

How to Make use of Forex Reserves (\$600 billions)through Financial Engineering

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Abstract: Indian economy is facing challenges from different sectors. Indian secondary market records peak performance as sensex cross 51,000 points, industrial production shows a growth of 13%, GST collections will be above one lakh crores per month regularly at one side and increasing in the unemployment, decline of sales among many industrial sectors, increase in the poverty rate and stoppage of operation of local industrial markets on the other hand. Is this is the signal for financial crisis in the near future. If you ask any businessman, they will the there is no good business due to lockdowns in various states. Before some financial crisis happens, Government should find some ways to increase the demand side of the various sectors. We are not sure about the benefits of Atmanirbhar package of twenty lakh crores and this time there are no further expectation of stimulus packages from the public. However, the economic growth will depend on demand and supply of goods and services sectors. There is urgent need to increase the demand side by increasing the purchasing power of the lower middle income and upper middle income of the people. Financial engineering is the strategy to find the innovative ways to increase the purchasing power by increasing credit facility or giving various source of financing. This paper is study the Indian economic condition and study the role of financial engineering to improve the same.

1. Introduction:

Financial engineering basically with integrate mathematics with economics and quantitative finance to find innovation solutions. It deals with quantitative aspects of the derivative markets, developing new financial products by restructuring the existing product. Financial engineering will helpful in developing the new financial products through creative design or modular designing of the existing financial instruments. It will be helpful in expanding sources of finance and meeting the public requirements in availing the credit. It is generally useful in valuation of securities, derivating accounting, risk measurement in capital markets, insurance markets and other financial decision applications. It is the time for expand further to meet the expectation of the potential customers as source of finance (Osouhaji,2013)

It is well known fact that the availability of adequate financial resources to the industries and people and making use of proper mix of needed funds from various sources for investment purpose are crucial for efficient financial system (Adam,1998). Financial engineering will improve the efficiency of financial system by providing suitable resource mobilization and wise allocation of funds, effective financial intermediation and boost the international trade by facilitating foreign exchange transaction with risk mitigation. Reserve Bank of India is doing its level best in this direction however there are no limitations for improvement.

2. Objectives:

- The objective of the papers are i)to study the financial engineering and its drivers
ii) To study the role financial engineering in management 600 billons dollars foreign exchange reserves

3. Financial engineering

According to (Cole,2013), financial engineering provides potential in reducing consumption fluctuations and lower adoption of risk management technology during selected seasons. Financial Engineers are responsible for combining, designing, researching, developing and implementing a range of innovative financial instruments for commercial use

Converting population to human capital requires huge amount of investment in training from the gross root level. This investment will not give the benefits immediately but in the long run. Human capital will be helpful in development of effectiveness and efficiency of the business and to make it reality we have to make use of the experts in the respective fields which involves financial investment. However, financial engineering will be helpful in asset liability management of the nation (Kuratko,2005). Building human capital will be helpful in development of entrepreneurship across the nation. The common element among the rich countries is entrepreneurship. Because we have missed that

opportunity, we can focus on social entrepreneurship with the help of financial engineering and reap more benefits.

The various function performed by financial system include a) providing structure to create the funds: financial engineering will be helpful in increasing the supply of funds as mentioned above ii) facilitating the exchange of goods and services with a payment system: financial engineering will find the new modes of payments to increase the effectiveness iii) Providing right mechanism for allocating of economic resources across the nation: financing the green engineering concept with the help of financial engineering this can be met iv) managing uncertainty and control risk: Financial engineering is the best suitable to minimize the risk and minimize the uncertainty v) making coordination among various economic sectors and integrating information is possible by financial engineering(Merton & Bodie,1993)

The growth drivers of financial engineering can be identified into two categories (i) environmental drivers including

Marshall (1992:20) has classified the growth drivers of financial engineering into two categories: (i) Environmental including price volatility, globalization of market, tax asymmetries, technological advances, advances in financial theory, development of market and market linkages, regulatory change and competitions and decrease in the information and transaction cost. (ii) the intra firm drivers include liquidity needs, risk aversion by management, and agency costs.(Marshall,1992)

4. Financial engineering and \$600 billions forex reserves

According to RBI data, Indian forexreserves had crossed a record of \$600 billion. It is one of the reasons for stability of foreign exchange rate. However the biggest question is it worthwhile to have so much reserves ideally and having foreign debt of \$520 billion. Usage of debt is not questionable it is one of the important source of finance for investment in development activities. However, RBI should make use of spirit of financial engineering to minimize its interest payment without affecting the risk components. The oil prices are stable globally however the petrol prices crossed one hundred rupees per liter in most of the states. Financial engineering will be helpful by suggesting keep the forex exchanger reserves to the extent of 450 billion dollars and make use of the remaining 150 billion dollars in either repayment of debt or buying the oils from global market at lower prices so that petrol prices will come down. By reducing the petrol prices, it will reduce the transportation costs thus the inflations. The projections of consumer price inflation is in double digits it is right time to act by RBI to advice the government to take necessary steps to control inflation to avoid adverse future economic crisis.

If part of the 150 billion dollars are invested in building the hospital through the country, the adverse effects of pandemic situation can be reduced thus it can build the investor confidence globally and attracts more funds.By using the part of 150 billion dollars in the money supply, the interest rates can be reduced by the demand for credit will grow and the entire economy can be revived. Use of special purpose vehicle is not unknown concept but its application in the various financial activities is limited.By investing the part of 150 billion dollars in building the immunity of the public will make virus proof of public so that Indians can work with courage and confident throughout the world

Opportunity cost is not a new concept, but we have forgotten to make use of this concept in the name of safety and risk avoidance.Is it possible to use funds to lend at free of cost to those companies who did not able to pay salaries during pandemic situation or those companies which did not layoff employee due to financial crunch.

By investing part of the 150 billion dollars in building the infrastructure in the country which will be helpful in reviving the industrial growth in double for long run. Then it will also attract more FDI compare to the neighboring countries. India should attract more FDI on regular basis so that the accelerate the growth of economy. Unluckily we have more FPI than FDI where FPI is for short period or speculative purpose while FDI is for long term and for development purpose. This will lead to development of more job opportunities and in turn it will reduce the employment problem.

Even though it is well known fact that investment in educations sector is not happening as expecting.it is right time make use of these funds so that we can make India 'India is rich in population' to "India is in rich in human resources". Part of the funds can us be used for enhancing the skills of Indian youth so that entrepreneurship can be encouraged.it is the right time for the government to invest in social entrepreneurship so that it will fetch for the long-term benefits.

Micro finance plays an important role in rural finance, however, the interest rates are higher. It is the right time for the government to start micro finance institutions so that the demand side of the economy can be increased. Instead of giving fish to the poor person, it is better to teach him fishing so that he

can sustain for long term.

Many states governments are interested in loss of tax revenue if they implement the prohibition of liquor or drink even though they are aware of social benefits of the same. If the part of the funds are used for this purpose majority of social ill effects to the society can be avoided.

Investment in Public health, education system, enhancing skills and micro financing will definitely make sustainable growth for India. Financial engineering will find the solutions to do all the above activities with proper return and calculate risk.

Creation for an institution for nonperforming assets as Bad bank is good idea. Such ideas need not be restricted toward only in banking industry; it can be applicable to various industries. Instead of privatization of public sector units in the name of they are making losses if government support them these PSUs will sustain and the objective of PSUs can be achieved. It is always surprising to note that in the same industry, PSU will make loss while private entities will make profits. In the name of privatization, many good potential PSUs were sold at a throw away prices. By training the Management and political leaders such mistakes can be minimized.

Government had observed that during pandemic many people draw the money from banks but they did not spend it. Financial engineering will find the ways to bring back those money to the circulation.

Conclusion:

Financial engineering is wonderful strategy to sustain the economic growth of the nation. In this paper discussion is restricted to how to make use of 600 billion dollars. If this concept is applied to all the concept the benefits to the economy will be much more than expected.

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