2009 and the stimulus package announced in 2009 another 1.9% in 2009, giving a overall impact of 2.9%. In addition, the multi-year time horizon of the fourth package will add another 1% to GDP in FY 2010 and beyond. Hence, the government's projection suggests that it expects the multiplier on spending to be around one. Due to the stimulus packages, the budget deficit is projected to increase from 3.2% of GDP in 2007 to 9.7% in 2010. Economists said the 7.2 trillion yen plan, equal to about 1.5 percent of gross domestic product. In total, fiscal stimulus amounted to 4.7% of 2008 GDP, the second largest among the G7 countries and above the average of 3.9% for OECD countries adopting crisis-driven stimulus programmes.

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<sup>20</sup> 3.5 trillion yen (\$39.3 billion) to help regional economies, 600 billion for employment and 800 billion for environmental projects. For break up of other stimulus packages please see figure 9.

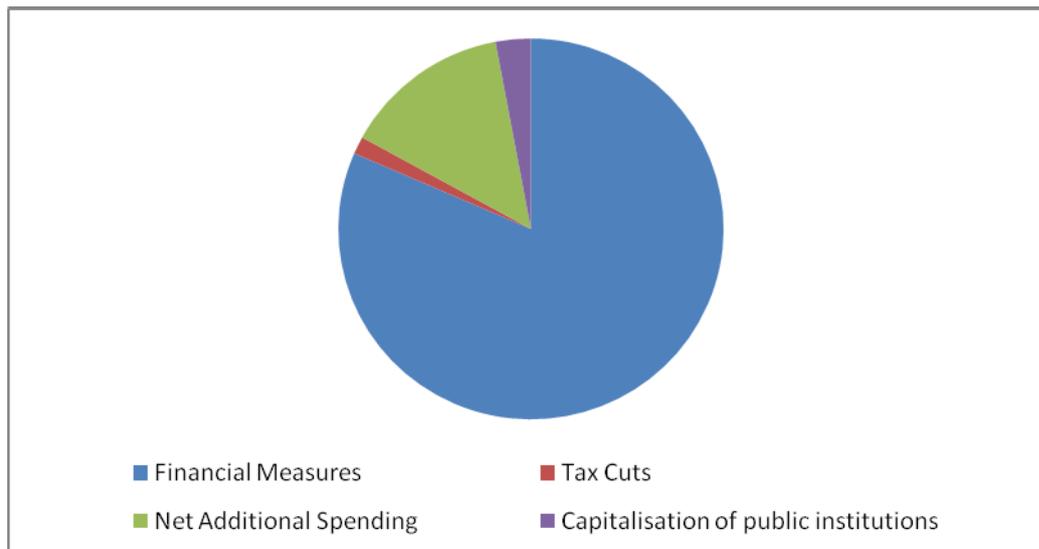
<sup>21</sup> The political reason behind the introduction of yet another package is due to election pressure for DPJ in the upper house in the Japanese Diet.

**Figure 16: Japan's Current Fiscal Stimulus Package**



Source: Cabinet Office, Government of Japan<sup>22</sup>

**Figure 17: Composition of Fiscal Stimulus Expenditure as % of GDP**



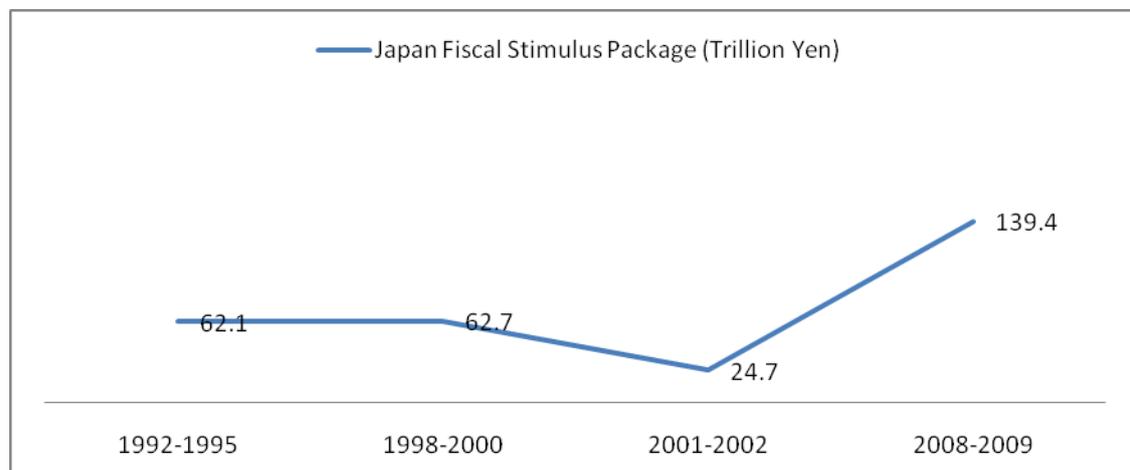
Source: Ministry of Finance, Cabinet Office, Government of Japan and OECD Japan Report September 2009.

<sup>22</sup> Includes: i) the Comprehensive Immediate Policy Package, August 2008, 11.5 trillion yen (Cabinet Office, 2008a); ii) Measures To Support People's Daily Lives, October 2008, 26.9 trillion yen (Cabinet Office, 2008b); iii) Immediate Policy Package to Safeguard People's Daily Lives, December 2008, 37 trillion yen (Cabinet Office, 2008c); and iv) Policy Package to Address Economic Crisis, April 2009, 56.8 trillion yen (Cabinet Office, 2009c)

In the case of Japan, the launching of fiscal stimulus packages is not new. Since the bubble burst in the 1990's, Japan has implemented 17 economic stimulus packages containing additional fiscal spending during four episodes: 1992-95, 1998-2000, 2001-02 and 2008-09. There were six stimulus packages announced during the years 1992-95, four packages during 1998-2000, three stimulus packages in 2001-02 and for the current crisis five packages for 2008-09.

The entire size of the stimulus, including net additional spending, tax cuts and financial measures, is four times larger (in % of annual GDP) than in the previous three stimulus packages. This is primarily due to the large size of financial measures, such as recapitalization of financial institutions, loans to enterprises and guarantees on loans to SMEs, to cope with the financial-sector origins of this recession.

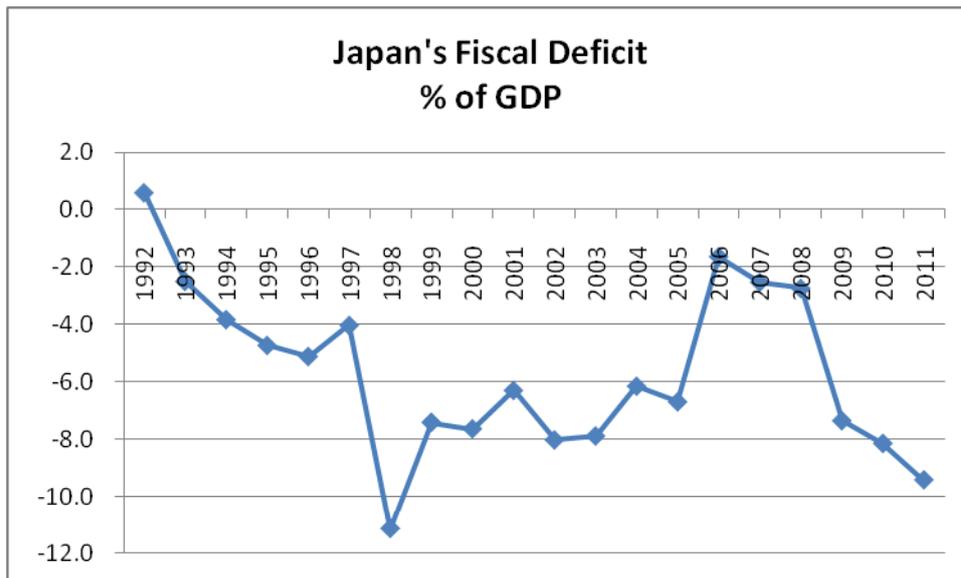
**Figure 18: Japan's Fiscal Stimulus (1992-2009)**



*Source: Cabinet Office, Government of Japan, OECD Report on Japan 2009*

During the “lost decade”, the Japanese government was very forceful in introducing fiscal stimulus packages. In 1991, public debt represented 60% of the country's GDP. By 2002, it had increased to 140 % and now it stands at 180% the 120% increase in government debt over a period of 18 years implies a very large and very decisive stimulus of 6 percent of GDP per year. The effects of long term government spending have been mitigated by the continued behavior of people saving rather than spending.

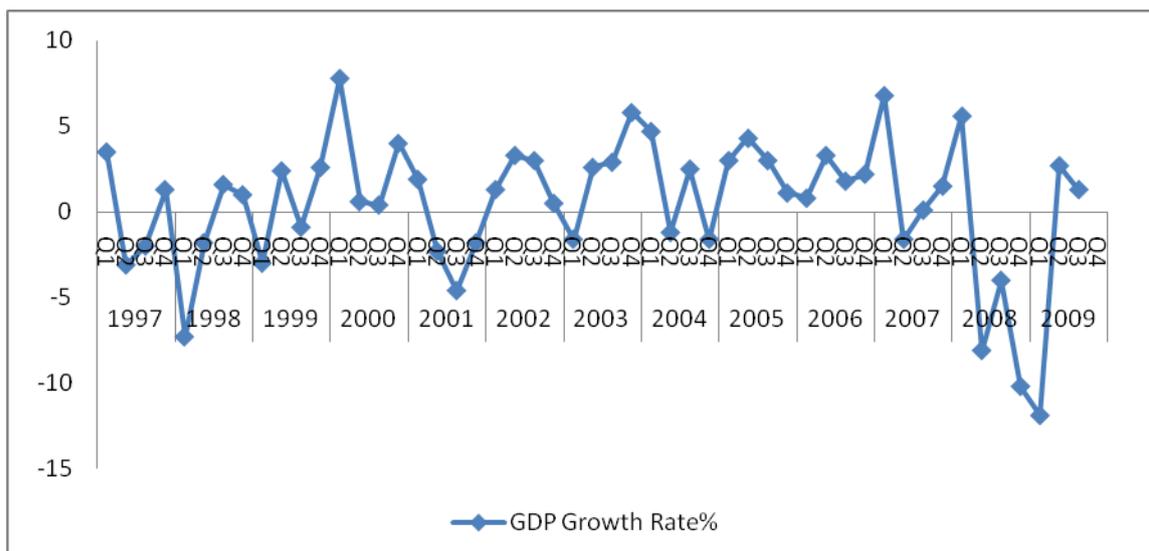
**Figure 19: Japan's Fiscal Deficit (% of GDP)**



Source: OECD Economic Outlook for Japan, November 2009

Japan is not at risk of sovereign debt as savings rate is high and Japanese institutions own much of the debt. The latest stimulus package has pushed the gross debt toward 200% mark as share of GDP, the highest among G7 countries. This is also the first time as debt issuance has outstripped tax revenues since 1946.

**Figure 20: Quarterly GDP Growth- Japan**



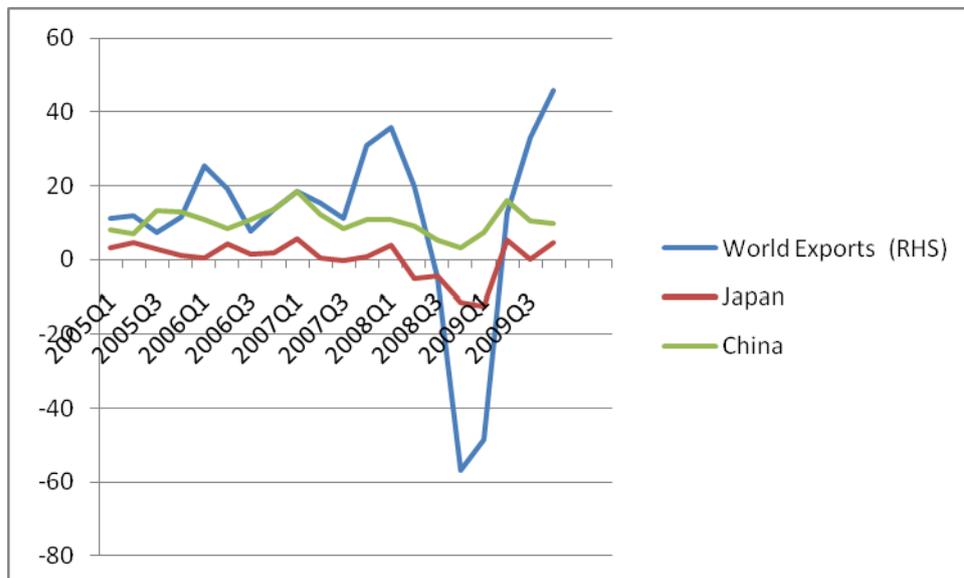
Source: Economic and Social Research Institute, Dept of National Accounts, Cabinet Office, Government of Japan

Apart from the national debt, the impact of the stimulus package can be seen in the quarterly GDP growth rate released by the Department of National Accounts in December 2009 and also in the subsequent figures from the World Economic Outlook 2010 (See above figure).

The status of Industrial production, Exports and Imports have fared considerably better due to the stimulus package and the loose monetary policy. Fears of deflation and a stronger yen are arising factors of concern in Japan. The following figures show the growth in exports on a comparative basis between China and Japan. Since both the countries are predominatly export driven economies, India is not included in the following two figures.

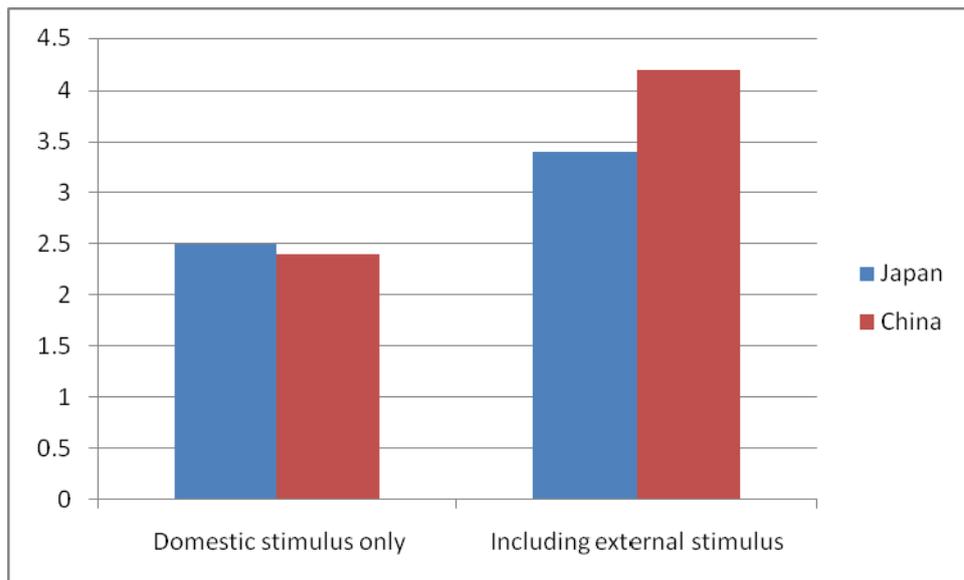
**Figure 21: World Exports and Asian GDP Growth**

(annualized quarterly percent change)



Source: World Economic Outlook Rebalancing Growth, April 2010

**Figure 22: Impact of Stimulus on Real GDP**

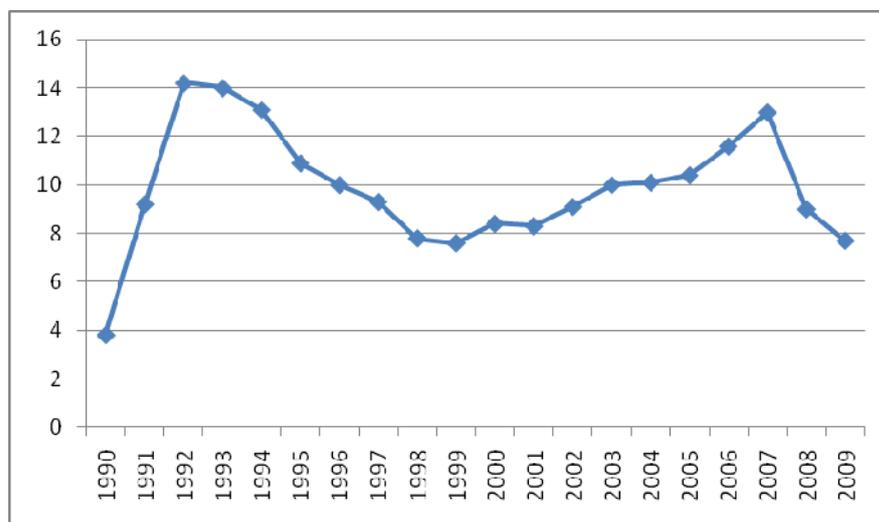


Source: *World Economic Outlook Rebalancing Growth, April 2010*

### **China**

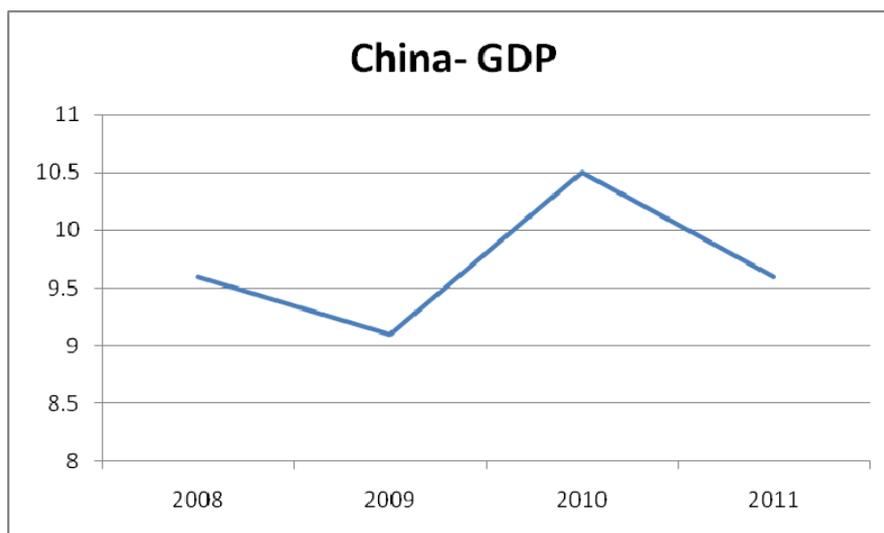
China has overtaken Japan as the world's second-largest economy in August 2010, a year after suffering one of its worst declines in growth levels for decades. China's economy has rebounded strongly, recording 9.1 per cent growth in 2009. The Chinese government's official growth figures for 2009 have exceeded earlier forecasts: the economy registered an unexpectedly high 10.7 per cent growth between October and December, largely due to government spending on infrastructure projects.

**Figure 23: China's GDP Growth Rate (1990-2009)**



Source: *National Bureau of Statistics, PRC*

**Figure 24: GDP**



*Source: World Economic Outlook July 2010 (2010 & 2011 are IMF Projections)*

The 10.7 per cent growth for the last quarter of 2009 was a marked improvement from the 6.2 per cent seen in the first, when the export-driven economy suffered in the wake of collapsing demand from the West. However, the last year has seen a steady recovery, with 7.9 per cent year-on-year growth in the second quarter and 9.1 per cent in the third. The big challenge China faces now, is the process of sustaining this recovery once the boost given by stimulus spending subsides.

According to the National Bureau of Statistics (NBS), the China's two most pressing challenges are, one, a widening gap between urban and rural areas, two, continued dependence on growth that is either government-driven or export-led. The economic recovery is largely due to the government's \$586-billion stimulus plan in November 2008. Urban fixed asset investment rose to 30.5 per cent last year to \$2.8 trillion. The Chinese government had unveiled measures to increase domestic spending, including subsidies for consumer goods, tax cuts in rural areas and an overall loosening of monetary policy.

There are also concerns of bubbles in asset markets because of the loosening of monetary policy and subsequent record lending, which doubled in the past year to \$1.45 trillion. By the end of 2008, the Bank of China confirmed that it was holding

approximately US\$9.7bn in securities backed by US subprime loans, while the Industrial and Commercial Bank of China and China Construction Bank have reported exposure of approximately US\$1bn each.<sup>23</sup> These are smaller debts compared to the huge debt accumulated by others in the crisis. Putting three Chinese banks together to get a total of US\$12bn exposure to subprime debt, this equates to just 6 percent of the US\$199bn in private foreign securities they held in 2008.<sup>24</sup> More importantly, the Chinese authorities have made public that none of its massive US\$1.5tn foreign reserves (the largest in the world) is invested in the subprime debt.

### **Fiscal Policy**

China undertook series of steps to act in response to the effects of the global financial crisis. On 9 November 2008, China announced a fiscal stimulus package of two year 4 trillion yuan (US \$586 billion) to help stimulate its economy making it one of the largest fiscal stimulus packages announced across the world. This stimulus plan constitutes 6.9% of its GDP larger than other stimulus plans announced by any other country.

For financing the stimulus package of this magnitude, the China is financing one quarter of the 4 trillion yuan stimulus through direct grants, interest rate subsidies and direct injecting registered capital for projects authorized by the central government. In addition, budget deficit is arranged through issuing government bonds (the ratio of budget deficit to GDP will reach about 3% in 2009, compared to 0.6% in 2008). Apart from these measures, China issued bonds on behalf of the local governments to fill the short fall in financing the local projects and lending from banks will be the main source for local governments.<sup>25</sup> The Chinese government has recently announced that

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<sup>23</sup> Shalendra D. Sharma, *Dealing with the Contagion: China and India in the Aftermath of the Subprime Meltdown*, *China & World Economy*, Volume 17, Issue 2, pages 1–14, March-April 2009.

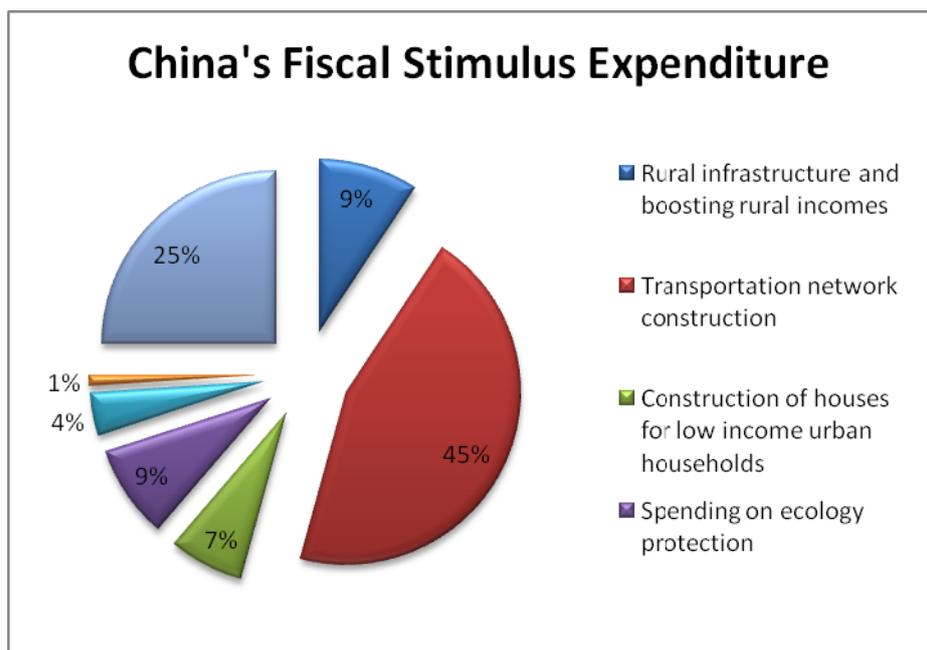
<sup>24</sup> *Ibid*

<sup>25</sup> Zhang, Liqing (2009), *China's Policy Responses to the Global Financial Crisis: Efficacy and Risks*, Conference on Global Financial Governance – Challenges and Regional Responses, Berlin, September 2-3, 2009.

stimulus package for 2010 will continue along with loose monetary policy despite fears of pushing up the prices of houses, stocks and assets.

The expenditure of the stimulus package announced by the Chinese government is as follows:

**Figure 25: China's Fiscal Stimulus Package**



*Source: China National Development and Reform Commission*

### Monetary Policy

Even as the Chinese government promoted an expansionary fiscal policy, the People's Bank of China shifted its stance from a tighter monetary policy, which it had adopted since 2003 to an expansionary monetary policy in November 2008. The earlier policy of tightening of monetary conditions was due to concerns over inflation and overheating of the Chinese economy. It maintained adequate liquidity in the banking system, guided financial institutions to increase credit extension and optimize the credit structure, and stepped up financial support for economic growth.

The loose monetary policy started with the People's Bank of China cutting down the

interest rates to a historical low level, lowering bank reserve requirement ratios, and removing quota control on lending by commercial banks (temporarily introduced in early 2008), China successfully made an injection of huge amount of liquidity to the banking system.<sup>26</sup> In order to reduce credit crunch and encourage banks to increase lending, the authorities announced a series of measures to accelerate the development of credit guarantee services. Moreover, it also decided to loosen control on mortgage loan in some extent for stimulating resident to buy property. As a result, China's money supply and bank credits increased rapidly in the first half of 2009. The growth reached a historical height since May 1996. The new bank lending in the first half of 2009 dramatically surged by 7.37 trillion Yuan, which roughly equals to 90% of the targeted scale for the whole year. In contrast, the annual increases in bank lending in 2006 and 2007 were 3.18 and 3.63 trillion Yuan, respectively.

In May 2010, the People's Bank of China decided to raise the RMB reserve requirement ratio for depository financial institutions by 0.5 percentage points. Rural credit cooperatives and village and township banks were temporarily exempted from the ratio hike.<sup>27</sup> In June 2010, in view of the recent economic situation and financial market developments at home and abroad and the balance of payments situation in China, the People's Bank of China decide to proceed further with reform of the RMB exchange rate regime and to enhance the exchange rate flexibility. Inflationary pressures will be the predominant factor guiding Chinese monetary policy. Although China remained in deflation in October, the strengthening economic recovery and rapid money supply growth are boosting inflationary expectations.

The increase in inflationary pressures and, especially, currency appreciation expectations are increasing the difficulty of Chinese macroeconomic policy management. As far as the exit debate is concerned, China continued its stimulus package into 2010. As China's economic recovery seems to take hold more strongly,

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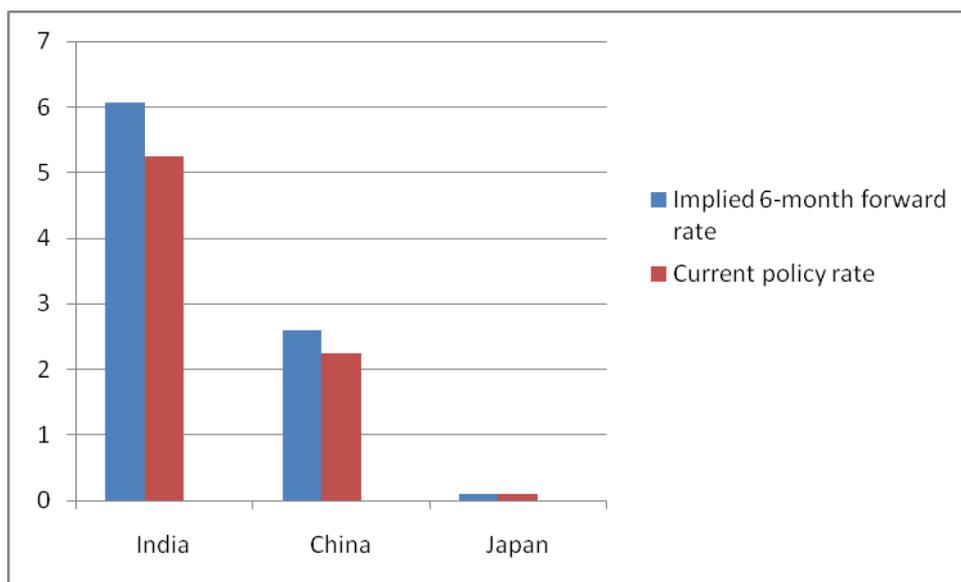
<sup>26</sup> Ibid.

<sup>27</sup> People's Bank of China Quarterly Review 2010

attention has shifted to how the country will exit from the accommodative monetary and fiscal policies that propelled growth in 2009. The State Council and the People’s Bank of China (PBOC) have hinted that an exit may be coming soon as inflationary pressures build and exports start to grow again from a weak base. Yet with investment contributing the bulk of growth so far this year (over 80%), there is a fear that tighter credit and liquidity conditions could weaken the economy before recovery takes hold.

Lending rates offered by financial institutions went up slightly, with the weighted average lending rate for non-financial enterprises and other sectors standing at 5.51 percent in March and 5.57 percent in June, up 0.32 percentage points from the beginning of the year.<sup>28</sup>

**Figure 26: Policy Interest Rate and Implied 6 month Forward Rate**



Source: IMF Regional Economic Outlook, April 2010

In June 2010, the interest rates of 3-month and 1-year central bank bills stood at 1.5704 percent and 2.0929 percent, up 24 basis points and 33 basis points from end-2009 respectively. When compared with the rates in March, the interest rates of 91-day repo, 3-month central bank bills, and 1-year central bank bills stood at 1.41 percent, 1.4088 percent, and 1.9264 percent respectively. Also, the interest rate for

<sup>28</sup> People’s Bank of China Quarter Two Monetary Policy Report 2010

3-year central bank bills posted 2.68 percent, down 7 basis points cumulatively since they were resumed. In an effort to enhance liquidity management, guide proper money and credit growth, and manage inflationary expectations, the PBC raised the reserve requirement ratio for RMB deposits in depository financial institutions on January 18, February 25, and May 10, by an increment of 0.5 percentage points. The reserve requirement ratio for rural credit cooperatives and other small financial institutions remained unchanged to support agriculture, rural areas, farmers, and county-level development.<sup>29</sup>

### **India**

The macro economic outlook in the country had undergone various phases of deceleration and recovery from 2008 to 2010. After the Lehman Brothers filed for bankruptcy on 15 September 2008, the impact of the financial crisis was global. As the US sub-prime crisis induced the financial crisis which then spread rapidly across countries, it was initially assumed that since India was not exposed to subprime lending it would not be affected by the crisis. Many believed in “decoupling” which meant that economies, especially developing markets such as China and India, have broadened and deepened to the point that they no longer depend on the United States for growth, leaving them immune to a slowdown or worse recession. This was proved wrong when crisis hit all countries sparing none. The impact was not as severe as the developed countries such as US, UK, Japan and other European countries whose economies contracted compared to developing countries such as India and China’s growth, which slowed down. India’s growth decelerated in the second half of 2008 when the crisis hit in September 2008 but later recovery set in early 2010.

India having opened up its economy in 1991 especially after the balance of payments crisis in 1990-91 underwent two more crises until the recent global downturn. The Asian Financial Crisis in 1997, the Dot Com bubble and the 9/11 in 2000-01 are the

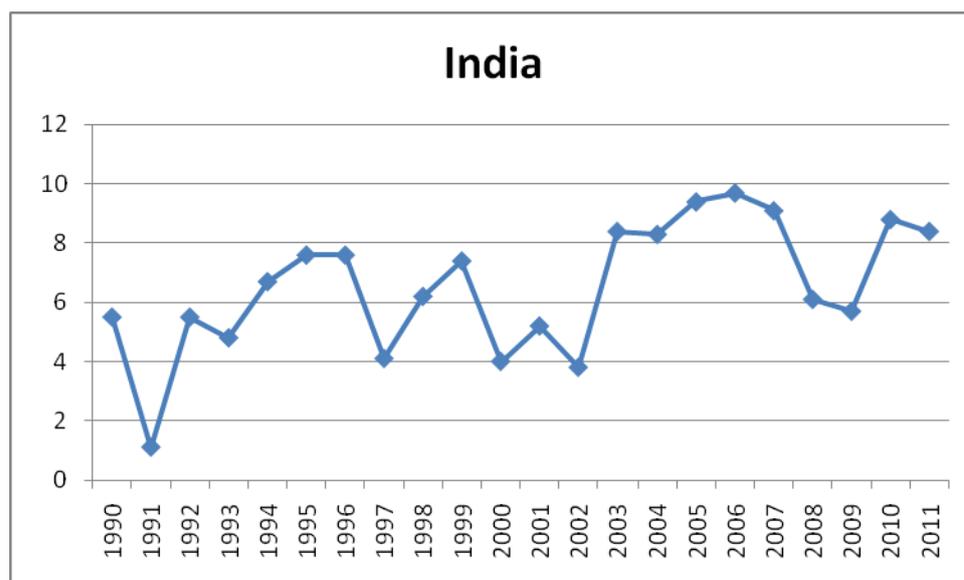
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<sup>29</sup> People’s Bank of China Monetary Policy Report Quarter One and Two, 2010.

other two crises, which had made an impact on the Indian economy. Disparate from financial institutions and banks of countries across the world that invest heavily in assets and derivatives backed by US subprime mortgages, India opted out of these financial investments hence limiting the severity of the impact of the crisis.<sup>30</sup> According to the Reserve Bank of India (RBI), the country's central bank, only US\$1bn out of India's total banking assets of more than US\$500bn was invested in toxic assets or related investments.

The following figure shows the GDP growth rate from 1990 until 2009 and further two years with IMF projections. The global financial crisis has left an indelible mark on the GDP graph, but has recovered due to the policy measures adopted by India.

**Figure 27: GDP Growth (year-on –year %)**



*Source: World Development Indicators 2009, IMF Regional Economic Outlook 2010 (2010 and 2011 are IMF projections)*

In developed economies such as UK and US, the transmission of the crisis was first through the financial sector and then the real economy whereas in developing economies, the real economy was affected and then to the financial sector. The means

<sup>30</sup> The StateBank of India, the ICICI Bank (Private Bank), the Bank of Baroda and the Bank of India have been exposed to international securitized debt in the form of collateralized debt obligations, with this debt amounting to approximately US\$3bn. This is tiny in comparison to ICICI's US\$100bn balance sheet.

of transmission of the crisis into the Indian economy was through three means: exports, exchange rates and then financial sector.<sup>31</sup> Even though exports of both goods and services, only account for 22% of the GDP, their multiplier effect for economic activity is quite large for India as the import content is not as high as the case is for the Chinese exports. Therefore, slump in exports has brought down GDP growth rate.<sup>32</sup>

Intense liquidity crisis hit Indian economy due to the tightening of global credit markets and the withdrawal of foreign institutional investors.<sup>33</sup> India's outsourcing industry and export-dependent information technology sector saw declining revenues, not only due to the slowdown in global demand, but also due to the rise in the value of the rupee against the US dollar. In fact, tightening credit and the declining value of the US dollar has hit India's information technology companies hard as the industry derives over 60 percent of its revenues from the USA.<sup>34</sup>

The immediate transmission of the financial crisis to India was through a cessation of credit flows, which reflected in the spiking of overnight call money rates that rose to nearly 20 per cent in October and early November 2008. Going by market rumors, depositors sought safety by shifting their deposits away from private banks to large public sector banks as reflected in the State Bank of India (SBI) seeing an increase in deposits of more than Rs. 1000 crore per day during that period. Foreign institutional investors (FIIs) withdrew from the Indian markets to provide the much-needed liquidity to their parents in the US or Europe. This resulted in a net repatriation of about \$ 13 billion by the FIIs in 2008 because of equity disinvestment though small

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<sup>31</sup> Kumar, Rajiv (2009), "Global Financial and Economic Crisis: Impact on India and Policy Response", UNDP Publication *Impact of Global Financial Crisis on India's Poor Some Initial Perspectives*, New Delhi.

<sup>32</sup> Ibid

<sup>33</sup> Shalendra. D.Sharma (2009), "Dealing with the Contagion: China and India in the Aftermath of the Subprime Meltdown", *China & World Economy*, 1-14, Vol.17, 2009.

<sup>34</sup> Ibid.

has resulted in a sharp decline in equity prices and market capitalization. Besides, there had been large-scale redemption of holdings with mutual funds, which put further pressure on liquidity. Thus, while the Indian banking sector remained largely unscathed by the global financial crisis, it could not escape a liquidity crisis and a credit crunch. This in turn has had its impact on investment and consumption and the real economy.

The policy response in India shifted from financial crisis management in 2009 to recovery in 2010. The Reserve Bank of India initiated an exit strategy by tightening monetary policy stance starting in October 2009 to contain inflation and anchor inflationary expectations. Despite efforts from the government and the central bank, inflation still remains a key concern for India.

### **India's Fiscal Policy**

#### *First Stimulus Package*<sup>35</sup>

The first package for fiscal year 2008-09 announced on 7 December 2008 for included additional plan expenditure of upto Rs 20,000 crore (US \$ 200 billion). The total spending programme in remaining four months of the fiscal year 2008-09, taking plan and non-plan expenditure together was put at Rs.300,000 crore (US \$ 300 billion). For handling a slump in exports,<sup>36</sup> India announced an interest subvention of 2 percent upto 31/3/2009 subject to minimum rate of interest of 7 percent per annum for pre and post-shipment export credit for labour intensive exports<sup>37</sup>. Allocation of

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<sup>35</sup> Ministry of Finance, Government of India

<sup>36</sup> Exporters were allowed refund of service tax on foreign agent commissions of upto 10 percent of FOB value of exports. They were also allowed refund of service tax on output services while availing of benefits under Duty Drawback Scheme. Export duty on iron ore fines was eliminated and on lumps reduced to 5%. Import Duty on Naphtha for use in the power sector was eliminated and an across-the-board cut of 4% in ad-valorem Cenvat rate except for petroleum products.

<sup>37</sup> Textiles (including handlooms, carpets and handicrafts), leather, gems & jewellery, marine products and SME sector. Provision of additional allocation of Rs.1400 crore to clear the entire backlog in Technology Upgradation Fund (TUF) Scheme in the textile sector. Inclusion of all items of handicrafts under 'Vishesh Krishi & Gram Udyog Yojana'.

additional funds of Rs.1100 crore was announced to ensure full refund of Terminal Excise duty/CST. In addition, Rs.350 crore each was allocated for export incentive scheme and for exports which are difficult markets/products. For the housing sector,<sup>38</sup> refinance facility of Rs.4000 crore allocated under the National Housing Bank. The government authorized Infrastructure Finance Company Limited (IIFCL) to raise Rs.10,000 crore through tax-free bonds by 31/3/2009 to refinance bank lending of longer maturity to eligible infrastructure projects, particularly in highways and port sectors.

### *Second Stimulus Package*<sup>39</sup>

The second stimulus package was announced immediately on 2 Jan 2009. the Government and the RBI have decided: (a) The 'all-in-cost' ceilings on such borrowing was removed, under the approval route of RBI; (b) Facilitating access to funds for the housing sector, permission of the 'development of integrated townships' as an eligible end-use of the ECB, under the approval route of RBI; (c) NBFCs, dealing exclusively with infrastructure financing was permitted to access ECB from multilateral or bilateral financial institutions, under the approval route of RBI. (d) In order to give a boost to the corporate bond market, FII investment limit in rupee denominated corporate bonds in India was increased from US \$ 6 bn to US \$ 15 bn. Ministry of Finance (MoF), as a part of the second economic stimulus package, relaxed the Debt Consolidation and Relief Facility (DCRF) guidelines by modifying the fiscal deficit target as 3.5% so as to enable the States to borrow up to 3.5% of their respective GSDP during 2008-09 as one-time relaxation for undertaking capital expenditures. The Finance Minister has, therefore, announced in the Lok Sabha on 24.02.2009 that the arrangement of 3.5% of fiscal deficit target for the States is being extended to 2009-10.

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<sup>38</sup> Under Indira Awas Yojana, public sector banks announced loans for homes for upto Rs.5 lakhs in one category and Rs 5 lakh-Rs 20 lakh in the second category.

<sup>39</sup> Ministry of Finance, Government of India

### *Third Stimulus Package*<sup>40</sup>

The third stimulus package was announced on 24 Feb 2009 through the interim budget passed for 2009-10. This package included further concessions on central excise and service tax. The general reduction in excise duty rates by 4 per cent points was made with effect by the first stimulus package announcement. In addition, the third stimulus reduced the general rate of Central Excise duty from 10 % to 8%, also the rate of central excise duty on goods currently attracting ad valorem rates of 8 per cent and 4 per cent were to be retained. There was another reduction of the rate of central excise duty on bulk cement from 10% to 8%.

In case of service tax, the dispersal between CENVAT rate and the Service Tax rate was reduced so that it would lead to a Uniform Goods and Service Tax. The rate of service tax on taxable services was reduced from 12 % to 10%.<sup>41</sup> The total fiscal burden for these packages amounted to 1.8 per cent of GDP.<sup>42</sup> "fiscal accommodation" in response to the crisis had resulted in a sharp increase in the fiscal deficit from 2.7 per cent in 2007-08 to 6.2 per cent of GDP in 2008-09 and estimated that the total fiscal stimulus (equal to 3.5 per cent of GDP at current market prices) in 2008-09 amounted to Rs.1,86,000 crore.

### **Monetary Policy**

As the crisis intensified, the Reserve Bank of India, like most central banks, took a number of conventional and unconventional measures to augment domestic and

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<sup>40</sup> Ministry of Finance, Government of India

<sup>41</sup> Apart from this, Section 10 AA of the Income Tax provides for exemption in respect of export profits of a unit located in a Special Economic Zone (SEZ) To provide relief to the power sector, Naptha imported for generation of electric energy has been fully exempted from basic Customs Duty. This exemption which was available upto 31 March 2009, is now being extended beyond that date.

<sup>42</sup> As per the new economic outlook published by ICRIER Macro team in October 2009, "The combined fiscal deficit of the centre and states including the off-budget bonds is now estimated to be at 10.7 per cent of GDP for 2008-09, a huge rise from 2007-08 figure of about 5 per cent of GDP and the original budget estimate of 4.6 per cent of GDP. Therefore, the total fiscal stimulus administered by India can be put at 5.7 per cent of GDP."

foreign exchange liquidity, and sharply reduced the policy rates. The central bank of India injected sufficient liquidity into the banking system to enable bank credit to meet up the growing requirements of the economy as due to credit crunch from non-bank sources by end of September 2008. In a span of seven months between October 2008 and April 2009, there was unprecedented policy activism.

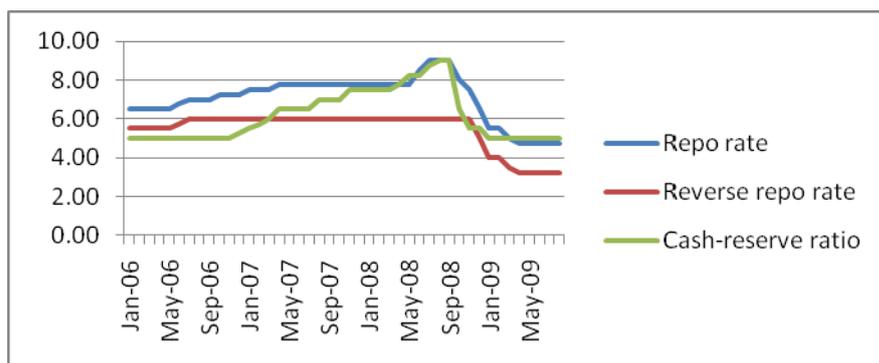
- (i) the repo rate was reduced by 425 basis points to 4.75 per cent,<sup>43</sup>
- (ii) the reverse repo rate was reduced by 275 basis points to 3.25 per cent,
- (iii) the cash reserve ratio (CRR) was reduced by a cumulative 400 basis points to 5.0 per cent, and
- (iv) the actual/potential provision of primary liquidity was of the order of Rs. 5.6 trillion (10.5 per cent of GDP).

Banks were provided adequate liquidity through a series of reductions in the Capital ratio requirement and additional flexibility in meeting the SLR requirement. Interest rate reductions had been signalled only after inflation peaked at 12.9% and the economy was in the clench of credit crunch. For reductions in the repo and reverse repo rates, RBI announced the following:

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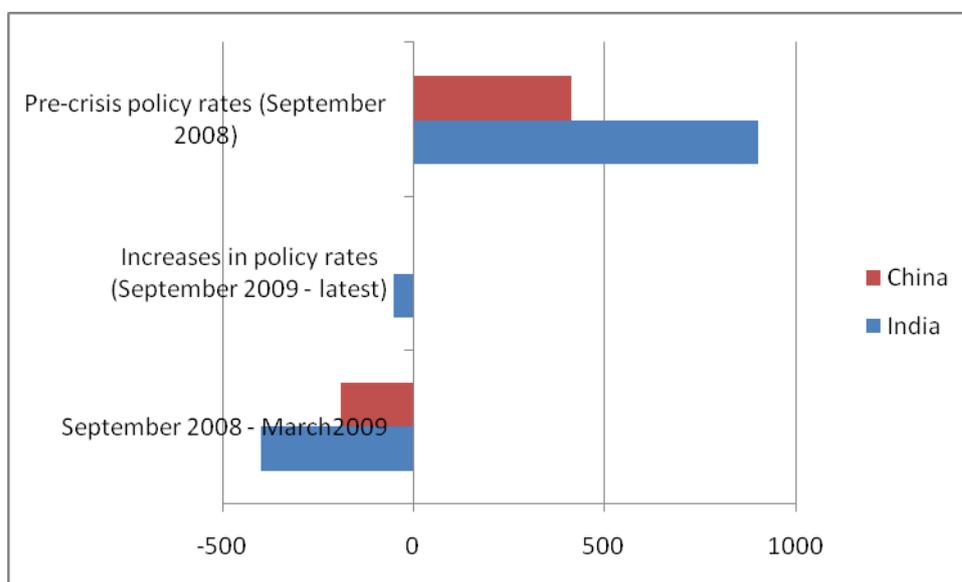
<sup>43</sup> Reduction of the repo rate from 9 per cent in August 2008 to 5.50 per cent in January 2009.

**Figure 28: Policy Rate- Reserve Bank of India**



Access to external commercial borrowings had been liberalized, enabling borrowers to access funds from other countries. In January 2009, RBI had announced a refinance facility of Rs.7000 crore for SIDBI (Small Industries Development Bank of India) available to support incremental lending. Credit Guarantee Scheme for Micro and Small enterprises on loans was extended from Rs.50 lakh to Rs.1 crore with guarantee cover of 50 percent.<sup>44</sup>

**Figure 29: Policy Rates: India, China |(In Basis Points)**



Source: *Regional Economic Outlook, IMF, April 2010*

<sup>44</sup> The lock in period for loans covered under the existing credit guarantee scheme will be reduced from 24 to 18 months, to encourage banks to cover more loans under the guarantee scheme.

There are, however, some key differences between the actions taken by the Reserve Bank of India and the central banks in many advanced countries: First, in the process of liquidity injection the counter-parties involved were banks; even liquidity measures for mutual funds, housing finance companies were largely channeled through the banks.<sup>45</sup> Second, there was no dilution of collateral standards, which were largely government securities, unlike the mortgage securities and commercial papers in the advanced economies. Third, despite large liquidity injection, the Reserve Bank's balance sheet did not show unusual increase, unlike global trend, because of release of earlier sterilized liquidity. Fourth, availability and deployment of multiple instruments facilitated better sequencing of monetary and liquidity measures. Finally, the experience in the use of pro-cyclical provisioning norms and counter-cyclical regulations ahead of the global crisis helped enhance financial stability. By synchronizing the liquidity management operations with those of exchange rate management and non-disruptive internal debt management operations, the Reserve Bank of India ensured that appropriate liquidity was maintained in the system, consistent with the objective of price and financial stability. The policy stance clearly reflected the forward-looking approach, particularly the expectations of more prolonged adverse external conditions in the face of no visible risks to inflation. While the magnitude of the crisis was global in nature, the policy responses were adapted to domestic growth, inflation and financial sector conditions.

The fiscal stimulus has helped in substituting for lost private demand to some extent and prevented a steeper fall in GDP growth. Some scholars are of the view that at this juncture when the RBI promoted loose monetary measures which have boosted growth, the central bank of India has started to tightening these measures due to inflation sooner than later in 2010. Many scholars believe that too early a tightening, however, may affect the rebound in industrial recovery.<sup>46</sup>

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<sup>45</sup> Reserve Bank of India Annual Policy Statement 2009-10

<sup>46</sup> Deepak Mohanty,

## **Policy Implications**

The policy challenges that lie ahead over the medium term is for the national and international policy makers to determine the adequate and proportionate pace for normalizing the fiscal and monetary policies. For the developing countries such as India and China, this process of normalization would occur well ahead of the process for the developed countries such as Japan, US and Europe. Since the recovery will continue to be fragile, recovery of the Asian countries would still have to rely on the global recovery. Although India and China have started to tighten the monetary conditions in early 2010 such as reversing reserve requirement, these levels of requirements are well below the pre crisis levels. The excess liquidity in the domestic sphere of their countries call for macro prudential measures and so does strengthening domestic demand in a more structural manner. The inflationary concerns in asset prices and consumer prices are a chief source of worry for policymakers in China and India as opposed to deflation in Japan. While several other economies are already debating phasing out economic stimulus deployed to fight the financial crisis, Japan continues to struggle amid chronically weak consumer demand and falling prices. Japan pulled out of recession in April-June 2009 due to a recovery in exports but figures released recently by IMF World Economic Outlook and the Regional Economic Outlook 2010 show that the growth for the next two years will be slower than emerging countries such as India and China. Despite all these pessimistic observations, the way the world sees the recovery is largely through the resilience of Asia's growth which has pulled the world out of a recession. The revised updates from the October 2010 World Economic Outlook are testimony to this fact.

With exit debate in mind, crisis management measures should not remain in place over a prolonged period as some of them include exceptional actions with large-scale public support. Such a situation could cause moral hazard in the marketplace or distort the system in the longer run. On the other hand, too hasty implementation of medium-term measures could rather exacerbate the situation and impede economic recovery. The communiqué issued after the Pittsburgh and the Toronto G20 summit

has made it clear that the rules to improve bank capital will be phased in as financial conditions improve and economic recovery is assured.

As for the exit strategies in the post crisis scenario, the diverse pathways of economic recovery across the globe signals not only the myriad ways of tackling the global economic downturn but also underscores the growing need to discuss how stimulus packages and loose monetary policies should be withdrawn addressing the specific needs of each country. Countries such as New Zealand, Vietnam, Australia, Denmark has exited from a loose monetary policy in the fourth quarter of 2009 due to various reasons. Policy attention shifted from crisis management to recovery in the second half of 2009-10.

In India, although growth consolidated, inflationary pressures emanated forcing the Reserve Bank to initiate a process of calibrated exit from the accommodative monetary policy stance starting in October 2009. While the growth outlook for 2010-11 remains robust, inflation has emerged as a major concern even after many attempts by the RBI to take stock of the situation. Going forward, as the monetary position is normalized, addressing structural constraints in several critical sectors is necessary to sustain growth and contain supply side risks to inflation. The fiscal exit, that has already started, will need to continue. Improving the overall macro-financial environment through fiscal consolidation, a low and stable inflation regime, strengthening of the financial stability framework and progress on structural reforms will help sustain growth and boost productivity. India has earmarked that by mid 2010 it would slowly increase the interest rate due to raising concerns of as inflationary pressures and a surge in capital inflows have started worrying policy makers.

China is expected to use a range of monetary policy tools and manage the intensity of monetary policy operations to enhance liquidity management, so that liquidity in the banking system will grow at a reasonable level and money and credit will grow properly, to satisfy credit demand for economic development and to create a sound

monetary environment for keeping the general price level basically stable and for managing inflation expectations.

Japan, on the other hand, in terms of monetary policy should stay highly supportive and should be the first line of defense against any larger-than-projected weakening of activity as fiscal support diminishes as suggested by IMF. With policy rates already near zero, monetary policymakers may have to resort to further unconventional measures if private demand weakens unexpectedly as fiscal support wanes.

### **Conclusion**

The global financial crisis has set in motion a series of events, which have ushered in the need for reform of economic systems across the globe. All over the world, governments and central banks have reverted to the financial crisis through both conventional and unconventional fiscal and monetary measures. These policy measures have been criticized for their size, timing, sequencing and design as more importantly, for their economic and ideological underpinnings. The key criticism has been that 'purely national responses' are inadequate to address a virulent global crisis. In recognition of a pressing need for global co-ordination and co-operation, particularly in order to inspire the trust and confidence of economic agents around the world, G-20 summit meetings have taken place from 2008-2010. At their recent meeting in April 2010 in Toronto, the G-20 leaders collectively committed to take decisive, co-ordinate and comprehensive actions to revive growth, restore stability of the financial system, restart the impaired credit markets and rebuild confidence in financial markets and institutions. The forthcoming G20 Seoul summit will signal a slightly different tone to exclusively deal with the post crisis scenario.

Economic recovery continued to strengthen during the first half of 2010, but global financial stability suffered a major setback with the turmoil in sovereign debt markets in the second quarter of 2010. The extent of economic recovery differs importantly across regions, with Asia leading the global recovery. United States and Japan

experienced a noticeable slowdown during the second quarter of 2010, while growth accelerated in Europe and stayed strong in India, China and other emerging and developing economies. Financial conditions have begun to normalize, but institutions and markets are still fragile. In general, volatility in financial, currency, and commodity markets remains elevated.

According to the IMF, near-term growth performance will vary across countries because of differences related to the strength of stimulus and private demand along with underlying economic and financial conditions and risks. Thus, a massive fiscal stimulus and credit expansion has boosted domestic demand in China. In India, low reliance on exports, accommodative policies, and strong capital inflows have supported domestic activity and growth. In contrast, Japan's economic prospects remain weak, given lackluster domestic demand and a lack of fiscal room to further boost the economy.

To be more specific, as per the country projections given by IMF in China, real GDP grew at 10.3 percent (year over year) in the second quarter, compared with 11.9 percent in the first quarter. Sustained growth in retail sales and industrial production confirms that private sector activity has advanced beyond the lift from government stimulus. Overall, growth is projected to average 10.5 percent in 2010 and 9.6 percent in 2011, driven by domestic demand. India's macroeconomic performance has also been vigorous, with industrial production at a two-year high. Leading indicators—the production manufacturing index and measures of business and consumer confidence—continue to point up. Growth is projected at 9.7 percent in 2010 and 8.4 percent in 2011, led increasingly by domestic demand. In Japan, an export-led recovery since the second quarter of 2009 strengthened in early 2010, thanks to a stronger-than-anticipated recovery in the Western advanced economies and rising demand for capital goods from China. However, sporadic appreciation of the yen and the recent cooling of the U.S. economy will continue to affect exports. Although investment activity is projected to pick up—sparked by export-oriented

businesses—the unwinding of fiscal stimulus and the sluggish labor market are likely to weigh on near-term growth. Real GDP growth is projected at 2.8 percent in 2010 and 1.5 percent in 2011, although output will remain below its potential level.

## **References**

### **Books**

Baldwin, Richard, *The Great Trade Collapse*, VOXEU Publication, 2009

Schiller, J. Robert, *The Subprime Crisis and the Solution*, Princeton: Princeton University Press, 2008.

India and the Global Financial Crisis Managing Money and Finance by Y V Reddy (*New Delhi: Orient Black Swan*), 2009; pp xvi-397.

Teranishi, Juro & Kosai, Yutaka Kosai, “ The Japanese Experience of Economic Reforms”, St. Martins Press, New York, 1993

Goldstein, Morris, *The Asian Financial Crisis: Causes, Cures, and Systemic Implications*, Institute for International Economics, June 1998, No.55.

Krugman, Paul, *The Return of Depression Economics and the Crisis of 2008*, Random House Audio

Andrew Felton, Carmen M. Reinhart (editors), *The First Global Financial Crisis of the 21st Century* Centre for Economic Policy Research, 2009

### **Articles**

Prasad, Eswar, & Sorkin, Isaac, *Assessing the G-20 Economic Stimulus Plans: A Deeper Look*, March 2009, Brookings Institution Working Paper

Carmen M. Reinhart & Kenneth S. Rogoff , *The Aftermath of Financial Crises*, American Economic Association, January 3, 2009

Nanto , Dick K. , *The Global Financial Crisis: Analysis and Policy Implications*, US Congressional Research Service, USA

Basu, Kaushik, *A Simple Model of the Financial Crisis of 2007-9 with Implications for the Design of a Stimulus Package*, August 2009

Zhang, Ming, *The Impact of the Global Crisis on China and its Reaction (ARI)* Real Instituto Elcano Ari, ARI 62/2009

- Zhang, Liqing, China's Policy Responses to the Global Financial Crisis: Efficacy and Risks, Working Paper for Conference titled Global Financial Governance: Challenges and Regional Responses. September 2009
- Zhang, Chengsi & Clovis, Joel," Financial Market Turmoil: Implications for Monetary Policy Transmission in China," China & World Economy / 1 – 22, Vol. 17, No. 3, 2009
- Eichengreen, Barry and Rourke. H. Kevin, The Tale of Two Depressions, Voxeu Publication, September 2009.
- Morrison M. Wayne , "China and the Global Financial Crisis: Implications for the United States, US Congressional Research Service, USA
- Zhang, Ming, "China's New International Financial Strategy amid the Global Financial Crisis China & World Economy / 22 – 35, Vol. 17, No. 5, 2009
- Zhang, Zhichao, Li, Wei & Shi, Nan, "Handling the Global Financial Crisis: Chinese Strategy and Policy Response", 2009 SSRN
- Impact of global financial crisis on Reserve Bank of India as a National Regulator\*
- Usha Thorat Deputy Governor, Smt. Usha Thorat on June 29, 2009 at the 56th EXCOM Meeting and FinPower CEO Forum organised by APRACA at Seoul, Korea.
- Kumar, Rajiv & Vashisht, Pankaj, "The Global Economic Crisis: Impact on India and Policy Responses", ADBI Working Paper Series NO: 164, November 2009, Asian Development Bank Institute
- Sharma. D. Shailendra, "Dealing with the Contagion: China and India in the Aftermath of the Subprime Meltdown , China & World Economy / 1 – 14, Vol. 17, No. 2, 2009.
- Kumar et al., Indian Economic Outlook 2008-09 and 2009-10, ICRIER Working Paper no.234
- Mohan, Rakesh, Rakesh Mohan: Global financial crisis – causes, impact, policy responses and lessons 7th Annual India Business Forum Conference, London Business School, London, 23 April 2009.
- Kumar, Rajiv, Global Financial and Economic Crisis: Impact on India and Policy Response, UNDP, 2009
- Joseph et al, The State of the Indian Economy 2009-10, ICRIER Working Paper No.241, October 2009
- Shirakawa, Maasaki, International Policy Response to Financial Crisis, Bank of Japan,

August 2009

Kawai, Masahiro, “The Impact of the Global Financial Crisis on Asia and Asia’s Responses”, Crisis Developments and Long-Term Global Responses: Insights from Asia and Europe AEEF Conference, Kiel 7 July 2009

Jha, Veena, The effects of fiscal stimulus packages on employment, Employment Working Paper No. 34, 2009, Economic and Labour Market Analysis Department International Labour Organisation, Geneva

Baldwin, Richard and Barry Eichengreen eds. (2008), Rescuing Our Jobs and Savings: What G7/8 Leaders Can Do to Solve the Global Credit Crisis. London: VoxEU.org.

Yongding, Yu, China’s Policy Response to Global Financial Crisis, Richard Snape Lecture, 25 November 2009, Melbourne, Productivity Commission, Australia

Barry Eichengreen, The Financial Crisis and Global Policy Reforms, Federal Reserve Bank of San Francisco, conference on Asia and the Financial Crisis, Santa Barbara, California, 19-21 October 2009.

## **Reports**

Trade and Development Report 2009, United Nations Center for Trade and Development.

World Financial Stability Report 2009 and 2010, International Monetary Fund.

World Economic Outlook April & October 2009, April & October 2010, International Monetary Fund.

International Trade Statistics 2009, World Trade Organization

Swimming against the Tide: How Developing Countries are Coping with the Global Crisis, World Bank Background Paper for G20, March 2009

OECD Economic Outlook, Volume no.86, November 2009

Asian Development Outlook Update 2009, Asian Development Bank

Bank of China Annual Report 2008, People’s Bank of China, PRC

OECD Economic Survey Japan 2009

Bank of Japan Yearly and Quaterly Statements 2009, 2010

Annual Report Reserve Bank of India 2009, 2010.