Impact of US Financial Crises 2008-09 on Chinese Economy Ashima Arora¹ Dr. Anjala Kalsie² <u>Abstract</u>

The objective of the paper is to outline a brief evaluation of the impact of financial crisis of 2008 having origin in US on China. This paper discusses about the consequence of financial crisis that erupted in US but found its way to emerging economies riding on trade and financial channels of transmission. It also presents various policy rejoinders to contain the negative impact of crisis and stimulate domestic demand, reviving its economic growth. The paper concludes that the crisis reversed the record of sustained growth of three decades with depreciation in year 2008 and 2009. The slowdown in industrial production and construction sectors besides downward revision in export orders were attributed to be the core causes behind the slackening economy. 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.

Keywords: Global Financial Crises, China, Economic Indicators, External Credit, International Trade

Introduction

The emergence of sliding economic growth of China during crisis period of 2008 shattered two delusional beliefs about China. These delusions were it being decoupled from the effects of crisis and other misconception rendered it the immunity from financial shock. The perception about immunity was the consequence of the regime of controlled capital account being followed and stringent regulators limiting the exposure of its financial system to the capital flows and institutions of the West. Accordingly, several domains of the economy endured the shock of the crisis that was visible in their year-on-year figures. And the severest impact was stomached by its international trade sector, specifically exports. Numerous companies got dissolved, attrition rate rose with copious lay-offs, and several migrant workers had to return to their home town as a result of shock to export sector.

¹ Doctoral Scholar, Faculty of Management Studies, University of Delhi, Delhi.

² Corresponding Author, Assistant Professor, Faculty of Management Studies, University of Delhi, Delhi.

On the other hand, the financial sector witnessed a crash that erased approximately two-third of market value of its stock market since October 2007. The copious investment in US treasuries backfired for China as its sovereign wealth fund deteriorated incurring losses owing to the crisis. In essence, this paper discusses about the consequence of financial crisis that erupted in US but found its way to emerging economies riding on trade and financial channels of transmission. It also presents various policy rejoinders to contain the negative impact of crisis and stimulate domestic demand, reviving its economic growth.

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.

Objective and Methodology

The effect of US financial crisis on economy of China had been examined in the paper. The analysis revolves around macroeconomic and financial variables such as economic growth, international trade, capital flows, exchange rate, stock and equity market, etc.

Analyses and Interpretation

Impact on Economic Growth of China

Indicator	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GDP growth (annual %)	8.4	8.3	9.1	10	10.1	11.3	12.7	14.2	9.6	9.2	10.4

Source: World Bank

The Chinese economy witnessed a depreciating growth after an uninterrupted evolution of 3 decades and a double digit progress since 2003 (latest). After expanding with 14.2% annual growth in 2007, it collapsed continuously in 2008 beginning with 10.6% in the first quarter followed by a consistent decline to 10.1%, 9% and 6.8% in the second, third and fourth quarters respectively. Cumulatively, the GDP growth witnessed a decline of 32.4% to 9.6% in the year 2008. The slowdown in the industrial production and construction sectors were attributed to be the core players behind the slackening economy. Even the sector-al constituents of the GDP exhibited the impact of the financial crisis with primary sector1

¹ The primary sector encompasses agriculture, forestry and fishing and mining and quarrying.

experiencing the decline from 2007 only followed by the secondary sector2 enduring the decline in the next subsequent year of 2009. Whereas, the tertiary sector3 on the other hand did not experienced any decline during this tumultuous period for the economy. The primary sector depreciated in the year 2008 contributing 11.3% to the GDP as against 11.7% in the previous year and a further decline in the subsequent year of 2009 and 2010 at 10.6% and 10.1% of GDP respectively. Whereas the secondary sector witnessed a decline form the year 2009 onwards to registered a contribution of 48.6% to the GDP in 2009 down from the previous year 2008 figure of 48.6%. This decline in the secondary sector was mainly fuelled by the weak global demand and diminishing infrastructural development in 2008. The major contribution to the decline in the economic growth of China was substantially backed by a downhill revision in exports from China to the world and reversal in capital inflows owing to the crisis.

Distribution of										
GDP (%)	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Primary Sector	15.80	15.30	14.40	15.20	12.40	11.70	11.70	11.30	10.6	10.1
Secondary									46.8	46.8
Sector	50.10	50.40	52.20	52.90	47.30	48.90	49.20	48.60		
Tertiary Sector	34.10	34.30	33.40	31.90	40.30	39.40	39.10	40.10	42.6	43.1

Source: Switzerland Embassy Report accessed from National Bureau of Statistics

The Chinese government responded swiftly to the deteriorating economic environment with the adoption of an aggressive fiscal and monetary policy measures. Expansion of the domestic demand was the chief focus of the stimulus package with the objective of driving and reviving the economic growth on the wheels of consumption and investment. The expansionary fiscal measure was implemented by facilitating a stimulus package of Yuan 4 trillion (USD 586 billion) in November, 2008. The expansionary monetary policy was realized with the sweeping reduction in the key policy rates, rising of the loan quotas, reduction in the reserve requirement ratio and an extensive increase in the credit provision. Leveraging its state owned enterprises (SoE)⁴; the Chinese government expanded their credit lending and fixed investments. The credit lending stood at Yuan 4.6 trillion by the first quarter of 2009 which was equivalent to the entire 2008's lending amount. This gave rise to a

² The manufacturing, gas, electricity, water and construction chiefly formulate the secondary sector of the GDP.

³ The "services" is the main ingredient that formulates the tertiary sector contributing to the economic growth of the economy. Thereby it includes wholesale, retail and motor trade catering and accommodation; transport, storage and communication; finance, real estate and business services, general government and personal services.

⁴ SoE had a great influence in the economy as it accounts for a substantial employment - almost about 20% of the total industrial employment in 2008.

surge in the private investment and thereby economic growth in which SoE's played a central role in exercising a countercyclical force against the meltdown of total exports and aggregate demand. Of this Yuan 4 trillion, the maximum share of 45% was committed to infrastructure of railways, ports, roadways, etc. The next big share was allocated to the construction in the earthquake affected Sichuan area aggregating 25% of the total amount. The rest were allocated to rural infrastructure and ecology each getting 9% followed by 7%, 4% and 1% allotted to the construction of house for low income people, technological innovation and economic restructuring and medical service, education and culture respectively. Thus, despite the significant size of the stimulus package launched by the government that was essentially construction centered in 2008 only, the decline in the GDP in the year 2009 continued but with a less vigorous strides to being recorded at 9.2% in 2009. It was in the year 2010 that the effects of the government efforts flowered with the consumption driven by fiscal and monetary policies gathering momentum resulting in economic growth making a recovery back to the double digit growth at 10.4%.

Inflation

The year 2008 witnessed a sweeping fall in another variable which was the inflation. It fell from its zenith of 8.7% in February 2008 to less than 4.6% by September, 2008 to end the year at 5.86% which yet was higher than the previous year inflation of 4.75% in 2007. The high inflation in the beginning of the year 2008 was driven by the bad weather conditions forcing the food prices to ascend and thereby creating an inflationary pressure in the economy. This issue was addressed by the government with the efforts channelized towards the expansion of the farm production implemented via the extension of subsidies and executing price controls. On the other hand, the year witnessed an increase in the producer price index inflation as well by 6.9% growth of y-o-y. The prospect of transfer of the rising producer prices of food to the consumers threatened to aggravate the situation further had it not been for the presence of intense competition among the wholesalers and producers that limited this option. The external factors also contributed their bit directly with the rise in the global commodity and the fuel prices having an impact on the domestic prices of China and thereby inflation⁵.

Indicator Name	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Inflation, consumer	0.26	0.72	-0.8	1.16	3.88	1.82	1.46	4.75	5.86	-0.7	3.31

⁵ The economy of China depends greatly on the foreign energy supply which can be both the nuclear material and oil and the imported raw material.

prices (annual %)

Source: World Bank

For the past three years, the concerned authority- People's Bank of China (PBoC) had exercised a tight monetary policy to contain the inflation with the interest rates being kept static since December 2007. But as the inflation essentially eased over the period from its higher stand in the beginning of the year 2008 concomitant with the worsening of the global and domestic economic scenario, the need and the room was created for the implementation of the accommodative monetary policy. Accordingly, the benchmark rates were revised downwards five times since September 2008 till December 2008. Further in the year 2009, the loosening of the monetary policy became more persistent with the sweeping reduction in the interest rates, loan quotas being raised and the contraction in the reserve requirement ratio. Consequently, the credit lending took a flight in the economy recording a whooping figure of Yuan 4.6 trillion within the first quarter of year 2009 which basically was almost equal to the credit extended in the whole year 2008 of about Yuan 4 trillion. Subsequently, both the consumer and the producer prices were also cooling with the continuous decline since the past 4 month w.r.t consumer price index inflation and past 6 months for the producer price index inflation. This steep decline in inflation was a confluence of weak external and domestic demand, recovering farm production and intense price competition arising from the rising inventory of industrial products. As a result, the year 2009 reported a net deflation of 0.7%. Subsequently, PBoC engaged in the rollback or tightening of the monetary policy after the accommodative monetary policy achieved its objective of reviving the domestic demand and propelling the economic growth⁶. Consequently, the inflation returned in the next year of 2010 to be recorded at 3.3%.

Interest Rates

The predominant goal of the monetary policy maneuvering interest rates is to stimulate the frozen aggregate demand and growth into the system by infusing the liquidity via credit channelization into the system. And this monetary rejoinder of the People's Bank of China (CBoC) was aimed in the direction of fortifying the financial assistance for the recovery of economic growth by facilitating ample liquidity into the financial system. The open market operations were conducted by its Central Bank – PBoC in order to facilitate sufficient liquidity into its banking system adjoined with the sub-objective of sending positive gestures to appease the overall market expectations. The problem of

⁶ The timing of the rollback of generous stimulus packages are crucial to the health of the economy of the country for its failure can lead to the repeat of US Financial crisis kind situation.

inflation that coincidently intensified in that year owing to bad weather conditions also got addressed by the flexible monetary policy.

Indicator Name	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Lending interest rate											
(%)	5.85	5.85	5.31	5.31	5.58	5.58	6.12	7.47	5.31	5.31	5.81
Deposit interest rate											
(%)	2.25	2.25	1.98	1.98	2.25	2.25	2.52	4.14	2.25	2.25	2.75
Interest rate spread											
(lending rate minus											
deposit rate, %)	3.6	3.6	3.33	3.33	3.33	3.33	3.6	3.33	3.06	3.06	3.06
			. –								
Real interest rate (%)	3.71	3.72	4.7	2.63	-1.2	1.59	2.25	-0.1	-2.3	5.94	-0.8

Source: World Bank

This monetary response of the PBoC was framed and executed in the conventional form of reduction in the key policy rates. The benchmark lending and deposit rates were reduced for five times between September 2008 and December 2008. The benchmark deposit rate was lowered from 4.14% in the year 2007 to 2.25% in the year 2008. Similarly, the benchmark lending rate was also lowered by 29% or 216 basis points from 7.47% in 2007 to 5.31% in 2008. Accordingly, the interest rate spread which essentially is a difference of the benchmark lending and deposit rate witnessed the steepest decline of the decade from 3.33% in 2007 to 3.06% in the next year 2008. In the interim of these reductions in the key policy rates, the PBC also engage in the reduction of two more rates – the deposit rates of statutory reserves from 1.89% to 0.99% along with the reduction in the excessive reserve ratio from 1.62% to 0.72%. On the other hand, the real interest with the adjustment of the inflation witnessed a decrease from -0.1% in the year 2007 to -2.3% in the year 2008. Simultaneously, the stipulated reserve ratios were also lessened four times that encompassed different rates for different size of the institutions. While, the small and medium financial institutions enjoyed a slashing of 400 basis points of the required reserve ratios, the large financial institution were facilitated with the reduction of 200 basis points only of the required reserve ratios. Many financial requirements were temporarily amended to infuse the credit into the system for the economic growth. Henceforth, the financial institutions (FIs henceforth) also witnessed the elimination of quantitative ceilings for the FIs credit supply. This was done observing the principle of differentiated treatment to different sectors to catalyze the growth of some chief sectors with the extension of supply of credit in the economy and also to optimize the credit structure. The sectors benefitting from this increased and eased credit extension plan were the rural belts, farmers, agricultural sector, small and medium firms, employment generation

programs, natural calamity hit regions for the post destruction construction, children with investment in the education, sick with the funds for the medicines, etc.

All the rates essentially came out to be unmoved in the subsequent year of 2009 which was basically the year of extremes as it was the year to witness not only the slackening economy but also the robust recovery of the same Chinese economy. However, as the inflation embarked on a downward journey in the subsequent year and the interest rates were not touched, the real interest rate appreciated from -2.3% in the year 2008 to positive 5.94% (approx. 6%) in the year 2009 testifying the favorable outcome of the efforts of the policymakers. Simultaneously, the provision of generous credit facilitation to stimulate the economy had triggered the fears of heating the sensitive sectors of the economy with the liquidity found to making its way to stock and housing markets. The credit extension concomitant with the boost to the infrastructure investment had set in the asset bubble with the steep appreciation in asset prices. The likelihood of increase in the non-performing assets and risks of misallocating had started to haunt the policymakers with the looming asset bubble and the generous credit facility provided in response to the global financial crisis.

These observations prompted the Central bankers to initiate the tightening of the monetary policy by the fourth quarter of 2009, the time when the economy had started showing the promising signs of recovery. Consequently, both the key interest rates and the reserve requirement ratios rates were increased. While, the reserve requirement ratio for the large financial institutions was 17%, the small financial institutions had to observe 15% as the reserve requirement ratio in May 2010. On the other hand, the lending interest rate increased to 5.81% in 2010 from 5.31% in 2009 followed by the deposit rate increasing to 2.75% in 2010 from 2.25% in 2008 and 2009.

Capital Flows

Indicator Name	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Foreign direct											
investment, net inflows											
(% of GDP)	3.2	3.34	3.39	3.01	3.22	4.61	4.57	4.47	3.79	2.63	4.11
Foreign direct											
investment, net											
outflows (% of GDP)	NA	NA	NA	NA	NA	0.92	1.22	0.87	1.59	1.6	1.47

Source: World Bank

The transmission of the crisis to the Chinese economy occurred through the channel of finance. Undoubtedly, the foreign direct investment forms a core part of the finances of the

Chinese economy fueling its growth along with the productivity gains. For a very long time, the foreign investment had been a source introducing and facilitating the job creation opportunities, physical and financial capital, and transfer of technological know-how to the Chinese economy. So much is the significance of the foreign investors (FIEs) to the economy and its GDP that they(foreign investments) comprises 50% of China's foreign trade besides the domestic manufacturing and export oriented units enjoying 90% of FDI inflow's share. The year 2007 was the year of record FDI inflows for the Chinese economy making it the third most favorable destination in the world for the foreign investors after EU and US. Owing to the strong and expanding linkages of the Chinese economy with the world and specifically the US, the precipitation of the crisis into the economy was trumpeted in October, 2008 after which the FDI registered a sudden depreciation in inflows and prior to which FDI inflow was enjoying a healthy growth. The FDI inflow for the year 2008 declined by 15% from 4.47% in 2007 of GDP to 3.79% of GDP in 2008. While the zenith position was achieved by the FDI inflows in January 2008, its nadir position was achieved in the same year in November, 2008, post the collapse of Lehman Brothers in US. The decline in the FDI that began in October, 2008 continued till May 2009 owing to which the year 2009 also registered a decline in the net FDI inflows of 30.6% from 3.79% of GDP in 2008 to 2.63% of GDP in 2009. Subsequently, the capital flows recuperated by the first quarter of 2010. Henceforth, the FDI inflows for the year 2010 registered an increase of 56% from 2.63% in 2009 to 4.11% in 2010.

While on one hand the FDI inflows were on a downward slide registering decline month-onmonth from 2008 into 2009, the FDI outflows on the other hand was gaining momentum from 2007 into 2008 to 2009. This strengthening FDI outflow from the Chinese economy to other foreign locations essentially demonstrates the proper exploitation of the opportunity. With the global economies and their businesses struggling with the impacts of the crisis, the market valuations of the firms worldwide took a beating creating an attractive and inexpensive investment situation globally. The opportunity in turn was lapped up by the Chinese enterprises with ample and growing foreign exchange reserves even during the buildup of the crisis globally. Consequently, the Chinese outward investments surged in the affected years of 2008 and 2009 by 82.76% at 1.59% of GDP in 2008 and 1.6% of GDP in 2009 respectively. The investments were mainly focused on acquiring the natural resources on an overseas land. Some of these included the stakes of Australian mining firms, oil firms of Russia and Venezuela, development of cement plants in South Africa and Mozambique,

mining in Zambia, etc. Subsequently, as the global environment improved by 2010, the pace of FDI outflow growth also got loosened to 1.47% of GDP.

Though numerous countries suffered from the sudden capital flight owing to the crisis, interestingly, the inflow from portfolio investors did not changed their stance much except for flinching and subsequently continued with their investments in Chinese bourses and its assets. The mystery behind this unique behavior of the FII was the fact that the funds redirected from Taiwan and similar tax havens formed the significant share of the FII inflows into the Chinese economy⁷. On the other hand, the FII outflow registered a limited volume for the Chinese stock exchange - Shanghai Stock Exchange (SSE). And this action of limited FII outflow is credited to its restrictive regime reducing the exposure to the international financial flows. The Chinese authorities have a significant expression in regulating and thus limiting the foreign banking exposure and the international flows into the economy, even though this control had been loosened with the entry of WTO in 2001⁸. Consequently, the stock exchange registered a decline of about two third of its market value crashing from 178.2% of GDP in 2007 to 61.8% of GDP.

Owing to the declining capital inflows in the wake of the global financial crisis, the Chinese authorities engaged in a series of stimulating policies to attract the investments encompassing both the FDI and FII. The regulations which were stringent prior to the crisis for the Mergers & Acquisition were relaxed during the build-up of the crisis. This was supplemented with the entrustment of additional powers to the state and local governments for increasing the attractiveness for the investors besides granting banks the consent to finance the M&A deals.

International Trade

⁷This explanation is based on the underlying fact that the large proportion of the FII and FDI coming into the economy comprises of those enterprises which had wrapped up their work from Chinese economies only to be rerouted back to the mainland as FII and FDI in order to avail tax benefits. For this purpose, some of the tax havens popular with these recycled domestic to FII investments are Hong Kong, Virgin Island, Singapore, Japan, Taiwan and South Korea.

⁸ The confluence of underdeveloped state of Chinese capital market and the partial convertibility of its currency (owing to managed float policy) served as the firewall during the contagion permeating and impacting the economy. These factors restricted the majority inflow of the foreign capital (up to approx. 90%) in the form of FDI and that too the green field investments chiefly. Though, this system had been taxing on the foreign investors compelling the intervention of the WTO but served in protecting the Chinese economy from the sudden flight of the capital flight.

Indicator Name	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Exports of goods and											
services (% of GDP)	23.3	22.6	25.1	29.6	34	37.1	39.1	38.4	35	26.7	29.4
Exports of goods and											
services (annual %											
growth)	32	10.1	28.1	27.6	27.3	22.4	20.5	14.3	-1	-12	26.6
Imports of goods and											
services (% of GDP)	20.9	20.5	22.6	27.4	31.4	31.6	31.4	29.6	27.3	22.3	25.6
Imports of goods and											
services (annual %											
growth)	24.8	12.7	15.6	31.2	29.9	12.3	12.9	8.7	-5.3	2.42	19.1

Peer Reviewed International Journal Vol. No. III Issue No. 08 August 2015

ISSN: 2347 5587

Source: World Bank

The international trade formulates the backbone of the GDP of China with the contribution of trade to the GDP stretching as high as 60% exclusively. Further, the export of services does not form a significant portion contributing only 8.3% of total exports with the remaining portion being contributed by its manufacturing base. China being the most significant assembly factory of the world production house, its imports embraces the raw material for the final product consisting of fabrication fuels, optical and medical tools and kits, metal ores, plastics, organic chemicals. Likewise, the consumer goods, electrical and other machinery encompassing data processing tools, apparels, textiles, toys, optical and medical tools and kits, iron, steel forms the list of popular exports from China. This robust integration of China with the world increased its vulnerability to the events and its contagion effects occurring on a global scale like the financial crisis of US in 2007. Consequently, the world affairs both impacts and get impacted⁹ by the trading equilibrium of China.

The contraction in the Chinese trade began with the evolution of the financial crisis originating from the US economy to making its way into EU, Japan and gradually to the rest of the world economies. While the US, Hong Kong, EU and Japan together receives about 60% of the Chinese exports, the 50% of the imports are sourced from a combination of Taiwan, EU, US, ASEAN, Japan and Germany. With US, EU, Japan, Hong Kong and Taiwan forming the chief trading partners of Chinese trade, the contraction in its trade (both the imports and exports) started becoming more evident with the passage of time.

⁹ The world affairs impacting Chines trade had recently been emphasized by the crisis bringing a turmoil in its trade growth and thereby its economic growth. The world economy getting impacted is evident from the fact that global commodity prices contracted sharply in response to the news of tightening of the policy of China. China is a net importer of 17% of the global palladium demand and 20% of the global platinum demand giving it a substantial influence over the trend of commodity price movements.

Exports from		Imports from	
Country/	Jan-Dec	Country/	Jan-Dec
Region	2008	Region	2008
USA	17.70%	Japan	13.30%
Hong Kong	13.30%	Taiwan	9.10%
Japan	8.10%	USA	7.20%
South Korea	5.20%	Germany	4.90%
Germany	4.10%	Australia	3.30%
Netherlands	3.20%	Malaysia	2.80%
United Kingdom	2.50%	Saudi	2.70%
Russia	2.30%	Brazil	2.60%
Singapore	2.30%	Thailand	2.30%
India	2.20%	Angola	2.00%
EU	20.50%	EU	11.70%
ASEAN	8.00%	ASEAN	10.30%
EFTA	0.50%	EFTA	0.80%
Iceland	0.01%	Iceland	0.00%
Liechtenstein	0.00%	Liechtenstein	0.00%
Norway	0.18%	Norway	0.19%
Switzerland	0.27%	Switzerland	0.64%

Source: (Embassy of Switzerland, 2008-2010); China's Customs Statistics

The first severe plunge was experienced post the collapse of Lehman Brothers of US bringing the international workings across the countries to a halt. The exports dropped by 18.5% in the fourth quarter of year 2008 to USD 111.16 billion from USD 136.43 billion in the previous third quarter of 2008. And since it was only the beginning of the recession turning out to be a significant event of a global scale and of the century, the recovery in Chinese exports so soon would have been either a miracle or a contradiction. Thus, the decline in the exports continued into the first quarter of the next year 2009 registering an export of USD 90.29 billion, a further deterioration of 19%. The imports on the other hand suffered a more severe impact from the decline in the economic activity in the country. The imports registered a decline of 32.58% in the last quarter of the year 2008 decaying from USD 107.07 billion in the third quarter of 2008 to USD 72.18 billion in the last quarter of 2008. The next year 2009, first quarter again witnessed a further decline which was actually the sustainability of status quo with the imports contracting minimally by 0.6% only to USD 71.73 billion. The maximum decline with regard to exports of the Chinese merchandise was experienced in February 2009 dropping by 28% succeeding the fall of 18% in the previous month of January 2009. Similarly, with regards to imports, 29% was the maximum deterioration which was experienced in January 2009 following a previous decline of 19.5% in November 2009.

The impact across the sectors, regions and the types of enterprises did not reveal any similarity amongst themselves. While among the sectors, the labor intensive exports were found to be relatively less impacted owing to their lower income elasticity of demand factor, the capital and technology based products emerged to be highly sensitive to the changes in income in the trading partner's markets and thereby ended up enduring greater impact. Accordingly, the exports of capital intensive goods suffered a decline of 19.6% followed by 17.7% decline for the technology based goods compared to a moderate decline of 10% for the labor intensive exports¹⁰ for the three fourth period of the year 2009.

Among the types of enterprises, it was the foreign invested enterprises (FIEs) and state owned enterprises (SOEs) that suffered relatively more than the domestic private businesses. Both the import and the export suffered significantly owing to the pulling of the investments from China by the foreign invested enterprises facing credit and liquidity issues during the crisis period in their domestic base. On the other hand, the state owned enterprises were hit by two factors, both the outcome of the impact of the financial crisis resulting in its decline of 30.2% and 28% in its exports and imports respectively. Initially it was the rising prices of the commodities, fuel and raw materials that raised the cost of the goods followed by the sharp relapse in the global demand for those goods.

Whereas, if the reason for the decline in Chinese imports (which was intriguingly more than the decline in its counterpart – exports) are analyzed, the depreciating Chinese exports emerges as the chief factor behind its decline. And China being a sizeable assembly factory of the world's production house, more than 50% of its export orders consisted or were processed by assembling the imported parts and supplies. Thus, with the waning global demand for Chinese products leading to the rise in the inventories of the producers, the import orders were also correspondingly revised in the downward direction. However, the respite in the declining trade was tendered by the magnanimous stimulus package implemented by the government in November 2008. It stimulated the domestic demand for the raw materials leading to the recovery in the waning imports from China. Consequently, the imports had embarked on its road to recovery by the second quarter of the year 2009 reflecting a growth of 21.5% from a decline of 0.6% in the previous quarter of 2009. Subsequently, the imports registered only robust growth for the rest of the year 2009.

¹⁰ The labor intensive products encompassed the exports of apparel, textile, shoes, furniture, bags, toys and suitcases suffering a decline of 10.2%, 13.7%, 5.6%, 8.5%, 9.7%, 11.3% and 9.7% respectively.

Stock and Equity Market

The period prior to the crisis witnessed a boom in the stock markets of many economies of the world riding on the extreme optimism regarding the future growth of the respective economies. Likewise, driven by the same sentiments, the stock market of China also enjoyed a boom particularly from 2005-2007 increasing fivefold in the respective interim period. Corresponding to the steep rise of the stock market accompanied with the wealth in the economy in the pre-crisis period, the downfall was also equally precipitous for the crisis period. Subsequently, the crisis propelled pessimism about the economic positions and risk perception among the investors leading to the lofty fall of the Chinese stock market erasing more than 60% of its market value within a year beginning from its October 2007 position.

Indicator Name	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Market capitaliz ation of listed compani es (% of											
GDP)	48.5	39.5	31.9	41.5	33.1	34.6	89.4	178	61.8	100	80.3

Source: World Bank

Despite the advice of the government against the sale of the equities to the fund managers, the stock market index endured the crash. The government in order to inspire the investors and boost the stock market participation, abolished the stamp duty tax on share purchases supplemented by another attractive resolution of suspension of the trading fees for the bond transactions at its national stock exchange – the Shanghai Stock Exchange but on the temporary basis. The ratio of market capitalization to GDP which is the benchmark of the depth of the stock market exhibited the impact of the crisis with the loss of 65% in the year 2008. The fall in the market capitalization was severe in the year 2008 at 61.8% of GDP from 178% of GDP in the previous year of 2009. However, owing to the intervention of the government, the capital market recovered in the next year to register the market capitalization at 100% of GDP for 2009. Not only the market capitalization escalated, the total number of companies listed in the stock market also witnessed an appreciation of 96 companies in 2009 from 1604 in 2008 to 1700 listed companies in the year 2009. Whereas, another indicator of the depth of the financial market also unearthing similar information namely, stocks traded turnover ratio posted depreciation by one third in the year 2008 at 121% from 180% in 2007.

Subsequently in the next year, it gained the momentum to register an appreciating close at 230% in 2009. Afterword, the economy witnessed a robust recovery of the securities, futures and bond market.

Total Listed Domestic					
Companies 323 1086 1387	1440	1530	1604	1700	2063
Stocks Traded, Turnover					
Ratio 116 158 82.5	102	180	121	230	164

Source: (The BRICS Report, 2012) sourced from Standard & Poor's, Emerging Stock Markets Factbook and supplemental S&P data

The development of the financial market or specifically the stock market of China had been profound and well planned. The evolution of the Chinese stock market had been a concerted effort of the capital market with a consistent support from its government unlike the markets of other emerging economies which had evolved on its own. As a result of the numerous government initiatives and low interest rates, the active trading on money market was observed with prominent growth in its trading volume. Similar was the performance of the bond market enjoying stable trading price and rapid growth with surging bonds issuance. Consequently, not only the turnover ratio, number of total listed companies and market capitalization increased from 2009 but the profitability of the trading firms also reported a considerable enrichment.

	Unit	2000	2005	2006	2007	2008	2009	2010	2011
Annual									
Average	RMB								
Exchange	per								
Rates	US\$	8.28	8.19	7.97	7.6	6.95	6.83	6.77	6.46
Year-									
End	RMB								
Exchange	per								
Rates	US\$	8.28	8.07	7.81	7.3	6.83	6.83	6.62	6.3
Foreign									
Exchange	Trillion								
Reserves	US\$.17	.819	1.07	1.53	1.95	2.4	2.85	3.18

Fluctuations in the Exchange Rate and Foreign Exchange Reserves of China

Source: (BRICS, 2013)

Forex Reserves

The relatively weak financial associations of the Chinese financial market with the markets of US and EU translated into its shield protecting it from the direct exposure of the financial turmoil in the international market. Yet the Chinese banks had made a substantial investment into the US toxic securities that rendered vulnerability to its investment valuation and thereby to its reserves during the crisis. However, with the enormous foreign exchange reserves to the tune of USD 1.9 trillion, the stability and influence augmentation of China on the globe during the crisis period was warranted. The foreign exchange reserves of China had experienced a sharp appreciation of 19 times from its 2000 figure of USD .17 trillion to USD 3.18 trillion by 2011. With the private firms and individuals having limited leeway of investing in the international assets, the Chinese government entities ended up having a significant exposure to the US troubled assets. Moreover, a substantial proportion of these capital outflows required for the investment in the overseas assets were derived from China's sizeable and ever-growing foreign exchange reserves. As per the Treasury Department of US, the investment of Chinese federal entities in the US distressed securities amounted to USD 1,205 billion by June 2008 appreciating from its June 2007 total sum of USD 922 billion. China was the second prime investor in the toxic assets of US following Japan till mid-2008 and was believed to have surpassed the Japanese investments by the end of 2008¹¹. These investments were bifurcated as - USD 527 billion were invested in long term US agency securities¹² followed by USD 522 billion and USD 100 billion into long term treasury securities and long term equities respectively. Rest relatively smaller share of their huge invested corpus was dedicated to long term corporate securities and short term debt amounting USD 26 billion and USD 30 billion respectively. This romancing of Chinese investments with the US securities continued even during the time of build-up of crisis besides and also during the pre-crisis period that stemmed into 88.3% of Chinese stake in the securities of US at one point. Both the interest rate risk and inflation risk threatened the foreign reserves of China. Subsequently, as the looming threat of losses owing to the crisis grew, its People's Bank of China (PBoC) sold more than half its stake in its agency security holdings. This action was more prompted when both Freddie Mac and Fannie Mae were nearing default risks but were saved by US assistance package saving the day for the Chinese

¹¹ This speculation and not the surety about Chinese investment is owing to its government policy of not declaring its dollar composition of its foreign exchange holdings. As per the CRS report, the Chinese investments were also estimated to surpass USD 1.4 trillion by the end of 2008.

¹² The agency securities are used to refer to mortgage backed securities of Freddie Mac and Fannie Mae. Further, the federal debt of the US was being financed by the treasury securities.

investments as well. Consequently, by June 2011, PBoC managed to shed 45% of its peak level agency securities to USD 245 billion.

Despite these substantial investments which were turning out to be a drag on its foreign exchange reserves, China continued to enjoy a comfortable position relative to other developed economies, riding on its sharply growing reserves. During the time of severe distress worldwide, the maintenance of huge foreign exchange reserves verified its worth in screening and aiding the economies and in pulling them out from the effects of the crisis¹³.

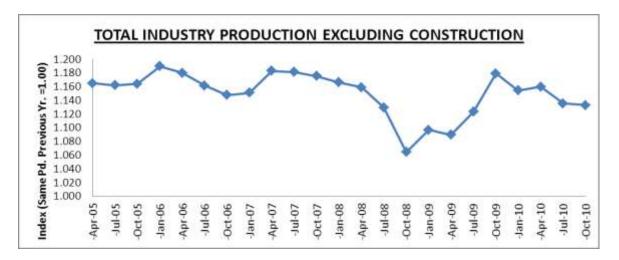
Exchange Rate of Yuan

The sequences of the unfolding events were almost similar for all the countries as and when the crisis was permeating into their economy. Thus likewise, as endured by other countries of the world, the inflow during the booming period followed by the capital flight during the crisis period threatened to destabilize the financial system, its exchange rate and thereby the economy with it. However, again similar to other emerging economies, the vigilant approach towards its capital controls and bounteous foreign exchange reserves gave Chinese authorities the capacity to intercede in the foreign exchange market and exercise effective control over its exchange rate of Yuan. Consequently, the Yuan was saved from the effects of the crisis shock. And it became evident by the fluctuations reflected in the exchange rate of Yuan that reported the annual average exchange rate of RMB 6.95 per USD in 2008 from RMB 7.6 per USD in the previous year of 2007. The Yuan basically had to endure the fluctuation of only 8.5% (an appreciation) during the build-up of the crisis. Subsequently, in the next year 2009, the Yuan appreciated again to register the annual average exchange rate of RMB 6.83 per USD followed by further strengthening in 2010 at RMB 6.77 per USD. On the other hand, the year-end exchange rates also exhibited the similar results gaining only the strength over this tumultuous period moving from RMB 7.3 per USD in 2007 to RMB 6.83 per USD in 2008 and 2009 to RMB 6.62 per USD in 2010. The Chinese exchange rate enjoyed the appreciation of 9-11% over the period from 2007-2010. There were two fundamental reasons of this sturdy performance of the currency during the crisis period during the period when even the favorable global currency was swinging on an oscillation of high amplitude. One was the stringent control of the Chinese regulators on the international capital flows entering

¹³ The threat of the local currency crises ignited by the abrupt capital flight or surge in the external debt attached with the collateral conditions acceptance were successfully averted by China due to the presence of their surplus reserves. The stimulus package of USD 1.4 trillion could be drawn by the respective authorities on the strength of their reserves that provided them their required strength and space to maneuver their policies according to the requirements.

and exiting its economy compared to its huge foreign exchange reserves. The other was the strong position of its macro-economy and financial fundamentals rendering robust outlook of the economy to the outside world. These policies in turn had assisted China in building its enormous foreign exchange reserves supplemented by the huge FDI and huge trade surpluses.

Industrial Sector



Source: OECD, "Main Economic complete database", Main Economic Indicators .

The bulk of the China's piercing and persistent rise in its GDP is credited to the explosive growth in its industrial production from early 1990s. On one hand, its industrial sector had delivered an exceptional average annual growth rate of more than 12.3% from 1990-2007, similarly on the other hand, its stake in the GDP (in current prices) of China had witnessed an equally sweeping increase from 41% to 49% by 2009. In fact for the period of 5 years from 2003-2005, the maximum contribution to the GDP was made by the industrial sector at 60% of total GDP followed by the service sector sponsoring 35% of total GDP growth and the rest 5% was made by the agriculture which clearly has failed to develop over the years.

The year 2008 kicked off with the countercyclical policy in force to manage the overheating economy of China, intimidated by the rising inflation. With the second half, the global financial crisis intensified leading to a swift plunging of the industrial production along with the exports. The economic growth started to take a beating with the plummeting of the industrial production first time from November, 2008 reporting a growth of only 5.4% relative to the previous month's figure of 8.2%. This decline in the industrial production was the first in its record of previous 7 years and the nethermost since 1999. Exactly, this was the time when there was no doubt left in the authorities' viewpoint of the approaching sharp and austere slowdown in the economy. The instances of phase-out of production of chief

industrial items encompassing cement, electricity, automobile, steel and metal products, petrochemicals, etc were increasing. The industrial production had first depreciation in the third quarter of 2007 which was negligibly small but was the start of the series of decline in the Chinese industrial production running continuously up to fourth quarter of 2008 before taking a break in the first quarter of 2009 and then resuming the decline in the second quarter of 2009. This slow depreciation of the industrial production was initially perceived as the effects of the self-adjustment or industrial restructuring owing to the contracting and countercyclical macroeconomic policies implemented by Chinese government. It was the substantial decline of 2.5% in second quarter followed by a decline of 5.8% in the fourth quarter of 2008 that jerked the Chinese authorities to recognize the swiftness of GFC engulfing the economy. Also, the analysis of the two popularly accepted indicators of industrial electricity consumption and the industrial value added had been used by the authorities to determine the depth of the impact of the financial crisis on the Chinese economy. There was no remarkable difference in the industry value added to the economy of China in 2008 relative to its contribution in the year 2007. While in year 2007 the industry value added to GDP was 47.34%, its contribution in the subsequent year 2008 was a 47.45%. The marked perceptible decline was reported in the next year 2009 when the effects of the crisis intensified to report the industry value added at 46.24% of GDP. As the various advanced economies of the world started recovering in the second half of the year 2009 concomitant with the recuperation of the domestic economy propelled by the expansive stimulus package implemented since November 2008, the year 2010 witnessed the increase once again to report the industry value added at 46.71%.

Indicator	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Industry,	45.92	45.15	44.79	45.97	46.23	47.37	47.95	47.34	47.45	46.24	46.72
value											
added											
(% of											
GDP)											

Source: World Bank

The impact on the industrial sector had translated into the closure of numerous export industrial units throughout the economy of China and thereby severity in the labor market

owing to the swelling layoffs by the affected industries¹⁴. Henceforth, as soon as the authorities realized the GFC permeating the economy indicated by the declining industrial production, a swift and prompt respond was presented in the form of Yuan 4 trillion stimulus package. Simultaneously the industrial revitalization program was also unveiled by the policymakers with the goal of stimulating the competitiveness of the 10 chief backbone industries of China encompassing automobile manufacturing, shipbuilding, machinery, logistics, electronics and IT, textiles and clothing, light industries, petrochemicals, steel, non-ferrous metals and logistics. The stimulus package for these industries included tax subsidies, sponsorship for the technology up-gradation, increase in the government purchases, domestic brand advancement and promotion, subsidies for the industries and introduction of the incentives for the foreign investors to increase foreign investments in the concerned sector.

Employment

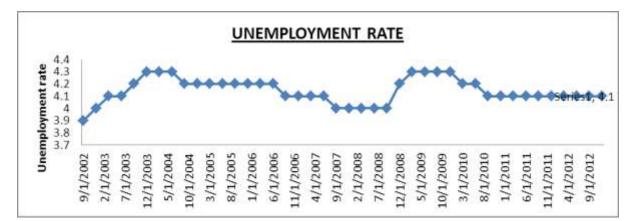
The global financial crisis (GFC) had an austere impact on the employment scenario of China. The impact on the labor market was visible even before the landmark episode of collapse of the Lehman Brothers in US i.e., in the third quarter registering a fall of 5.5%. This impact of the slowdown in the Chinese economy triggered by GFC was felt the most in the southern-most part of the China's manufacturing and export hub. The downward revision of the demand for the Chinese goods from the international market had led to the closure of numerous labor intensive establishments. In terms of the region, the most impact was felt by the export oriented firms established in the coastal regions. Before the completion of quarter 4, about .67 million establishments (these were particularly export oriented industries) were already closed rendering more than 10 million migrant workers job-less. The official data comprises of the eligible registered workers which by the literature is a biased and an exclusive version of the true data. It is because this data excludes the migrant workers, skilled and unskilled laborers, laid-off SoE workers, workers of the disintegrating SMEs, budding employees - fresh graduates¹⁵, demobilized militias and disappointed lot which had ceased looking for jobs. The combination of the official estimates with the unofficial, unregistered figure translated into a grimmer situation for Chinese economy. The numerous primary

¹⁴ In one of the export prominent province of China- Guangdong, the number of companies operating at 30-40% of their potential was above 20,000. Additionally, the most impacted were the class of small and medium enterprises as over three fourth of the registered SMEs had to withstand the complete cessation of their firms. ¹⁵ Nearly 7 million college graduates were estimated to join the job market of China during the affected year of

^{2008.} These were the supplementing pressure on the Chinese job market which was already struggling to absorb the migrant workers besides the freshly sacked employees owing to the crisis affect.

studies conducted in China quoted the unemployment rate during the crisis period ranging from 9.4% to 41.8%¹⁶.

Even though the official figure quote a nominal increase of 0.2% in the fourth quarter of 2008 rising from 4% unemployment rate till third quarter 2008 (static since last 1 year) to 4.2% rate, the actual number was quite significant counting to 8.86 million urban residents with an increase of .56 million relative to previous quarter figure. The subsequent quarter 1 of 2009 witnessed an increase of another 0.1% as the crisis impact on the economy intensified.



Source: BloomBerg

The evolution of the crisis threatened to evolve into a full blown crisis of unemployment being triggered by the plummeting of the global demand hurting the Chinese trade flows which was further severely aggravated by the credit crunch inhibiting the real economy. The possibility of millions falling back into the trap of poverty was increasingly menacing the Chinese economy. Consequently, the Chinese authorities responded ardently by infusing enormous amounts of credit into its financial market, thereby penetrating the ailing economy, reducing interest rates and adopting a generous, expansive fiscal policy and stimulus package. The stimulus package of Yuan 4 trillion was basically implemented with the aim to arrest spillover effect of the crisis on the unemployment and further on the economy. Thus, package was basically centered on the employment generating measures with the help in the increase of the domestic demand leveraged by the increase in the credit extensions by the financial institutions. A huge portion of the stimulus package was assigned to be invested in the public projects generating employment for the laid off workers. Other initiatives included tax subsidies, credit for the new ventures, loan and tax savings for the enterprises employing

¹⁶ Chinese Academy of Social Sciences (CASS, 2008), (Li, 2009), (Zhou, 2008), (Schucher, 2009)

fresh graduates, reinforcement to training and holding employees. Further a strategy was formulated by the government for 2009 by the name of "95146 strategy" that expanded into the facilitation of 9 million jobs for new entrants, re-hiring of the 5 million for the xiagang (migrant) workers , 1 million jobs for the unemployed person which were challenging to be employed and 46 representing 4.6% reduction in the registered unemployment.

Banking Sector

Indicator	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Domestic											
credit to											
private											
sector (% of											
GDP)	112	111	119	127	120	113	111	107	104	127	130

Source: World Bank

The financial institutions of China (both banking and non-banking) experienced a restrained impact of the global financial crisis particularly when compared with the exposure and impact on the advanced economies' financial sectors. The complete credit of this limited impact is owed to its vigilant financial framework and the policies of the respective regulators of China. The restricted and prudent financial regulation on capital flows from and to China rationed the domestic investor's ability which encompassed both the individual and institutional investors from investing in the foreign assets. The adherence to the conservative investment strategy on the international financial market by the government bodies particularly the state owned banks, China National Investment Corporation and the SOEs assisted in ensuring a control over their investments. Thus, a cushion was formed that shielded the financial institutions from having a direct exposure to the troubled and complex assets of the US. Simultaneously, with prudent regulations, the financial institutions were mandated to maintain sufficient deposits and liquidity giving them a sufficient veiled leverage during the time of the crisis. Consequently, the exposure of the Chinese financial institutions to the complex financial instruments and related risks of the west was contained to a larger extent translating into a controlled loss for these institutions. Yet the banking sector of China endured a substantial loss with the state owned entities having a stake in these assets of US if not the individual and the local institutional investors.

The losses were incurred by some of those banks that held the securities issued by the troubled financial institutions of US that either had applied for the bankruptcy protection or had gone insolvent altogether. The leading loss on these investments was reported at about

USD 2 billion by the Bank of China followed by the loss of USD 1.8 billion and USD 673 million by the Industrial and Commercial Bank of China and China Construction Bank respectively. Another financial institution namely, Ping An Insurance Group of China also reported a substantial loss of about €1 billion (Schüller and Schüler-Zhou, 2009 cited in (Yang & Huizenga, 2010).

CHINA'S INVESTMENT INTO	ASSETS C	OF FANNIE MAE AND	FREDDIE MAC (USD E	Billions)

	Industrial and Commercial Bank of China	Construction Bank of China	Bank of China	Merchant Bank of China	China Investment Trust Bank	Minsheng Bank	Total
Fannie Mae and							
Freddie Mac related							
bonds	2.176	3.25	17.29	0.255	1.584	0.227	25.32
Other Agency Bonds	0.465	2.555	10.67	0.18	0.43	NA	14.24

Source: Bloomberg and China International Investment Corporation (CIIC) cited in (Yongding, 2010)

Despite the significant exposure of the Chinese financial institutions to the subprime assets and related derivatives, the financial sector of China continued to maintain its sturdiness even during the tumultuous period of financial crisis. The losses registered by the financial sector accounted for only 1% of the total assets of the financial institutions at about USD 2.8 billion. In fact, the benchmark ratio measuring the health of the financial sector viz., non-performing ratio registered a decrease to 2.45% even during the crisis impacting year of 2008. In essence, the sound performance was delivered by the financial system of China attained with the pillars erected through banking reforms post Asian Crisis that rendered strength to its financial institutions bestowing a stable operation of its financial market during the crisis period with the enhancement in its financial infrastructure.

In response to the contracting domestic and the global economy and financial landscape, the Chinese government implemented a loose monetary policy that emphasized on uplifting the economy via the thrust of the domestic demand. This goal was processed by encouraging an increased credit extension that embraced the continued social and economic development. The Chinese economy witnessed an intense surge in the credit lending with the beginning of the year 2009. The credit lending in the first quarter of 2009 was the testament to this trend which stood at Yuan 4.6 trillion as against the whole 2008 year figure of Yuan 4 trillion. The amount credited in the year 2009 was a lavish figure of Yuan 9.6 trillion, more than double of 2008 amount. The Chinese economy had also started reflecting the signs of recovery from the

second half of the year 2009. The fear of misallocation of funds surfaced with the swift growth of credit lending penetrating into the stock and housing market. This misallocation of funds had the potential to lead to the rise in the bad loans, NPAs and escalated risk of an asset market bubble. Thus, in the subsequent year 2010, the government started implementing the roll back of their magnanimous scheme along with the strict assessment of the loan situation. The bank credit objective also witnessed a downward revision to Yuan 7.5 trillion for 2010. The domestic credit to the private sector also echoed the same trend with a reduction registered for the year 2008 at 104% of GDP from 107% of GDP in previous year 2007 followed by the windfall increase in the next year 2009 at 127% of GDP. As the government had become cautious regarding its credit lending, the domestic credit to private sector also witnessed a marginal increase in the next year 2010 at only 130% of GDP.

Conclusion

The crisis reversed the record of sustained growth of three decades with depreciation in year 2008 and 2009. The slowdown in industrial production and construction sectors besides downward revision in export orders were attributed to be the core causes behind the slackening economy. To revive the economy, the government promptly facilitated expansionary fiscal and monetary policies. The fiscal policies provided a stimulus package of Yuan 4 trillion (USD 586 billion) in November, 2008. Further, key policy rates were reduced drastically, loan quotas were raised, reserve requirement ratio was decreased and credit provisions were increased. The private investment and thereby economic growth was rekindled through the expansion in the credit lending and fixed investments by the government. 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. Additionally to manage inflation, accommodative monetary policies were implemented by policymakers to revive the domestic demand and propel economic growth. The infused liquidity not only assisted financial institutions but also raised the confidence of general investors and public. The results were so penetrating that year 2009 witnessed a net deflation of 0.7% compelling the re-implementation of restrictive monetary policy. However, another reason motivated the rollback of accommodative monetary policy so soon. High liquidity floating in the economy had overheated the economy with funds penetrating into stock and housing markets formulating asset bubble with the steep appreciation in asset prices. It had triggered the threat of rise in non-performing assets and risks of misallocation of funds resulting in surge in key interest rates and reserve requirement ratios.

The impact on Chinese capital flows foretells a unique story. While a decline was registered by FDI inflows in October 2008, FDI outflow exhibited a new vigor gaining momentum from 2007 into 2008 to 2009. Alternatively in case of FII flows, Chinese bourses did not suffered much from capital outflows as portfolio investors continued with their investments in Chinese bourses and its assets. The restrictive regime ensured reduced exposure to the international financial flows limiting the impact of crisis. Since China is globally integrated with the world through trade, the same channel served as a crisis transmitting medium due to global contraction in trade orders hurting Chinese exports from fourth quarter of year 2008. The imports from China also witnessed an equally severe downward revision. The stock market witnessed a loss of over 60% of its market value despite strong macroeconomic fundamentals in 2008. The government swamped the market with stimuli to attract and sustain the investors by abolishing stamp duty tax on share purchases and suspension of the trading fees for the bond transactions. The recovery in the capital market was complete by 2009. The reserves of China enjoyed a comfortable position relative to other developed economies.

The stringent control of the Chinese regulators on international capital flows along with robust macroeconomic and financial fundamentals ensured appreciation of its currency instead of depreciation. The Chinese exchange rate enjoyed the appreciation of 9-11% over the period from 2007-2010. Industrial production had begun declining from last quarter of

2007 till second quarter of 2009 leading to the closure of numerous export industrial units, unemployment and deterioration in economic growth. In response, industrial revitalization program was executed by the government to instigate competition among the industrial players besides facilitating fiscal stimulus of Yuan 4 trillion. Due to a significant exposure to toxic and sub-prime assets of US and its financial institutions, the banking sector of China incurred the wrath of crisis originating in US by reporting losses, approximately over USD 4 billion. Yet financial sector of China continued to maintain its sturdiness even during crisis period.

In essence, Chines authorities were swift in realizing and countering the plausible damage to economic structure due to crisis. Loose monetary policy, generous fiscal policy, and easy access to credit through government support gave the thrust to domestic demand reviving the economic growth by second half of 2009.

References:

- 1. The BRICS Report. (2012). New Delhi: Oxford University Press.
- 2. Banerjee, R., & Vashisht, P. (2010, June). The financial crisis: impact on BRIC and policy response. *Revista Temp Do Mundo*, *2*(2).
- 3. Bloomberg. (n.d.). *Various Databases*. Retrieved 2015, from Bloomberg Professional: Subscription Service
- 4. BRICS. (2013). Joint Statistical Publication. Durban, South Africa: BRICS.
- 5. Embassy of Switzerland. (2008-2010). *China: Annual economic report.* Beijing: Embassy of Switzerland.
- 6. Financial Stability Analysis Group of the People's Bank of China. (2008-2011). *China Financial Stability Report 2008-2011.* China: China Financial Publishing House.
- 7. Li, L., Willett, T. D., & Zhang, N. (2011, December 11). The effects of the global financial crisis on China's financial market and macroeconomy. (R. C. Burdekin, Ed.) *2012*, pp. 1-7.
- 8. Morrison, W. M. (2009). *China and the global financial crisis: Implications for the United States.* Washington: Congressional Research Service.
- 9. recession, S. e. (n.d.). *Fresh business*. Retrieved from Freshbiz.com: http://www.firstbiz.com/economy/slowdown-effect-unemployment-on-rise-in-china-amidrecession-34118.html
- 10. Schmidt, D. (2009). *The financial crisis and its impact on China*. Trier University. Germany: China Analysis 67.
- 11. Verick, S., & Islam, I. (2010, May). TheGreat Recession of 2008-2009: Causes, Consequences and Policy Responses. *IZA Discussion Paper No. 4934*.
- 12. Wen, Y., & Wu, J. (2014, March). Withstanding Great Recession like China. *Federal Reserve Bank of St. Louis. Working Paper Series 2014-007A*.
- 13. World Bank. (n.d.). Various Databases. Retrieved 2011-2015, from The World Bank: Data: data.worldbank.org/Xing, Y. (n.d.). The global economic recession and challenges to China's export-led growth strategy. Conference on Global Economic Crisis: Impact and Implications for Industrial Restructuring in Asia. ADBI. Yang, L., & Huizenga, C. (2010). China's economy in the global economic crisis: Impact and Responses. In S. Dullien, D. J. Kotte, A. Márquez, & J. Priewe (Eds.), The financial and economic crisis of 2008-2009 and developing countries (pp. 119-144). Geneva: United Nations, UNCTAD.
- 14. Yongding, Y. (2010). *The Impact of the Global Financial Crisis on the Chinese Economy and China's Policy Responses.* Malaysia: Third World Network.
- 15. Yongzongh, W., & Freeman, D. (2013, March 29). The international financial crisis and China's foreign exchange reserve management. *BICCS Asia Paper*, 7(2).