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IMPACT OF US FINANCIAL CRISES 2008-09 ON THE ECONOMY OF RUSSIAN FEDERATION

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Abstract
The paper attempts to determine the severity of the impact of US financial crisis of 2008 on Russian Federation and how the government responded to the crisis situation. The paper focuses on the cost incurred through the macroeconomic and financial arms of the economy. The paper found that Russia was severely hit by the global financial crisis that crippled its growing economy. The plummeting oil and gas prices aggravated the situation of Russian economy which is substantially financed by energy exports. The paper concludes that tumbling commodity prices, plunging oil prices, fall in demand worldwide, plummeting trade and the credit squeeze in the international market played out due to crisis inflicting substantial harm to the economy. The weak demand from both domestic and external market combined with credit crunch increasing the cost of borrowing fuelled the deterioration in industrial production.

Key Words: Global Financial Crises, Macroeconomic and Financial Variables, Stock Market, Industrial Sector, Exports.

1. INTRODUCTION
The US financial crisis of 2008 was molded with the rising foreclosures and delinquencies on sub-prime mortgaged loans. The rising defaults pricked the asset bubble in US impacting both the households as well as financial systems of US. Due to growing integration between global economies with US at the epicenter, the crisis traversed the boundaries. The contagion reached the far corners of emerging economies on the transmission channels of trade and finance. For Russia, the crisis occurred at a time when it was basking in the strengthening receipts of energy exports and enjoying spectacular economic growth since 1998. The impact was so profound that it reversed the defenses built by the economy in the last decade registering high growth. The structural susceptibilities of excessive dependence on energy exports, limited venture capitals and narrow industrial base accentuated the impact of crisis on its economy. The impact echoed the most in the segments of employment, poverty, and economic growth. The economy was an impressive story of growth till the first half year 2008, post which both the oil and its stock market plunged. The effect multiplied to culminate into deteriorating ratings by credit rating agencies on both the economy as well as its financial systems. The situation was aggravated by the capital flight that resulted in a severe depreciation of its currency which played a significant role in depleting its foreign exchange reserves.

The paper shall focus on the grounds and the effects of US financial crisis on Russian economy. The paper was drafted to squarely explore the fundamental factors playing a significant role in the propagation of crisis i.e., both its macroeconomic and financial indicators were examined elaborately. Also analyzed were the policy responses of policymakers and government of Russia to confront the emerging challenges serving as the roadblock in the revival of the economy.

The paper is divided into following sections Section 2 is about Objectives and Methodology, Section 3 is about Analyses and Interpretation and Section 4 finally concluded the paper.

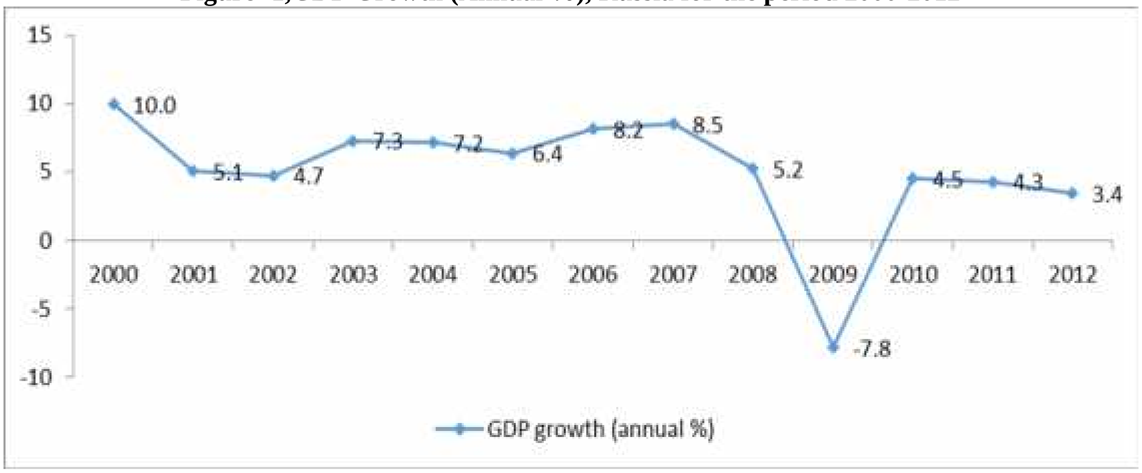
2. OBJECTIVE AND METHODOLOGY
The objective of the papers is to analyses the impact of US financial crises on Russia. Few indicators for Russian economy were analyzed such as economic growth, inflation, capital flows, international trade, stock and equity market, exchange rate and foreign exchange reserves, industrial sector, employment and banking sector.

3. ANALYSIS AND INTERPRETATION
The crisis abetted the decline in inflation which was high in pre-crisis period and decreased with the worsening of global and domestic economic scenario.

3.1 Gross Domestic Product (GDP) Growth
The vigorous growth of GDP in the first half of the year 2008 at about 8% testified for its strong macroeconomic fundamentals and thriving growth of the economy for the year ahead. This growth in fact was indicating at an overheated economy that had beaten its own long term potential. The assortment of factors comprising of managed inflation, surging capital flows both in the form of equity and FDI, swelling construction and retail activities, declining unemployment and rising real wages were behind the overheating of the economy. On the other hand, the tumbling oil prices served as a vital influence eroding the fiscal and external account surpluses besides the drain on its well-maintained foreign exchange reserves. The prices of the crude oil dropped from USD 144 per barrel in July 2008 to under USD 55 per barrel by

November, 2008. The reason was none other than the falling demand from the industrialized nations of EU and US struggling with the effects of financial crisis along with the expectation of waning demand riding on decaying global economy.

Figure- 1,GDP Growth (Annual %), Russia for the period 2000-2012



Source: World Bank

The economy which was enjoying a robust economic growth averaging over 7% in the pre-crisis period of 2000-07, had to deal with the negative GDP of 7.8% in 2009 due the US financial crisis. Consequently, in its struggles to uplift the economy, the budget surplus position being relished since 2001 got transformed into a budget deficit status to the tune of 6.3% of GDP in 2009. The growth of GDP in the first three quarters of 2008 was strong at an average of 7.7% which aided in compensating for the loss of growth in the last quarter owing to the crisis effects. The growth of GDP in the last quarter stood out at only 1.1% while the industrial production was down by 6.1% straight in the same last quarter of 2008. The fall of the Lehman Brothers in September, 2008 was a landmark event that sent the crisis shock waves rippling to nook and corner of the global economy sparing none. Being an economy rich in natural resources with foreign trade and financial flows powering a major share of economic growth, the same dynamics served as the channel of transmission of contagion effects of the crisis to the economy. Thus, the factors contributing to the slowdown of the GDP growth rate in 2008 were the same- tumbling commodity prices, fall in the demand worldwide, plummeting trade and the credit squeeze in the international market. Barring few indicators, the slowdown was an across-the-board experience that were exploring new depths in the last quarter of 2008 and thereby entering into deep recession with the 2009 beginning.

Table -1, GDP Growth by main sectors, 2006–08

	2006	**2007**	**2008**	**2009**	**2010**
Total (value added)	7.70	8.10	5.60	-7.80	4.00
Tradable sectors	3.4	3.9	1.8	-8.6	6.5
Agriculture, forestry	3.8	2.6	8.4	1.4	-12.1
Extraction industries	-3.3	-2.6	0.2	-0.3	4.8
Manufacturing	7.3	7.8	0.9	-15.6	13.4
Non-tradable sectors	9.7	10.3	7.4	-7	2.9
Electricity, gas, water production and distribution	5.7	-0.7	1.2	-3	5.9
Construction	11.8	9.3	13.2	-14.6	-0.9
Wholesale and retail trade	14.1	13.7	8.4	6.5	4.5
Financial services	10.3	12.5	6.6	2.2	-3
Transport and communication	9.6	3.4	6.9	-8.4	7

Source: Rosstat, World Bank

The three quarter growth balancing the last quarter decline of 2008 registering a positive growth figure of 5.6% could not be replicated in the next year of 2009 which posted a decline of economic growth at -7.8%. In 2009, the damage was experienced more by the tradable sector with a decline of 8.6% compared with the non-tradable sector with a decline of 7%. The plummeting tradable segment growth was stirred by the rapidly surging wages overtaking productivity growth concomitant with the appreciating currency, ruble. Paradoxically, the growth in tradable sector reduced from 3.9% in 2007 to 1.8% in 2008 to an altogether decline of 8.6% in 2009. The most hurt was the manufacturing sector which had to endure a steep fall in 2008 from 7.8% growth in 2007 to only 0.9% growth rate in 2008. The collapse in demand, the reduced private expenditure owing to freezing credit conditions and despairing sentiments did not helped the manufacturing sector in the next year of 2009 when the decline was at 15.6% relative to the previous year 2008. The electronics, electrical, optical and electro-technical equipment were the hardest hit within the manufacturing industry sector. Whereas, the non-tradable sector that managed to fare relatively dynamically posting a growth of 7.4% in 2008 compared to the tradable sector could not sustain the momentum in the subsequent year 2009 and depreciated by 7% with the deteriorating economic position of Russia. The construction and retail segment that are the central artist in the non-tradable sector and are sensitive to the demand and finance could not escape from the heat of the declining economy, aggravating in 2009. The construction retail segment also survived 2008 declaring a rather robust growth rate of 13.2% but followed other falling segments to post a decay of 14.6% in 2009. These segments were riding on the strong consumer demand and flexible credit availability.

3.2 Inflation

Even though with the improving macroeconomic conditions, the inflation does had come down from its highs of 85.7% but it was yet hovering above the acceptable range. From 2000-2007, the inflation's annual growth rate was over 9% where it increased by 9.68% and 9.01% in the pre-crisis years of 2006 and 2007 respectively. Managing such high inflation robs the citizens of the nation of their savings with the currency losing its worth annually leading to the corresponding reduction[1] in their disposable income. This had a cumulative impact on the demand which is the fuel of growth for any emerging economy. The inflation in 2008 rode another steep number despite the financial crisis making a mark in the latter part of the year in economy. The loose monetary and fiscal policy along with the higher import prices had raised the expectation of higher inflation in 2008 driving the actual figure to 14.1% relative to the inflation growth of 9.01% in previous year 2007. Subsequently, the respite from the re-escalating inflationary pressures came in the form of financial crisis dampening the inflation fueling factors in the economy. Thus, slackening economic growth and aggregate demand were expected to cool the inflation. However, the stimulus package injecting liquidity in the economy along with the rising import prices countered the effects of the crisis leading to a higher inflation of 11.7% in 2009 as well. The higher inflation rate owed its due credit to the increase in the prices of products under government regulation besides the increase in the money supply within the economy. The prices of the natural monopoly sectors of locomotive (rail), electricity and natural gas that were governed by the state regulators witnessed an increase adding to the inflationary pressures that was already seething from the rise in the energy and food prices in the world market.

Nevertheless the effects of the crisis did played out with the domestic demand decelerating, capital flows exiting the economy and the lingering liquidity crunch sponsoring the stringent monetary policy thereby alleviating the inflationary pressures form the economy . Accordingly, the inflation lessened with 6.86% in the year 2010, the lowest rate in its decade long Russian history.

Table- 2, Consumer Price Inflation for the period of 1999-2010

Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Consumer Price Index (annual %)	85.7	20.8	21.5	15.8	13.7	10.9	12.7	9.68	9.01	14.1	11.7	6.86

Source: World Bank

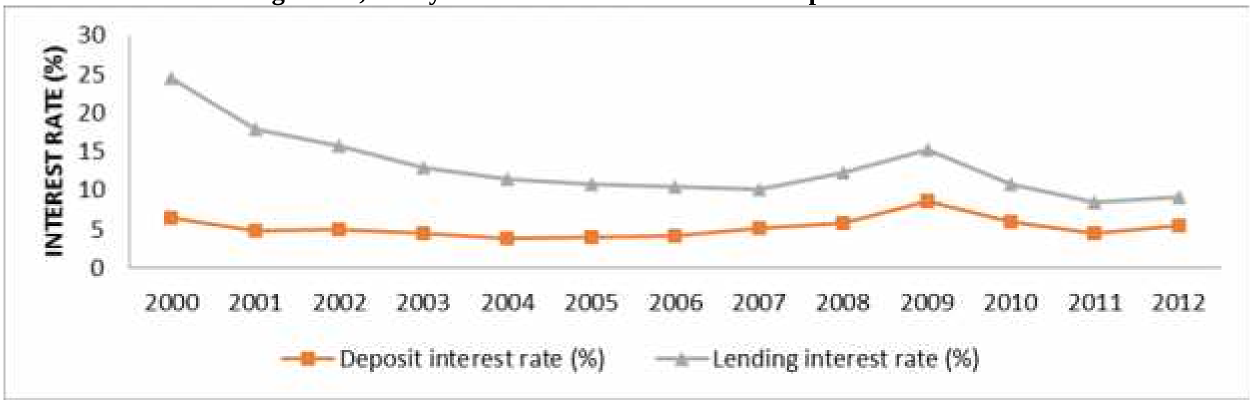
3.3 Interest Rates

The beginning of the year 2008 witnessed a switch in the focus of the Central Bank of Russia (CBR, hereafter) from the management of exchange rate in the international market to the management of inflation. This led the CBR to tighten its grip on its monetary policy by steering towards higher reserve requirements and higher interest rates. This led to the deceleration in the money supply growth to 8.3% only in the first 3 quarters of 2009 compared to 27.8% growth in the previous year, 2007, same period. However, the measures proved to be inadequate in tackling down the inflation which remained high riding on the robust aggregate demand within the economy. Subsequently, by the end of third quarter in September 2008, the CBR was compelled to reverse its monetary policy stance towards expansive policy to counter the liquidity and confidence crisis penetrating the economy. The CBR suddenly dropped the reserve requirements in September-October, 2008 to 0.5% followed by the increase in the daily limits for REPO operations. These initiatives injected bounteous liquidity amounting

[1] *Disposable income is the income minus the taxes paid.*

approximately Rubles 700 billion into the economy. Additionally, in order to provide the liquidity to the banking sector, the federal budget doubled the budget funds to be allocated temporarily into the short-term deposits of 3-months to the selected banks. Yet, the inflation in the year 2008 remained high despite the combined efforts of the CBR and Ministry of Finance on account of higher domestic demand for goods and higher import bills. Also, the generous liquidity flooded by the CBR in the market failed to make a significant imprint on the money supply in the market as it got diverted to facilitate capital outflows and the flight into foreign currency.

Figure - 2, Policy Interest Rates in Russia for the period 2000-2012



Source: World Bank

Consequently, by February, 2009 the monetary policy was again constricted by the CBR with the aim of containing any further outflow of the foreign exchange reserves. Hence the liquidity was squeezed from the repo market by reversing the monetary policy and increasing the policy rates in February 2009 from its lows of 2008. Then again by the next quarter, the monetary policy was again loosen, this time obliged by lower than expected inflation and rising oil prices alleviating the ruble exchange rates. Accordingly, the lending and deposit interest rates witnessed a slight increase in the year 2008 at 12.23% and 5.76% respectively compared to their corresponding figures in 2007 at 10.1% and 5.14%. The increase despite the loose monetary policy was owing to the tight monetary in the first three quarters of 2008 balanced by a sole quarter dedicated to the relaxed policy in the last quarter 2008. Successively, again the stifling of the monetary policy in the next year 2009 led to the higher lending and deposit rates at 15.3% and 8.6% respectively which were relieved in the subsequent year of 2010 only at 6% deposit rate and 10.8% lending interest rate.

3.4 Capital Flows

The intensification of the global financial crisis from September 2008 led the investor's confidence to crash not only in Russia but in all the emerging economies of the world. This led the investor gripped in the panic for the safety of their invested funds in the emerging economies to relocate those investments to safe havens which ironically turned out to be US- the epicenter of financial crisis. Thus, the reversal in capital flows began from the third quarter 2008 declining by 40% relative to the same quarter in the previous year 2007 in Russia. The capital outflow in Russia was of severe and sudden nature was testified by the capital account balance posting a surplus of only USD 0.5 billion for the first three quarters of 2008 compared with the surplus of USD 59.3 billion in the same period of 2007. The capital outflows also made the dent in the reserve accumulation despite a robust performance of the external current account for the first three quarters of the year 2008. Though all the segments of the capital flows were hit, still the most hurt was the equity segment followed by the bond segment.

Table - 3, Flow of Foreign Direct Investments for Russia for the period 2000-2010

Russia	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Foreign direct investment, net inflows (% of GDP)	1.05	0.9	1	1.85	2.61	2.03	3.8	4.3	4.5	2.99	2.83
Foreign direct investment, net outflows (% of GDP)	NA	NA	NA	NA	NA	2.34	3.03	3.45	3.35	3.54	3.45

Source: World Bank

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However, the decline in the FDI which is basically a long term capital with the benefit of sharing the technical know-how occurred not only due to the changes in the investor sentiments for worse alone but also the change in the domestic laws. Determined to increase the state control in the sectors of strategic significance, the government formulated and adopted the law on April 29, 2008 that restricted the foreign investments in some strategically significant sectors. One of those sector was the resource extraction industries that witnessed a decline USD11.4 billion from USD13.9 billion in 2007 to USD2.5 billion in the first half of 2008. This law did not translated into a complete loss of FDI inflow for the Russian economy as the electricity sector attracted those foreign investments witnessing a rise from 0.5% of total FDI share to 33.9% share of the total FDI within the first half year only. Further, the surging external financing via the government debt route compensated any loss incurred from the declining FDI. Consequently, the FDI in the year 2008 remained almost unchanged at 4.5% of GDP as inflow and 3.35% of GDP as outflows. The impact on the FDI became more visible in the subsequent year when the FDI inflow declined to 2.99% of GDP while FDI outflow also dropped to 3.54% of GDP in 2009.

These reversals in the capital flows from the Russian economy were triggered by the transformations of the investment sentiments from one of optimism to one of pessimism and distrust. The short-term speculative flows and the FDI emerged to be chief victim of these sentiments reversal. Successively, the capital outflows also impacted the currency valuation of ruble as the foreign investors vacated their position from the ruble that was appreciating in the pre-crisis period, thereby overturning the capital account balance. Furthermore, the net private capital flows to the banking sector also witnessed a sharp reversal totaling to a deficit of USD55.2 billion in the year 2008. The outflow from the banking sector amounted to the complete drain from the net capital flows in third quarter of 2008 alone when compared with its contribution to only half the net inflows and that too in the combined first two quarters of 2008. Comparatively, the net capital outflow from the non-banking sector was more at USD78.3 billion in 2008.

Table - 4, Net Capital Flows (US$ Billions) , 2007–2012

	2007	**2008**	**2009**	**2010**	**2011**	**2012**	**Q1 2012**	**Q2 2012**	**Q3 2012**	**Q4 2012**
Total net capital inflows to the private sector	81.2	-133.6	-57.5	-30.8	-81.4	-54.6	-33.8	-4.7	-7.9	-8.2
Net capital inflows to the banking sector	45.9	-55.2	-32.2	15.9	-23.9	18.5	-9.7	11.6	7.7	8.9
Net capital inflows to the non-banking	35.4	-78.3	-25.3	-46.7	-57.4	-73.1	-24.1	-16.3	-15.6	-17.1
Capital and financial account	84.5	-131.2	-43.5	-25.5	-75.3	-31.2	-28.8	1.7	-4.3	0.1

Source: World Bank, CBR

The deterioration in the capital flows in the year 2008 worsening in 2009-2012 duly owed its credit to the accumulation of repayment obligations, the scarcity of portfolio and foreign direct investments besides the colossal capital outflows from the economy. Consequently, the maximum decline in the capital and financial account was experienced in 2008 at USD 131.2billion which subsided from the next year settling but still depreciating at USD 43.5 billion, USD 25.5 billion and USD 75.3 billion from 2009 to 2012 respectively. The improvement in the capital flows occurred with the improvement in the global demand and the prices of the oil in the international market that took a plunge in 2008 and remained volatile for first two quarters of 2009.

3.5 International Trade

Russia had enjoyed a piercing growth in its external trade since 1999 with exports reporting a decade long growth of 525% while imports reporting a decade long growth of over 640%. A minimum annual growth percentage enjoyed by the Russian exports hovered at 6.3% from 2000-2007 relative to its counterpart at 14.6% in imports annually. The external trade performance benefitted the economy not only by boosting the current account balance but also the foreign exchange reserves as well. While the current account relished a decade long growth of over 315.8% since up to 2008, the foreign exchange reserves spiraled by over 30 times for the same period. In fact it was these resources (strong fiscal and reserves) that helped the economy in buffering it from the impact of the crisis.

Table- 5, Current Account Balance for Russia for the period of 2000-2010

Russia	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Current account balance (% of GDP)	Na	Na	Na	Na	Na	11	9.33	5.55	6.26	4.12	4.42
Exports of goods and services (% of GDP)	44.1	36.9	35.2	35.2	34.4	35.2	33.7	30.2	31.3	27.9	29.2
Exports of goods and services (annual % growth)	9.5	4.22	10.3	12.6	11.8	6.5	7.3	6.3	0.6	-4.7	7
Imports of goods and services (% of GDP)	24	24.2	24.5	23.9	22.2	21.5	21	21.5	22.1	20.5	21.1
Imports of goods and services (annual % growth)	32.4	18.7	14.6	17.3	23.3	16.6	21.3	26.2	14.8	-30	25.8

Source: World Bank

The Russian exports had been governed chiefly by the oil and petroleum by-products inclusive of natural gas and other fuels accounting for about 65% of its total exports. This share increases to over 75% of the total exports when the metals are supplemented to the energy resource share. The oil and other energy resources deliver about 80% of the Russian exports proceeds along with the 40% contribution to budget revenues generated from various taxes on energy exports. On the other hand, the machinery and equipment dominates the imports of the Russian economy accounting for 43.9% followed by the food and other agricultural product imports dictating over 16% share of the total imports. Further, it is the European Union market catering as the chief trading partner of the Russian international trade accounting over 50% of its total exports which is again dominated by the energy resource exports and over 40% of the Russian imports. Over the period of time, China had occupied the second position for the significant trading partner of Russia. The year 2008 witnessed 6% Russian export to China and 14% of imports from China. While, it is least dependent on United States for its export earnings as its contribution gets restricted to mere 1% of GDP of Russia. Russian economy is basically rooted in the commodities segment to power its economic growth despite its efforts to realign it up the value-added chain. As a result, the collapse of the commodities market following the collapse of the global economy dealt a devastating blow to Russian economy. And thus, both the client and the product of the Russian trade, served as the source transmitting the effects of the crisis to the economy turning its whole macroeconomic position upside-down.

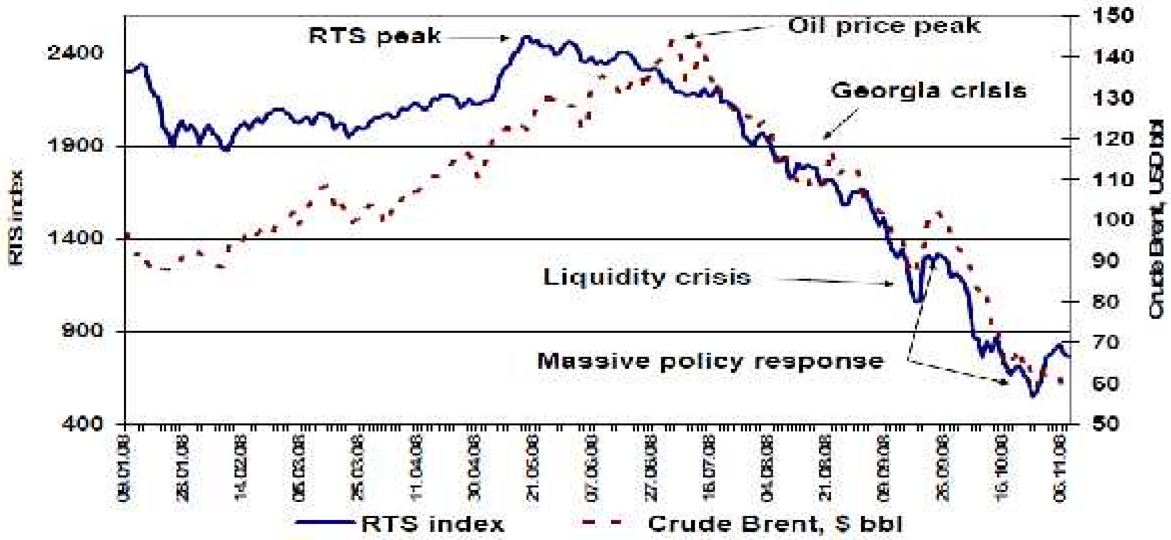
The non-diversified and excessive reliance on the energy resources and raw material as the chief exporting commodity left the Russian exports (approximately over 2/3rd of total exports) exposed to the volatility being played out in the international market. This fact was testified when the global economic downturn reversed the demand for the Russian exports (dominated by oil and natural gas). Consequently, the current account registered a decline in the last quarter relative to its surplus record in the first three quarters of 2008. This left the current account balance cataloguing an increase from 5.55% of GDP to 6.25% in GDP as the fall in one quarter was over-compensated through the previous three quarter's robust performance. The actual impact of the declining trade owing to the crisis became evident in the next year of 2009 when the current account depreciated to 4.12% of GDP. The recovery in export of its principle commodities had begun by the second half of the year 2009 even if sluggish, with the improvement in the demand and the prices of oil in the global market. The recovery in the imports was prolonged by another quarter remaining dampened for the first three quarters and beginning in the last quarter of the year 2009. Hence, the current account reported a surplus for the year 2009 of USD 49.5 billion. And continuing forward, the metal prices reached the pre-crises level by the end of the year 2010 that further helped the Russian economy to accelerate its external trade and thereby current account position.

3.6 Capital Market

Another blow to the Russian economy post the dawn of the financial crisis on its territory was dealt through the crash of its stock market. The stock market by mid-November, 2008 lost almost two-third of its value within five months, induced by the drop in the market sentiments and loss of confidence of the global investors along with the steep decline of the oil prices. Additionally, the bourses- RTS along with Moscow Interbank Currency exchange witnessed the suspension of trading for three days from September 16-18, 2008. The descent of the stock market of Russia was inflamed by the collapsing banks such as the failure of KIT Finance in the payment of its debt. Subsequently, the descent aggravated and the RTS experienced a single day fall of 18% on October 6, 2008.

As per the World Bank report, the RTS Index (Stock market index of Russia- Russian Trading System) is highly dependent upon the fluctuations in the oil prices. Evidently, the correlation between the oil price and RTS index had also witnessed an increase from 0.6 in 1998 to 0.8 by 2008. In this crisis episode as well, the deteriorating oil prices caused the plummeting of the RTS index by 69% in 2008. Besides international dynamics, another factor contributed in the drop of the stock market by further sapping the investor confidence. This factor was the domestic events and related news which included corporate dispute within TNK-BP and Russia's conflict and war with Georgia in 2008 further denting the stock market performance.

Figure- 3, Russian Stock Market and Oil Price Dynamics During Crisis



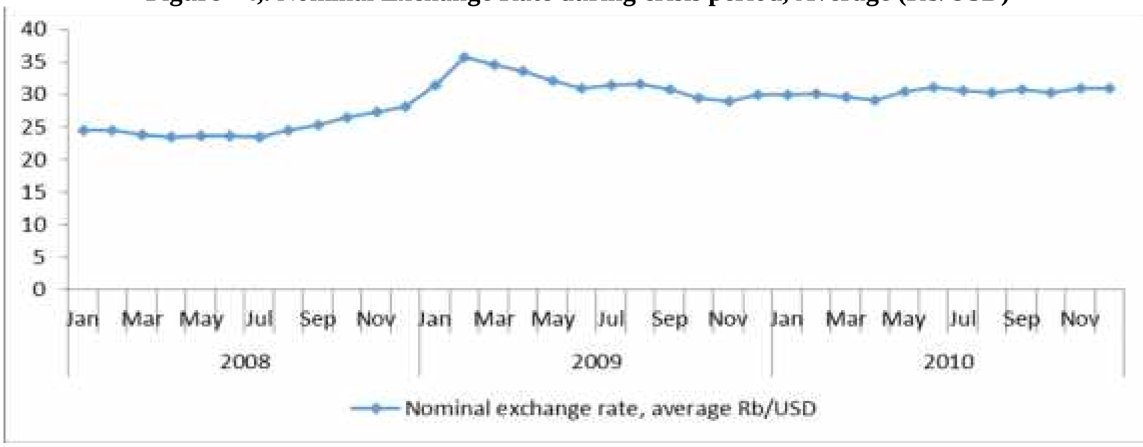
Source: RTS; Thomson Datastream, World Bank Report

The volatility in the Russian stock market RTS Index owing to the financial crisis started playing out in May 2008. Though the descent of the stock market was gradual, yet it lost close to USD 1 trillion or 84% of its 2007 GDP in these 5 months of its degeneration. From mid-May, 2008, when the global environment had begun on its downward journey with deteriorating investor confidence in the equity market, the RTS witnessed a decline of 11.1% up to July3, 2008. It was the flight of investors and their capital to safe havens gripped in the fear of unknown impending losses in the financial sector that converted a restraining uncertain global environment to a full-blown crisis situation on a global scale supplemented with the equity market crash worldwide. Consequently, both the liquidity and the investor confidence were frail and at its nadir. Investors had ceased to view Russia as a safe haven for their equity investments and thus reassessed their investment positions in its equity market. Next was another event that aggravated the drop in investor sentiments inducing the RTS to tumble further and by greater degree of 38.7% from July4, 2008 to mid-September, 2008 owing to the waning prices of oil in the international market. In between, the geopolitical news and policy related news further dented the investor confidence displaying the direct effect on the RTS Index. Subsequently, the global landmark event of the collapse of Lehman Brothers in US resulted in the virtual freezing of its interbank market. While on the other hand, the stock market had to stomach an escalation in the equity sell-off stimulated by colossal margin calls with the investors trying to liquidate their diminishing equity position. Though all the emerging economies went through the similar experience of crashing stock market but Russian experience was the worst among the BRICS nations. This was apparent from the rise in its sovereign spreads immediately post the Lehman Brothers' collapse despite the fact that it's macroeconomic position and the fundamentals were quite strong in the pre-crisis period. The RTS touched its lowest in mid-February, 2009 after which its performance started improving with the demand and the price of the oil recovering. Consequently, the oil and gas price dominated-RTS rebounded and increased by approximately 85% by mid-June from its lowest price of February 2009. Also, worthy is the fact that the improvement in the performance of Russian stock market emerged to be better among the numerous other economies in the post-crisis period corresponding to its worst performance during the crisis period.

3.7 Fluctuations in the Exchange Rate and Foreign Exchange Reserves

There is a clear association between the financial crisis and substantial change in the exchange rates of the currencies of economies which are not even in the center of the crisis. There are two general forces during the crisis period driving such a change – one echoing the surging risk aversion attitude while other resonating the alteration in the risk perception of the investors towards certain currencies. Accordingly, the Russian currency, ruble also experienced the severe fluctuations despite not being at the locus of the financial crisis that originated in advanced economies of US and Europe. Thus, the investors which were earlier engaged in speculation gains on ruble appreciation in the pre-crisis period reversed their position during the crisis period generating the rapid fall of ruble with it. As much as 46% decline was experienced by ruble within 9 months from July, 2008 to April, 2009 after which it recovered for some time period before again making a dive of 32% from its appreciated position since July 2009.

Figure - 4,. Nominal Exchange Rate during crisis period, Average (Rb/USD)



Source: World Bank

Table- 5, Statistics of Exchange Rate Value for Russia for the period of 2001-2010

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Nominal exchange rate, average Rb/USD	29.2	31.4	30.7	28.8	28.3	27.1	25.6	24.8	31.7	30.4
Real effective exchange rate, % change, p-o-p (IMF)	20.3	2.8	3	7.8	8.7	9.5	5.7	6.1	-6.6	Na

Source: World Bank

The economy was suddenly in the midst of liquidity crisis with the collapse of Lehman Brothers in September, 2008, the affair that further worsened the deteriorating financial conditions of the world. The Russian economy was staring at the surging liquidity risks with the challenge of reinstating the confidence that was withering owing to the crisis effects by supporting the faltering liquidity within the system. The opportunity cost for providing liquidity to the system came in the form of CBR compelled to loosen their grip on exchange rate policy that resulted in its depreciation. The bilateral dollar-euro currency basket trading band was amplified since early November, 2008 from the preliminary ceiling of 30.7 rubles on 11 November 2008, to 41 rubles on 23 January 2009[2]. It was during this period that the ruble was permitted to drop by 1% per week initially followed by 2-3% per week. The ruble endured depreciation first time in its decade long record at 6.6% in the year 2009 in its real effective exchange rate. This amplification and the resulting loosen exchange rate to diminish the excessive volatility in the financial market made a hole in their foreign exchange (forex, hereafter) reserve. In order to defend its currency, USD 200 billion was spent from the forex reserves of Russia bringing down its record amount of USD 580 billion in September, 2008 to USD 380 billion by March, 2009. The fall of the crude oil prices globally also made its contribution in increasing the volatility in the stock market and that of the ruble.

INTERNATIONAL RESERVES

The forex reserves of Russia endured a depreciation of 35% within six months (July, 2008- January 2009) from the time CBR decided to defend its currency depreciation by intervening in the forex market. In contrast, the inaction and a mute spectatorship by the policy makers to the panic run on the domestic currency would have proved to be a costly affair for the whole economy. The currency depreciation would have triggered a run on the banks triggering surging defaults on debt payments, depositor flight on a countrywide scale and a general distrust within the domestic financial system.

[2] *The exchange rate policy is disciplined through the managed floating regime by the CBR that leverages in the moderation of external shocks on the economy through capital flows. For this, CBR uses the floating operational intra-day band of fluctuations in the value of the bi-currency basket.*

Table - 6, International Reserves for the period of 2000-2010

Russia	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Reserves and related items (BoP, current US$)						6E+10	1E+11	1E+11	-4E+10	3E+09	4E+10
Total reserves (includes gold, current US$)	3E+10	4E+10	5E+10	8E+10	1E+11	2E+11	3E+11	5E+11	4E+11	4E+11	5E+11

Source: World Bank

The depreciating situation of 2008 started reversing with the rebounding of the declining oil prices in the international market which helped the stock market to recover as well. Simultaneously, there was the improvement in the capital inflows that not only helped the ruble to recuperate but also rebuilt the forex reserves of Russia as well by September, 2009. The rebuilding global conditions restored not only the investor's confidence towards the world economy but also repaired their risk indulgence in the emerging economies. Cumulatively, it got reflected in the appreciating valuation of ruble echoing the market expectations about its further appreciation riding on the appreciating demand and prices of oil. Consequently, the average nominal exchange rate appreciated from rouble/USD 31.7 in 2009 to 30.4 in 2010, while, the forex reserve swelled by USD 33.38billion in the year 2010 relative to its 2009 statistics.

3.8 Industrial Sector

Figure- 5, Manufacturing and Industrial Production during crisis period

Source: World Bank

Maintaining consistency with other macroeconomic variables that exhibited the effect of crisis during the last quarter of year 2008, the industrial production also experienced the similar trend. The industrial production as well as its most significant component "manufacturing" fuelling Russia's industrial growth performed reasonably till September, 2008 before plummeting from October, 2008. The industrial production increased by only 2.1% in the crisis year of 2008 but decreased by 10.8% in the next year 2009, its first steepest fall since 2000. The encouraging performance in both the industrial production index and its components for the year 2008 could be fairly attributed to its past orders from its clients encompassing chiefly of state-owned enterprises. The factors impacting the industrial sectors were the slump in the global commodity market accompanied by the credit crunch in both the international and domestic markets with the construction and retailing at the receiving end of this factor. With construction and retailing propelling the GDP of Russia, they were simultaneously engaged in heavy borrowing being stimulated by their growth and development prospects in the pre-crisis period. With the dawn of the crisis, the combination of confidence and liquidity crisis drove the cost of the funds for these sectors of manufacturing and retailing. As the going got tough, these sectors started postponing or in some cases terminating their projects. With the rising cost and slackening economic growth, the aggregate savings increased while the aggregate demand suffered which in turn affected the consumption and investments within the economy. Consequently, the construction sector reported its first decline in the first quarter of 2009 at 20.9% similar to the retail sector which also reported its first decline in the same period but of less magnitude at 4.9%. The impact multiplied and reverberated through various means, one of which transcended in the form of retarded growth in the industrial production index which translated into reduced economic growth[3] further.

Table- 7, Manufacturing and Industrial Production for the period 2001-2010

Russia	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Industrial Production, % change Y-O-Y	4.9	3.1	8.9	8	5.1	6.3	6.3	2.1	-10.8	8.2
Manufacturing, % change Y-O-Y	-	1.1	10.3	10.5	7.6	8.3	9.5	3.2	-16	11.8

Source: World Bank

Another significant sub-sector of industrial production index –manufacturing, dubbed as the lead factor in Russia's industrial growth, also suffered from the effects of the financial crisis. Before taking a profound plunge to settle at 0.3% y-o-y in October, 2008, manufacturing registered a growth of 8.2% y-o-y in the respective preceding month of September, 2008. The growth in manufacturing in the flourishing period prior to September was stimulated by the progress in the production of water turbines (97.3 percent y-o-y), tractors (74 percent y-o-y), passenger cars (28.4% y-o-y), and pipes (26.1 percent y-o-y). These sectors having a considerable influence on the manufacturing index dragged the number of the index also down when they took the plunge in the tumultuous period. Among all the affected segments, automobile sales suffered the severest setback being a luxury investment for the consumer that could afford rescheduling in plan with crisis knocking on consumer's doors. By September, 2008 automobile registered a decline of about 25% in Europe. Accordingly, the domestic automobile producers were struggling with the deprecating sale which had slumped by 40% by August, 2008. Correspondingly, the manufacturing registered a decline to 0.3% y-o-y followed a consistent short term negative performance for almost a year continuing into the year 2009. The steepest decline in manufacturing was registered for the months of January and April 2009 at 24.1% y-o-y and 25.1% y-o-y respectively. It was only in the last month of 2009 in December, after a gap of 13 months that the manufacturing recorded its first positive growth at 0.7% y-o-y marking the recovery of the economy. Beyond that the manufacturing has maintained a healthy performance. The weak demand both from the domestic as well as the external market concomitant with the financial constraints sponsored the utmost decay of the manufacturing productions.

3.9 Impact on Employment

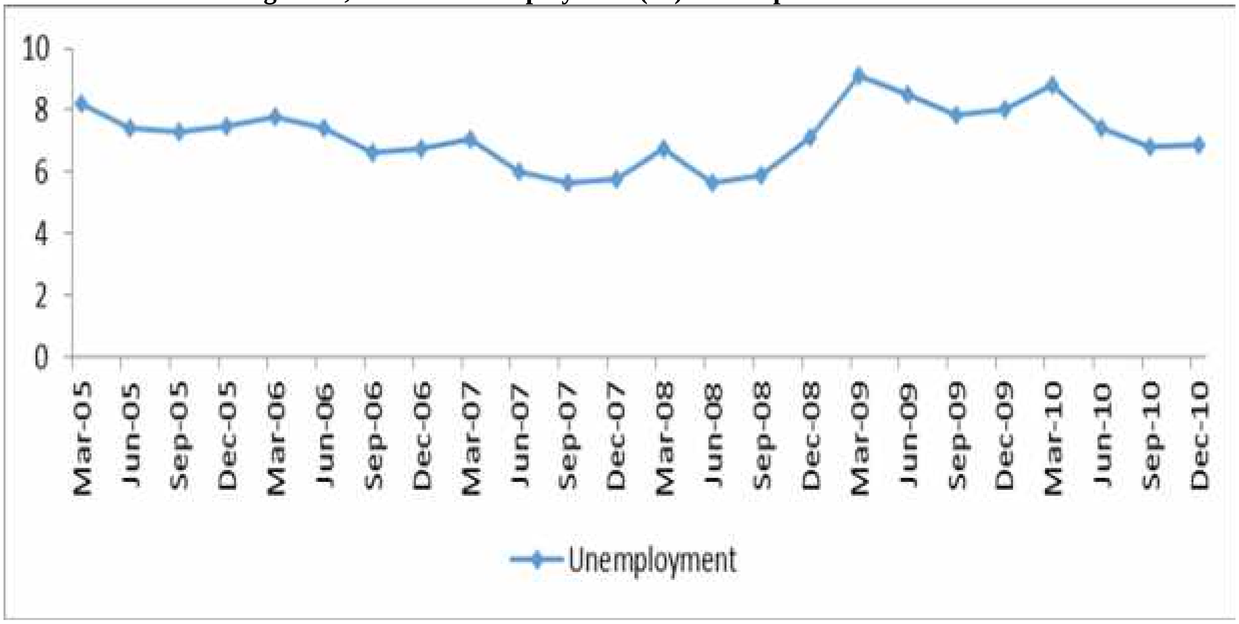
With the robust economic growth experienced by the Russian economy since 2000, the unemployment rate also walked the deteriorating trend gradually from 12.5% in 1999 to 6.1% by 2007. Subsequently, the effects of the global financial crisis started percolating the Russian economy leaving its imprint on almost all the sectors of the economy. The impact on all these sectors of the economy that surfaced in the garb of reduced demand, increased cost of operation, contract withdrawal and deferment of private investment was adjusted through the layoffs along with the wage cuts. That is to say, the labor intensive and non-tradable sector of manufacturing, construction and trade (export and import) were already struggling with the effects of liquidity and confidence crisis by prolonging the implementation of their current and fresh projects in order to cope with the dwindling profit margins and other challenges. As the impact of the crisis was concentrated in the last leg of the year, the effect on the unemployment also surfaced in the last quarter with it rising by 26% from 6.2% in quarter 3, 2008 to 7.8% in quarter 4, 2008. The subsequent quarter- first of year 2009 experienced the maximum unemployment at 9.2% in the economy riding on the plummeting industrial sector output.

Swiftly increasing unemployment and deteriorating capital of the firms led to the reduction in the real wages in the first half of the year 2009. Consequently, the rising unemployment and the falling wages in turn formulated a vicious circle by further impacting the non-tradable sector encompassing the retail, construction, trade, manufacturing, etc. pushing away any odds of recovery in these sectors and thus the economy.

Subsequently, the unemployment rate exhibited some improvement in the second and third quarter of year 2009. This was probably due to the direct support extended to the firms via stimulus packages announced by the government to uplift the ailing economy reeling from the effects of the crisis. The result was the increased willingness of the employers to hoard the labor by engaging in them in part-time employment and reduced wages instead of absolute sacking of employees or laborers.

[3] According to Rosstat (Russian Federal State Statistics Service) approximately 40% of the GDP is contributed by the industrial sector of Russia which is second to the contribution of almost half of GDP is yielded by the Russian service sector.

Figure- 6, Russia's Unemployment (%) for the period of 2005-2010



Source: Bloomberg

Furthermore, according to various reports, it was mainly on the account of seasonal factors[4] relative to any steadfast improvements in labor market situation (specific to improvement in labor intensive industries). But then, the unemployment increased again in the fourth quarter of 2009 at 8.2% and first quarter of 2010 at 8.6% before declining again in the subsequent two quarters.

The government increased its aid and amplified its policy in response to surging unemployment with the implementation of active labor market programs. These programs facilitated public work, fexi-work system, assistance for SMEs, provisional employment. Besides these efforts, the cure was still temporary that ensured only the prevention of the redundancies in the first place with the benefits ultimately seeping and reaching the enterprises instead of the affected class. Nevertheless, the government aid to the firms diminished the risk of mass downsizings. However, these measures could not address the problem plaguing the labor market completely as only 30% of the total unemployed in the economy had registered themselves in the government record. Thus, both the unemployment and associated poverty will require a consistent effort and focus of the government and their policies for a prolonged period of time.

3.10 Banking Sector

Numerous players encompassing state owned banks, privately owned banks – local and national level banks alog with the “bank” with overseas capital control and administering the whole financial system- their Central Bank of Russia (CBR, moniker) cumulatively forms the financial system of Russia. The Russian financial market or rather banking system is dominated by the credit institution capturing 90.1% of total banking assets. Also, a major chunk of the total banking assets are governed by a handful of banks, namely about 70% of all the assets are owned by the top 30 banks of the country. Further, the state owned banks dictates the retail and corporate segment of the banking and together governs over 48% of the banking sector’s total assets. When the crisis landed on the Russian market riding on the transmission channels of trade and finance, the financial channel gripped the Russian banking system. The credit crunch sucked the liquidity from the system which was required at that time in order to fulfill their short-term external repayment obligations. This all escalated with the fall of the Lehman Brothers in US triggering worldwide confidence crisis. Russia, very much integrated with the global market also suffered with the virtual freeze in its interbank market for a complete week from September 15-19, 2008. Subsequently, the interbank lending rates appreciated by 100basis points within a matter of few days, while the interbank market was occupied maintaining its dysfunctional status quo. However, towards the end of the month (September), the overall liquidity did improved but the general environment of distrust had seeped into the financial system. The fact that the reliance of the Russian banking sector on the foreign funds had increased was supported by the fact that the loan-deposit ratio

[4] *The seasonal sectors of agriculture, fishing, construction, etc., became the industries responsible for the improvement in the unemployment rate for two quarters.*

in the Russian banking sector witnessed a jump of 19% within 4 years, increasing from 105% in 2005 to 125% by the first quarter of 2008. Thus, the actual stress and burden of the shrinking liquidity in the international arena was experienced by the small and medium banks of Russia which could not find the alternate significant and reliable source of external borrowing and refinance options. The larger banks on the other hand were better equipped in weathering this storm of financial crisis. The slump in the economy further increased the problems for the banking sector in the form of rising non-performing assets and surging rollover risks. Already the increased from 2.5% in 2008 beginning to 3.8% in 2009 during same period owing to the swelling unemployment and depreciating business conditions in the economy. Consequently, with the rising fear of counterparty risk gripping the banking sector, the large banks became increasingly reluctant to extend the liquidity facilitated through the central bank and government initiated policy measures to second and third tier banks.

The government and the Central Bank had come out with prompt and substantial policy programs addressing the issues afflicting in the banking sector. Initially, the total limit of budget funds available over deposit auctions was augmented by the Ministry of Finance followed by the initiative of the CBR increasing the daily limits for REPO operations. CBR came with another proposal of facilitating a curtailment in the reserve requirements with the aim of providing further liquidity to the banking sector. The cumulative cost of these 2 policies implemented by CBR amounted to 730 billion (rubles). The federal authority also stepped in to provide liquidity to the banking sector which till now was proving to be incapable of achieving its aim or make a significant statement in that direction. Thus, the short term deposits were injected with the federal budget temporarily followed by the deposit insurance agency's supplement to augment the liquidity by reducing the deposit insurance premium payment requirements[5]. Further addressing the weakening confidence of the depositors towards their banking system and avoiding the panic run, the deposit insurance coverage was increased to 7,00,000 rubles. Similarly, numerous other reforms were implemented by the combination of CBR and federal authorities to provide ample liquidity and raise any confidence crisis surrounding the banking sector of the economy.

4. CONCLUSION

The economic growth of Russian Federation suffered the most severe blow enduring a free fall to -7.8% in 2009 from average rate of over 7% during 2000-2007. The same means of transmissions i.e., trade and finance that fuelled its exemplary GDP growth in previous decade pricked its growth during crisis period. Tumbling commodity prices, plunging oil prices, fall in demand worldwide, plummeting trade and the credit squeeze in the international market played out due to crisis inflicting substantial harm to the economy. The slowdown was an across-the-board experience for Russia that explored new depths in the last quarter of 2008 continued to penetrate into 2009. Typically, the financial crisis actually assisted in cooling the overheated economy and thereby bringing down the inflation from its high levels in pre-crisis period. Loose monetary and fiscal policy in conjunction with higher import prices had increased inflation in pre-crisis and crisis period of 2008 too with its stimulus packages. The financial crisis culminating into decelerating domestic demand, exiting capital flows, credit crunch, and restrictive monetary policies essentially dampened the inflation fueling factors in the economy post-crisis period. The monetary policy was constricted to contain any further outflow of foreign exchange reserves squeezing liquidity from the market.

Capital flows suffered from the confidence crisis with investors fearing the security of their investments pulled out from Russian stock markets. The plummet in stock market was aggravated by the collapsing banks such as KIT finance and diving oil. The FDI outflow in 2008 was essentially catalyzed by both domestic and external factors. The increasing state control in strategic sectors through amended law discouraged FDI inflows besides twisted investor sentiments due to crisis. The capital outflow resulted in currency depreciation that cumulatively caused the reversal of capital account surplus to deficit worsening in 2009-2012. The appreciation of currency had begun from July 2009. However, it was not before the economy had lost substantial portion of its reserves in its attempt to defend its currency permitting measured deprecation of 1-2% per month.

The substantial dependence of Russian economy on oil and gas exports exposed it to the volatility in international market. Nevertheless, the recovery in exports was witnessed by second half of 2009 riding on revived demand and prices of oil and gas globally. The weak demand from both domestic and external market combined with credit crunch increasing the cost of borrowing fuelled the deterioration in industrial production. Weak domestic demand and rising import duties impacted the automobile sector and manufacturing sector the most. Consequently, the layoffs witnessed a spurt from third quarter of 2008 worsening in 2009. Unemployment combined with deteriorating capital of the firms led to the reduction in the real wages. The government swung the stimulus packages aiding the ailing government and indirectly supporting the employment in the economy. The employment recuperated from second half of 2009.

[5] *This is the amount that the banks are compulsorily required to deposit with the Deposit Insurance Agency in the deposit insurance fund.*

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REFERENCES

1. *The BRICS Report.* (2012). New Delhi: Oxford University Press.
2. Bloomberg. (n.d.). *Various Databases*. Retrieved 2015, from Bloomberg Professional: Subscription Service
3. Chang, W. W. (2011, 28 Febuary). *Financial Crisis of 2007–2010.* Retrieved January 2014, from Department of Economics, SUNY at Buffalo, NY : http://www.economics.buffalo.edu/people/faculty/chang/.
4. Cooper, W. H. (2009). *Russia's economic performance and policies andtheir implications for the United States.* International Trade and Finance. Washington D.C: Congressional Research Service 7-5700, RL34512.
5. Guriev, S., & Tsyvinski, A. (n.d.). *Challenges facing the Russian economy after the crisis.* Peterson Institute for International Economics.
6. Kregel, J. (2009). The global financial crisis and the implications for developing countries and the BRICs. Is the B really justified? *Public Policy Brief, 102*.
7. Malle, S. (2009, December). The impact of the financial crisis on Russia. (A. Monaghan, Ed.) *NDC Forum paper series, 12*.
8. Rutland, P., & Middletown, C. (2008, October 17). *Impact of the Global Financial Crisis on Russia*. Retrieved March 2014, from Russian analytical digest 48/08: www.laender-analysen.de/russland
9. World Bank. (Miscellaneous). Russian Economic Report . *Economic Management and Policy Unit*. Russia.
10. World Bank. (n.d.). *Various Databases*. Retrieved 2011-2015, from The World Bank: Data: data.worldbank.org/
11. Zeljko, B., Karlis, S., Sergey, U., Olga, E., & Marco, H. (November 2008). *Russian economic report No. 17.* The World Bank, World Bank Russia Country Office. Munich Personal RePEc Archive Paper No. 12434.