



EXAMINE THE CAUSES AND EFFECTS OF EXCHANGE RATE VOLATILITY ON ECONOMIC GROWTH

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Abstract

Stock market volatility is an important idea for understanding the financial specialists' responsiveness, and along these lines, it encourages taking a shot at investment strategy. This research inspects the volatility in Indian stock market of day by day and month to month return for the period from January 1996 to December 2005 with three distinct purposes of perspectives - volatility of day by day return in a year, volatility of day by day return in a month, and volatility of month to month return in a year regarding economic growth. For the examination, a balanced opening and shutting cost of the Bombay Stock Exchange recorded index BSE 100 have been inspected. The examination period shows a blended arrangement of economic condition, wherein the Indian economy has watched three particular economic stages progressively - decay, subsidence, and growth. The investigation includes understandings and testing of volatility in the domain of various economic conditions, which has wide running ramifications for policymakers and financial specialists. It likewise endeavours to perceive the factors in charge of creating volatility. The investigation additionally looks at volatility pattern of both every day and month to month returns in cutting edge situation.

INTRODUCTION

The Indian economy has experienced a notable turnaround in recent years. Growth has rebounded, inflation has moderated, and the budget and trade deficits have narrowed. The Indian Government has also initiated policies and reforms aimed at encouraging

investment, strengthening productivity and ensuring fiscal sustainability. Stronger growth in domestic demand has led to a recovery in India's imports, including from Australia. The recent volatility in foreign exchange markets and the recovery in oil prices pose upside risks to inflation and the current account deficit.

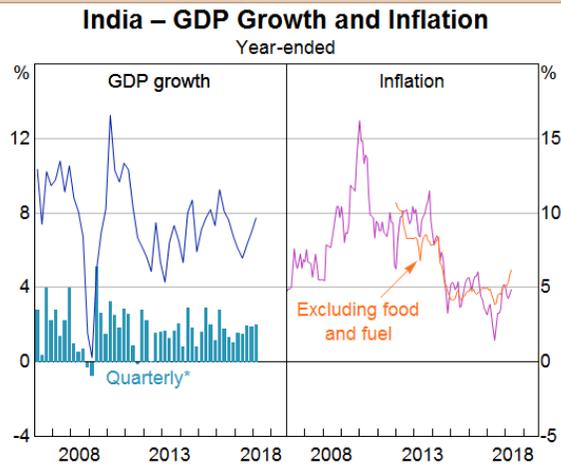


Figure 1: Economic Trends in India

The rapid pace of growth in recent years has seen India become the third largest economy in the world on purchasing power parity (PPP) basis. While India's importance in global trade has grown over the past few decades, its share remains modest at less than 2 per cent. Nonetheless, the resurgence in domestic demand in recent years has underpinned a rebound in India's imports. Consequently, after declining in importance as a trading partner for Australia between 2009 and 2014, more recently, India has grown in significance as a source of demand for a range of Australian goods and services exports.

Volatility in the stock market involves extraordinary worry for policy producers and financial specialists. Large changes in the stock costs, which show volatility, acquire variety the estimation of the financial specialists' portfolio. The stock market does not perform reliably in every economic circumstance. Therefore, portfolio estimation of financial specialists likewise

experiences changes relying on the economic conditions. Speculators' desires as for unmistakable and immaterial economic essentials tend them to inflow/outpouring of their assets from the stock market' which results in volatility various exact investigations look at stock market volatility resultant to change in economic and financial factors, and Point out that financial specialists are largely delicate to these factors.'

The long pattern of volatility, fundamentally, ought to be related to economic growth. Financial specialists will in general change the hazard premium return of their portfolios concerning changing macroeconomic essentials like expansion, loan fee, exchange rate, and industrial production, which develop the long haul pattern of volatility. Large inconstancy in market essentials, which results in long haul volatility in stock market presents a hazard to those financial specialists who keep their store put resources into the marketable

securities like common stocks for the significant lot.

THE CAUSES AND EFFECTS OF EXCHANGE RATE VOLATILITY ON ECONOMIC GROWTH

The forerunners to the breakdown of the Bretton Woods were driven by large U.S. equalization of instalment shortages, noteworthy gold outpourings, and the reluctance of real exchanging accomplices to realign money esteems. The one-sided end of convertibility of the US dollar to gold by the Nixon organization along these lines pushed the Bretton Woods experiments to the brink of collapse. In this way, various monetary forms started to be unreservedly dictated by market powers.

The discussion concerning the general benefits of fixed as opposed to skimming exchange rates keep on overwhelming talks in international money and finance, and it stays disrupted after more than four many years of the post-Bretton Woods age. Advocates of fixed exchange rate have frequently contended that adaptable exchange rate increases trade vulnerability and may in reality decrease trade volumes as it opens merchants to more serious dangers by changes. Without a doubt, there is proof that hard exchange rate pegs advance trade receptiveness and economic reconciliation. Past increases from trade, hard exchange rate pegs could improve monetary establishments consequently impelling sounder budgetary management as

governments lose influence to print money to finance spending.

In both created and creating economies, worries about exchange rate vacillations have advanced amazingly largely on its effect on fares, employment growth; expansion; investment, and all the more for the most part economic action and growth. In India, the coming of the Financial Sector Adjustment Program (FINSAP) – a segment of the Economic Recovery Program (ERP) – presented real changes in the financial sector including the discard of the fixed exchange rates for the free gliding routine during the 1980s. Among others, this change was done under the reason that adaptable exchange rates would check the boom– and– bust disorder just as turn the nation towards a direction of growth with the growth-improving impact exuding from the exchange rate pass-through on customer prices, terms of trade, trade volumes and investments.

Since the adoption of the adaptable exchange rate routine in India, the India Cedi has deteriorated against real monetary forms particularly the US Dollar (US\$), though, not monotonically, as the India Cedi recorded a small amount of solidness somewhere in the range of 2002 and 2007. India redenominated her cash on first July 2007 where US\$1 was exchanged for 93 pesewas. This move saw a deterioration of the Cedi additional time, and before the finish of July 2009, the US\$ was exchanged for GH¢1.49. Notwithstanding, between August 2009 to March 2010, the Cedi

imperceptibly valued by 3% and was like this exchanged for US\$= GH¢1.49 in April 2010. Most recently, the Cedi has been unpredictable. For example, toward the start of January 2014, a US\$ was exchanged for GH¢2.21, and before the finish of September 2014, the Cedi– Dollar exchange rate remained at GH¢3.20 – meaning about 44.65% deterioration.

Seemingly, this dimension of devaluation added to an ascent in customer price swelling which remained at 17% in December 2014 from 13.8% in January 2014. Gross domestic product growth which remained at 15.0% in 2011 dropped to 8.8% in 2012 and further to 7.6% in 2013. GDP growth rate for 2014 was 4.2% down from a reconsidered starting focus of 7.1%. While episodically the volatility of the exchange rate has been connected to macroeconomic shakiness, next to no endeavour has been made to inspect the factors behind it and the effect it has for both inward and outer dependability.

Over the long haul, exchange rate volatility is essentially impacted by government consumption and money supply growth, and terms of trade stuns. Stuns to the real exchange rate are observed to be mean returning. We report a somewhat U–molded relationship between real exchange rate change and long– term growth proposing that impact on the growth of volatility isn't constantly harmful.

EXCHANGE RATE VOLATILITY AND ECONOMICS GROWTH

The theoretical literature on the effect of exchange rate volatility on the economy is still a matter of great debate among economist. At the theoretical level, while some studies posit that large swings in exchange rates can be costly to the domestic economy, studies such as Devereux and Engel (2003)[84] contend that the welfare effects of exchange rate volatility are conditional upon the manner in which prices are set. The empirical literature is equally unsettled regarding the effects of exchange rate volatility on economic growth. In this brief review we survey the literature with the view to disentangle the various factors documented in the literature as important in driving the exchange rate volatility-growth nexus. Following the liberalization of global foreign exchange markets, identify two compelling areas of particular interest for exchange rate dynamics:

1. Significant long–run relationship between real exchange and fundamentals and
2. Relative significance of shocks in total exchange rate volatility.

Generally, the causes of exchange rate volatility can be grouped into domestic real shocks affecting supply, domestic real shocks affecting demand, external real shocks and nominal shocks reflecting changes in money supply. Unanticipated monetary policy shocks generate large variations in the exchange rate. Here, nominal shocks affect real exchange rate but only in the short-run. Because real exchange rate deviates from its long-run equilibrium

path, extant studies on the cause of the deviations and results are largely torn between two schools. The first documents significant relationship between real exchange rate fundamentals including supply and demand factors where the former largely relate to the level of output capacity and expected to follow the Balassa–Samuelson hypothesis.

Experimentally, they utilize the general balance model on the presumption that vulnerability emerges just from monetary and financial policy. A fascinating finding from their examination demonstrate that the monetary upgrade in a nation that causes devaluation of its money might not have much effect on its trade as deterioration of the exchange rate, on one hand, lessens imports however then again, the increase in domestic demand identifying with the monetary boost may increase imports in a similar greatness.

This has welfare suggestions and ought to be a policy concern. Changes in the real exchange rate should be guided by adjusting the exchange rate with basics. This in actuality keeps up outer aggressiveness and domestic dependability. In this investigation,

we endeavour to intently recognize the reasons for exchange rate volatility and the dynamic linkages between exchange rate volatility and economic growth in India. The impact of yield remains vigorously negative and huge (at 1%) recommending that volatility diminishes (increases) in light of higher (lower) productivity. The outcomes likewise demonstrate a negative and critical relationship between terms of trade and real exchange rate volatility. The suggestion is that an improvement as far as trade lessens volatility.

Conceivable thinking for this is because of progress in outer obtaining power limit which decreases import prices. The coefficient of FDI is certain and measurably noteworthy inferring that mix into the international financial market increases long-run volatility. The impact of government use is sure and noteworthy at 1% recommending that development of government utilization use increases exchange rate volatility. Here, demand factor – government consumption – has a comparable impact as real impact. Ostensible stun, for example, growth in money supply is decidedly connected with long-run exchange rate developments.

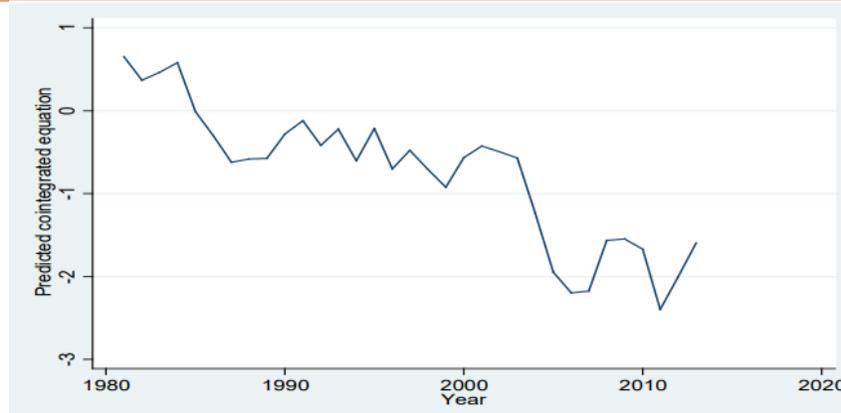


Figure 1: Predicted cointegrating equation

The graph shows that large shocks are apparent and have visible effects on the predictions from the cointegrating equation. Notable are the significant negative trends between 1983–1987 and 2003–2006. These we respectively attribute to the effect of the gradual devaluation of the currency in 1983 as part of the ERP, the subsequent adoption of the “managed” floating regime in 1986 and the 2004 general elections. Also clear is the apparent sharp rise in the volatility in 2007–2008 emanating from the effect of the cedi redenomination in 2007? Notwithstanding this, the graph generally reveals a negative trend.

POLICY IMPLICATIONS OF THE CAUSES AND EFFECTS OF EXCHANGE RATE VOLATILITY

It has been underestimated in the international macroeconomics writing that a high connection between the ostensible and real exchange rate is proof in help of the overshooting model which underlines monetary stuns and sticky prices. In any

case, stuns to taste, innovation, financial and trade may even easily compare to monetary stuns especially for creating nations. This announcement holds independent of the exchange rate routine a nation operates. The most important driver of exchange rate volatility in India is changing in yield. We especially found a reverse relationship among yield and real exchange rate volatility, proposing that diminishes in yield elevate volatility in real exchange rates. From the traditional monetary adaptation of exchange rate volatility, one ought to anticipate that these stuns should show in ostensible exchange rates as the experts endeavour to settle the price level.

In any case, we don't see this in the Indian case. Or maybe we report that yield vacillations to reflect in debilitating economic basics, incorporating wide developments in exchange rates. In the time of adaptable routines, yield variances ought to be moderated by changes in the ostensible exchange rate, since that is most likely the most grounded intrigue of drifting exchange

rates in any case. To this end, intercessions, whatever their inspirations to short-run yield variances, first might be excessively expensive, and second may not yield the expected advantages. In the light of our discoveries, hence, the ideal policy ought to be one that centers on the wellspring of the yield vacillations as opposed to interceding in the foreign exchange market.

A change to increasingly steady international money, for example, the US dollar by domestic specialists may result if volatility is over the top. One important ramification of our outcomes on the financial sector is the finding that portfolio streams aren't an important driver of exchange rate volatility in the short run. Rather than large developing markets where hot money inflows will result in general reason large swings in the exchange rate, India's moderately small and illiquid financial sector appear to be protected from the desolates of hot money streams.

We demonstrate that stun to the terms of trade influence volatility of exchange rate over the long haul. Government spending additionally influences the exchange rate just over the long haul. Reliable with a hypothesis, a stun to the exchange rate will in general mean return. Our evaluations demonstrate that about 6.9% deviation is amended per annum. What's more, this takes around 14.5 years for all disequilibrium to realign completely to the long-run balance. Albeit adaptable exchange rate enables relative prices to alter through changes in the ostensible exchange rate, the fairly

significant lot and moderate modification procedure could have extreme welfare suggestions for makers and shoppers as the impacts of large swings in the exchange rate sway on information prices, intensify investment vulnerabilities and effect on utilization choices.

Terms of trade (1.7%) and money supply (0.7%) represent the rest of the volatility of real exchange rates. Over the long haul accordingly, both real and monetary factors are important in clarifying exchange rate volatility. India's electioneering and government use nexus merit nuanced consideration. From the fourth Republic to date, the four-year political cycle has seen wonderful spending overabundances in every decision year. India's experience in decision years has been nevertheless transcendently financial indiscipline prompting intemperate large monetary shortfalls coming full circle in exchange rate devaluation. The leftovers of the previous three races (2004, 2008 and 2012) were set apart by an intemperate consumption – largely intermittent – as wages and sponsorships. It is accordingly not astonishing that these periods saw the gigantic devaluation of the money. The overabundances of government in the 2008 decision prompted a continued deterioration of the Cedi from the second 50% of 2008 until July 2009 which followed an age of sombreness measures. Experience in 2012 was not unique. Government consumption as an extent of GDP was up from 16.64% in 2011 to 20.98% in 2012. The resultant impact was a fairly high exchange rate

volatility largely determined by monetary weights.

Specifically, FDI inflows to the country reduced from US\$ 3.293 billion in 2012 to US\$ 3.226 billion in 2013. Given that India already receives less FDI this may be detrimental to growth. Assuming it was possible to diversify currency risk; domestic policy would still have to adjust to accommodate this risk. This may reflect in domestic tax concessions and rebates, among other incentives that are typically put in place to attract FDI. The long run consequences of these on growth performance are always negative. The consequences of exchange rate volatility also hold lessons for debt. A strong depreciation of the Cedi against the US dollar, for example, implies a higher cost of servicing an external debt that is mainly denominated in dollars.

For instance, recent data from World Bank's International Debts Statistics reveals that India's external debt amounted to US\$ 7.17 billion in 2005 and decreased to US\$ 3.68 billion in 2007. Because exchange rate was relatively stable during this period, interest payments amounted to US\$ 112.7 million and US\$ 103.3 million respectively. It is needful to note that after 2007, India's external debt position continued to rise annually. In 2009, the external debt which stood at US\$ 7.2 billion increased by US\$ 2.1 billion in 2010 with total debt accumulating to US\$ 15.8 billion in 2013.

The rise in debt stock was accompanied by higher debt servicing. While the interest payments on external debt was US\$ 139.6 million in 2009, the total amount of interest paid on the debt increased to US\$ 335.7 million in 2013 up from US\$ 128.7 million and US\$ 219.9 million in 2011 and 2012 respectively. Arguably, this higher cost of servicing external debts and the growing size of the debt leave painful consequence of reduced spending on social protection programmes and other developmental commitments with its preminent effect on welfare. Exchange rate volatility has also proven crucial in the real estate sector particularly on mortgage financing.

The uncertainty generated by the high volatility does not only disrupt timely repayments but also negatively affects access to mortgages quoted in foreign currencies especially the US Dollar. Apart from decreasing the welfare gains of existing mortgages in the form of higher financing, depreciation of the Cedi denies would be property owners from accessing and owning mortgage house(s) on account of rather high pricing. The net effect of our study establishes that excessive volatility is detrimental to growth. But is this always the case? If indeed the answer was in the affirmative, the consequences could be dire.

CONCLUSION

So it is concluded that exchange rate volatility– economic growth nexus is U-shaped. In other words, real exchange rate volatility is detrimental to growth up to a

certain threshold where it begins to positively influence longterm growth. Thus higher volatility does not always hurt growth. For instance, greater exchange rate fluctuations could lead to a more efficient resource allocation thus propelling growth. Furthermore, excessive volatility could promote firm innovation and productivity as domestic firms cannot fully rely on the undervalued exchange rates and intervention in foreign exchange market in order to maintain international competitiveness. The real challenge is whether Indian firms can receive the rewards emerging from the unstable exchange rate condition, specifically if this collaborates with inconsistent power supplies and other related expenses of working together.

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