

## SIMSETT Volume 3

### Japan's Quantitative Easing Program

The question still remains whether this time the Bank of Japan will be able to help the country come out of the deflationary trap it got into almost 25 years back



**PUSHPANJALI MITRA**

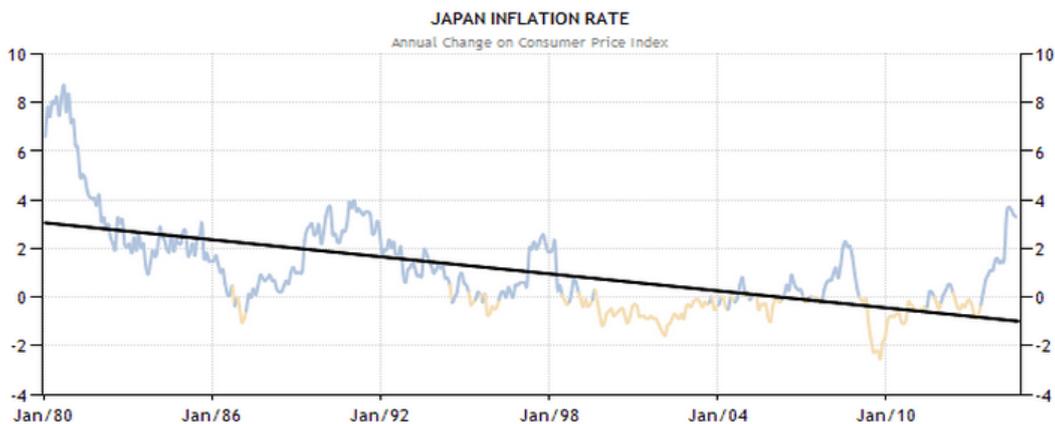
**Finance-IB**

**Batch-2013-15**

“Strive not to be a success, but rather to be of value”

On 31<sup>st</sup> October 2014, with the historical move of ending the bond buying program of the US Federal Reserve after 5 years, Japan started off with yet another monetary stimulus program. Japan has been suffering from a deflationary trap for the past 2 decades. Hence, the bank aims to buy more assets this year in order to bring back the economy on the right path.

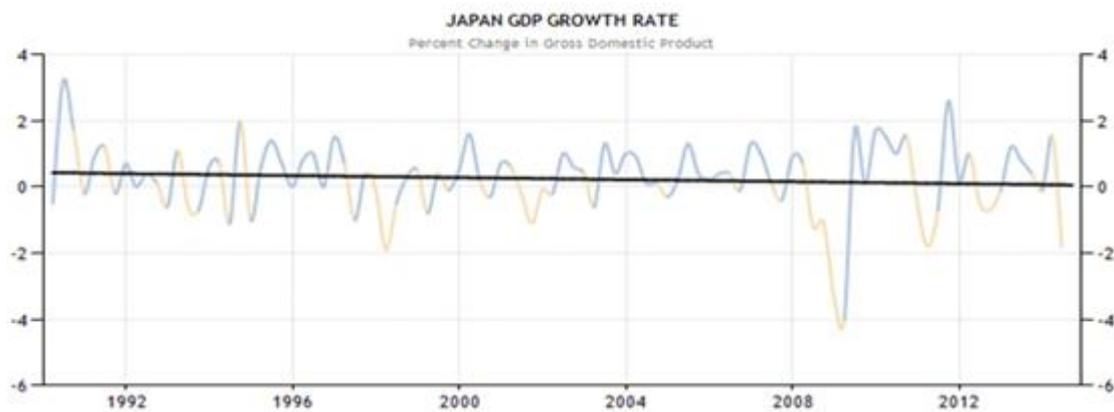
Quantitative Easing is the unconventional supply of money in the economy by the Central Bank by buying assets from the commercial banks thus put money in the hands of the people. Most of the economies have a target inflation rate which needs to be maintained and if the rate falls much below the target, the economy can fall into a deflationary trap like Japan.



Graph showing the trend of inflation in Japan. The downward trend line shows the deflationary trap Japan has been facing for the past two decades

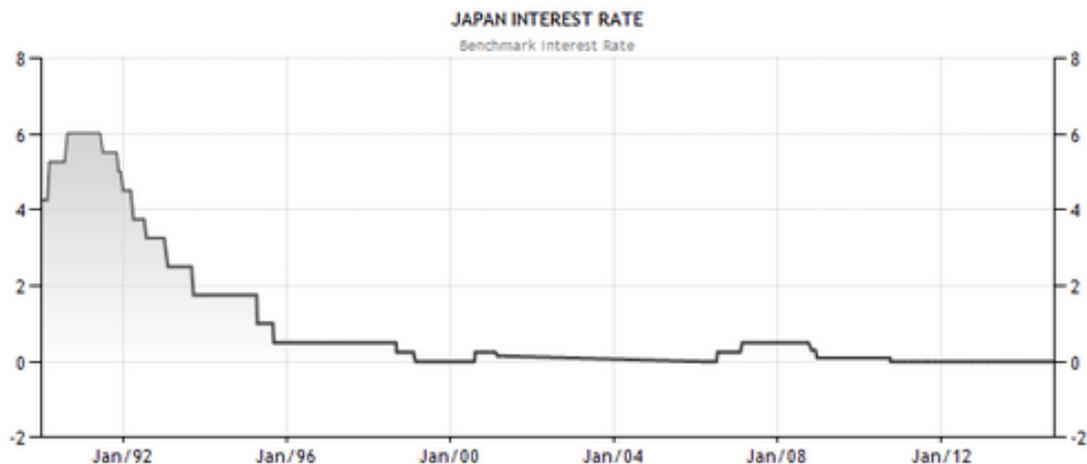
#### **Japan's Quantitative-Easing Program:**

Japan has seen development and economic prosperity in the initial period of 1980s which turned out to be a scenario where the banks were lending money to the people without keeping a check on the borrower's credibility. This led to the creation of a bubble and as a measure they increased the inter-bank lending rates and the bubble burst. Since the burst the economy has remained in a stagnant phase.



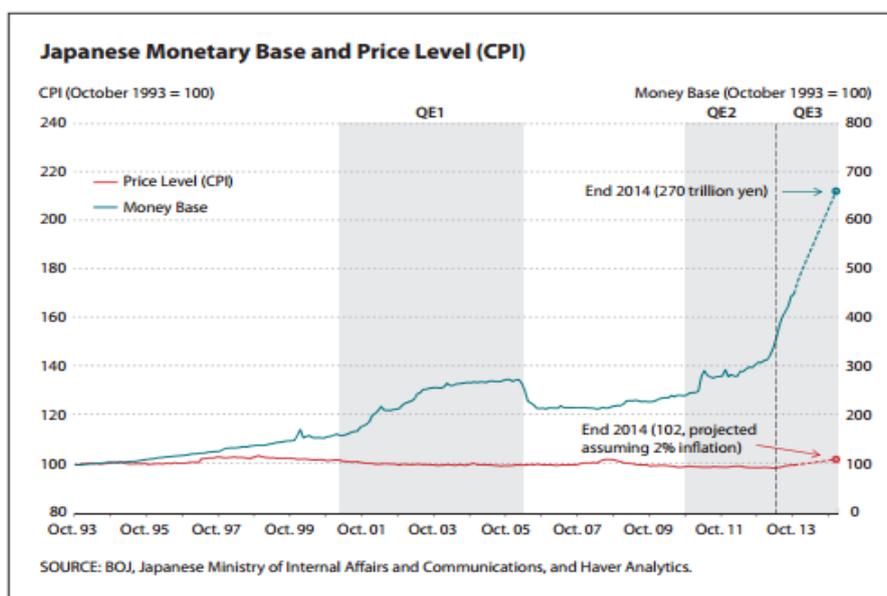
Trend followed by Japan in the past two decades show stagnant Growth and Disposable income

This led to the creation of ‘Zombie Firms’ (firms which need constant bail-outs for their existence and operations) which is said to be responsible for the long stagnation of the country. The banks and financial institutions were constantly funded because the government thought these banks were ‘Too Big to Fail’.



Trend followed by the Central Bank to regulate the Interest Rates; since late 2008 Interest Rate is almost 0

Soon after the sudden increase in the inter-bank rate the bank started decreasing the rate so that people would borrow more money and this would lead to the increase in the rate of consumption. But the banks failed to bring reforms and re-structuring in the banking sector. According to Keynesians Theory, Japan went into a ‘Liquidity Trap’ which is a situation where the people lose faith in assets; do not spend or invest money and hold on to cash (infinite liquidity preference). The banks had a huge repository of monetary base which led to big lending by the banks. The borrowers were not eligible or qualified enough to handle those values and they slowly started defaulting resulting into NPAs (Non-Performing Assets). Hence, the banks started increasing the rate which actually was because of the high pile-up of bad debts. Since 2008 zero-interest rate policy (ZIRP) has been implemented in Japan. The policy is a monetary action where the nominal rates are maintained at a level of 0% to encourage people to purchase and consume more directly increasing the demand.



Trend showing the relationship between the monetary base available with the commercial banks and the economy's inflation

The monetary base is made double since the commencement of QE 3

The first program of QE began in 2001 which left the commercial banks with excess of liquidity. The current account balance of the commercial banks was increased from ¥ 5 trillion to ¥35 trillion. The QE1 for Japan had almost nil impact on the inflation of the country. For an economy like Japan, inflation has a tonic effect on the economy. This program came to a halt in 2006 without causing any impact to the financial situation. The second cycle started in 2010 with a purchase of ¥5 trillion worth assets. This was followed by devaluing of Yen against Dollars in order to make its exports cheap in the market but the attempt failed. Since then the Central Bank has undergone a lot of asset purchasing programs and increase of the current account balance of the commercial banks, but no substantial impact can be shown. Then the third cycle namely QE 3 was undertaken announcing the purchase of \$1.4 trillion worth assets and a target inflation rate of 2%. The Central Bank has offset the program with the issuance of the Inflation Indexed Bonds (IIB) which are bonds having returns depending on the inflation of the economy.

The recent decision of infusing even more liquidity is said to be taken because of the inability of the Japanese government to reach the target inflation rate of 2%. Also the household spending has fallen by 5.6% indicating a considerable fall in the consumption power of people. The question still remains whether this time the Bank of Japan will be able to help the country come out of the deflationary trap it got into almost 25 years back.

## **Manufacturing Sector to Usher Inclusive Growth**

**The government hopes to ensure 25% GDP contribution from manufacturing by 2022 and create 100 million jobs to make the growth inclusive.**



**Praveen Kumar Verma**

**Operations - Finance**

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**Exploring new places and meeting new people, fascinates me.**

The Union Government is striving to give a new push to the manufacturing sector. The government hopes to ensure that 25 per cent share of gross domestic product (GDP) growth comes from manufacturing by 2022 and eventually create 100 million job opportunities to make the growth inclusive. The Government is also evolving a special incentive package to promote local manufacturing of electronic goods and telecom network equipment. The new manufacturing policy aims to encourage domestic manufacturers in public procurement, provide them a level playing field, cut red tape and redefine the role of PSUs rises to restrict them to areas that are vital but not attractive for the private sector.

For unhindered growth of Indian Economy, manufacturing sector plays a vibrant role, what with the manufacturing PMI standing at 51.6 against forecasted 51.14. Manufacturing Purchasing Manager's Index (PMI) measures the performance of the manufacturing sector and is derived from a survey of 500 manufacturing companies. The Manufacturing Purchasing Managers Index is based on five individual indexes with the following weights: New Orders (30%), Output (25%), Employment (20%), Suppliers' Delivery Times (15%) and Stock of Items Purchased (10%), with the Delivery Times index inverted so that it moves in a comparable direction.

Manufacturing industry is the backbone of any economy that fuels growth, employment generation and acts as a catalyst for agriculture and service sector and above all each one manufacturing job creates 4 more jobs in the non-manufacturing sector. Indian manufacturing sector has witnessed spectacular growth in recent years after a slowdown in the nineties. With many multinational corporations treating India as a major manufacturing hub amidst the IT boom the nation is poised for a big leap. With more diversification and better availability of skilled manpower Indian manufacturing industry is now ready to compete in global markets.

The manufacturing industry has made rapid strides in India mainly because the country meets the key requirements of skills in resources, product and process. The technical manpower available in abundance along with cheap labour has attracted a host of foreign companies in every conceivable sector. India has the potential to become a global manufacturing hub. No other nation produces as many engineering graduates every year as India does. The huge domestic market along with the opening up of the economy created the right investment climate. India is now getting recognized for high value goods requiring engineering precision and quality. Be it mobile phone industry or automobiles, consumer durables or engineering products, luxury brands or aircraft industry major global players are all eyeing India. Nokia, Samsung and LG have already set up manufacturing plants in India. Some other firms are expected follow suit. Skoda Auto has big plans for India. The cases of Ford India, Hyundai and Suzuki are no different. Airbus Industries will have a manufacturing base in India soon.

With FDI in defence sector at 49%, India is slowly emerging as a significant player in the heavy machine industry which is undergoing transformation. Airframe manufacturers have started sharing the work load and risks with suppliers. Major players in aviation industry are seeking to outsource aerospace products. This has thrown up excellent opportunities for aerospace goods and services. There are avenues for collaboration and creation of joint ventures for establishing Maintenance Repair Overhaul (MRO) facilities for aircraft, overhaul and maintenance of aero engines and production of avionics, components and accessories. Tapping this new opportunity in a big way can yield substantial benefits for Indian economy.

### **Key Problems**

The problems facing the sector are many. Earlier, Indian manufacturing suffered from high costs of production, poor quality of products and lack of competitiveness of its exports. This has been changing over the years. How to increase the productivity in the manufacturing industry should be the prime concern. Studies have revealed that the productivity of the manufacturing industry in India is about 20% of the productivity in the US. It is almost half of the productivity in South Korea.

Use of outdated technology, poor infrastructure, costly financing and bureaucratic control have hindered the growth of the sector. FICCI points out that the higher input costs for the Indian manufacturing sector due to impact of indirect taxes, high cost of power, water, higher cost of finance and high transactions costs puts the sector at a severe disadvantage. While laying down guidelines to the government to accelerate growth and improve competitiveness of the manufacturing sector, it has sought more private sector participation in infrastructure sectors like electricity distribution, aviation, roads, railways and ports. IT revolution could play a key role in increasing the productivity on the shop floor and supply chain management. In an environment of intense global competition with customers becoming more demanding, manufacturers must find ways to achieve greater efficiency and speed in the product development process.

## **Role of Supply Chain**

Supply chain is the biggest contributor to productive efficiency of the manufacturing sector. A Supply chain comprises of vendors that supply raw material, producers who convert the material into products, warehouses that store, distribution centres that deliver to the retailers and retailers who bring the product to the ultimate user. Companies have to establish a formalized list of expectations for suppliers and quickly move on to creating exclusivity agreements in exchange for volume guarantees.

The paradigm-shifting, consumer-driven world requires a new type of supply chain technology. Yes, you still need the basics of supply chain planning and replenishment, warehouse management, labour productivity software, and transportation and logistics systems. But they must be in real-time and integrated to a much higher level where they are aware of constraints across the suite, provide cross-system visibility and workflows, and are agile, extensible, and infinitely scalable and incorporate real-time analytics. And because these new supply chain suite support cross-system workflows and analysis, they must also provide persona-based work paths that are simple and intuitive so the associates can be as agile and productive as the systems.

So, manufacturing is the order of the day to provide jobs to millions of Indians and hence efficient supply chain management is the need of the future to get the bottom of pyramid included in the new India growth story.

## **The Basel Capital Accord: The Journey and Way Ahead**

**The Subprime crisis has put various global banking institutions under the spot light for all the wrong reasons. Can a challenging and stringent regulatory framework be a cure for the same?**



**Aishani Sharma**

**Finance-Marketing**

**Batch 2014-2016**

**Little girl with dreams, aspiring to be a woman with vision!**

The rapid pace of globalisation over the past few decades has resulted in the emergence of a highly integrated, interdependent and complex global financial system. This emphasizes the need for a universally standardized regulatory framework which can assist in regulating and channelizing the resources of the global financial (banking) system in an efficient, effective and equitable manner. Accordingly, the Basel Capital Accord was introduced by the Basel Committee on Banking Supervision (BCBS), under the guidance of the Bank for International Settlements (BIS) in the year 1988. The main objective of these norms is to facilitate the development and functioning of a strong, prudent and resilient international banking system.

The Basel I Capital Norms provided guidelines on the minimum capital requirements for banks and primarily focused on credit risk, which refers to the risk that a borrower can default on any type of debt by failing to make the required payments. Every asset in the banking system has different credit risk levels attached. For instance, loans that are secured by a letter of credit are riskier than a mortgage loan that is secured with collateral. Thus, various assets need to be measured and weighted with their respective credit risk levels and their summation is known as the 'Risk Weighted Assets (RWA)'

of a bank. The ratio between the total capital of a bank and the RWA is known as the 'Capital Adequacy Ratio' (CAR), the amount of capital which banks need to protect depositors, especially during a crisis. According to the Basel I norms, this ratio needs to be maintained at 8%. Moreover, the assets have been categorised on the basis of different risk levels or weights attached which are 0, 10, 20, 50 and up to 100. However, a bank is also prone to two other types of risks namely operational risks and market risks. Operational risks arise from breakdowns in internal procedures, people and systems and market risks arise due to external factors like economic situation, socio-political conditions, natural disasters, etc. These were not considered during the formulation of Basel I regulations. Moreover, the above mentioned categorization of risks were found to be narrowly classified defined for the complicated real business world.

These issues combined with a limited global participation (mainly from G-20 countries) hampered the effectiveness of Basel I regulations, thereby encouraging the Bank for International Settlements (BIS) to include more countries and paving the way for its successor the Basel II Norms.

The second set of the Basel regulations (2006), integrated all applicable provisions of Basel I and introduced certain amendments. The Basel II Norms were based on 3 pillars. The First Pillar: Minimum Capital Requirements; The Second Pillar: Supervisory Review Process; The Third Pillar: Market Discipline. The first pillar, the minimum capital requirements, requires banks to cover credit, market and operational risk. Here, the capital of a bank is divided into three tiers. Tier 1 Capital, which is the most liquid and crucial component mainly comprises of permanent shareholders' equity and disclosed reserves. The Tier 2 Capital is comparatively less liquid in nature and includes undisclosed reserves, revaluation reserves, general provisions and loan-loss reserves, and hybrid capital (combination of debt and equity instruments). The Tier 3 Capital includes loan instruments which are of lower priority.

Within the Capital Adequacy Ratio of 8%, highest composition is of Tier 1, followed by Tier 2 and Tier 3. The whole rationale behind this classification was to improve the quality of capital in banks. The second pillar, the Supervisory Review process mainly aims at ensuring proper supervisory processes that ensure the effective implementation of the various regulations through their own internal risk assessment processes. The Third Pillar, Market Discipline, gives a set of disclosure requirements that provide information on the capital, risk exposures, risk assessment processes & overall capital adequacy levels.

Unfortunately, the Basel II Norms were ineffective in controlling the sub-prime crisis (2008). Due to various technical loopholes and manipulations, there were alarming discrepancies between the reported and actual capital levels of banks. For example, intangible assets like goodwill, which have minimal liquidity were included in the calculation of capital. Thus, when the banking system was hit by the crisis, the institutions did not have adequate 'real' capital to survive. The lessons from this episode led to the formulation of the Basel III Norms.

The Basel III capital accord was introduced in the year 2010 and is expected to be implemented completely by the year 2019. In order to make these set of regulations more holistic and stringent than its predecessors, the following new ratios have been introduced:

- 1. Capital Conservation Buffer:** Within the CAR levels of 8%, this new buffer of 2.5% needs to be maintained by banks which would help them to absorb losses, especially in periods of tight liquidity levels.
- 2. Countercyclical buffer:** Along with the capital conservation buffer, Basel III has introduced a countercyclical capital buffer which ranges from 0 – 2.5%. This requirement is made for periods of excessive credit growth and by triggering this ratio the excess liquidity in the system can be optimized.
- 3. Liquidity Requirements:-**For this requirement, banks need to maintain two ratios namely the Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio

(NSFR) at 100% levels. The LCR requires institutions to hold a sufficient buffer of 'high quality' assets that can be converted into cash within 30 days. The NSFR requires institutions to have more sources of stable funding such as retail deposits, savings accounts rather than risky instruments like certificate of deposits.

#### **4. Leverage Ratio:-**

This ratio requires the Tier I capital to represent at least 3% of total assets, in order to prevent excessive build-up of leverages (amount of debt) on banks.

On paper, the Basel Capital Accord appear to be well drafted and prudent. Yet, the world has seen their paralysed effectiveness in handling various financial crises. The actual effectiveness of the regulations can only be appreciated with strict and timely implementation by the respective Central Banks. This should go in hand in hand with the objective of financial inclusiveness and not contradict this function. For instance, Indian Public Sector Banks need to raise INR1.5 to INR2.2 trillion, or US\$26 to US\$37 billion between FY 2015 and the full implementation of Basel III in FY 2019. This challenge has been caused due to high amount of NPAs. But, can crucial, yet "non-performing" sectors like agriculture be ignored by Government banks?

Every economy has certain sectors that can possess high volatility and uncertainty (like the real estate market) thereby making it crucial for regulators to ensure that such sectors are specified and prohibitions should be made to optimize (if not minimize) exposure to the same. Strict penalties, at national/international levels need to be imposed in cases of manipulative non-compliance. In a nutshell, if the various global and national macro-economic factors are considered, the regulations are improvised continuously, enforced diligently and are inclusive of higher number of countries, the Basel Capital Accord can lead to the formation of a healthy, wealthy, and progressive banking system.