



Munich Personal RePEc Archive

An Analysis of Macroeconomic State and Prospects of Pakistan during Recent Global Financial Turmoil

Mahmood, Haroon and Rehman, Kashif-ur-

Shaheed Zulfiqar Ali Bhutto Institute of Science and Technology

25 August 2013

Online at <https://mpra.ub.uni-muenchen.de/49447/>

MPRA Paper No. 49447, posted 04 Sep 2013 04:17 UTC

An Analysis of Macroeconomic State and Prospects of Pakistan during Recent Global Financial Turmoil

Haroon Mahmood

Shaheed Zulfikar Ali Bhutto Institute of Science and Technology, Islamabad.

haroonmahmood29@gmail.com

Dr. Kashif ur Rehman

Iqra University, Islamabad.

drkashif@iqraisb.edu.pk

Abstract

The overall economic situation of the world is facing a threat with a deep and prolonged recession as the consequence of the squeeze in the fiscal system which was triggered by housing mortgage crisis in the United States. The importunate financial ramification of the worldwide macroeconomic inequality smoothed the progress of the expansion of the housing fizz with the amplification of toxic assets that burst in September 2008 as many of the major investment and commercial banks and leasing institutions collapsed. This study aims to contribute in summarizing these events and the diffusion of this financial turmoil through the advanced economies like United States and the Eurozone to the developing economy of Pakistan. The paper analyzes specifically Pakistan's current macroeconomic economic situation during this financial crisis. It also discusses the consequences of the surge in food and oil prices. This study also evaluates the government's response to the deteriorating conditions and proposes a number of policy measures.

1. Introduction

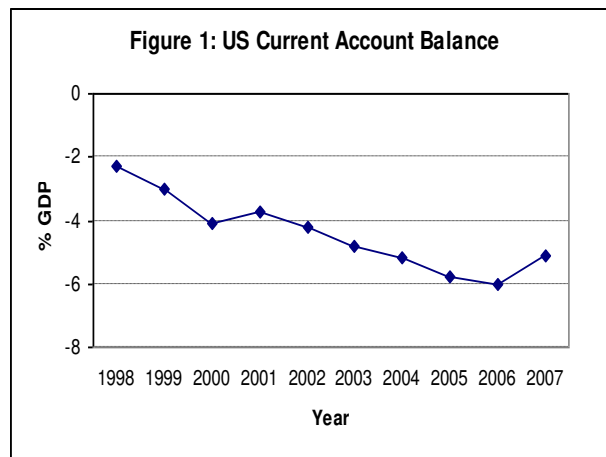
The recent crisis which swept through the global has done serious damage to the U.S. economy. The stock market collapse that took place on Monday, 29 September 2008—a loss of 778 points off the Dow Jones Industrial Average (DJIA)—was the largest single-day loss in the history of the DJIA. In a single day, US\$1.2 trillion of wealth, equivalent to nearly 7% of the market's value, was wiped out. Globally, equity markets were hammered in the aftermath and the credit freeze has become severe. The seizure of credit was echoed by abnormal increase in the London Inter Bank Offered Rate (LIBOR)—the rate of interest banks charge one another for short-term (overnight) loans—which rose to an astonishing 6% in September. Commercial paper, usually regarded as a safe investment by money market funds, suddenly became risky as blue chip firms' profit reports had worsened. Bankruptcy procedures involving large investment banks had also tied up funds of third parties. Then runs began on money market mutual funds that up till then had been regarded as akin to deposits in commercial banks. Loan windows suddenly were slammed shut. Credit became impossibly expensive as bank margins were exorbitantly raised, which forced the investors to look for cash and US Treasuries, to the point that interest on the latter approached zero. Understanding why this has happened and what the implications will be for developing economies especially Pakistan is the purpose of this paper.

The paper begins in Section II by identifying the underlying fundamental causes of the collapse in the US after a credit crisis that took years in the making. The spread of the crisis from the US to the rest of the industrialized world, particularly Europe, is discussed in Section III. Section IV sets out the macroeconomic condition of Pakistan and its exposure to the current turmoil. Section V evaluates the government's response to the deteriorating conditions and Section VI concludes the study with the recommendation of a number of policy measures

2. Anatomy of the US Financial Crisis

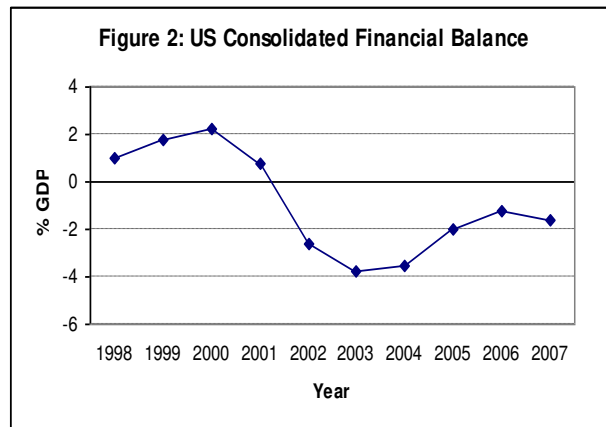
The monetary and fiscal policies are not only the underlying causes of the financial turmoil in United States, instead the weak management of private lenders, irresponsible behavior of the borrowers. Also the availability of plentiful and low-priced money made the housing bubble to expand for more than a decade. The decline in the housing prices became the contiguous basis of the recession in the US economy. However, if we consider the slump in housing prices in solitary, it is not possible to explicate the recent financial crises, since housing industry was showing the downward trend for

about 2 years before crises. Elementary structural tribulations are obvious and needed consideration for the analyses of the turmoil and the evaporation of confidence that accompanied the recent credit crunch. The US macroeconomic fundamentals are indicative of the policy shifts that occurred just after the turn of the century toward fiscal and monetary excess and showed a persistent deepening of the US current account deficit.



Source: US Department of Commerce, Bureau of Economic Analysis (2008).

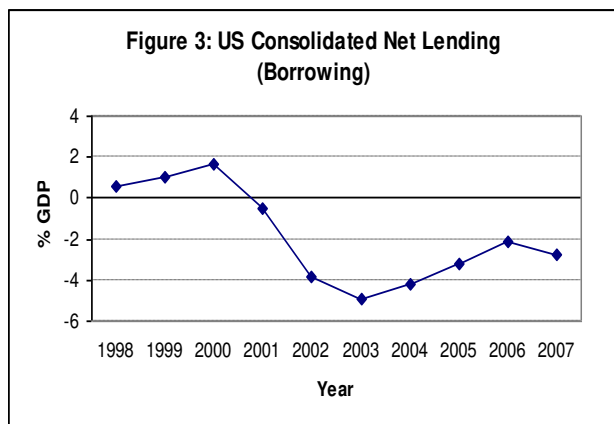
This reached the critical level of 5% of GDP or more than US\$600 billion in each of the past 4 years to 2007. The component of the current account deficit that is explained by private investment in excess of private saving was partially offset by positive net government savings (fiscal surpluses in the consolidated government account) in the years 1998–2001 but since then the fiscal balance has deteriorated.



Source: US Department of Commerce, Bureau of Economic Analysis (2008).

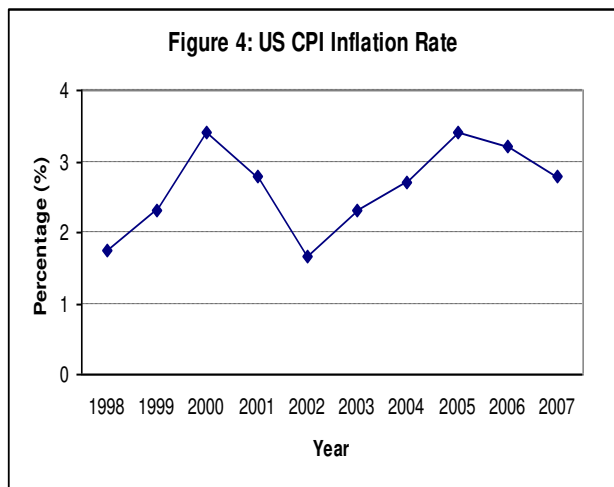
In 2008 the consolidated US fiscal deficit is expected to surpass the US\$400 billion mark. The degree of fiscal proclivity is reflected in net consolidated government borrowing ranging from over 2% to nearly 5% of GDP

between 2002 and 2007 as a combination of tax cuts, war expenditures, and absence of any sacrifice of other expenditure categories resulted in cumulative borrowing of over US\$2.5 trillion till 2007.



Source: US Department of Commerce, Bureau of Economic Analysis (2008).

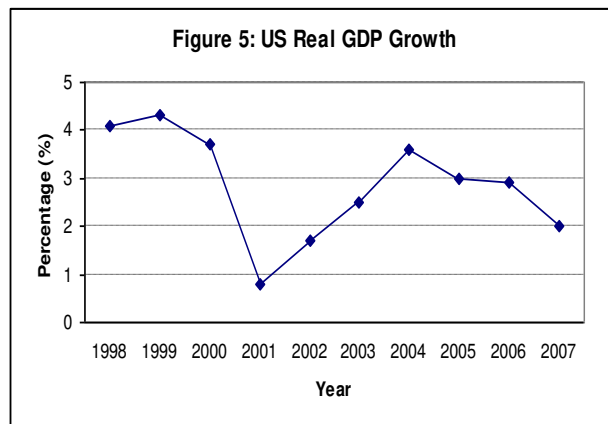
The fiscal imbalance (government sector de-saving) is thus contributing to the rise in the current account deficit. The current account imbalance also reflects the decline in US private saving, which is largely attributable to falling household savings. Corporate private sector saving on the other hand has been relatively steady. Macroeconomic performance has deteriorated. Inflation as measured by the consumer price index (CPI) has exceeded 2% in each of the 5 years after 2002 and after rising close to 3% in 2007, jumped to nearly 5% in 2008



Source: US Department of Labor, Bureau of Labor Statistics (2008).

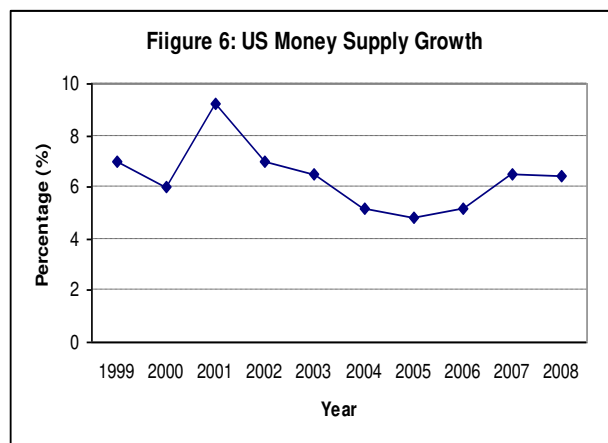
Real GDP growth has weakened and has topped 3% only once in the past 7 years a growth rate attained routinely in the period 1998–2000. Inflation rates now typically exceed GDP growth rates—another indicator that a loose policy environment has taken hold. Growth in 2008 is

now widely expected to be the lowest since 2001 after negative growth in Q3 2008 of -0.5%.



Source: US Department of Commerce, Bureau of Economic Analysis (2008).

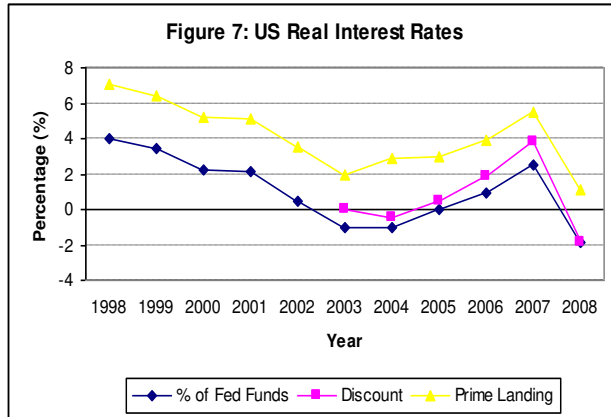
Money supply growth as measured by M2 (currency, demand deposits, time deposits, and money market mutual funds) grew continuously over the past decade. The expansion of broad money was benign as long as fiscal policy was restrained, as the surpluses of the consolidated governments (municipal, state, and national) afforded cope for non-inflationary credit growth.



Source: Board of Governors of the Federal Reserve System (2008).

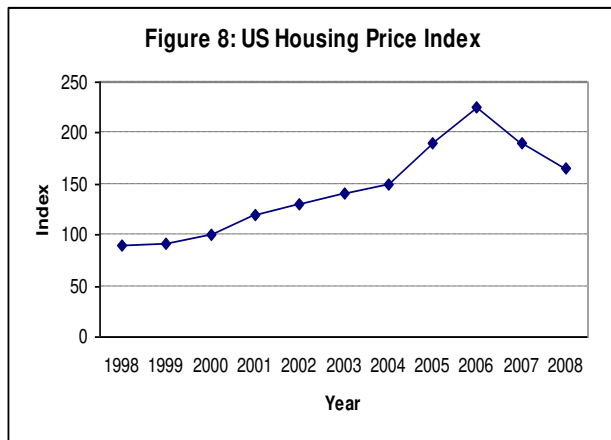
However, once tax cuts and outsized expenditures pushed the fiscal balance into deficit, continued easy monetary policy exacerbated imbalances and fueled a housing-led consumption binge that was financed in large part by borrowing abroad.

The expansionary monetary policy stance that characterized the boom years after the 2001 dotcom recession is reflected in the sharp drops in nominal and real interest rates between 2001 and 2004.



Sources: Board of Governors of the Federal Reserve System (2008); US Department of Labor, Bureau of Labor Statistics (2008).

Policy rates were negative in real terms for a period of 3 years between Q4 2002 and Q3 2005, and after a brief interval of tightening between Q4 2005 and Q4 2006 were subsequently loosened thereafter, in response to the slowdown in economic activity turning negative in real terms again by Q1 2008. In 2008 the real policy lending rate fell sharply as the Federal Reserve (Fed) aggressively implemented a series of cuts, although this decline failed to alleviate the freeze in credit markets as the spread between policy and lending rates widened. With the boom in the housing prices in United States for more than a decade, there was a proportionate rise in the mortgage lending. This was indicated in the Case-Shiller Composite Index of housing prices, showing the continuous rise for almost a decade till the first half of 2006, after which it started to decline.



Source: Standard & Poor's (2008).

The main reason for the provision of the sub-prime mortgage from many of the lenders was the consistent trend in the abnormal growth in housing prices. The peak in the housing price index and its growth coincided with the effects of loose monetary policy. The

rapid expansion of base money (currency plus bank cash reserves) operates with an approximate 12-month lag and the overly expansionary policy fueled housing prices and peak growth in housing prices in 2004–2005. The easing in base money growth that began in Q2 2005 through Q2 2008 had a dampening effect that is now apparent in the contraction in housing prices that started in the latter half of 2006. The subprime mortgages were packaged and securitized (with “triple A” ratings provided by credit rating agencies) and then were sliced and diced into derivative assets that provided the fuel to investment banks to develop the credit default swap (CDS) market on a global basis. The development of subprime lending led to the perverse trend of US homeowners defaulting on their mortgage payments at nearly the same rate as customers defaulted on their credit card debts.

The credit freeze will be difficult to mitigate as long as financial institutions struggle to reduce leverage and restore minimum capital requirements. This becomes even more difficult as financial companies’ share prices continue to plunge to new lows and as customers cash out of money market funds and other investments. There are still some additional financial landmines that are waiting to be set off—hedge funds are even more highly leveraged than banks at up to 100:1 (Morris 2008). Credit card debt is another huge risk with defaults likely to erase the profits and capital of card issuers and their investors. Commercial mortgage backed securities (CMBS) are warehoused in banks amid fears that if marked to market there would be huge additional losses facing commercial banks (Morris 2008). Finally monoline insurers that have underwritten insurance policies for purchasers of securities such as municipal bonds are also facing potentially huge losses. Some of these insurers have in recent years expanded into mortgage-backed CDOs and are even more highly leveraged than the hedge funds. Thus, the turmoil in financial markets is far from over.

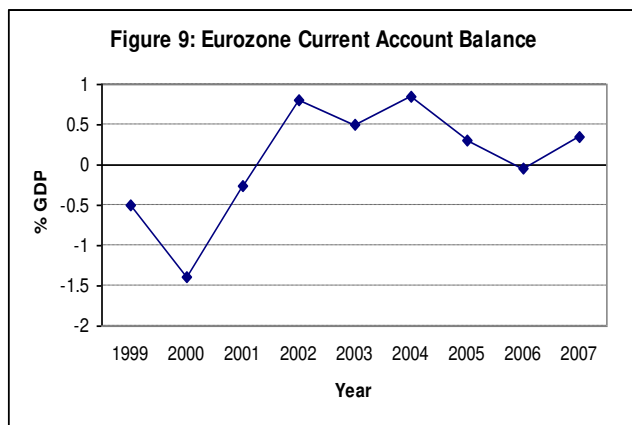
3. The Spread of the Crisis to Financial Markets

This section considers the exposure of various groups of countries in the Organization for Economic Co-operation and Development to the US meltdown. Housing bubbles in the United Kingdom (UK) and in parts of the eurozone became noticeable almost immediately after the subprime crisis began in the US in August of 2007. The large mortgage lender, Northern Rock, ran into funding difficulties in September 2007 and requested help from the Bank of England. Northern Rock had aggressively expanded its share of the UK mortgage lending from 3.6% in 1999 to 9.7% in 2007 (Bank of England 2008) and had financed this expansion through securitization of its assets. In a situation of deteriorating credit and money market conditions, Northern Rock faced difficulties in

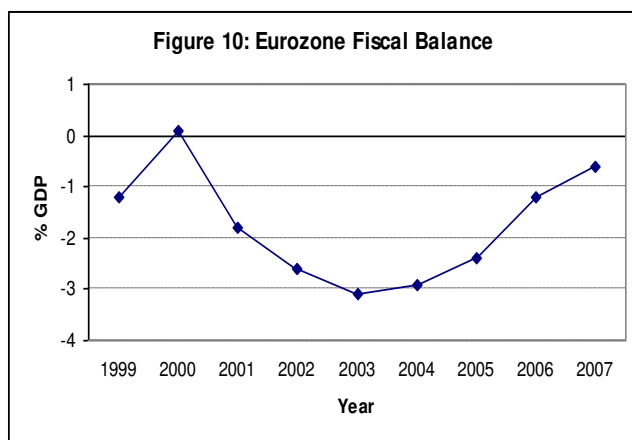
meeting its debt obligations amid doubts about the value of its assets. Quickly the spread between its borrowing and loan rates plunged and Northern Rock approached the monetary authority for help. Liquidity support provided by the Bank of England could not save Northern Rock from bankruptcy, and in early 2008 the UK Government had to place Northern Rock under public ownership.

3.1. The Eurozone

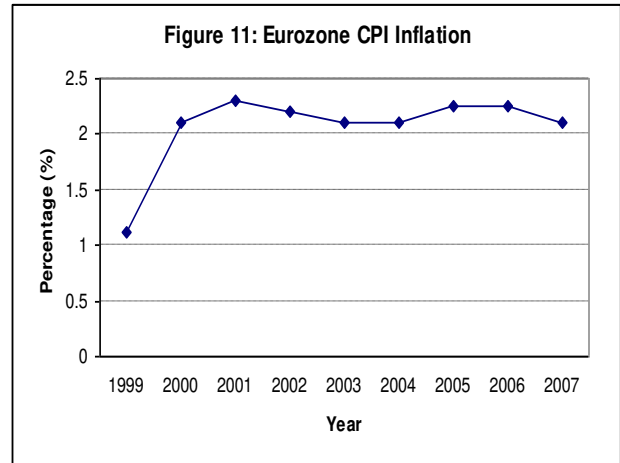
Macroeconomic conditions in the eurozone appeared to be less precarious than in the US case. The current account balance has varied from small surpluses to small deficits, and fiscal balance is also much more comfortable than in the US case. Consumer price index inflation and growth have generally been more sluggish in the eurozone than in the US.



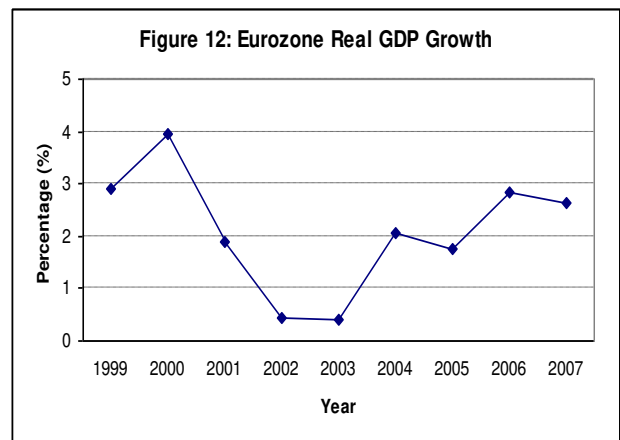
Source: CEIC Data Company, Ltd., downloaded 18 November 2008.



Source: CEIC Data Company, Ltd., downloaded 18 November 2008.



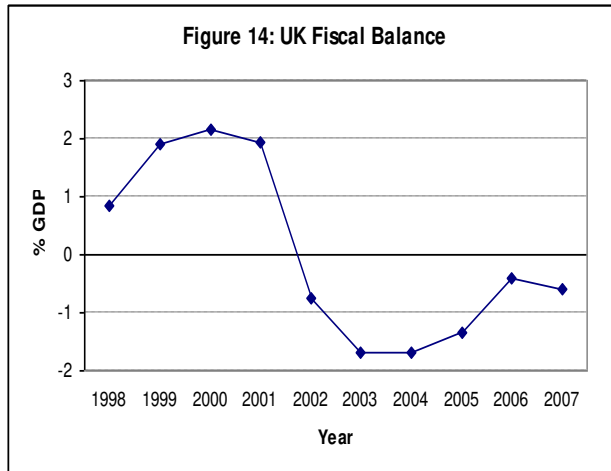
Source: CEIC Data Company, Ltd., downloaded 18 November 2008.



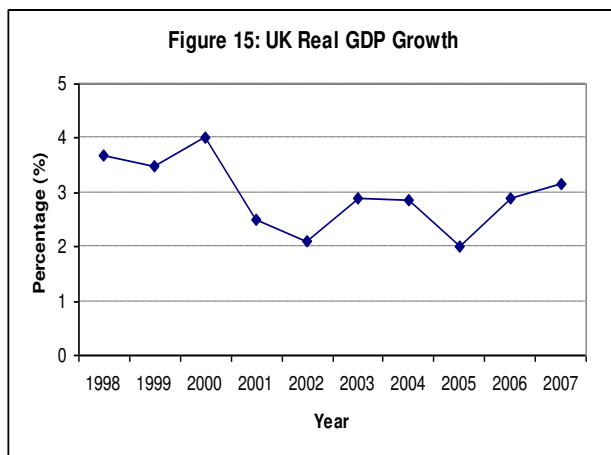
Source: CEIC Data Company, Ltd., downloaded 18 November 2008.

3.2. United Kingdom

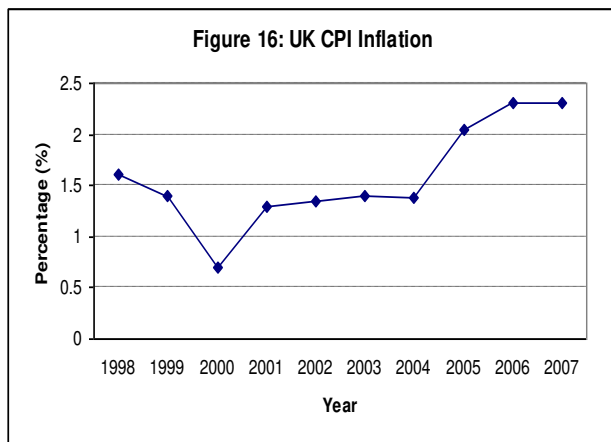
United Kingdom also faced the same challenges as by US because of rise in the fiscal deficit since 1998. The UK's current account deficits however are smaller as a share of GDP than those of the US. Moreover UK real GDP growth has been close to 3% per annum and has exceeded the rate of inflation in most years in this century.



Source: Datastream, downloaded 18 November 2008.



Source: Datastream, downloaded 18 November 2008



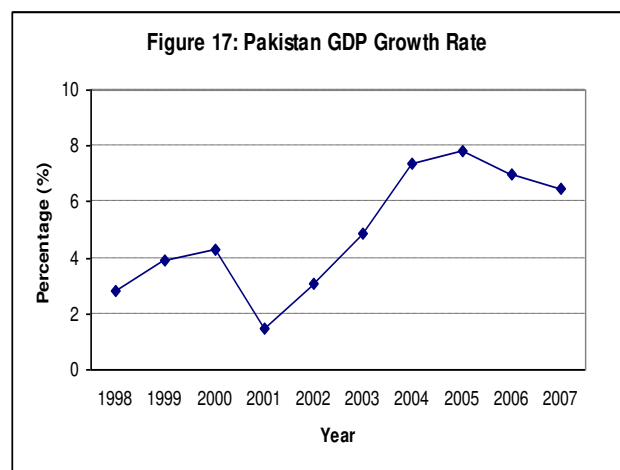
Source: Datastream, downloaded 18 November 2008.

Inflation has reached new heights in 2008 and was a major reason why the Bank of England kept the policy rate relatively high at or above 5% over the period of Q4 2006 to Q3 2008. It was only cut to 4.5% in coordination

with rate cuts by other central banks after the global financial turmoil of late September and October 2008 and remained positive in real terms. Subsequent sharp interest rate cuts in November brought policy rates down to 3.0% with an effective real rate of interest near or below zero. Retailer's margins had crossed to double-digit rates for a stretched period (1998–2005) but were sharply lowered in 2006–2007 before beginning to accelerate again in 2008. This growth had fueled the housing fizzle that remained through in 2007 before it burst in Q2 2008. Housing market troubles spread more rapidly into the financial system in the UK with the Northern Rock failure discussed above. In 2008 the deepening of the housing crisis led to the collapse of the large mortgage lender Bradford and Bingley, forcing the UK Treasury Department to take over that institution. The UK government then moved quickly to inject large sums of new capital into the banking system, providing support to a number of large banks in an unprecedented move. These banks had yet to record subprime write-offs unlike their American counterparts. A clear sign that the UK is on a precipice is the sharp increase in LIBOR that occurred in late September and its widening spread over treasuries, reaching about 400 basis points (bp). Consumer debt in the UK is even greater than in the US relative to GDP and household income. Hence, the outlook is grim and a prolonged recession is as or more likely to be experienced in the coming 12–24 months.

4. Macroeconomic Condition of Pakistan

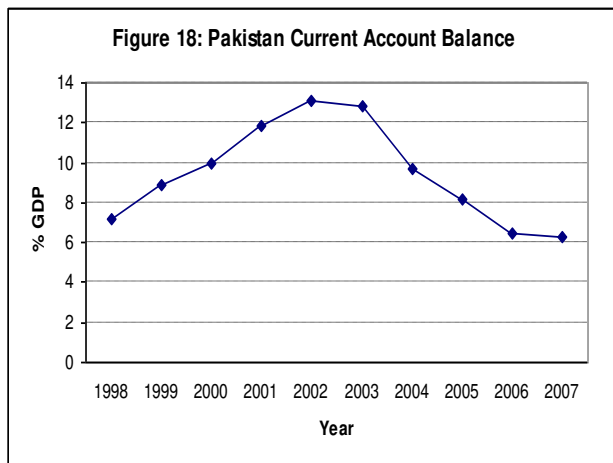
The GDP growth started to recover after the Asian Crisis in 1997, but again in 2001 it decreased significantly. Since 2002, it recovered, and especially between 2004 and 2007 the economy registered high growth.



Source: International Financial Statistics online (IMF 2008).

The current account deficit reached more than 5% in 2005/06 and 2006/07, and in fiscal year 2007/08 it

reached 8.4% of GDP (over \$14 billion dollars). Fortunately, current transfers and remittances made by overseas Pakistani workers are helping the current account deficit not to deteriorate further (in fact, the current account was in surplus during 2002–2004).



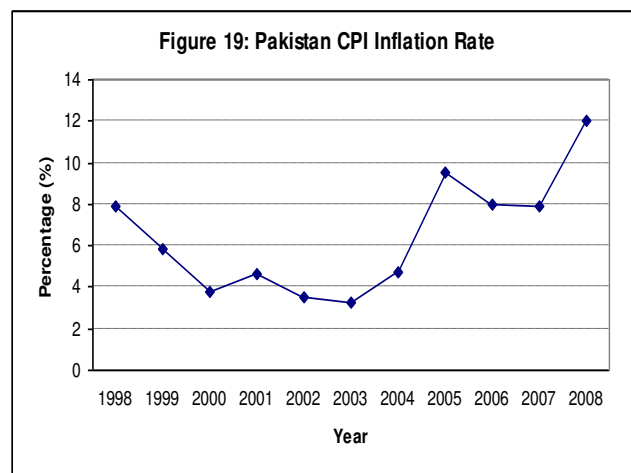
Source: International Financial Statistics Online (IMF 2008).

4.1. Exposure of Pakistan’s Macro-economy to the Financial Turmoil

In this section, we explore the issue of the extent to which the current global financial turmoil rooted in the US subprime crisis has affected the financial stability of Pakistan. In Section III, we determined the spread of sub-prime blow through Atlantic to many other developed economies in Europe. However, the financial system in Pakistan, on a whole, is unscathed by this turmoil. By and large, the empirical evidence, which will be presented and discussed below, justifies this upbeat perception. The fundamental basis of relative immunity of the country’s financial institutions is that they have only a marginal exposure to the toxic assets (the sub-prime mortgages and related products), unlike their counterparts in advanced economies. Although the impact of the global financial instability on Pakistan’s financial stability has been limited up to now, we should remember that the region as a whole has suffered a devastating financial meltdown of its own a decade ago. The most unswerving and core diffusion channels are through financial institutions and supplementary credit markets. Banks either directly or indirectly (investing in the foreign financial institutions which have high exposure, like Lehman Brothers) exposed to these toxic assets. Impact of the global financial instability on Pakistan’s financial stability has been limited up to now, we should remember that the region as a whole has suffered a devastating financial meltdown of its own in early 90’s.

4.1.1. Fuel and Food Inflation

These global events have contributed to the worsening of Pakistan’s macroeconomic situation. On the inflation front the graph shows that between fiscal years 1997/98 and 2006/07, Pakistan was able to maintain the inflation rate below 10%. Pakistan only experienced moderate-high inflation in the mid-1970s, over 25%, when the first oil price shock caused stagflation throughout the world. The figure shows that in fiscal year 2007/08, consumer price index (CPI) inflation breached the 10% level and reached 12%.

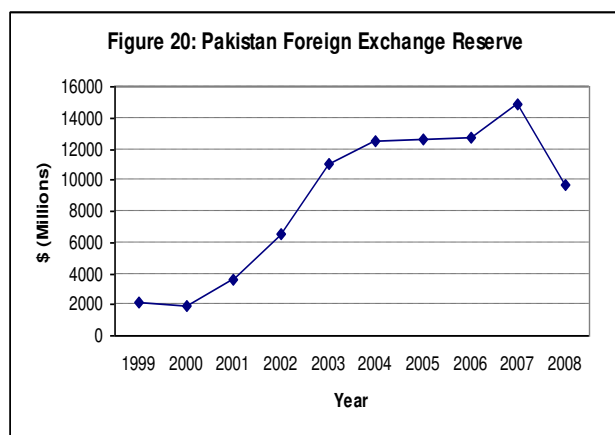


Source: International Financial Statistics online (IMF, November 2008).

In 2008 high food prices and rising fuel prices brought inflation to double digits. In June 2007/08, inflation reached 21.5%. Inflation is caused primarily by increases in food prices, which represent 40% of the CPI basket. In June 2008, food inflation surpassed 30%. What is worrisome is that core inflation (i.e., excluding food and fuel inflation) is on the rise. There are fears that this may lead to a wage-price spiral. Although the largest contribution is provided by house rent, its share has declined, and in June 2008 it contributed slightly less than 45% to total core inflation. On the other hand, during the last few months, the contribution of transport fare/charges has risen significantly. This reflects the pass-through to consumers of higher petroleum prices. The contribution of doctor’s fees, drugs and medicines, and washing soap and detergents to core inflation has also increased. Whether these increases are leading to workers’ demands for higher wages, which then feed into higher price increases is difficult to know as Pakistan’s statistical offices do not provide data on wages.

4.1.2. Declining Foreign Exchange Reserves

As a consequence of political uncertainty and economic deterioration (increasing external deficits and reduced capital inflows), foreign exchange reserves, which had been rising since 2001, started declining in November 2007, and the deterioration in the overall reserve position has accelerated in recent months. From a total of \$16 billion (in liquid foreign reserves) in October 2007, reserves fell to \$9.661 billion on December 31, 2008 (a fall of more than 45%). The deterioration has been caused by rising imports of fuel and food products, increased outflows of portfolio investment, and use of foreign exchange reserves to defend the rupee. Inflows of overseas remittances are still holding and helping counterbalance the trade deficit. FDI is lower but is still significantly positive. It amounted to \$3.88 billion during the first 11 months of 2007/08, as against \$4.52 billion in 2006/07. The decline is not excessive given that last year's FDI was extraordinary (Ministry of Finance 2008).



Source: State Bank of Pakistan.

4.1.3. Downgrade of Debt Rating

As noted above, the consolidated government deficit has also deteriorated significantly from an already high 5% of GDP in 2005-2007 to 6.5% of GDP in 2007/08. In recent years, fiscal deficits have been financed significantly through borrowings from the State Bank of Pakistan (SBP). Both the SBP and the international financial markets believe that this monetization of the deficit contributes to inflationary pressures, although the empirical evidence is scant. Nevertheless, this is inconsistent with the SBP's efforts to fight inflation. The political instability of the coalition government; increasing inflation; as well as the large trade, current account, and fiscal deficits led Standard and Poor's (S&P) to downgrade Pakistan's debt rating on 15 May 2008 from B+ to B, and its long-term local currency rating from BB to BB-, signaling a negative outlook. The S&P Transfer and Convertibility Assessment rating on Pakistan

also downgraded to BB- from BB (*Business Recorder* 2008). Moody's followed suit on 21 May 2008, and lowered Pakistan's credit rating from B1 to B2 depicting increased economic imbalances and rising political instability in the country. The rating of domestic debt was also reduced to B2 (*The Nation* 2008). S&P and Moody's have termed Pakistan a "highly speculative" country for bond investment. This pessimistic view from the international financial markets is reflected in the current year, which shows Pakistan's sovereign credit spread (between the yield of the sovereign bond and the US Treasury bond of equivalent maturity) being not only much higher than of other emerging markets but also on a rising trend since May 2007.

Today, international financial markets and credit rating agencies exert significant influence on economic outcomes. High inflation quickly brings in credit downgrades, loss of confidence, capital outflows, and reductions in capital inflows.

4.1.4. Depreciation of the Rupee

In late May and early June 2008 (during the period right after the credit downgrade and the announcement that inflation had reached 20%) the rupee fell fast from around 66 to the dollar to almost 70. The exchange rate only recovered when the SBP intervened in the foreign exchange market and raised its discount rate by 150 basis points. At the year end the rupee touched 88 to the dollar, a 28% drop since the start of 2008. This prompted the SBP to issue a statement indicating that it would support the currency to ensure exchange rate stability. While defending the rupee will control imported inflation, the SBP is using its reserves and thus contributing to their depletion. Finally, the SBP has issued a temporary suspension of forward booking for all imports. It is difficult to assess the impact of this measure and how the private sector will react.

5. Government Response to the Deteriorating Macroeconomic Situation

The government's response since May 2008 to the quickly deteriorating conditions can be summarized as follows:

(i) The SBP reacted to the increasing inflation and to the depreciation of the rupee by raising the discount rate by 150 basis points to 12% on May 23. It also increased the cash reserve requirement for all deposits up to 1 year maturity. In addition, the statutory liquidity requirement was increased by 100 basis points to 19% of total time and demand deposits. The SBP also enacted stricter rules on foreign exchange convertibility to end speculative foreign exchange trading (*Dawn Internet* 2008).

(ii) The government has tried to show a more realistic stance by scaling down its GDP growth forecast to 5.5% for fiscal year 2008/09. This is still seen as too optimistic by some experts. The International Monetary Fund, for example, is projecting a 3–4% growth rate for 2008/09. The government also scaled up its projected inflation rate for 2008/09 to 11 %.

(iii) The government has committed itself to during fiscal year 2008/09 to:

(a) Reducing the fiscal deficit to 4.7%

(b) Increasing the investment-to-GDP ratio to 21.5%

(c) Reducing the current account deficit to 6% of GDP

(d) Increasing foreign exchange reserves to \$12 billion from the current level below (\$11 billion)

(e) Reducing the tariff rates of imported inputs of agricultural products, textile, pharmaceutical products, and other industrial products.

The government's response has failed so far to convince the credit agencies to reverse the country's credit downgrade. The mood is still rather pessimistic as it is not clear how people will react once food subsidies are removed during fiscal year 2008/09, and consequently prices go further up.

A major aspect of the government's response to the current difficulties is the federal budget item changes from fiscal year 2007/08 to fiscal year 2008/09.

Key to this budget is a proposed increase in revenues by 20% and an increase in expenditures by only 7%. There will be a major reduction in expenditures on Economic Affairs, mainly reduction in subsidies. Overall, these changes are expected to lead to a reduction of 40% in the deficit.

6. Conclusions

The overall macroeconomic conditions of Pakistan showed remarkable progression through 2003-2007, derived mainly by the huge remittance inflow from overseas, cheap domestic lending rates, rescheduling of sovereign loan repayments, as well as FDI. This growth model although showed success during the initial stage but was not very persistent as it failed to address some major tribulations afflicting the economy of Pakistan. Some of these issues were;

i) a shattered confidence level in the democratic setup of the country and an overall robust opinion of a flimsy government, which made unable to commence sturdy

economic steps, like improved revenue collection measures, provision of income subsidies rather than price subsidies, and resolving the electricity and water dearth issue.

ii) ignorance to the capacity building of the economy (i.e. productive as well as technological advancements) and

and
iii) incapacity to restrict the escalating current account deficits.

Similar to many developing economies which have employed dubious internal policies, exogenous shocks adversely affected the overall economy of Pakistan. The measures taken to cope up with these challenges like reducing demand by implementing recessionary route for supply side, were proved to be very short term strategies and showed no significant contribution towards the improvement in the economic conditions. Too much austerity has compelled unnecessary reduction in high yield investments in almost every economy, resulting in increased unemployment rates as well as divergence in actual productivity. To achieve stability in the political structure is one of the key determinant among different modes of solution. Along with there is a need of strict fiscal and monetary policy measures. Similarly, the circumstances entail a synchronized attempt at the global level.

By taking into account all these determinants, several considerations may impart reasonable solution to the problems faced by Pakistan's economy:

(i) A consistent program to deal simultaneously with the macroeconomic imbalances and the rejuvenation of the economy.

(ii) The stability of the political structure should be such that it can enforce:

(a) implementation of progressive direct taxes for generation of higher levels of revenue; (b) changing focus towards income subsidies rather than the price subsidies; (c) look after critical economic resources while increase in poverty levels; and (d) allocate funds to manage the electricity and water shortages issue.

(iii) To deal with the current account imbalances as well as the decreased foreign exchange reserves by focusing mainly on the increased levels of exports of the country.

7. Recommendations

In our view, and despite the looming risks, the after math of the Asian financial crisis in early 90's proved its inability to resolve the issues afflicting economic state of Pakistan.. Pakistan's policy makers must aim at maintaining strong aggregate demand.

The new government has to avoid at all costs setting overly optimistic GDP growth targets, as well as

implementing populist economic policies. Its credibility is at stake. During 2007 and the first few months of 2008, it became clear that inflationary pressures, limited job creation, and the highly skewed nature of the income gains during the last few years led to the change in government.

The government also needs to find a delicate balance between measures aimed at alleviating the impact of food and fuel inflation, and economic policies aimed at gradually redressing the macroeconomic imbalances. At the same time, it needs to devise and implement a long-term growth model that leads to the transformation of the economic base from an agricultural and textile-dependent economy into a modern industrial and service economy. Furthermore, during the last few years, FDI inflows have concentrated on the service sector. However, the focus should be on attracting more FDI in production sectors. This transformation should also lead to the creation of productive and decent employment. This model requires an in-depth analysis of the possibilities of structural change and diversification in Pakistan. The years 2009 and 2010 have to be dedicated to setting the foundations of this model, in which both private and public sectors must understand the role that they have to play.

References

- [1] Adams, C. 2006. "Global Current Account Imbalances." Lee Kuan Yew School of Public Policy, National University of Singapore.
- [2] Ahya, C. 2008. "Capital Inflows—A Critical Macro Link." Global Economic Forum, Morgan Stanley, <http://www.morganstanley.com/views/gef/archive/2008/2/0080930-Tue.html>
- [3] ADB. 2004. *Asian Development Outlook 2004*. Asian Development Bank, Manila.
- [4] ADB. 2007. *Key Indicators 2007*. Asian Development Bank, Manila.
- [5] Akbari, A. H., and W. Rankaduwa. 2006. "Inflation Targeting in a Small Emerging Market economy: The Case of Pakistan." *SBP-Research Bulletin* 2(1):169–90.
- [6] Barro, R. 1997. *Determinants of Economic Growth: A Cross-Country Empirical Study*. MIT Press: Cambridge, MA
- [7] Bernanke, B., T. Laubach, F. S. Mishkin, and A. S. Posen. 1999. *Inflation Targeting: Lessons from the International Experience*. Princeton: Princeton University Press.
- [8] Blinder, A. 1987. *Hard Heads Soft Hearts*. Reading: Addison-Wesley.
- [9] Bruno, M. 1995. "Does Inflation Really Lower Growth?" *Finance and Development* September.
- [10] Bruno, M., and W. Easterly. 1998. "Inflation Crises and Long-Run Growth." *Journal of Monetary Economics* 41:2–26.
- [11] *Business Recorder*. 2008. "S & P Downgrading of Pakistan's Credit Rating," May 20. www.silobreaker.com/DocumentReader.aspx.
- [12] Chaudhry, A. A., and T. T. Chaudhry. 2008. "The Effects of Rising Food and Fuel Costs on Poverty in Pakistan." Lahore School of Economics.
- [13] Chaudhry, M. A., and M. A. S. Choudhary. 2006. "Why the State Bank of Pakistan Should Not Adopt Inflation Targeting." *SBP Research Bulletin* 2(1):195–209.
- [14] Davidson, P. 2006. "Can, or Should, a Central Bank Inflation Target?" *Journal of Post Keynesian Economics* 28(4, Summer):689–703.
- [15] *Dawn Internet*. 2008. "Rupee Rebounds Against the Dollar." May 26. Available: www.dawn.com/2008/05/26/ebr21.htm.
- [16] Dornbusch, R. 2000. "Containing High Inflation." In R. Dornbusch, ed., *Keys to Prosperity. Free Markets, Sound Money, and a Bit of Luck*. Cambridge.
- [17] Eisner, R. 1995. "Our NAIRU Limit: The Governing Myth of Economic Policy." *American Prospect* 6(March):58–63.
- [18] Eisner, R., 1995. "Our NAIRU Limit: The Governing Myth of Economic Policy." *American Prospect*.
- [19] International Monetary Fund. 2004. "Global Financial Stability Report 2004, Market Developments and Issues". www.imf.org/external/pubs/ft/GFSR/2004/02/index.htm.
- [20] Khan, M., and A. Senhadji. 2001. "Threshold Effects in the Relationship between Inflation and Growth." *IMF Staff Papers* 48:1–21.
- [21] Kriesler, P., and M. Lavoie. 2007. "The New Consensus on Monetary Policy and its Post-Keynesian Critique." *Review of Political Economy* 19(3, July):387–404.

[22] Lubna, S., U. Khalid, and S. Akhtar. 2008. "Unpaid Family Workers; Unravelling the Mystery of Falling Unemployment". Centre for Research on Poverty Reduction and Income Distribution, Islamabad.

<http://www.crprid.org/Publications/unpaidfamily.pdf>

[23] Ministry of Finance. 2008. "Update on Pakistan's Economy. Debt Office, Ministry of Finance, <http://www.finance.gov.pk/admin/images/updates/FDI%20May%2008.pdf>

[24] Ministry of Internal Affairs and Communications, Statistics Bureau and the Director-General for Policy Planning (Statistical Standards). 2008. www.stat.go.jp/english/data/getujidb/index.htm. Downloaded 14 November..

[25] Moinuddin. 2007. "Choice of Monetary Policy Regime: Should SBP Adopt Inflation Targeting". SBP Working Paper Series No.19. State Bank of Pakistan, Karachi

[26] Office of Federal Housing Enterprise Oversight. 2008. "Mortgage Markets and the Enterprises in 2007." www.ofheo.gov.

[27] *The Nation*, 2008. "Moody's Downgrades Pakistan Rating, May 22. www.nation.com.pk/pakistan-news-newspaper-daily-english-online/Politics/22-May-2008/Moodys-downgrades-Pakistan-rating