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Editorial

Crises, India, and Its External Sector

Globalization, a product of two processes of liberalization and privatisation, is nothing but "Americanisation" of the whole world, through various methods, techniques and forms of liberalization of the economies of nations and their international trade for integration in the world economy, more particularly subordination to the US economy. On account of disintegration and breakdown of the socialist system in USSR and eastern European countries and consequent emergence of a uni-polar world under USA neo colonialism; India and other developing countries had no alternative but to sign the Dunkel Draft under the pressure of USA to open up their economies which was a hidden step to reduce the growing relative strength of major trading nations, groups, regional trading blocks and bilateralism which was going against the trading interest of USA.

Secondly India's bargaining power with multilateral agencies like IMF and World Bank has also declined even to nil due to defunct COMECON. Hence, at present, the conditionality of IMF loan is decided mainly by USA who controls around 17.1 percent of total votes in both the International Monetary Fund (IMF) and World Bank, whereas decision is to be taken by 85 per cent of votes. The voting strength is decided on the basis of the strength of the financial contribution of a nation in these two institutions, not on the basis of "one nation, one vote", as in United Nations Organization (UNO).

It is to be noted that European Union, Japan, Canada and USA exercise 63 percent of votes, whereas the 80 poorest countries must do with a mere 10 per cent. For decades, the US who has always held more than 15 per cent of the quotas, has had veto power since any major decision requires 85 per cent support. The Managing Director of IMF has traditionally been European. The President of World Bank has traditionally been American. There is little disagreement that Asia is underrepresented and some critics think that Europe is over represented on the IMF's 24 member Executive Board. Korea, Japan, China and the 10 members of ASEAN together accounted for 19per cent of world GDP in 2004 but have only a combined 13 per cent voting stake in the IMF.

External Borrowing

It is but natural that USA government collects its financial resources mainly by way of taxation on industries and others some of which are multinationals operating all over the world. These corporate sectors also finance the election campaigns of presidential candidates of USA. Hence these transnationals (the corporate sector of USA) put pressures on the USA government to ask the developing countries (when they borrow from it)through IMF and other multilateral agencies to open up their economies for these multinationals. So, we have the present situation of liberalization of international trade and free entry of multinationals and transnationals for trade and investment, the benefit of which is mostly reaped by USA and its associates over the developing countries. In fact, there was a bipolar world up to 1991 and since then it is a uni-polar world under the dominance of USA due to breakdown of USSR. This process is truly a process of americanization of globe rather than globalization of international economy. Rather it is imperialistic globalization, not democratic globalisation. Capital from USA can enter freely to India but labourers (i.e. natural persons) from India and other developing countries cannot move freely into USA and other developed nations under the so called globalization. The adverse effects of these processes have been felt gradually in India. It is not sudden in India because ours is a democracy. In a democratic country,the ruling party tries to please the various interest groups and to slow the speed of reforms as the elections approach.

When a country resorts to external borrowing, there are various channels through which external economy and political factors influence domestic policy of a developing country such as (i) business cycles, (ii) international network and socialization, and (iii)loan conditionality. External sector including multilateral agencies seek to influence domestic policy more directly through loan conditionality.Devaluation, liberalization and privatization are often made obligatory conditions for the loan from multilateral institutions like IMF and World Bank to which most developing countries turn. This is the case with India.

India was in deep debt crisis in the early 1990s. The credit-rating and country-risk status of India was very low not only due to economic problems like current account deficit, high debt-service ratio, etc., but also for internal political condition like communal riots and terrorist activities in some states. The situation became so alarming that India was unable to get official loan or commercial loan from the external bilateral sources. So, the government of India was forced to swap 20 tonne of confiscated gold in Union Bank of Switzerland for a loan of US$ 200 million and mortgaged 40 tonne of gold in Bank of

England for further loan of US$ 200 million. But this meager amount was not sufficient to solve India's debt problem. So, India was forced to go to IMF for loan.

India borrowed Rs.3,153crore from IMF in January 1991 under Compensation and Contingency Financing Facility (CCFF) and US$ 200 million in July 1991. The IMF also sanctioned US$ 2.2 billion stand-by loan paid in installments during 1991-93. Devaluation of Indian Rupee, liberalization of international trade and privatization of public sector undertakings were made obligatory conditions by the IMF for which there were two stroke devaluation on July 1 and 3, 1991 by which Indian Rupee depreciated by 20 percent against major currencies and consequent depreciation of Rupee against US$ under free float, and proclamation of new industrial policy promoting liberalization and privatization including disinvestment of PSU shares on 6th August, 1991.

In the 1990s due to liberalization and move to market-determined economy and the consequent entry in India of multinationals and transnationals which indirectly tried to control state power as it was happening and is happening in India at present, have a dampening impact on industry, small-scale industries, rural non-farm sector and agriculture due to flooding of cheap substitutes and similar products, and change in taste and preferences of both the rural and urban consumers on account of aggressive advertisement of their products in both print and multi-channel electronic media.

Besides current account deficit, there is possibility of heavy outflow of foreign exchange due to (i) dubious tactics by multinationals, (ii) role of foreign institutional investors and (iii) debt service payments. Multinationals use the techniques of over invoicing of imports and under-invoicing of export to take precious foreign exchange to parent companies situated in USA and other advanced European countries. Foreign institutional investors (FIIs) engaged in portfolio investment may withdraw at anytime, if conditions are favorable in other stock markets or unfavorable in India. FIIs also manipulate for their benefits against the interest of the country.

Due to the global integration of India's equity market, FIIs are playing a major role in India.Various factors have played important role in the process of global integration of India's equity market such as (i) evolution of foreign investors' perception of equity market risk, (ii) structural and regulatory changes in the international investment process,(iii) tailoring of financial instruments and (iv) development in industrial countries'markets. But there are various investment problems of integration with global market.

2008 Financial Crisis

It is pertinent to mention here about the 2008 Financial Crisis and the 2011 Euro-Zone Sovereign Debt Crisis. Excessive decontrol, deregulation and liberalization in the US economy particularly in the financial sector was responsible for the 2008 Financial Crisis. A surplus of savings of export power houses of Asia and petroleum exporting countries in the US has been identified for creating the initial conditions that led to the crisis.

Major causes of 2008 crisis was reckless sub-prime lending, securitization of debts, speculative borrowing and investment, carelessness and irresponsibility of the insurance regulators and credit rating agencies, laws forcing commercial banks and investment banks to lend to sub-prime borrowers, proliferating credit derivatives market without central counter play, creation of more and more complex financial networks by Wall Street managers to pursue more profits irrespective of the risk involved and many other factors. Important was the prolonged rise in housing prices from 2000 to 2005 in USA due to easy availability of credit at lower interest rate and large inflow of foreign funds.The banks and financial institutions offered more and more loans to higher-risk borrowers including illegal migrants by offering increasingly risky loan options and borrowing incentives such as (i) easy initial terms, (ii) "no income, no job, and no assets" loans, and (iii) "teaser" loans.

An increase in loan incentives and a long-term trend of rising housing prices had encouraged many sub-prime borrowers to assume risky mortgages in the belief that they would be able to quickly refinance at more favourable terms. This credit and house price explosion led to a building boom and eventually to a surplus of unsold houses, which caused US housing prices to peak and began declining in mid-2006.Borrowers, who could not make the higher payments once the initial grace period ended, would try to refinance their mortgages. Refinancing became more difficult, once house prices began to fall and interest rates began to rise in USA. Borrowers who found themselves unable to escape higher monthly payments by refinancing began to default.

Thus, there was rapid and large-scale increase in defaults and foreclosure activity. Foreclosure accelerated in the US in late 2006 and triggered a global financial crisis through 2007 and 2008. As foreclosures and the supply of houses for sale increased, there was further a downward pressure on housing prices, a fall by, on an average, 30per cent in September 2008 from the mid-2006 peak. Borrowers, in this situation had an incentive to walk away from their mortgages and abandon their houses. This trend made large home builders bankrupt. This, in consequence, led to free fall in stock prices of home builders.

India was not among the worst affected during 2008 Financial Crisis. Because, in spite of the efforts of neoliberals in Government, the nationalized banking still dominated and greater degree of regulation existed, largely because of pressure from various quarters inside the country.The impact of the 2008 global financial crisis on India would have been much worse and disastrous, if government at the Centre were allowed to implement the so-called financial sector reforms such as denationalization of government-owned banks and insurance companies, opening up of banking sector to foreign banks, increasing the FDI cap in the insurance sector beyond 26 per cent, transferring the social security funds like pension and provident fund to the stock market and full capital account convertibility. Financial deregulation could be stalled to a considerable extent only because of staunch opposition by the Left parties on which UPA-I government at the Centre was depending.The role (i.e. stubbornness against pressure from powerful quarters) of the then Governor of Reserve Bank of India against full capital convertibility and withdrawal of all controls on foreign investment is praiseworthy.

Other factors which helped India to withstand US 2008 meltdown are : (i) strong foundation of PSU Banks, insurance and core sector, (ii) majority of the people's dependence on agriculture, (iii) operation of a strong parallel economy (which accounts for around half of the economy), and existence of huge amount of black money, and informal credit market (on which large number of small entrepreneurs and traders mostly depend), (iv) some unintended steps taken by the Government of India before the September 2008 financial crisis such as (a) Rs.60,000 crore farm loan waiver, (b) huge investment on MGNREGP and other anti-poverty and rural development programmes,(c) implementation of Sixth Pay Commission Report for government employees; and after the crisis, the large expenditure on 2009 General Election for Lok Sabha, Rs.1,300crore by government and around Rs.20,000 crore by various political parties, helped to boost purchasing power of the people, which, in consequence, stemmed the process of recession to a greater extent.

In spite of these, India suffered a lot such as (1) fall in industrial production in October 2008, (2) decelerating growth of infrastructure sector, (3) slowing sales of automobiles, (4) fall in growth rate of indirect tax collection, (5) fall in export particularly,of ready-made garments, leather goods, jewellery, IT service, automobile components,etc. (6) fall in fuel sale as economy slowed down, (7) a general fall in the foreign exchange inflows for investment, (8) decline in FDI flow, (9) depreciation of Rupee and rise in import cost, (10) threat to short sellers, (11) fall in business and employment in industries with a large global (particularly USA) market (eg. software,hotel, real estate, infrastructure, construction, banking, mutual fund),(12) abandonment of huge projects (world class new plants for which there was

suddenly no demand) unfinished, (13) redemption of Rs.23 thousand crore by mutual fund investors in September 2008 and (14) costlier Rupee options as premium jumped four times. There had been some more visible changes in banking and stock market. There was rise in fixed deposits in PSU Banks.

There had been dramatic rise of confidence of people including overseas Indians on public sector banks and insurance companies; due to the collapse of a large number of banks in the US and West. The most dramatic visible and significant impact was on Indian equity market. There was free fall in stock market. The FIIs collectively withdrew huge amount of their investments from the Indian equity market since the sub-prime crisis broke out. The momentum of BSE sensex reaching new peak of 20,873 on January8, 2008 could not be sustained and the indices recorded significant downtrend and it fell to 12,576 on July 16, 2008 and later, the BSE sensex declined by 60.9 per cent overJanuary 8, 2008 to a new low on March 9, 2009.

The 2008 financial meltdown, the 2011 Euro-Zone Sovereign Debt Crisis, Occupy Wall Street (OWS) movement, downgrade of US Treasury debt during 2011 and consequent turmoil in stock and foreign exchange markets are all interrelated. The 2008 Financial Crisis in USA with its impact on European economy and the bail-out packages seeking a way out of the financial meltdown is nothing but the conversion of corporate insolvencies into sovereign insolvencies. In spite of huge rescue packages after the sub-prime crisis, there was no resolution of the financial crisis of 2008. Therefore, 2011 Euro-Zone Sovereign Debt Crisis is a continuation of the 2008 American Financial Crisis.

2011 Euro-Zone Sovereign Debt Crisis

The governments and central banks of USA, UK and Euro-zone printed, spent, lent and guaranteed $17 trillion since 2008, over 50 per cent of the estimated GDP of the three. The governments in the US and Euro-zone borrowed heavily to bail out corporate sector, along with tax cuts, various packages, and fiscal stimulus and austerity measures. In spite of these, during 2011, the corporate sector was unable to repay the debt. Almost three years after the Lehman Brothers collapse and repeated rescue efforts by governments and central banks, the global economy was not out of danger. The recessionary trend might have stopped by 2010 but the global growth had not really recovered. There was every possibility of a Euro-zone financial meltdown in future, though European Central Bank (ECB) announced a series of measures aimed at reducing volatility in the financial markets and at improving liquidity. Iceland, Ireland, Italy, France,

Belgium, Portugal, Greece and Spain faced the problem. Hence, corporate insolvency led to sovereign insolvency in Europe. The Euro-zone with a single common currency but different country specific configurations of debts and deficits turned out to be the most vulnerable.

The impact of the Euro-zone crisis was felt on the rest of the world including India, whose exports to the Euro-zone decelerated. The sensex in India plunged by 2.6 percent (by 425.41 points) to 15,946.10, as Indian Rupee closed at 52.16 to US$ (i.e.$1=Rs.52.16) on 21st November 2011. This happened because investors fled from Indian financial market for safety amid "Euro quake" and political limbo over cutting US deficit. The weakening Rupee to the US$ would prompt foreign investors to trim their Indian stock holding.

The exchange value of Indian Rupee to the US$ was falling due to intensifying European crisis. Euro crisis hit cotton demand in India as demand for clothes and textiles was falling in the US and European Union. Since May 2011, the double impact of(i) Rupee depreciation, and (ii) slide in the sensex led to a 23 per cent fall in the value of investments of FIIs, which was, in November, forcing the FIIs to take their money of the Indian market.

Foreign Institutional Investors (FIIs)

Thus, short-term flows including portfolio flows of FIIs to developing countries in particular are inherently unstable and increases volatility of the emerging equity markets. They are speculative and respond adversely to any instability either in the real economy or in financial variables. Investment in emerging markets by FIIs can at times, be driven more by a perceived lack of opportuny in industrial countries than by sound fundamentals in developing countries including India. Emerging stock markets of India and other developing countries have a low, even negative correlation with the stock markets in industrial nations. So, when the latter goes down, FIIs invest more in the former as a means to reduce over all portfolio risk. On the other hand, if there is a boom in industrial countries, there may be reverse flow of funds of FIIs from India and other developing countries. Of course, there is pull of international private portfolio investment of FIIs due to the impact of wide-ranging macro-economic and structural reforms including liberalization or elimination of restrictions, improved flow of financial information, strengthening investors' protection, and the removal of barriers on FIIs'participation in equity markets in India and other emerging markets. However, to the extent FIIs view emerging markets as an asset class, stocks in one country or region can also be transmitted to other emerging markets producing volatile collapsing share price behaviour.

Bear hammering by FIIs has been alleged in case of almost all companies in India tapping GDR market. The cases of SBI and VSNL are most illuminating to show how the FIIs manipulate domestic market of a company before its GDR issues. State Bank of India gave mandate to Merrill Lynch and Lehman Brothers for its GDR issue worth of $ 400 million in 1996. Jardine Fleming (Hong kong) failed to get the mandate from SBI. So, Jardine Flemming intentionally tried to depress the price of SBI shares before its GDR issues. Thus share price of SBI was down to Rs.239 on October3, 1996 from Rs.333 on July 17, 1996. SEBI also confirmed this manipulation by Jardine Flemming.

The manipulation of FIIs, working in collusion, operates in the following way. First, they sell *en masse* and then when the price has been pulled down enough, pick up the same shares cheaply in the GDR market. Though FIIs had freedom of entry and exit, they alone have the access to both the domestic as well as the GDR market but the GDR/ADR market was not open to domestic investors. Hence FIIs gain a lot at the cost of domestic investors due to their manipulation which is possible owing to integration of Indian equity market with global market consequent upon liberalization.

It is to be pointed out that in 1996; individuals could not purchase foreign stock. Of course, later on, an individual could buy foreign stocks worth $ 25,000 under Liberalized Remittance Scheme (LRS). But mutual funds can invest in stocks listed outside India up to US$ 25,000 in a stock of a company that has an equity holding of at least 10 per cent in a listed Indian company. This restriction has been abolished in2006-07 Union Budget of India.

Besides price rigging, FIIs try to control indigenous companies through the GDR route where they are also active. GDRs acquire the voting rights once an ordinary share gets converted into equity within a specified limit. So, the GDR route which is considered as FDI plus portfolio investment is a round-about way adopted by FIIs to gain control of indigenous companies.

The movement of hot money of FIIs due to integration of emerging markets of India and other countries with global market have given the *hawala* traders and criminal elements, an easy means to launder international money from illegal activities which in consequence have also an impact on equity market. Sometimes, FIIs act as an agent for money laundering.

Much of the debate in India over FII money has centered on the fickle nature and unclear antecedents of these funds, particularly those coming through the sub-account or the participatory notes (PN) route. The fact that nearly 90 per cent of FII investment is through

sub-account route (of which about 25 per cent is through PNs) calls for better understanding of their source, to keep tainted money out.

2015 Financial and Economic Crisis in Greece

Major problem of Greece was that most growth was financed by foreign debt, not by equity. Flows of huge funds allowed Greek government to increase public expenditure on subsidies, salaries, pensions and creating larger public sector employment after 2008 crisis. Since joining euro-zone in 2001, Greece did not meet the conditions of fiscal deficit and public debt. There was huge expenditure on Olympic Games and heavy loss due to damages for earthquake. The crisis started in 2010, fiscal deficit exceeded 11 percent of GDP and public debt was 146 per cent of GDP. In 2010, Greece needed the first bailout. But the conditions of the first bail-out package such as implementation of austerity measures, structural reform and privatization did not happen in any significant way.

Therefore, there was a second bail-out in 2012. It was of $ 130 billion including (i)bank recapitalization of $ 48 billion and (iii) a hair cut of 53.5 per cent by private creditors holding Greek government bonds. Even, that failed. In December 2012, IMF provided another $ 8.2 billion of loans. The bail-out was not really to help Greece but to bail out German and French banks. Loans were used to pay off maturing debt.

In June 2015, Greece defaulted on an IMF loan and faced bankruptcy. In July 2015,banks were shut down for two weeks, cash withdrawals were rationed; stock markets were shut down for five weeks, capital control was imposed, manufacturing collapsed. The shut-down battered the economy already weakened by closure of banks and financial markets for weeks. Therefore, 28 euro-zone leaders including 19-nations currency union, on 13 July 2015, made Greece surrender much of its sovereignty to outside supervision in return for agreeing to talks on a $ 86 billion ($95 billion) bail-out over three years to keep the near bankrupt country in the single currency union.

Offshore bond issuance by Indian companies had taken a hit due to the global uncertainties which gathered momentum with the debt crisis of Greece, particularly for market volatility. Adani Port, Power Finance Corporation and Axis Bank Ltd. did road shows and investors' meet in Europe but did not go ahead with their issuance. State Bank of India also delayed plans for a $ 1.5 billion bond offering. It is to be mentioned that for the first half of 2015, the volume of total issuance dropped 31 per cent to $ 6.5 billion, compared with $ 9.5 billion in the same period of 2014.

2015 Economic Crisis in China

The meltdown across China's markets during 2nd week of the same month of July 2015 caused more financial damage than Greece, though both the crises in China and Greece have direct and indirect link with 2008 global financial crisis. It is to be mentioned that the US played the main role in the global economic growth up to 2007. Since the2008 crisis, the US and Europe have struggled with economic stagnation and persistent financial instabilities. The capitalist countries have relied upon China as the leading engine of global economic growth.

As the western developed countries struggled with economic growth, the exports of China to the Western countries have stagnated or declined. After 2008, China struggled to increase exports to the western developed countries. Confronted by the stagnation of exports, China became more dependent on investment as the main source of economic growth.

It is to be pointed out that corporate debt in China was estimated by Standard and Poor's at $14 trillion. China's overall debt including that of government, household and business stands at $28 trillion (nearly triple of its economy), as estimated by McKinsey in a Report. It was also more than the debt of Germany or USA.

Growth had been steadily decelerating, and producers have lost all pricing power. There had been deflation at the factory for years now. Exports decelerated. The real estate market, the driver of the domestic demand, had not been able to pick up the slack. In this situation, the rise of the stock market, in the first place was perhaps due to lack of government policy, as observed in the increase in margin loans which pushed the indices to their heights in the recent past (before July 2015). The perception about China, particularly in world commodity market has been affected.

Thus, on 8th July 2015 (Wednesday) CS 1300 of largest listed companies in Shanghai and Shenzhen fell 6.8 per cent from its previous close; while Shanghai Composite Index dropped 5.9 per cent. More than 500 China listed firms announced trading halts on the Shanghai and Shenzhen stock exchanges on 8th July 2015 taking total suspension to about 1300; 45 per cent of the market or roughly $ 2.4 trillion worth of stocks.

In the background, of an economic slowdown, 8.3 per cent decline in its export in July 2015 and stock market slump, the Peoples' Bank of China allowed the Reniminbi to fall by 1.8 per cent, that is, the government devalued the country's currency, Yuan, making it weaker by 1.8 per cent against US$. It was the highest devaluation since the introduction of modern

exchange rate system in China at the beginning of 1994. For the second straight day, China devalued its currency by another 1.98 per cent on August 12, 2015.

The Chinese government had taken a series of steps since late June to stave off a crash in its stock markets which plunged nearly 32 per cent over the previous three weeks since touching a peak on June 12, 2015. But, Chinese shares bounced around six per cent on 9th July due to the government's emergency measures to stem a stock market crash.

The consequences of the Chinese Crisis had effects around the world due to the size of China and its share in international trade. Equity and commodity markets around the world fell with the Chinese crash despite the Chinese efforts to reverse the trend. Thus the crash of the stock markets in China and the sovereign debt crisis in Greece pulled down most of the metal prices due to a broad based sell off.

The fall in the stock markets in China on 8th July 2015 affected global markets including India. The BSE sensex fell by 1.72 per cent with a decline of 483.97 points from its previous close to end at 27687.72. All 12 of BSE's sectoral indices such as Metal Index, Banking Index, etc. declined. There was fall of around 1,812 stocks, while 942stocks rose. In India, securities worth of Rs.3.70 lakh crore changed hands on 8th July2015.

Again stock markets around the world fell for a second day on 12th August 2015 due to devaluation of Yuan on 11th and 12th August 2015. Indian rupee settled at s.64.21/$; and the BSE sensex declined by 1.3 per cent (354 points) to end the day at 27512.26on 12th August 2015. FIIs sold shares worth of Rs.1855 crore ($ 285 milion).Within hours after devaluation of Yuan, the government of India announced a 2.5 per cent hike in import duty across the board on iron and steel. It was the second such duty hike in less than two months. On 12th August 2015, import duties on iron and non alloyed steel ingots, bars, rods, wires, stainless steel, semi-finished products of iron was raised to 10 per cent; and basic custom duty on flat-rolled steel products was raised to 12.5 percent from 10 per cent. There was a fear that the iron and steel sector could be worst hit with dumping from China, even though the duty was hiked. The Yuan devaluation leading to import of cheap Chinese products put increased pressure on cash-strapped, debt-laden metal firms as well as commodity companies. Thus Indian mining and metal industry suffered due to low global demand; and cheaper imports from China made domestic industry less competitive. However, the prices of most metals and energy fuels like crude oil, coal and natural gas were already low in the global market. As a consequence, it was favourable for the external balance of India since the current account remained under control to some extent.

Due to slowdown in China, there was fall in the stock market again on 24th August 2015. The sell-off was severe. Ninety per cent of stocks incurred losses. BSE sensex fellover 1600 points losing about six per cent of its value. The rupee depreciated by 1.23per cent from Rs.65.83/$ on 23rd August 2015 to Rs.66.65/$ on 24th August 2015. Falling share prices adversely affected the government's disinvestment programmes and fiscal situation. Companies with external commercial borrowings (ECB) were heading towards safe havens of US Treasuries and German Bonds. However, the rupee continued to remain one of the best performing emerging market currencies. The rupee was not in the basket of "troubled ten currencies", after the devaluation of Yuan, though it figured earlier in "fragile five" in 2013.

2019 Economic Slowdown in India

Economic slowdown in India is more visible in fall in consumers' demand in both urban and rural areas; more particularly in rural areas by about nine per cent including fall in consumption of food items by 10 per cent (a seven year low). Even in festive season (2019-20), consumers' demand not rising as usual, demand increased only by 13.8 per cent compared to 22 per cent rise last year. This is mainly due to agricultural distress and fall in agricultural (and farmers') income aggravated by demonetisation in 2016 and consequent acute liquidity squeeze (lack of cash). 2016 demonetisation also caused distress in micro, small and medium enterprises (MSMEs), for which there was biggest fall in consumers' demand even in rural areas of industrial states, such as Haryana (18 per cent), Maharashtra (18 per cent) and Karnataka (17.8 per cent) as per National Statistical Office (NSO)'s Consumer Expenditure Survey 2017-18.

This fall in overall consumers' demand is responsible for the fall in manufacturing production and industrial output (down to 2-year low), such as, in automobile sector including, truck, car and two-wheelers and fall in production of capital goods, FMCG, tanneries in Kanpur (100 units closed), textile industry in Surat (demand down by 40 per cent, capacity utilisation by 20-40 per cent of around 320 textile units) and many other key sectors all over the country. Other impacts are: new projects halved over last one year, investment is on hold, expansion of start-ups is receding, investment in factories is declining and slowdown is visible in many more core economic activities.

These trends in consequence, led to more and more unemployed, the number of unemployed youth has risen from nine million in 2011 to 25 million in 2018, contracting mining activities, falling generation of and demand for electricity, reduced earnings from

railway freight, falling non-oil and non-gold import, and declining fuel/diesel consumption, etc, indicate decreasing industrial production.

In the prevailing situation, firms are preferring more workers without any work contract leading to fall in permanent and regular workers in private firms during 2011-2018; and public sector firms increasingly denying social security to workers; wages of labourers are also falling. A higher enrolment of people in 18-30 age-bracket in subsistence level job guarantee programme (e.g. MGNREGA) prima facie shows severe lack of employment opportunities. Thus, joblessness that industry has been experiencing since 2016 demonetisation and rollout of Goods and Service Tax (GST) is likely to remain. So, corporate results are disappointing and tax revenue is less than the budget estimate.

In view of this, Foreign Institutional Investors (FIIs) are dumping the shares in stock markets; and Sensex is moving southwards. RBI, World Bank, IMF, investment banks, rating agencies, independent research bodies, almost all of them place GDP growth for India at reduced levels as time advances, revising the growth estimate to still lower level, as in the Table.

Table 1: Estimate of GDP Growth (%) in India

Union Budget	–	7.0
IMF	–	6.1
RBI	–	6.1
World Bank	–	6.0
Moody's	–	5.6
GoI	–	5.0
Independent Research Bodies	–	4.9
Fitch	–	4.7
DBS Bank	–	4.3

Note : Estimate as on or before Nov. 2019

Many (including Moody's) report India's outlook is negative as (1) growth will be lower and (2) debt burden will rise, citing (a) ongoing economic slowdown, (b) financial stress among rural households, (c) weak job creation, (d) liquidity crunch, and other economic problems.

Already GDP growth slipped to 4.5 per cent in the July-September, 2019 quarter, lowest in more than six years.

Thus global factors or external sector does not fully explain the 2019 economic slowdown, as claimed by Government of India, because compared to India's five per cent growth, China's growth is six per cent, though its on-going trade war is with USA, and Vietnam has 7.1 per cent growth. The slowdown is mainly due to internal factors, which the Government of India is reluctant to accept, which again worsens the economy. The internal facts and events are:

First is Demonetisation on 8th November, 2016 with multiple flip-flops on the execution of the demonetisation scheme with more than 50 notifications for various changes on note ban with a number of confusing and often contradictory rules, notices and announcements coming from RBI and Finance Ministry. The failed demonetisation scheme caused huge disruption, inconveniences to MSMEs, small traders, businessmen, farmers, workers, common men and others, which has been continuing till today due to cash crunch, acute liquidity squeeze and thus lack of cash.

Further, the disruption in production and trade channel continued further due to hasty implementation of GST. Moreover, due to rising non-performing assets (NPAs), and bank and NBFC frauds, commercial banks are scared of lending for which MSMEs are facing more and more difficulties to get funds for their working capital, and farmers to get credit for purchasing agricultural inputs and for paying wages to workers. Again, consumers, after demonetisation, are not keeping all their savings with banks, rather keeping cash with them, not also spending as earlier, because they are uncertain about their jobs.

So, the present economic slowdown is more due to fall in demand due to low purchasing power of the consumers mainly in rural areas than owing to supply side constraints. Consumption expenditure grew at the slowest rate since 2016 demonetisation; but the government is taking (and media advocating it) decisions to help big industries. Housing and export packages, proposed reduction of GST rate on cement, auto, biscuits, etc. may help industries but not boost consumers' purchasing power. The step of corporate tax rate cut, reduced the tax burden of companies by 18 per cent, thus increasing their profit by 22 per cent; but on the other hand, the measure is unable to check slump as factory output is declining. There will be fall of government revenue to the tune of 1.45 lakh crore creating adverse effect on government finance leading to increasing fiscal deficit which may rise to four per cent of GDP. Forty two per cent of central tax shortfall due to corporate tax rate cut will be borne by the states through lower devolution, putting overwhelming burden on states. Thus, the intensifying economic slowdown is adversely impacting government revenue. In this circumstance, Finance Commission must refrain from raising the centre's

finance at the expenses of the states (as the Government of India is seeking reducing of divisible pool of taxes and asking the states to fund defence expenditure).

Therefore, the government must take measures to boost demand by increasing consumers' purchasing power; such as, by bringing more structural reform, more public sector investment including infrastructure, reducing personal Income Tax rate or even exempting totally Personal Income Tax for 2019-20; and filling up all vacancies at least in the offices of Government of India (around seven lakh), State governments, public sector undertakings and state sector units. However, as the present economic slowdown in India is primarily due to fall in rural demand, and the income-oriented programmes such as, MGNREGS, MSP for crops, PM-Kisan, and similar others (like Kalia in Odisha) have failed to sustain rural consumers' demand; the government should shift the focus of agricultural promotion programmes from production to income generation, as well as undertake the policies for growth of rural non-farm sector (RNFS). Farmers should be allowed to earn remunerative price for their produce by non-intervention of government (for example, without any measure like (i) curbs on export and (ii) emergency import). Steps may also be taken simultaneously to help micro, small and medium enterprises (MSMEs). It is to be pointed out that Direct Benefit Transfer Schemes are better measures than "Loan Mela" (of banks, as directed by GoI in spite of warning from PSU banks, as it will further increase NPAs) to increase consumers' purchasing power and thus boost demand and consumption for checking economic slowdown in India.

Summary

As a whole, India was less disturbed in stock and currency markets among the emerging economies during the 2015 crisis through 2008 and 2011. But it was difficult on the part of India to boost export due to unsatisfactory growth in EU, China and Japan, huge revenue loss in oil-exporting countries, and long-fought continuing war in Arab countries. All the recent crises of 2011 euro-zone sovereign debt crisis, and 2015 Greece and China crises had roots in 2008 crisis. From these 2008, 2011 and 2015 crises, we observe that, in the economy, where market forces operate, booms and recession are the rules. However, the role of the government in economic sphere is to be recognised since these crises are mostly the result of excessive deregulation, decontrol and liberalization; and major steps are and have been taken by the government to stem these processes. We also observe each time, either after the crisis in 2008, or in 2011 or in 2015, FII investments declined, foreign exchange reserves decreased, sensex moved southwards and rupee depreciated. But no such dramatic changes occurred in overall exports and imports of India.

The external sector does not fully explain the 2019 economic slowdown, we can point at internal factors, more particularly, for fall in consumers' demand.

Skill Development

Various schemes for skill development of youth such as DDU-GKY, PMKVY and many others have been launched. National Skill Development Corporation is formed under the Ministry of Skill Development. Various centres of Skill Development and vocational training have come up to implement various schemes, most of them run by NGOs.

Instead of these new organisations, it would have been better to revitalise the existing institutions such as ITIs, engineering schools and +2 vocational schools. For unorganised and informal sector, on-the-job training and apprenticeship are sufficient for development of skill of youths. For this, employees (apprentices, workers on-the-job training), and employers of informal sector could be taken into account, registered, and recognised by the government agencies, under Shops and Commercial Establishments Act, to help the workers through stipend and other benefits, rather than inexperienced institutions and NGOs to train the workers, and unemployed youth.

Kishor C. Samal

Presidential Address

Dynamics of Public Expenditure Management of Non-Special Category States in India: Lessons for Odisha

Bhagabata Patro[1]

1. Preamble

I feel greatly honored to address you today as the President of the Orissa Economics Association in its 51st Annual Conference at Kendrapara (Autonomous) College, Kendrapara. I am highly grateful to all the members of the Orissa Economics Association for unanimously electing me as the President in the 50th Golden Jubilee conference held at the NKC Centre for Development Studies, Bhubaneswar. Needless to mention that, this Association is one of the leading professional associations of the state and has been adorned by eminent economists of the state at various times in the past.

I also sincerely thank Kendrapara College authorities for hosting the 51st conference, for having given the proposal from the beginning and shouldering the enormous responsibility ungrudgingly. Hosting a state level conference is extremely difficult now-a-days, primarily due to difficulty in resource mobilization. Unfortunately, the institutional support to host a professional conference is very meager and hence, one has to depend on many organisations to support in hosting the conference. I also thank all those organisations who supported our endeavor, both financially and physically.

This year the topics identified in the conference are: 1. Skill Formation and Entrepreneurship in Odisha, (2) India's External Sector. I have identified the topic for my deliberation as, "DYNAMICS OF PUBLIC EXPENDITURE MANAGEMENT OF NON-SPECIAL CATEGORY STATES IN INDIA: LESSONS FOR ODISHA." In this election year, the performances of the different layers of government require exact public scrutiny and right voting, so as to bring the next government to take up the task of nation building. Abraham Lincoln defined democracy as an institution by the people, for the people and of the people. But decision making in a democratic system is extremely complex due to existence of lot of pressure groups. My discussion in the address is divided into four sections. Section-I elaborates the need for government and public sector intervention in the economic management. Section-

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II focuses on the principles of public expenditure management. Section-III contains the analysis of public expenditure management of non-special category seventeen states in India. Section-IV highlights the situation in Odisha and the future course of action for the state. I hope my deliberation will help the policy makers to formulate appropriate policies in the coming years.

2. Government: A necessary evil

2.1 Minimum Government:

Two basic lines of argument can be advanced to justify the role and existence of government. These are the requirements of efficiency and equity in the economic management of various levels of governments. Efficiency relates to arguments concerning the way of performing the aggregate level of economic activity whereas equity refers to the distribution of economic benefits. The most basic motivation for the existence of a government follows from the fact that entirely unregulated economic activity could not operate in a very sophisticated way. This means an economy requires robust and undisputed laws relating to property rights and carrying out contracts. In the absence of property rights, satisfactory exchange of commodities cannot not take place given the lack of trust that would exist between contracting parties. Hobbes, the famous philosopher, in this regard viewed the government as a social contract that enabled people to escape from the anarchic "state of nature". The institution of property rights is a first step away from this anarchy and reduces the possibility of theft in the society. Theft discourages enterprises since the gains achieved by one may go to the others. Contract laws determine the rules of exchange and facilitate marketing of the products. Examples of contract laws include the use of weights and measures and the obligation to offer product warranties. These laws encourage trade by assuring the consumer that the product is of standard quality and there is no uncertainty in transactions. In addition to passing the legislation on property law and contract law, the state has to provide the law enforcement mechanism to all citizens who are in need, free of cost. Enforcement officers must be employed and courts must be provided in which grievance redressals can be sought.

Once a country develops, its economic activity needs to be defended from being invaded by outsiders. This implies the provision of defence for the nation - provisioning the minimal requirements of the enforcement of contract and criminal laws and the defence, resources for the expenditure incurred in employing people and other logistic support to execute these activities. This need for income requires collection of revenue by the government by using its power over the citizens. Whether these services are to be provided by the public, private or joint sector organizations is a matter of debate and depends on the functioning of

these organisations and the desire of the Government. Even if it is provided by the government, the nature of the government i.e. centralized or decentralized, depends on the environment prevailing in the economy. This is the minimal role of a government in an economy. This is the first role of the government which is to assist with the attainment of economic efficiency by providing an environment in which trade can flourish.

The second role of the government is to determine how the revenue required for discharging the first role should be collected. This collection should be done with as little cost as possible imposed upon the economy. The distortion arising out of taxing the people should be as minimum as possible.

2.2 Managing Efficiency and Equity

Over the years, the expectations of the people from the government have increased. It is felt that adding a few more activities of the government may increase welfare level of the people. This additional intervention may be warranted due to the failure of the market to provide some services which are consumed collectively. If some economic activity generates externalities (effects that one economic agent imposes on another without their consent), the market fails to value the cost correctly and there is divergence between private and social valuations and the competitive outcome is not efficient. In such situations there is a necessity for the state to intervene, to limit the inefficiency. This happens in case of public goods and where there is imperfect competition. Reacting to such market failures is intervention motivated on efficiency grounds. However, the efficiency of the government intervention has raised many questions in the recent years and it is demonstrated that the ability of public sector to improve welfare is not always correct. It must be recognized that the actions of the state, and the feasible policies that it can choose, are often restricted by the same features of the economy that make the market outcome inefficient. One role for public economics is therefore to determine the desirable extent of the public sector or the boundaries of state intervention. Furthermore, a government managed by non-benevolent officials and subject to political constraints may fail to correct market failures and may instead introduce new costs of its own creation which will aggravate the situation. It is important to recognize that this potential for government failure is as important as market failure and that both are often rooted in the same problems of lack of information. Normally, the government machinery may adopt coercive techniques which are not desirable as a tool of intervention. The excessive taxation and regulation of enterprises may lead to misuse of powers of the government. The real objective of policies intending to achieve general interest may be converted to create vested interest groups under the banner of government machinery.

Working on economic policy, governments are faced with another objective which is in conflict with the efficiency requirement. All governments are concerned with organizing economic activity to optimize the use of scarce economic resources. Simultaneously governments are also concerned to see that the benefits of economic activity are distributed fairly. This is the equity aspect of policy design. The dilemma facing the government is that the requirements of equity and efficiency frequently conflict. It is often the case that the efficient policy is highly inequitable, whilst the equitable policy can introduce significant inefficiency into the system. The government has to choose the correct mix of equity and efficiency which is extremely difficult. It depends on the objective of the government in power. Ignoring equity considerations makes the situation simple, but it is not desirable in a democracy. Elections are held at regular intervals and the government in power is accountable to the people.

3. Basics of Public Expenditure Management

3.1 Evolution and Importance of Public Expenditure

Public expenditure is one of the important instruments of the fiscal system of any nation. The size and pattern of the public spending has great influence on the growth process and on the correction of economic disparities. Much importance was not given to the study of public expenditure till 1920s because of the belief that all public expenditure was not very useful. Adam Smith (1776), the Father of economics, was of the opinion that the government should restrict its activities to "justice, police and arms". J. B. Say, another classical economist, stated that public spending was directed mostly towards useless gratification of the wasteful whims of rulers and interfered in the process of the private capital formation necessary to the development of trade and industry. David Ricardo, too, viewed public spending as wasteful because of its possible effects on private capital formation. On the question of government's role, Malthus was of the view that public expenditure could be excessive, leading to "injudicious taxation" or too large a national debt. J. S. Mill, another economist, stated, "the business of life is better performed when those who have an immediate interest in it are left to take their own course, uncontrolled either by the mandate of law or the meddling of any public functioning". In the post-Keynesian era, the approach was different. In 1936, Lutz favoured public expenditure as it directly adds to the community wealth. He said, "Well run government commercial enterprises, reforestation and reclamation projects, and other forms of state business are the most obvious illustrations. Even the expenditure on ordinary services may result in the accumulation of certain assets, such as public buildings, which are a useful addition to the aggregate of community wealth". Keynes regarded public expenditure as an exogenous factor which can be utilized as a policy instrument to stimulate economic growth. R. A. Musgrave, a twentieth century economist, advocated

public expenditure as the government is forced to do many activities such as: (i) redistributive activities, (ii) activities to secure right-allocation of resources, (iii) stabilizing activities. Through public expenditure, the government, directly or indirectly, influences production, consumption and distribution of the nation. It thus helps towards the economic and social development of the society. It is worth noting here that public expenditure has played a significant role both in developed as well as in underdeveloped countries. In the developed economies, the role of public expenditure consists of preventing cyclical fluctuations, counteracting a secular tendency towards stagnation and improving income distribution whereas in developing economies, it stimulates economic growth.

3.2 Meaning and Objectives of Public Expenditure Management

The job of a government is to present a 'budget' before the elected body on an annual basis and to collect and spend the money for public welfare, after getting the approval. The budget is expected to be a financial mirror of society's economic and social choices. Given the power of the government, the government finds no difficulty in raising the money from different tax and non-tax sources. But the more important function of the government is to identify the collective desire of the people and spend the money accordingly. It is very difficult to say whether one way of spending the money is better than another way of doing the same thing, due to presence of a lot of heterogeneous people in an economy.

Public expenditure management involves two things: The first one is the expenditure policy question of "what" is to be produced, and the second one is expenditure management question of "how" it is to be produced and who will share the cost. It may not be possible to set hard boundaries between the two. In such a situation it may lead to unrealistic policies, ad hoc implementation and finally both bad policy and bad implementation.

The PEM may intend to achieve three important policy goals: 1. Fiscal discipline; 2. Resource allocation consistent with policy priorities ("strategic" allocation); and 2. Co-ordination in management. Co-ordination in management calls for both efficiency (minimizing cost per unit of output) and effectiveness (achieving the outcome for which the output is intended).

The objectives stated above are not to be looked in isolation. They have close linkages among themselves. Identifying right functions of each department of the government and the nature of monitoring process may be required to achieve these objectives. Fiscal discipline requires control at the aggregate level, Strategic resource allocation requires good programming, which entails appropriate cabinet-level and inter-ministerial arrangements; operational management is largely an intra-ministerial affair. It is viewed that fiscal discipline Co-ordination in management can be improved by adopting new techniques. The political masters in the government have the capability to identify the

people's preferences as they interact with them frequently on different issues. To quote Petrei (1998), "The ministries, the headquarters of the principal agencies, and many other decision-making positions are occupied by politicians who, theoretically, have developed a certain intuition about what people want."

The focus on public expenditure management should not lead us to forget the essential link between revenue and expenditure. The PEM objectives can easily be expanded into a set of fiscal objectives. Fiscal discipline results from good forecasts of revenue as well as expenditure. Strategic resource allocation has a counterpart in the tax incidence across different sectors, tax rates and expenditure administration.

It is also required to understand that the three objectives mentioned may be mutually conflicting in the short run but are clearly complementary in the long run. Further, good aggregate budgetary outcomes must emerge from good outcomes at each level of government taken separately. Therefore, an overall expenditure limit is necessary for good PEM. Here the intention of the higher authorities to root out waste, fraud, and corruption may not be accomplished because of the vested interest groups. It may lead to underfunding of the vital components as it does not benefit individual bureaucrats who are in charge of co-ordination. All this means management and operational efficiency cannot normally be improved except in an overall context of fiscal discipline and sound allocation of resources, to which good management itself makes a key contribution.

3.3 Nature of Institutions:

In several developing countries the tidbits of PEM system appear good and coherent in every respect but the final impact of public expenditure remains poor, corruption is endemic, and public services are of worse quality and even less accessible than what they were at the beginning. This is probably due to deficiency in the right institutions to support the percolation process.

Normally, the term "institution" is used as a synonym for "organization" even though they are different. Budgetary outcomes are profoundly influenced by institutions because institutions comprise both formal and informal rules. Good institutions improve the outcomes. At times these "improvements" may not be realised because they are in conflict with the less visible informal rules and incentives promoted by the vested interest groups. The number of institutions is always larger than what is visible on the formal surface, especially in developing countries. This leads to four difficulties. They are as follows;

- The failure to take into account existence of key informal rules is likely to lead to a failure of the budgeting reform itself.

- Durable institutional change, in general, and public budgeting, in particular, take a long time to be implemented successfully (a result of what Douglass North called "path dependence".

- One way to improve the overall institutional framework is to make the informal rules more visible and less important, gradually.

- Budget organizations and new units can be merged, restructured, recombined and created, but no change in behavior (and hence in budgetary outcomes) will result unless the basic rules, procedures, and incentives change as well. For example, simply merging the ornamental Ministry of Finance with a Ministry of Planning or renaming a Ministry as is done in Odisha, will not do much by itself to improve coordination of current and investment budgets.

3.4 Quality of Governance:

Public expenditure outcomes depend largely on the nature of governance of the economy. Good governance rests on "four pillars" in a democracy. These are accountability, transparency, predictability, and participation. Let us discuss each of them in more detail.

3.5 Accountability

Accountability means the ability of anyone to call public servants to explain their actions. Accountability is needed both for the use of public money and for getting the results of spending it on different activities. Effective accountability requires (i) answerability and (ii) consequences. First, answerability is the requirement for central budget officials and sector ministry personnel to respond periodically to questions concerning where the money went and what was achieved with it. Any query related to the scheme has to be answered. Second, there is a need for predictable and meaningful consequences or results. This should be self- evident. However, the need for consequences is so often disregarded in practice that one must make the elementary point that without consequences, "accountability" is only an empty and time- consuming formality.

Accountability in public expenditure management has two origins. These are (i) internal accountability and (ii) external accountability. Stronger internal accountability of budget system personnel to their superiors is necessary to achieve macro-economic objectives. External accountability is needed from the service users. With the dramatic improvements in information and communication technology, feedback from service users and the citizenry can now be obtained at low cost and for a greater variety of activities, and is an essential requirement to improve efficiency and effectiveness of service delivery. Strengthening external accountability is necessary in the context of initiatives for greater decentralization

or managerial autonomy to lower levels, when new checks and balances are required to assure that access to and quality of public services is not compromised as a result.

All accountability must be reflected in performance. But "performance", too, is a relative and culture-specific concept. Government employees could be considered "well-performing" if they satisfy certain criteria. These are - i. sticking to the rules, ii. accounting precisely for every rupee of public money, iii. obeying without question a superior's instructions, and finally, iv. cooperating harmoniously for group influence.

3.6 Transparency

Transparency entails the low-cost access to relevant information. Transparency of fiscal and financial information is a must for an informed executive, legislature, and the public at large. It is essential that information be provided in a relevant and an understandable form. Putting huge quantity of raw budgetary material in the public domain does nothing to improve fiscal transparency. Rather such statistics will create more confusion than clear understanding. The IMF provided a Code of Good Practices on Fiscal Transparency in 1998 which underlines the importance of clear fiscal roles and responsibilities, public availability of information, open processes of budget preparation, execution, reporting and independent reviews and assurance of the integrity of fiscal forecasts, information and accounts. The countries may not need to apply these principles identically but should keep them in mind while framing their own transparency rules.

3.7 Predictability

Predictability results primarily from the law and regulations that are clear, known in advance, and uniformly and effectively enforced. Lack of predictability of financial and physical resources undermines the strategic prioritization and makes it hard for public officials to plan for the provision of services. Predictability of government expenditure in the aggregate and in the various sectors, is also needed as a signpost to guide the private sector in making its own production, marketing, and investment decisions. This is also helpful in creating a competitive environment between the public and private sector which will enhance efficiency of the system. The local government in our state greatly suffers from this problem.

3. 8 Participation

Participation of all stakeholders is needed to supply reliable information and to provide a reality check for government action. Appropriate participation by public officials and employees and by other stakeholders is required for the sound formulation of expenditure programs; participation by external entities, for the monitoring of operational efficiency; and feedback by users of public services, for the monitoring of access to and quality of the

services. Participation improves the knowledge of the bureaucracy on the grassroots situation and facilitate designing of appropriate policies.

Good governance requires facilitating the presence of all the four pillars concurrently. Absence of any one may lead to lop-sided management and may not be helpful in reaching the objective outcomes. Furthermore, all governance concepts are universal in application but relative in nature when applied to specific cases. Accountability is a must everywhere, but does not become operational until one defines accountability "of whom", "for what", and "to whom". Transparency can be problematic when it infringes on necessary confidentiality or privacy. Predictability ensures the situation in the long run. It is evidently impossible to provide for participation by everybody in everything. It is also unwise to use participation as an excuse to avoid taking tough but necessary actions against people who act as obstacles in achieving the objectives.

3.9 Corruption and public expenditure management:

Although corruption in government is often identified with large procurements and major public works projects, public expenditure is hardly the only source of potential corruption. Tax administration, debt management, ill-designed privatization, the banking system, etc., can be equally troublesome and corruption may exist in these activities. But certainly, one major route to improving PEM is to reduce the opportunities for corruption in the process and punish corruption when it occurs. The reverse is also true. A major way of reducing corruption is to strengthen PEM. Quite aside from any moral or legal consideration, corruption weakens fiscal discipline, distorts the allocation of resources, harms operational efficiency and effectiveness, and, obviously, is antithetical to due process.

The simplest definition of corruption is: corruption is the misuse of public or private office for personal gain. "Misuse" covers both "sins of commission" (i.e., giving illegal favors), and "sins of omission" (i.e., deliberately overlooking the things). In the context of developing countries, this points out that much corruption is externally generated. Clearly, attention needs to be paid to the "imported corruption" as well as to the home grown variety.

The World Bank enacted an official policy against corruption in September 1997. Other multilateral development banks (MDBs) followed it rapidly. The IMF promulgated the Code for Fiscal Transparency and finally, the Organization for Economic Cooperation and Development succeeded in negotiating in December 1997 a landmark convention against bribe-giving, which entered into force at the end of 1998. Thus, although many economists, country officials, and development professionals had always been aware of the inefficiencies and inequities of corruption, it is only recently that the taboo on even mentioning the "C

word" has been removed and a clear consensus has emerged. In the long run, corruption (i) is bad for economic efficiency and growth, and (ii) hurts the poor most. Corruption is increasingly being seen as neither beneficial, nor inevitable, nor respectable. This new consensus has been translated into actual policies of international organizations and governments around the World.

4. Public Expenditure Management of Non-Special Category States in India

In the Indian Union, the centre and state governments are the major players of economic development. Very little space is available to the local governments and it has happened only in the early nineties. Since 1951-52, the State finances have shown a rapid upward trend both in revenue and expenditure.

As per the RBI report on State Finances, 2015-16, the quality of expenditure at the sub-national level has received less attention than it deserves. The report further outlines the relationship between different categories of public expenditure and economic growth/ development. There is empirical evidence that capital spending, particularly on health, housing and welfare, has positive effect on growth (Diamond 1989). Endogenous growth theory turned attention to the macroeconomic effects of the quality of government spending, with investment in human capital, innovation, and knowledge being significant contributors to economic growth (Romer, 1986; Lucas, 1988; Rebelo, 1991). It is argued that in a knowledge-based economy, sustained investment in human capital would result in positive externalities which would perpetuate the growth process for a protracted period of time leading to overall economic development (Barro and Salai-Martin, 1992). Specific categories of government expenditure such as on public infrastructure, human capital, science and technology can be growth and welfare enhancing, by improving capital and labour productivity (Tanzi and Zee, 1997). Moreover, public investment in social and physical infrastructure is observed to play a complementary role in crowding in private investment, particularly in the case of developing economies (Erden and Holcombe, 2005). It has also been pointed out that public expenditure needs to encompass both growth and equity considerations (Pattnaik et al., 2005; Daniel et al.,2006).

Based on the review of literature, it may be inferred that a shift in the composition of public expenditure towards human and physical capital would not only be growth enhancing but also welfare augmenting for the society as a whole, notwithstanding some evidence to the contrary. The channels through which this works are: (i) increase in capital and labour productivity; (ii) crowding in of private investment; (iii) higher fiscal multipliers; and (iv) direct/ indirect impact on poverty and unemployment reduction. Given that the empirical evidence on quality of expenditure at the sub-national level is quite limited and somewhat

ambivalent, especially in the Indian context, an attempt has been made to examine the gamut of issues around it at the state level.

The RBI carried out an analysis in the said report to find out the impact of different types of government spending on per capita GSDP growth. It hypothesised that higher share of capital outlay and developmental expenditure in total government spending have a positive impact on per capita GSDP growth of states. To test this hypothesis empirically, a dynamic panel model is estimated in the tradition of Cabezonet.al, (2015) comprising NSC states over the period 2001-02 to 2013-14 (221 observations). Percapita GSDP growth is regressed on the gross fiscal deficit (GFD) as a proportion to GSDP (GFD/GSDP), the ratio of public debt to GSDP (as in Baldaccietal., 2004) and on the share off our important expenditure categories - capital outlay, revenue expenditure, development and non-development expenditure in total expenditure (following Devarajan et al., 1996).

4.1 The Present Analysis:

The analysis carried out in my paper is very simple and easy to comprehend. To assess the impact of public expenditure management of NSC states, I have taken the activities of the NSC states for period from 2000-01 to 2014-15. The nominal GSDP of these 17 states (excluding Telegana for which data for the entire period is not available) is taken as the dependent variable. Four different independent variables were taken in four different models and a simple linear regression is carried out using the Gretl econometrics software package. The usual assumptions of OLS regression is taken as given in the model. The independents chosen for the study are; 1. Aggregate Expenditure 2. Capital expenditure 3. Developmental expenditure and 4. Social sector expenditure. The definition of each of these variables is given in detail in the Report of the RBI on state finances. The data is collected from the NITI AYOG and RBI websites. The expenditure and GSDP variables are expressed in current prices. Data used in the calculation is given in the annexures of the paper. The value of the regression coefficients, standard error of the slope regression coefficients, the explanatory power as reflected by R^2 and the significance of the B2 coefficients are presented in the Tables-1 to Table-4 given below. Each of these tables is analysed for generating interesting findings.

4.2 Aggregate Expenditure and GSDP

In India, the state governments present the budget to the state legislature on a day convenient to the government before the beginning of a financial year and the date varies from state to state. Odisha government presents the budget in the month of February. The total size of the budget also varies from state to state. The latest budget of Odisha is around 1 lakh 20 thousand crores (2018-19) whereas its GSDP in current prices was 3 lakh 77 thousand

crores (2016-17). This means one/third of the GSDP is spent by the state government and the rest is left to the private sector. The time series data from 2000-01 to 2014-15 of aggregate expenditure and GSDP is given in Annexure -2 and Annexure -1.

Table-1: Regression relationship between Aggregate Expenditure and GSDP of NSC States in India

State	B_1 (intercept)	B_2 (slope)	SE of B_2	R2	Significance
AP	25619.5	3.18	0.39	0.83	Significant at 1%
Bihar	22401.5	3.13	0.23	0.93	Significant at 1%
Chhattisgarh	13865.2	4.40	0.21	0.97	Significant at 1%
Goa	-1754.6	5.39	0.35	0.95	Significant at 1%
Gujarat	-61542.3	8.06	0.26	0.99	Significant at 1%
Haryana	-14100.2	7.65	0.25	0.99	Significant at 1%
Jharkhand	52557.6	3.23	0.79	0.58	Significant at 1%
Karnataka	-110495	7.97	0.25	0.99	Significant at 1%
Kerala	-12543.8	6.74	0.14	0.99	Significant at 1%
M. Pradesh	-23717.7	4.57	0.28	0.95	Significant at 1%
Maharashtra	-133435	9.05	0.35	0.98	Significant at 1%
Odisha	8516.4	4.60	0.30	0.94	Significant at 1%
Punjab	-51477	7.76	0.34	0.98	Significant at 1%
Rajasthan	-7876.9	5.62	0.34	0.95	Significant at 1%
Tamil Nadu	-55310.8	7.31	0.16	0.99	Significant at 1%
Uttar Pradesh	18699.6	4.26	0.19	0.97	Significant at 1%
West Bengal	-25231.2	6.51	0.16	0.99	Significant at 1%

Source: Compiled from the data given in Annexure-I and Annexure-2

The important findings of the model are given below.

1. The explanatory power of the aggregate expenditure is more than 90 percent for all the states except Jharkhand and AP. For Jharkhand, it is only 58 percent.

2. The aggregate expenditure and nominal GSDP have positive relationship for all the 17 states.

3. The regression coefficient takes a high value of 9.05 for Maharashtra and lowest value of

    3.13 for Bihar. This means 1-rupee public investment results in Rs.9 rise in GSDP in Maharashtra as compared to Rs. 3 in Bihar.

4. Surprisingly, the coefficient is near to the lowest figure for states like AP and Jharkhand.

5. For Odisha, the value is 4.60 which is on the lower side. It is close to MP, UP and Chhattisgarh.

6. The value for Rajasthan is 5.62 and it is close to Goa, a developed state which is at 5.39.

7. The states of Gujarat, Haryana, Karnataka, Punjab and Tamil Nadu have high value of the regression coefficient of above 7.0

8. West Bengal and Kerala, both states with similar political set up, have moderately high value of more than 6.0.

9. All the regression coefficients qualify the significance test at 1 % level.

4.3 Capital Expenditure and GSDP

Aggregate expenditure is divided into two parts. These are revenue expenditure and capital expenditure. Revenue expenditure is day to day expenditure to facilitate the running of the government. These items are related to administrative matters and are recurring in nature. The capital expenditure on the other hand is the spending on creation of capital assets like roads and bridges, buildings, vehicles, store houses, air ports, railway stations, irrigation projects, electrification, etc. These are social and infrastructure items which facilitate economic activities. Normally, capital expenditure is met from surplus in the revenue account and borrowing from external agencies. It is assumed that capital formation will strengthen the income generation capacity of the economy and facilitate repayment of borrowed capital out of this additional generation of income. Table-2 presents the regression results of capital expenditure and GSDP of the NSC states for the same period.

Table-2: Regression relationship between Capital Expenditure and GSDP of NSCS in India

State	B_1 (intercept)	B_2 (slope)	SE of B_2	R^2	Significance
AP	83905.3	10.80	3.97	0.36	Significant (5%)
Bihar	30587.4	12.92	1.19	0.90	Significant(1%)
Chhattisgarh	2192.54	24.66	1.95	0.92	Significant (1%)
Goa	-369.99	24.75	2.39	0.89	Significant (1%)
Gujarat	17575.1	26.82	2.15	0.92	Significant (1%)
Haryana	-28358.3	44.79	5.99	0.81	Significant (1%)
Jharkhand	52947.5	13.57	4.55	0.42	Significant (5%)
Karnataka	-130567	38.27	3.47	0.90	Significant(1%)
Kerala	-17582.7	52.04	4.12	0.92	Significant(1%)
M. Pradesh	-13731	17.23	2.05	0.84	Significant(1%)
Maharashtra	-155837	50.43	7.88	0.75	Significant(1%)
Odisha	15941.3	22.22	2.53	0.85	Significant(1%)
Punjab	27790.3	35.12	13.10	0.35	Significant (5%)
Rajasthan	-3800.57	27.27	2.78	0.88	Significant (1%)
Tamil Nadu	-54860.8	37.24	3.95	0.87	Significant (1%)
Uttar Pradesh	85796.3	15.82	1.95	0.83	Significant(1%)
West Bengal	10016.9	36.29	5.92	0.74	Significant(1%)

Source: Compiled from data given in Annexure-3 and Annexure-1.

The regression model generates the following important findings.

1. The explanatory power of the independent variable fails to explain the variation in the dependent variable and there is wide divergence among states. Only four states, i.e. Kerala, Gujarat, Karnataka and Bihar exhibit 90 or more than 90 percent explanation.

2. Punjab, AP and Jharkhand have very low explanation of around 40 percent. This means capital expenditure is not an important independent variable in these states.

3. For all other 10 states, the explanatory power is around 80 percent which is moderate in character.

4. The regression coefficient has the highest value of 52.04 for Kerala followed by Maharashtra at 50.43.

5. The lowest value of the regression coefficient is for AP at 10.80. Surprisingly, it is even lower than the figures of so called backward states like Bihar (12.92), Jharkhand (13.57), UP (15.82) and MP (17.23).

6. Haryana, Karnataka, Punjab, West Bengal and Tamil Nadu are other high performing states.

7. Gujarat, Odisha, Rajasthan, Chhattisgarh are moderate low performing states.

8. Regression coefficients are significant for all states at 1% and 5% level.

4.4 Development Expenditure and GSDP

The important heads of developmental expenditure within the revenue account are (i) social and community services, (ii) economic services and (iii) grants- in-aid to states and union territories. The largest component in this group is economic services. Economic services include general economic services, agriculture and allied services, industry and minerals, water and power development, transport and communication, railways, post and telegraphs, etc. The components of development expenditure on capital account are: (i) loans and advances to states and union territories, (ii) loans for social and community development services and (iii) loans for economic services. Non-development expenditure on revenue account is divided into two classes, (i) the general services and (ii) the grants-in-aid to states and union territories and also to other countries. This is one more different way of looking at expenditure.

Table-3: Regression relationship between Development Expenditure and GSDP of NSCS in India

State	B_1 (intercept)	B_2 (slope)	SE of B_2	R2	Significance
AP	43090.6	4.35	0.34	0.93	Significant (5%)
Bihar	8527.03	5.83	0.19	0.99	Significant(1%)

Chhattisgarh	12445.1	6.33	0.16	0.99	Significant (1%)
Goa	-1932.19	8.26	0.24	0.99	Significant (1%)
Gujarat	-44163.4	11.95	0.43	0.98	Significant (1%)
Haryana	-15090.5	11.80	0.49	0.97	Significant (1%)
Jharkhand	65180.5	4.32	1.48	0.39	Significant (5%)
Karnataka	-87650.6	11.17	0.41	0.98	Significant(1%)
Kerala	-15307.1	13.82	0.32	0.99	Significant(1%)
M. Pradesh	-15459.2	6.67	0.41	0.95	Significant(1%)
Maharashtra	-116124	14.14	0.44	0.99	Significant(1%)
Odisha	24663.9	6.73	0.36	0.96	Significant(1%)
Punjab	-23179.2	15.29	0.51	0.99	Significant (5%)
Rajasthan	14653.9	8.04	0.43	0.96	Significant (1%)
Tamil Nadu	-23513.6	11.43	0.23	0.99	Significant (1%)
Uttar Pradesh	35515.9	7.29	0.35	0.97	Significant(1%)
West Bengal	29181.0	10.27	1.20	0.85	Significant(1%)

Source: Compiled from data given in Annexure-4 and Annexure-1.

The regression model generates the following important findings.

1. Development expenditure also fails to explain the GSDP rise of Jharkhand state as the explanatory power is only 39 percent. The explanatory power for all other states is satisfactory. It is slightly low for West Bengal.

2. The value of the slope regression coefficient is the highest for Punjab (15.29) followed by Maharashtra (14.14).

3. Kerala, Gujarat, Tamil Nadu, Haryana are the other states with high slope regression coefficient.

4. The low slope regression coefficient is for the states of Jharkhand, AP and Bihar. For other states including Odisha, it is moderate.

5. All the slope regression coefficients are significant at 1% or 5% level.

4.5 Social Sector Expenditure and GSDP:

Social sector expenditure of the government has been closely looked at, as it is this expenditure which never comes from the private sector. This sector involves public goods consumed collectively by the people of the state and is crucial for providing growth potential of the economy. Items included in this sector are education, health, water supply, weaker section development, etc. The immediate impact of this sector may not be visible. But it is very important to create the human capital which is required for the economic development.

Table-4: Regression relationship between Social Sector Expenditure and GSDP of NSCS in India

State	B_1 (intercept)	B_2 (slope)	SE of B_2	R2	Significance
AP	50270.9	7.74	0.76	0.89	Significant (1%)
Bihar	55409.8	5.77	0.57	0.88	Significant(1%)
Chhattisgarh	22312.6	7.94	0.42	0.96	Significant (1%)
Goa	2414.2	13.67	1.07	0.93	Significant (1%)
Gujarat	10604.9	18.31	0.79	0.98	Significant (1%)
Haryana	24637	16.92	0.87	0.97	Significant (1%)
Jharkhand	58949.4	6.56	1.87	0.51	Significant (5%)
Karnataka	-47723.1	18.34	0.92	0.97	Significant(1%)
Kerala	831.5	18.28	0.72	0.98	Significant(1%)
M. Pradesh	18441.1	9.76	0.90	0.90	Significant(1%)
Maharashtra	15379.2	19.38	0.78	0.98	Significant(1%)
Odisha	33835.6	9.38	0.72	0.93	Significant(1%)
Punjab	21339	21.95	1.35	0.95	Significant (5%)
Rajasthan	25907.4	11.54	0.89	0.93	Significant (1%)

Tamil Nadu	-4596.2	17.02	0.53	0.99	Significant (1%)
Uttar Pradesh	79436.1	10.24	0.39	0.98	Significant(1%)
West Bengal	66110.2	13.04	0.47	0.98	Significant (5%)

Source: Compiled from data given in Annexure-5 and Annexure-1

The regression model generates the following important findings.

1. The independent variable explanatory power is also low in case of Jharkhand at 53 percent only. For all other states, it is more than 90 percent.

2. The highest value of the slope regression coefficient is associated with the state of Punjab followed closely by Maharashtra.

3. Karnataka, Kerala, Gujarat, Tamil Nadu and Haryana are the other high performing states. Low performing states are AP, Bihar, Chhattisgarh and Jharkhand.

4. States like Odisha, MP, WB, Rajasthan, Goa and UP have moderate values of the slope regression coefficient.

5. The regression coefficients are significant for almost all the states at 1 and 5 percent levels.

5. Overall Findings

The analysis carried out is a small attempt to understand the nature of public sector investment in the NSC category states in India. It is not much technical. The usual assumptions of advanced time series econometrics are not carried out to keep it simple. The analysis is for the period of 2000-01 to 2014-15.

1. The performance of so called Bimaru states including Odisha, has improved. The performance of Odisha, Rajasthan, UP, and Madhya Pradesh has shown satisfactory result.

2. Bihar and Jharkhand continue to be at the bottom of the ladder.

3. Surprisingly, the performance of AP is not at all satisfactory in all the models of the analysis.

4. Among top performing states, Maharashtra has done consistently well and states like Punjab, Karnataka, Gujarat, and Tamil Nadu are also doing well.

5. The possibility of convergence of advanced and backward states may not be possible in the near future as the advanced states have much higher performance compared to the backward states.

6. Lessons for Odisha

Odisha faced a situation of fiscal crisis in the beginning of 21st century. The government of Odisha brought out a white paper in 2001 to make the situation public and conducted six regional workshops in the state to create awareness among the people about the grim situation. The government at that time used to take ways and means advances from the RBI for almost 364 days out of 365 days. Fiscal reform was introduced as per the MOU with the central government and under the guidance and assistance of international financial institutions. It was identified that the prime causes of the fiscal distress were the following;

1. Sharp rise in wages, salaries and pension expenditure due to high employee-population ratio.

2. The interest burden was also very high due to high debt-GSDP ratio.

3. The state PSUs' guarantee liability and loss making situation had aggravated the situation.

The state government tried to correct the employee size by stopping the appointments in the vacant government posts. It also liquidated the loss making PSUs and reduced their employees by adopting voluntary retirement scheme. Debt swapping was another important measure to reduce the interest cost burden. Because of all these measures, the state could enter into a phase of revenue surplus in 2005-06. The state now requires looking into the areas of infrastructure investment which is very important for the purpose of having a sustainable high growth path. The areas of concern for the state are 1. Inadequate capital expenditure, 2. Stagnant social sector expenditure and sharp rise in wages, salary and pension expenditure arising out of 7th pay commission implementation.

The state is not likely to be favoured by the Finance Commission in the coming days due to good performance by the state. It has to mobilise more resources on its own. Let us look at the future of Odisha with optimism.

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Annexure-1: Nominal GSDP of Non-Special Category States in India from 2000-01 to 2014-15 (Rs. In Crores)

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-2010	2010-11	2011-12	2012-13	2013-14	2014-15
AP	144,723	156,711	167,096	190,017	134,767	147,606	174,064	212,361	237,383	273,327	273,327	319,864	410,961	468,494	532,922
Bihar	57,242	57,657	64,965	66,174	77,781	82,490	100,737	113,680	142,279	162,923	162,923	203,555	282,368	317,101	373,920
Chhattisgarh	32,093	35,069	37,967	42,449	47,862	53,381	66,875	80,255	96,972	99,364	99,364	119,420	177,511	206,786	236,318
Goa	6,757	7,097	8,100	9,301	12,713	14,327	16,523	19,565	25,414	29,126	29,126	33,605	38,647	42,243	45,548
Gujarat	111,139	123,573	141,534	168,080	203,373	244,736	283,693	329,285	367,912	431,262	431,262	521,519	724,496	807,623	895,927
Haryana	58,183	65,505	72,528	82,862	95,795	108,885	128,732	151,596	182,522	223,600	223,600	260,621	350,407	395,748	441,864
Jharkhand	108,362	112,847	120,889	130,990	59,758	60,901	66,935	83,950	87,794	100,621	100,621	127,281	174,724	188,567	217,107
Karnataka	72,659	77,924	86,895	96,698	166,747	195,904	227,237	270,629	310,312	337,559	337,559	410,703	692,224	818,167	920,061
Kerala	79,203	86,745	86,832	102,839	119,264	136,842	153,785	175,141	202,783	231,999	231,999	263,773	412,313	465,040	526,774
M.Pradesh	25,846	29,539	32,493	38,802	112,927	124,276	144,577	161,479	197,276	227,557	227,557	263,396	380,926	435,790	484,538
Maharashtra	252,283	273,188	299,479	340,600	415,480	466,766	584,498	684,817	753,969	855,751	855,751	1,049,150	1,448,466	1,647,506	1,792,122
Odisha	43,351	46,756	49,713	61,008	77,729	85,096	101,839	129,274	148,491	162,946	162,946	197,530	255,273	277,271	309,807
Punjab	74,677	79,611	82,249	90,089	96,839	108,637	127,123	152,245	174,039	197,500	197,500	226,204	297,734	334,714	368,011
Rajasthan	82,435	91,771	88,550	111,606	127,746	142,236	171,043	194,822	230,949	265,825	265,825	338,348	494,004	549,701	612,194
Tamil Nadu	146,796	148,861	158,155	175,371	219,003	257,833	310,526	350,819	401,336	479,733	479,733	584,896	855,481	971,090	1,092,564
Uttar Pradesh	181,512	190,269	206,855	226,972	260,841	293,172	336,317	383,026	444,685	523,394	523,394	600,286	822,903	944,146	1,043,371
West Bengal	143,725	157,144	168,000	189,259	208,656	230,245	261,682	299,483	341,942	398,880	398,880	460,959	603,311	706,561	800,868

Annexure-2: Capital Expenditure of Non-Special Category States in India from 2000-01 to 2014-15 (Rs. In Crores)

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-2010	2010-11	2011-12	2012-13	2013-14	2014-15
AP	5049	6348	8316	10290	15845	13391	15210	20892	18950	21627	22101	25466	26739	26255	12759
Bihar	2601	2309	3727	4501	5416	4812	6551	8008	8570	10212	12489	13681	14740	17928	31932
Chhatisgarh	305	710	1292	2351	2544	2268	3188	4189	3920	4293	4209	6093	7847	6582	9314
Goa	253	252	401	653	598	658	708	781	1092	1297	1445	1471	1285	1346	2177
Gujarat	5134	2933	5481	11032	10598	8769	9968	9142	13156	11697	14157	19570	28623	29462	32892
Haryana	1978	2072	1240	5005	3035	2190	3276	4553	5833	7305	6124	7737	8440	7042	8853
Jharkhand		1935	2072	2436	3217	3661	4492	5264	5162	5486	6259	5015	7002	6632	10786
Karnataka	2979	3332	5260	7982	9315	6932	10649	10656	12380	15427	17900	20641	20368	21459	24088
Kerala	1271	1470	2211	4273	3106	2891	2335	3801	4330	4701	6100	7745	8544	8864	9095
M.Pradesh	1938	2591	4429	5158	11386	8412	7854	9664	10516	14136	15044	27965	20529	19894	25140
Maharashtra	4807	4198	6743	18354	21622	16397	14456	15460	23375	22515	23096	25174	25486	31927	33255
Odisha	2219	2187	3252	4704	3513	2143	3574	5121	5483	5249	6683	7445	9018	10513	15855
Punjab	2398	2982	2511	4633	3796	2244	7753	3458	4217	3900	4163	3765	5049	6016	7448
Rajasthan	2459	3046	4526	7021	9001	5721	6902	8630	8673	8618	8830	11719	17602	18591	24924
Tamil Nadu	2885	3261	4469	8494	12625	6736	12882	12773	14133	13355	17065	25627	24328	24368	24699
Uttar Pradesh	5849	6324	9148	19220	14514	13222	19284	22081	28429	31742	26910	25827	32997	42573	70713
West Bengal	4637	4684	4555	12564	5348	9471	7042	6330	9320	9534	8424	10505	13247	16716	22819

Annexure-3: Development Expenditure of Non-Special Category States in India from 2000-01 to 2014-15 (Rs. In Crores)

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-2010	2010-11	2011-12	2012-13	2013-14	2014-15
AP	18381	19828	19696	23063	24829	29553	36298	51153	56466	57200	65910	78750	88270	91470	98190
Bihar	10089	7898	9290	10127	9095	12988	17304	20456	24754	28220	28220	38910	46760	53920	62920
Chhattisgarh	1284	3568	4388	5736	5719	6734	8581	10782	13005	16010	16870	21320	26150	29750	35920
Goa	1121	1200	1289	1463	1672	1938	2232	2544	3117	3790	4320	4840	5010	5540	5970
Gujarat	19643	17356	15593	18137	18796	21569	25092	26887	35645	39840	47500	51860	66710	70530	79690
Haryana	5701	6814	6146	8411	7428	9436	13684	15420	18820	23180	23360	27320	32000	32460	36350
Jharkhand	0	5357	6735	6094	7963	9708	11803	12819	14045	14970	17820	16360	19370	18250	27210
Karnataka	12922	14352	14551	15484	19321	22734	29952	33642	37133	44920	51630	60930	68070	76330	88910
Kerala	7157	6672	8923	9913	10018	10697	10397	12912	15913	17570	20480	27040	32270	34510	38770
M.Pradesh	10514	10986	11608	14446	17757	19189	18509	22597	26027	32960	39770	57910	57940	60430	79940
Maharashtra	27071	24523	27128	31999	38211	43408	47220	52064	67311	79320	85910	97560	107460	119460	134400
Odisha	6061	5958	6404	7835	6862	7648	9536	13174	17571	19170	23350	27760	30640	38750	46790
Punjab	6722	6981	6238	7695	7988	8765	10797	11879	12929	13480	15890	17040	22240	23020	26050
Rajasthan	10212	10742	11624	14451	15299	17291	19533	24048	27705	30720	33470	42700	55550	66060	82940
Tamil Nadu	14217	14048	16370	17538	20397	22042	28820	32443	42705	45370	55030	68880	75030	83650	98150
Uttar Pradesh	18865	18628	20458	39660	26091	32446	42872	52231	64988	70790	75520	87080	98060	117330	146940
West Bengal	15555	14953	12451	14875	15329	17247	19137	52231	34730	35340	37960	43620	51700	57630	70270

Annexure-4 : Social Sector Expenditure of Non-Special Category States in India from 2000-01 to 2014-15 (Rs. In Crores)

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-2010	2010-11	2011-12	2012-13	2013-14	2014-15
AP	10006	10876	11179	13367	13821	14900	18654	24471	31440	30280	39130	45400	49440	53740	46150
Bihar	3077	3035	3233	3709	6117	8663	11127	13815	16340	17870	19370	24050	30740	34920	67080
Chhattisgarh	968	2435	2820	3244	3635	4295	5707	6947	8870	11680	11820	14810	16970	21050	30350
Goa	518	543	626	686	798	880	1010	1124	1460	1790	2090	2300	2500	2920	3800
Gujarat	9681	9029	8177	8992	10127	10995	13104	14893	18180	23170	28590	30350	38060	41880	51980
Haryana	3387	3675	2810	2818	3497	4742	5605	7343	9810	13360	13640	16270	18590	18100	29670
Jharkhand		3727	4904	4320	5127	6156	7392	7984	9870	10040	12300	10720	12030	11710	24530
Karnataka	7541	7642	7570	8315	9764	11675	14407	17644	20440	25100	28690	32370	37830	41590	56740
Kerala	5242	4932	6338	5924	7344	7524	7189	9010	10860	12030	13620	18740	21650	23950	31400
M.Pradesh	7153	6007	7158	6787	7268	9425	10658	12600	14690	17630	23450	27130	33370	35740	57530
Maharashtra	15429	15452	15704	18877	20433	24268	28276	29721	36500	47360	53830	61130	70030	78200	100320
Odisha	4065	4122	4210	4360	4598	5386	6127	8196	11090	12520	15240	18050	19660	24810	34970
Punjab	3887	3730	2990	3625	3747	4052	4706	4991	6860	7110	8350	9970	12560	13080	17810
Rajasthan	7224	7730	8032	9228	9845	10920	12580	14683	19430	21580	22790	27850	33700	41900	59940
Tamil Nadu	9618	9190	9662	11586	13617	14297	16921	19994	26890	29350	36490	41900	46750	55120	68280
Uttar Pradesh	12135	12279	13103	12999	16932	20141	24032	30006	39510	47250	50670	59720	67440	76560	102240
West Bengal	9623	9581	8463	9008	9732	11445	13142	16192	19470	27700	30560	35610	40100	45580	59220

Exports Behaviour of South Asian Countries: An Empirical Examination

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Abstract

Exports contribute to growth and long-term development of an economy by opening the economy to world markets and the resulting flow of new technologies, expertise, and capital. The determinants of exports of developing countries include both demand-side and supply-side factors. So far, most of the studies have focused more on demand-side factors and less on supply-side factors. Such models have been unsuccessful in explaining long run export performance of these countries. This paper investigates both the demand-side and supply-side determinants of exports of five South Asian countries (Bangladesh, India, Nepal, Pakistan and Sri Lanka) using panel data analysis over 1990-2018. Our empirical analysis suggests a long-run relationship between exports and its determinants and that both demand and supply side factors have significant impact on exports behavior in South Asia. The income and price elasticities of export demand have a relatively large and significant impact on exports. Similarly, supply side factors such as infrastructure availability, financial market development, development of human capital and FDI have positive impact on export supply. The findings presented in this paper have several potential policy implications for South Asian countries.

1.Introduction

Exports are an integral part of any economy by way of having a positive contribution to GDP and growth, and by contributing to long-term development of an economy by opening the economy to world markets and the resulting flow of new technologies, expertise, and capital.

As a result of failed import substitution policies during 1950s and 1960s, South Asian countries

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adopted export promotion strategies in 70s and 80s to increase growth. There are many factors responsible for this shift. One, higher exports increase income and result in higher imports that include raw materials and capital goods for industry that in turn enhance the productive capacity of the developing countries. Two, greater competition in the exports market could imply greater capacity utilization, higher scale economies, greater trade specialization and faster technical progress in production which would also create new jobs thus increasing employment.

Post the economic crisis of 1990-91, India followed an export-led growth strategy of globalization, liberalization and privatization. These strategies hit the mark and proved to be successful for India (Dhavan and Biswal 1999; Sahoo and Dash 2012). In India, exports were contributing around 7% of GDP till 1990-91, increasing substantially to reach 24.64% in 2011-12 but thereafter falling to 19.73% in 2018-19 (World Bank). Many economists have investigated the role of increasing exports in the growth of developing countries (Tyler 1981; Ram 1987; Fosu, 1990). Generally, such studies have reported positive impacts of exports on economic growth. Apart from India, other developing countries of South Asia have also recorded positive impact of exports on growth—Achchuthan (2013) for Sri Lanka also suggests that small and medium enterprises should be more export-oriented; and, Shahbaz (2014) for Pakistan links financial development to economic growth and exports. For Bangladesh, Meraj (2013) suggests bidirectional causality between exports and GDP and also recommends more export-oriented policies that would generate more foreign exchange for payment of import bills and enhance capital accumulation. In case of Nepal, Sharma et al. (2005) find that exports growth leads to economic growth and suggest policies of export promotion and import substitution for further growth.

Since 2014, South Asia has been the fastest growing sub-region in the world, with an expected growth of up to 6.3 percent in 2020 and 6.7 percent in 2021 (World Bank). Domestic demand is the main factor that drives this region's growth, which increases import dependence far beyond its exports. This widens the trade gap and current account deficit and depreciates currencies in some South Asian economies. This calls for stronger exports that lead to integration into international markets to sustain the high growth momentum of the region. As per the report "South Asia Economic Focus, *Exports Wanted*", South Asian countries export only one-third of their potential. This gap is widening and stood at over 20 percent of GDP in 2017, as South Asia did not take advantage of a favorable global trade environment before the trade war between the US and China.

Following open economic policies, South Asian countries experienced higher exports both in terms of volume and share in world market. However, the exports share of these countries moderated in recent years, particularly after global financial crisis owning to slow down of world market and rise of protectionism. Figure 1 shows exports trends (as a percentage of GDP) for Bangladesh, India, Nepal, Pakistan and Sri Lanka, from 1990 to 2018. In the last three decades, India's exports increased from 7 percent in 1990 to 19.7 percent in 2018, where it peaked at 25.43 percent in 2013. From 1990 till 2001, Bangladesh and India had nearly the same levels of exports (as a percentage of GDP), after which India's exports became higher all throughout. Figure 2 shows individual share of each of the five South Asian countries in world;s manufacturing trade. India's share increased from 0.5 percent in 1990 to 1.66 percent in 2018, while that of the other four South Asian countries was approximately 0.2 percent or below all throughout. This shows that all these countries have a huge scope for expanding their exports further. Figure 3 plots manufacturing exports as ratio of merchandise exports for the five South Asian countries from 1990 to 2018. Overall we observe that south Asian countries are not able to improve their export performance except India. In this context, empirically examining the factors affecting exports of these countries would be useful.

The determinants of exports of developing countries include both demand-side and supply-side factors. Demand-side factors include relative price, foreign income, real effective exchange rate and oil price. Supply-side factors include domestic demand, production capacity, foreign direct investment, infrastructure, institutional quality, financial sector development and human capital. So far, most of the studies have focused more on demand-side factors and less on supply-side factors. Such models have been unsuccessful in explaining long run export performance of these countries. In this paper, our main motivation is to investigate both the demand-side and supply-side determinants of exports of five South Asian countries (Bangladesh, India, Nepal, Pakistan and Sri Lanka) using panel data analysis over 1990-2018.

The paper is divided into five sections. Section II reviews the literature underlying the export performance in developing countries and the determinants of exports. Section III looks into data sources, methodology and model specifications. Section IV analyses the results and section V concludes and highlights policy implications.

Fig -1: Exports as ratio of GDP (%)
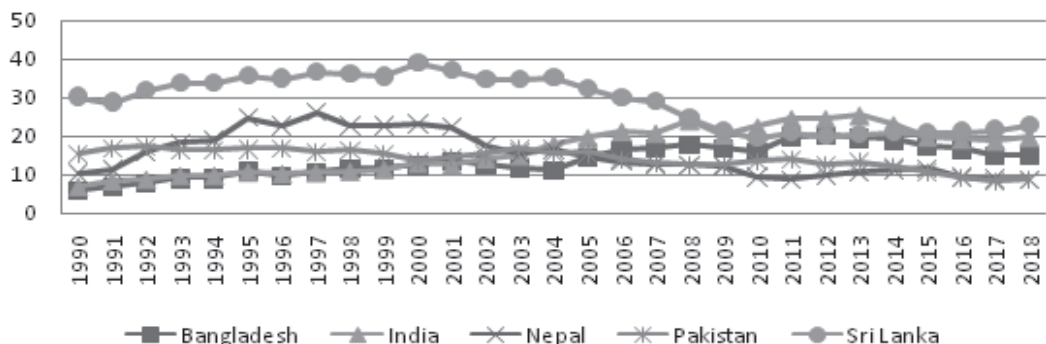
Fig-2: Share of South Asian countries in World's Manufacturing Trade (%)
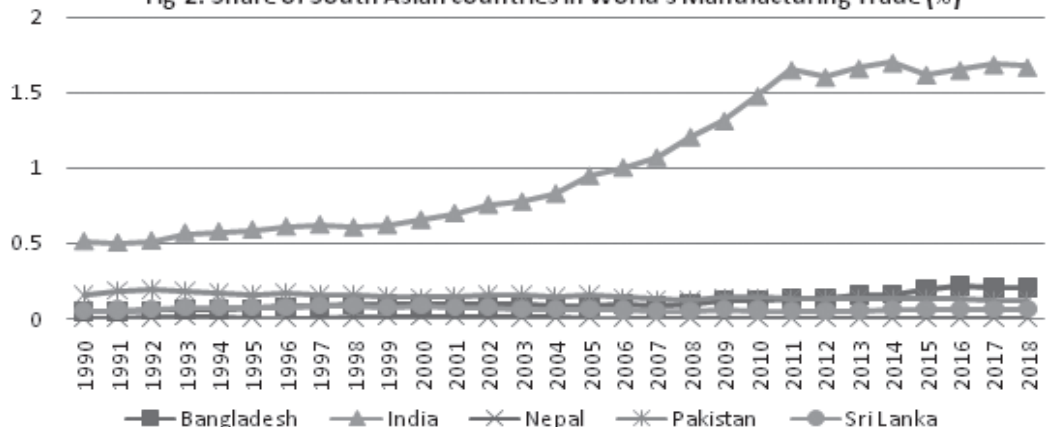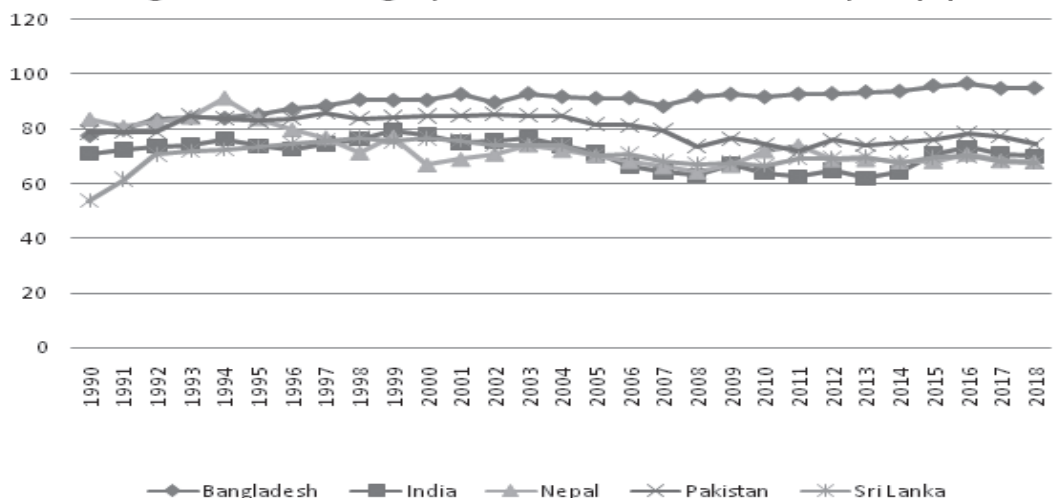

Fig-3: Manufacturing Exports as Ratio of Merchandise Exports(%)

2. Literature Review: Determinates of Export

There are many empirical studies on developing countries that examined the relationship between export and its determinants. Research on the determinants of developing countries export performance is growing, but is still incomplete. Broadly, export performance of developing countries depends on demand factors as well as supply factors. However, in many studies it is identified that Supply -side conditions have often been the more important constraint on export performance for developing countries (Fugazza, 2004; Anagaw, and Demissie, 2012). In the traditional export function demand side factors were given much more importance assuming supply is not a constraint on exports. Such models have generally been rather unsuccessful in explaining long run trends in export performance. Funke and Holly (1992) show that for developing countries demand and supply factors are equally important in determining their export growth pattern. Therefore, any export function should take possible demand side and supply side factors. In this section, we briefly review possible determinants of both export demand and supply.

2.1 Demand Side Factors

Relative Price (PX$_d$)

In the export demand function, the real exports can be regarded as a decreasing function of relative prices (the price of a country' exports relative to the foreign price of related goods). All other things being equal, an increase in the price of exports lowers the demand for exports while a rise in the price of the competing goods would increase demand for exports. Empirical results suggest that the average long-run price elasticity is found to be approximately -1 but there is a wide diversity of experiences (Goldstein and Khan (1982), Arize (1987), and Senhadji and Montenegro (1999)).

Foreign Income (WY)

Apart from relative price effect, the export demand is also influenced by conditions prevailing in the world market (Goldstein and Khan, 1978). The demand for exports, increase with the income of the rest of the world. That is, higher the level of foreign real income, larger would be the foreign demand for a nations export, *ceteris paribus*. Empirical results suggest that the average long-run income elasticities are found to be approximately 1.5, but there is a wide diversity of experiences (Arize (1990), and Senhadji and Montenegro (1999)). The measurement of world demand variable has often been varied across studies. Generally,

three income measures are used in the literature, GNP or GDP, industrial production, world real import of major export destination of particular products.

Real Effective Exchange Rate (REER)

The second major factor that affects export supply capacity is the real exchange rate. The real exchange rate can be an important element in determining export growth, diversification and international competitiveness of goods produced in a country (UNCTAD, 2005). While an overvalued currency can undermine export competitiveness through a direct loss of price competitiveness for exporting firms undervaluation of the currency can bolster export competitiveness (Biggs, 2007), enhance the incentives for export activities (and lead to diversification of exports (Mouna and Reza, 2001). It is well known that the appreciation of the real effective exchange rate (REER) decreases competitiveness of domestic export in foreign market resulting in decreased demand for exports (Edwards and Alves, 2005; Mishkin, 2008). Hence, we expect a negative link between the appreciation of REER and export demand and vice-versa.

Oil Price (OP)

Increase in oil price will have negative impact on export demand if the domestic country is an oil importing country as it increases production costs. However, if the domestic country's labour supply is elastic due to the large reserves of workforce, the oil price increase may be more harmful to its competitors. As a consequence, both oil prices and exports may increase over time (Faria et al. 2009; Lutz and Meyer, 2009). If exports are not energy intensive, that is, oil is not a significant input in its production and, then, increase in oil prices have little effect in production costs and exports' prices. Therefore, oil price increase may have positive, negative or no effect depending on the above factors (Faria et al. 2009).

2.2 Supply Side Factors

Supply side factors are very important because supply conditions are fundamental in defining the export potential of an economy and, for a given level of access to international markets, countries with better supply conditions are expected to export more (Fugazza, 2004). On the supply side, we can identify the following factors as the major determinants of exports:

Relative Price (PXs)

On the supply side, export decision mainly depends upon relative price changes, i.e. export price relative to domestic prices. This reflects relative profitability of selling in foreign markets.

We expect that an increase in the relative price will have a favorable impact on the incentive for machine tool manufacturers to engage in exports i.e., the ratio should be above unity. On the other hand, a better domestic price reduces this incentive and domestic manufactures will be interested in catering to domestic demand, *ceteris paribus.* Empirically it is found that the estimated supply price elasticity is significant for most of the countries but the magnitude varies (Goldstein and Khan, 1982; Arize, 1990; Muscatelli et al., 1992).

Domestic Demand (DD)

Increase in domestic demand diverts export supply towards domestic consumption, leading to a fall in exports. Also, domestic demand signifies the cyclical effect, as the industry is very sensitive to them. Here the hypothesis is that during high domestic demand pressure, firms will operate at full capacity and will export little, while during domestic recession capacity utilization will be low and firms will attempt to export as much machines as possible (Joshi & Little, 1994).

Production Capacity

For a growing economy the export supply function will shift over time. Therefore, factors augmenting supply capacity needs to be considered. Therefore, coefficient of this variable is positive since export supply increases with increase in production capacity of the domestic country (Goldstein and Khan, 1978; Moran, 1988). The measurement of production capacity variable has often been varied across studies. For example, Milner and Zgovu (2004) used agricultural GDP as a measure of productive capacity.

Foreign Direct investment (FDI)

Foreign direct investment influence supply-side determinants of exports and imports, reflecting to some extent the quality of physical capital as well as worker skills and market penetration potential (De Gregorio, 1992). There is consensus among development economists that FDI inflows are likely to play an important role in explaining growth of recipient countries (De Mello, 1999). However, the World Bank (1993) notes that the role of FDI in export promotion depends crucially on the motive for such investment: If the motive behind FDI is to capture the domestic market (tariff-jumping type of investment), it may not contribute to export growth.

Infrastructure

One of the major factors affecting export supply capacity is the domestic infrastructure. To sustain the rapid growth of exports, it is necessary to have a well-functioning infrastructure,

including electric power, road and rail connectivity, telecommunications, air transport and efficient ports (UNCTAD, 2005). Empirical studies also support the positive relationship between infrastructure development and export performance (Fugazza (2004 and UNCTAD, 2005). Therefore, improvements in infrastructure can lead to better export performance (Fugazza, 2004; UNCTAD, 2005).

Institutional quality

The fourth and last major factor that affects export supply capacity is institutional quality. The quality of institutions and policies are decisive in determining whether countries can benefit from globalization (UNCTAD, 2008). Weak and missing institutions have been shown to limit the ability of firms to take advantage of new trading opportunities in low-income countries (Roland 2000; Stiglitz and Charlton 2006; Biggs, 2007). It has also been shown that institutional quality is highly correlated with trade (Dollar and Kraay, 2002; Francois and Manchin, 2006). In this regard, Francois and Manchin (2006) show that export performance and, the propensity to take part in international trade depend on institutional quality. In addition to the direct effect, institutions may also indirectly affect trade through their impact on other variables that determine trade flows like investment and productivity (Méon and Sekkat, 2006). Therefore, we expect positive sign of this variable.

Financial Sector Development

Financial sector development is also another important factor that plays a significant role in influencing export supply. For example, access to finance at reasonable cost can be important for export development for the simple reason that firms find it easier and less costly to finance working capital needs (including trade financing) and investments in technical upgrading and new innovative activities (Aghion and Griffith, 2005; Biggs, 2007). Further, if financial markets are underdeveloped, and then risk cannot be diversified, as a result that affects supply response of firms adversely. Therefore, we expect positive effect of financial sector development on export supply.

Human Capital

Low human capital is a hindrance for technology transfer and learning in developing countries that have been shown to hamper export growth and diversification (Hausmann et al, 2006; Bhavan 2017). A country's level of human development indicators are an important and useful barometer of how much it is likely to benefit from international trade. The current export success of the East Asian countries and China can be explained, by its

achievement of good human capital (Farok and. Susan, 2008). Hence, we expect positive effect of human capital development on export supply.

Based on the above literature, we specify Export Demand Function as:

$$EX_D = f\,(PX, RER, WY, OP) \qquad (1)$$

Where PX is the export price relative to world price, RER is the real exchange rate, WY world income net of GDP, OP average crude oil price (per barrel) adjusted for inflation.

Export Supply Function as:

$$EX_S = f\,(RP, FDI, INFRA, FIN, DD, HUM, GFC, INST) \qquad (2)$$

Where RP relative export price of supply, FDI foreign direct investment, FIN is financial development Index, INFRA infrastructure index, DD is domestic final expenditure as ratio of GDP, HUM is human capital proxied by gross secondary enrolment ratio, GFC is gross fixed capital, INST is institutional quality proxied by economic freedom index.

Malhotra and Kumari (2016) study the factors determining the export performance of selected Asian economies in the period 1980-2012. The three sub-regions include East Asia (China, Japan, and South Korea), Southeast Asia (Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam), and South Asia (Bangladesh, India, Pakistan and Sri Lanka). The variables defined include both the demand and supply side factors such as world demand, real effective exchange rate, production level and capacity and relative prices, with addition of foreign direct investment (FDI) inflows and trade openness. Results reveal that in the East Asian region, the variable world demand was the most influential factor in determining export performance. In Southeast Asian sub-region, variables like world demand, GDP and trade openness were the most significant factors while in South Asian region, trade openness determined the export performance.

Özgur et. al (2018) in their study analyzed the determinants of export performance in East Africa from 1990 to 2014. The study spanned over seven countries of East Africa—Ethiopia, Madagascar, Kenya, Sudan, Mozambique, Tanzania and Zambia. The variables were percentage growth of gross domestic product, gross domestic product, labor force, GDP percentage of industry value added, inflation, GDP percentage of foreign direct investment and exchange rate. Results showed that labor force, industrialization, FDI, and exchange rate have a positive impact on exports but inflation has a negative impact on export. Moreover, growth of GDP is the only variable that does not affect exports.

Developing countries, like China, are increasingly becoming exporters of high-tech products. Mehrara et. al (2017) investigated the determinants of high-tech exports and estimate the share of each of these factors using the "Bayesian Model Averaging (BMA)" and "Weighted Average Least Square (WALS)" techniques. The variables taken to study their impact on exports include ratio of capital to labor, land area per capita, human capital, ratio of research and development expenditure to GDP, ratio of foreign direct investment to GDP, ratio of imports of goods and services to GDP, population, institutional quality, gross domestic product (GDP), inflation, real effective exchange rate and distance. Panel data from 24 developing countries during the period 1996 to 2013 have been taken. The countries have been selected on the basis of similarities in structures, data quality and availability. As per the results of the study, institutional quality index, human capital (proxied by the index of gross tertiary education enrolment rate), the ratio of imports to GDP (as a proxy for the degree of trade openness) and the GDP are the most important determinants of high-tech exports. The variables—ratio of capital to labor, ratio of research and developments expenditures to GDP, the land area per capita, and the real effective exchange rate do not have expected positive effects on the high-tech exports of the developing countries.

Marco et. al. (2017) investigate the determinants of export market participation of Indian manufacturing firms. Their main focus lies in addressing the important role of technology, cost-competitiveness and trade policy in affecting firms' trade. The authors follow the work of Dosi et al. (2015) in the context of a developing country like India. The important variables, that is, determinants of export performance include total factor productivity, unit labor costs, R&D intensity, investment intensity, and import intensity. The authors conclude that technology (proxied by R&D) determines export performance both in terms of increasing probability to export and boost export volume as well. Moreover, efficiency and cost-competitiveness determine level of exports. When domestic firms import intermediate goods, favored by import-trade liberalization, they get access to the foreign technology which not only increases the efficiency of the firm, but also offers greater export opportunities by improving firm competitiveness and profitability in the export market.

On similar lines, Appiah et al. (2015), in their study of Ghana's SME horticultural exporters, suggest that government support policies, access to finance, technological innovation, entrepreneurial factors, and number of exporting destinations of the SME have a positive impact on export competitiveness of SME horticultural exporters. Sharma et al. (2016) combine and compare studies conducted on determinants affecting exports of Indian textile

industry and find out that most of the researches carried out found a positive impact of the determinants—GDP, exchange rate, labor, capital (FDI) and technology, on textile exports.

Thus, these are the critical factors that affect exports' performance.

3. Data Sources, Methodology and Model Specifications

The majority of the data is collected from the World Bank Development Indicators and UNCTAD online database. Annual data for five South Asian countries (India. Pakistan, Bangladesh, Nepal and Sri Lanka) on total export, manufacturing export, gross fixed capital as ratio of GDP, FDI as ratio of GDP, consumer price index (base 2010), domestic demand as ratio of GDP, secondary school enrollment (% gross), broad money (M2 as ratio of GDP), bank credit to private sector and number of bank branches per lakh people, world income (2010 base price), average exchange rate in term of US$ are collected from World Development Indicators, 2019. Data on infrastructure variables (telephone line, both fixed and mobiles per 100 people, air transport, freight (million ton-km), energy use (kg of oil equivalent per capita) are also collected from World Development Indicators. Data on unit value of export price is collected from UNCTAD online database. Average crude price of oil (in $/per barrel) is collected from World Bank. Data on institution (Economic Freedom) is collected from CATO Institute. The analysis is limited to the period 1991–2017.

3.1 Methodology

For deriving robust results, this study applies advanced panel data analysis in three-step procedure. In the first step, variables are checked for stationarity by using unit root test developed by Pesaran (2007) CIPS test. In the second step, long-run relationship or co-integration is examined between real exports and its determinants by using co-integration test developed by Westerlund (2007). Finally, long-run coefficients of both demand and supply of export is derived by using Common Correlated Effects Mean Group (CCEMG) estimator developed by Pesaran (2006), and the Augmented Mean Group (AMG) estimator of Eberhardt and Teal (2010)[1].

3.2 Model Specifications

The econometric model of demand equation (1) can be written as:

$$EX_{Dit} = á_0 + á_1 PX_{it} + á_2 WY_{it} + á_3 RER_{it} + á_4 OP_{it} + å_{it} \quad (3)$$

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[1] *For detail of these methods, please see Eberhard (2012) Estimating panel time-series models with heterogeneous slopes, The Stata Journal, 12, No. 1, pp. 61–71.*

Where EX is the real exports, PX relative (export price to world) export price, RER is real exchange rate, OP average crude oil price ($/barrel).

The expected sign of ($á_1$, á3, and $á_4$, is) < 0 and $á_2$>0

The econometric model of supply equation (2) specified as:

$$EX_{Sit} = â_0 + â_1 RPit + â_2 FDIit + â_3 GFCit + â_4 FINit + â_5 INFRAit + â_6 DDit + â_7 INSTit + â_8 HUMit + å_{it}$$
(4)

Where, EX is real exports, RP is (export price to domestic price) is relative supply price, GFC is gross fixed capital as ratio of GDP, DD is domestic final demand as ratio of GDP, FDI is foreign direct investment as ratio of GDP, INFRA is Infrastructure Index, FIN is Financial development Index, INST is economic freedom index and HUM is human capital proxied by gross secondary enrollment ratio. $[_{it}$ is idiosyncratic error terms. The number of countries is denoted by i =1, 2... N and the number of time periods is t =1, 2...T.

The expected sign of ($â_1$, $â_2$, $â_3$, $â_4$, $â_5$, $â_7$ and $â_8$ is) > 0 and $â_6$<0

The equation (3) and (4) is estimated using CCEMG and AMG models.

4. Results Analysis

4.1 Panel Unit Root Test

Considering the potential cross-sectional dependence problem in first generation panel unit root test, Pesaran (2007) CIPS unit root test is used to determine the properties of variables. The CIPS unit root test for both 'constant' and 'constant and trend' specifications and allowing for the lag order to be at maximum equal to 3 (p=1, 2, 3) are presented in Table 1. It is clear that CIPS panel test rejects the null of unit roots for the panel at level for all variables except the variable institution proxied by the index of economic freedom and FDI. On the contrary, the differenced series are stationary leading us to conclude that a panel unit root is present in the level series of all other variables. Hence, the CIPS test indicates that all the variables are integrated of order one or I (1) variables except institution.

Table 1: Pesaran (2006) CADF Panel Unit Root Test

Variables	At level With constant	Optimal Lag	With Trend	Optimal Lag	Ist Difference	Order of Integration
LREX	-1.92	2	-2.62	2	-3.78**	I(1)

LMREX	-1.97	2	-2.49	1	-3.52**	I(1)
PX	-1.23	2	-1.45	2	-3.05**	I(1)
LRER	-1.36	2	-1.53	3	-4.15**	I(1)
LWY	2.60	1	1.70	1	-3.76**	I(1)
RP	-1.54	2	-1.86	2	-3.12*	I(1)
GFC	-1.01	1	-1.28	2	-3.59**	I(1)
FDIY	-2.55*	1				I(0)
INFRA	-1.9	3	-2.15	3	-3.21**	I(1)
DD	-0.43	1	-1.25	2	-4.03**	I(1)
FIN	-1.54	2	-2.14	2	-3.64**	I(1)
HUM	0.66	3	-1.73	2	-3.43*	I(1)
INST	-2.59*	2				I(0)

*Notes ** denotes the rejection of the null hypothesis at 1% level and * the rejection of the null hypothesis at 5% level. The optimal lag length is chosen on the basis of the Schwartz Information Criterion.*

Given that most of the variables are non-stationary in nature, co-integration is appropriate. Therefore, long-run relationship or co-integration is examined between real exports and its determinants in the next step using bootstrap version error correction panel co-integration test developed by Westerlund (2007). The results of Westerlund (2007) co-integration test separately for demand and supply equation for total exports and manufacturing exports with the asymptotic p-values based on 500 replications are presented in Table 2. For each possible co-integration relationship, two group mean test (Gt and Ga) and two panel tests (Pt and Pa) as proposed by Westerlund (2007) are presented. When using the asymptotic p-values, the no co-integration null is rejected by all test statistics in favor of existence of co-integration at 5 per cent level, indicating we have co-integration for at least one cross-section for total export demand equation. Similarly, with the asymptotic p-values, the no co-integration null is rejected by all except Pt at the 5 per cent level (i.e. when $\tilde{n}_i$ is restricted to be homogenous), suggesting that the whole panel is co-integrated for supply equation. Similar results are also found for manufacturing exports. Therefore, this result establishes

the long-run relationship between real exports and its determinants for South Asia. Similar results are found for manufacturing exports.

Table 2: Westerlund (2007) Panel integration tests (Total exports)

Test statistics	Total Exports				
	Demand Equation		Supply Equation	
	value	P-value	value	P-value
Gt	-8.22*	0.014	-4.67*	0.02
Ga	-19.56*	0.01	-12.96*	0.03
Pt	-14.66*	0.04	-14.05*	0.02
Pa	-18.53*	0.013	-11.33*	0.05
	Manufacturing Exports			
Gt	-3.72*	0.04	-3.96*	0.05
Ga	-18.87*	0.01	-16.54*	0.02
Pt	-12.97*	0.05	-14.05*	0.04
Pa	-15.82*	0.02	-6.16	0.30

Notes: The Westerlund (2007) tests take no cointegration as the null. The test regression is fitted with constant and one lag lead. * denotes rejection of null of no cointegration at 5% level.I(0) variables are dropped for cointegration test.

4.2 Determinants of Exports Demand

After establishing long-run relationship between exports and its determinants, long-run coefficients are estimated using two different methods namely the Pesaran (2006) Common Correlated Effects Mean Group (CMG) estimator and the Augmented Mean Group (AMG) developed by Bond and Eberhardt, (2019)[1].For comparison, we also present the result of

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[1]   *Panel estimators such as fixed/random effects, FMOLS and DOLS,GMM etc. assume cross-sectional independent errors. However, in the presence of some form of cross-sectional correlation of errors in panel data could lead to wrong inferences and inconsistent estimators (Chudik and Pesaran 2013).*

Pesaran and Smith (1995) Mean Group (MG) estimation. The estimation of long-run coefficients are presented in Table 3 and 4.

4.3 Demand side factors

The results show that as expected real world income has positive significant effect on real exports in South Asia. However, the coefficient of real world income is less than one (much smaller), indicating income elasticity is less than 1 except by mean group (MG) estimation. This is in contrast with earlier previous empirical studies (Arize 1990; Senhadji and Montenegro 1999). Therefore, exports from South Asia are more likely to be affected by external shocks like any kind of changes in major export destination markets. Similarly, the coefficient of relative price (export price relative to world export prices) is negative and less than unit indicating that an increase in the relative price will have a unfavorable impact on exports as goods became more costly in the world market (Goldstein and Khan (1982).

The coefficient of real exchange rate (RER) is found to have negative impact on real exports as appreciation of domestic currency adversely affects exports. It is well known that the appreciation (depreciation) of the real effective exchange rate (RER) reduces (increase) export (Joshi & Little 1994; Srinivasan 1998; Sharma 2003) hence, a negative link between the appreciation of RER and export demand is expected. Compared to income effect, price effect remained strong for South Asia as price elasticity is higher than income elasticity. In the case of manufacturing exports, price elasticity is greater than one indicating rise in export price would reduce real exports by more than unit. It is important to note that the MG estimator does not explicitly account for cross-section dependence; hence, it yields a higher income coefficient and lower price effect. The results indicate that impact of oil price on exports is found to be negative for South Asian countries as South Asian countries are importer countries . The coefficient of oil price is -0.06, indicating 1 percent increase in oil price decreases exports by 0.06 per cent. Increase in oil price leads to loss of competitiveness of South Asian countries as oil is one of the main raw materials used in production. Therefore, oil price increase leads to reduction in exports (Lutz and Meyer, 2009).

Table 3:Determinants of Export Demand

Variables	Dependent Variable: Total Export			Dependent variable: Manufacturing Export		
	MG	CMG	AMG	MG	CMG	AMG
Constant	-14.65*	-1.56	1.98	-13.24*	-0.021	16.15**
	(-2.01)	(-0.31)	(0.52)	(-2.34)	(-1.53)	(-2.97)
Export Price	-0.76*	-0.53*	-0.54*	-0.88*	-0.77**	-0.76**
	(-2.24)	(-2.44)	(-2.52)	(-2.64)	(-3.04)	(-3.15)
RER	-0.17*	-0.14**	-0.15**	—0.21*	-0.12**	-0.18**
	(-2.26)	(-3.51)	-(3.65)	(-2.61)	(-3.01)	(-3.76)
WY	2.50**	0.56**	0.36**	2.14**	0.62**	0.68*
	(3.01)	(3.00)	(3.32)	(3.50)	(3.37)	(2.77)
OP	-0.06*	-0.05*	-0.05*	-0.09*	-0.07*	-0.07*
	(-2.31)	(-2.11)	(-2.54)	(-2.64)	(-2.65)	(-2.45)
RMSE	0.13	0.15	0.09	0.12	0.08	0.10

*** and * denotes significance at 1 and 5 percent level respectively. Figures in the parentheses are t-ratio.*

Notes: MG- Mean Group estimation, CCEMG- Common Correlated Effects Mean Group and AMG-Augmented Mean Group estimation

4.4 Supply Side Factors

Similarly, the coefficients of supply side factors are presented in Table 4 and 5 for total and manufacture exports respectively. It is clear that supply side factors such as infrastructure stock, human capital, domestic final consumption, financial development and FDI have expected signs. The coefficient of relative supply price (export price relative to domestic prices) is positive and significant but less than one. This indicates that an increase in export price relative to domestic price will have a favorable impact on exports as the incentive for exporters to sell the good in foreign market increases (Goldstein and Khan, 1982).The impact

of domestic final consumption on real export is negative and statistically significant. The negative elasticity of domestic demand pressure indicates that the export supply declines as domestic demand increases (Joshi & Little 1994; Sharma 2003). As domestic demand pressure increases, selling at home market becomes more profitable than at abroad.

The impact of FDI on exports is found to be positive but the coefficient is very small, which is one of the focus variables in our analysis. One unit increase in FDI inflows increases around 0.04 per cent of export in India. Our results are similar to the existing empirical studies about the role of FDI in export performance (UNCTAD 2005 and Sun et al 2012).This suggests that FDI inflows to export-oriented sectors helps generate export growth as well as induces local firms in the host country, directly and indirectly, to make use of the technology spillovers and market linkages to export their own products (UNCTAD, 2005).

In addition, development of financial sector also plays a vital role in promoting exports. This is because, as in the case of goods exports, it reduces the costs of exporting services, enables efficient and quick transactions, and ensures the availability of working capital for firms, thereby increasing the competitiveness of services exports. In addition, the financial sector plays a crucial role in the economy, underpinning private sector development, facilitating investment in businesses, technology and training and contributing to productivity.

Table 4: Determinants of Supply Exports

Variables	Dependent Variable: Real Export					
CMG	**MG**	**MG**	**CCEMG**	CCEMG	**AMG**	**AMG**
Constant	2.16**	3.25**	-0.42	0.34	2.65**	1.88**
	(10.2)	(8.45)	(-1.02)	(.92)	(4.02)	(3.12)
RP	0.15*	0.17*	0.30*	0.28*	0.21**	0.20*
	(2.59)	(2.46)	(2.36)	(2.56)	(3.05)	(2.55)
GFC	0.12	-	0.11	-	0.15*	-
	(1.24)		(1.34)		(2.28)	
FDI	0.03*	0.04*	0.05*	-	0.02*	0.04*
	(2.25)	(2.55)	(2.09)		(2.19)	(2.25)

INFRA	0.07*	0.09*	0.14*	0.15*	0.08*	0.08*
	(2.65)	(2.41)	(2.15)	(2.34)	(2.49)	(2.24)
DD	-0.21*	-0.19*	-0.15*	-0.17*	-0.24*	-0.20*
	(-2.15)	(-2.12)	(-2.45)	(-2.72)	(-2.59)	(-2.68)
INST	0.15**	0.12**	-	0.11*	0.06**	0.09**
	(7.15)	(4.47)		(2.35)	(3.20)	(3.35)
FIN	0.06*	0.06*	0.07*	0.08*	0.07*	0.10*
	(2.71)	(2.71)	(2.12)	(2.09)	(2.25)	(2.44)
HUM		0.08*		0.11*		0.10*
		(2.21)		(2.54)		(2.36)
RSME	0.13	0.15	0.12	0.08	0.08	0.13

*** and * denotes significance at 1 and 5 percent level respectively. Figures in the parentheses are t-ratio.*

Notes: MG-Mean Group Estimator, CCEMG-Common Correlated Effect Mean Group and AMG-Augmented Mean Group

Similarly, the coefficient of index of economic freedom (INST), which is the proxy for institution quality, is positive and significant. Since 1991, South Asia has been consistently following privatization and liberalization along with sector specific regulatory mechanism for free and fair competition in the economy. This has positive impact on regulation and export performances in South Asia. Finally, results indicate that the availability of higher human capital increases export supply, as their coefficient is positive (UNCTAD, 2005).

Table 5: Long-run coefficients of Exports (Supply-Side)

Variables	Dependent variable: Real manufacturing Export					
	MG	MG	CCEMG	CCEMG	AMG	AMG
Constant	1.31*	1.56*	-0.28	0.34	2.38**	2.56**
	(2.42)	(2.65)	(-0.69)	(0..98)	(10.55)	(12.43)

RP	0.15*	0.19*	0.16*	0.15*	0.21*	0.21*
	(2.29)	(2.67)	(2.51)	(2.65)	(2.26)	(2.51)
GFC	0.15	_	0.17*		0.16	
	(1.44)		(2.44)		(1.64)	
FDI	0.05*	0.05*	0.08*	0.07*	0.03*	0.08*
	(2.78)	(2.78)	(2.33)	(2.33)	(2.38)	(2.77)
INFRA	0.12*	0.14*	0.20*	0.21*	0.19*	0.19*
	(2.52)	(2.82)	(2.25)	(2.55)	(2.31)	(2.31)
DD	-0.25*	-0.21*	-0.19**	-0.18*	-0.21*	-0.24*
	(2.68)	(2.58)	(-3.12)	(-2.82)	(-2.56)	(-2.88)
FIN	-	0.07*	0.06*	0.08*	0.04*	0.05*
		(2.13)	(2.02)	(2.25)	(2.18)	(2.44)
HUM		0.12*		0.13*		0.06*
		(2.55)		(2.68)		(2.14)
RSME	0.09	0.12	0.12	0.11	0.14	0.12

*** and * denotes significance at 1 and 5 percent level respectively. Figures in the parentheses are t-ratio.*

Notes: MG- Mean Group estimation, CCEMG- Common Correlated Effects Mean Group and AMG-Augmented Mean Group estimation

Overall, we find that the major determinants of total and manufacturing exports are real world demand, real exchange rate, relative supply price, domestic demand, trade agreements, FDI and relative endowment factors (infrastructure stock, human capital, institutions and financial development).

5. Conclusion and Policy Implications

Theoretical studies suggest that many factors affect export performance of a country. In the literature, the majority of the previous approaches have emphasized demand factors and less on supply side factors. Such models have generally been rather unsuccessful in

explaining long run export performance of developing countries. Therefore, the objective of this study is to identify both demand and supply factors that explains the export performance of five south Asian countries using panel data analysis over 1991-2017.

Our empirical analysis suggests that there is a long-run relationship between exports and its determinants. Further, results also indicate that both demand and supply side factors have significant impact on export behavior in South Asia. The income and price elasticities of export demand have relatively larger and highly significant impact on exports. Similarly, supply side factors such as infrastructure availability, financial market development, development of human capital and FDI have positive impact on export supply. The findings presented in this paper have several potential policy implications for South Asian countries.

- · For sustainable export growth, strategy for better market access has to be ensured with the diversification of exports, upgradation of technology, reduction in trade and transaction cost.

- · From the policy perspective, it can be concluded that FDI complements domestic exports and consequently, policy priority should be given to attract more FDI to boost exports.

- · It is also recommended that policies should be put in place to attract more FDI into export oriented sector to promote more exports.

- · In order to promote exports via FDI, the developing countries should focus on attracting more FDI into those sectors that would contribute to national competitiveness, assist local businesses in improving their productivity and learning export activities. Well-designed FDI strategy, directing FDI into export oriented sector might achieve the desired results.

- · Policy priority should also be give to improve the quality of infrastructure, financial market and business climate to improve the export competitiveness.

- · While FDI has potentials in helping host countries' exports, the benefits do not accrue automatically or evenly across countries.

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Local Self-governance: A Case Study in Odisha

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Abstract

Objectives: *The 73rd and 74th constitutional amendment act provides the power to the local government to act as a self-institution. The rationale behind the study is to examine the extent of devolution of power by the government of Odisha to the Panchayati Raj Institutions (PRIs) and Urban Local Bodies (ULBs) and the revenue position of the PRIs and ULBs, and also to evaluate the participation of elected representatives in the decision making of PRIs.*

Methodology: *The study was based on both secondary and primary data. Descriptive analysis is used to substantiate the objectives.*

Results: *Even if both the central and state governments allocated the resources sufficiently and the revenue positions are relatively better than before, there still exist various problems. The secondary data reveals that the income generating capacity and the sources of own revenue income generation are declining day by day. When it comes to the local participation rate, the primary data shows a major issue that only 56% of the representatives actively participated in the panchayat. Another major issue is that though the male-female ratio was 13:12, the active participation of male representatives is more than that of female representatives. Only 21.4% female participation was recorded and the rest 78.6 % belonged to male.*

Conclusion: *The study discovers that low income generation capacity of local bodies is now a major problem for them. Even if the Panchayat has plenty of economic resources, they were unable to utilise it properly. The low level of local participation was largely influenced by low level of education, lack of employment opportunities, unawareness of constitutional*

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rights, the patriarchal attitudes, lack of political experience and administrative knowledge, and an excessive of social structural limitations. Therefore, the situation demands effective capacity building programmes, institutional accountability and regular monitoring of local governance.

1. Introduction

The system of decentralization is an indispensable part of a democratic country like India. It helps in accelerating the performance of public sector and the basic objective is to establish a proximate relationship between the people and government. Decentralization of power will bring social equity and prosperity in the economy. Oates (1999) stated that "it will always be efficient for local government to provide Pareto efficient level of output". In India, the rationale of local governments is now recognized by contiguous relationships with citizens along with this involvement in the decision making process and functioning as a democratic self-government. After the implementation of 73rd and 74th constitutional amendments in India, now it is pertinent to examine their effectiveness at the ground level. Have the state governments fully transferred the functions to the local governments? Do the local governments have sufficient functionaries to deliver the services to the people? Do the local governments have sufficient funds to function efficiently? Do the local governments generate sufficient revenue on their own effort? Are the local governments able to function independent tiers of government? How do the elected representatives of local governments participate in decision making? This study seeks to find answers to these questions by undertaking a study in the context of Odisha. The study examines the extent of devolution of power by the government of Odisha to the PRIs and ULBs. It also analyzes the revenue position of the PRIs and ULBs and evaluates the participation of elected representatives in the decision making of PRIs.

2. Decentralization in Indian Context

According to Government of India Task Force on Decentralization (2001), "Decentralization in the context of panchayats means that when authority is transferred from the state to the local governments, the latter should have the prerogative of taking decisions on the planning and implementation of such activity."Oates argues that decentralization is required if there are information asymmetries i.e. the local governments are closer to people and if

there are typical political pressures and also if central government has limited capacity to distribute the public services, which differs from one jurisdiction to another. Decentralization usually leads to lower expenditure in comparison to the higher or top level government (Cullis and Jones, 2009). According to Oates (1972), decentralized expenditures are considered the more accurate local preferences than decisions made by the central government (Gurumurthi, 1998). Various studies have focused on the issues relating to the decentralization in India. Among them, horizontal imbalance is an important one and it persists in India even today. The economic and political factors are responsible for the imbalances. The most relevant point is that the horizontal imbalances exist not only because of poor resource capacity of states or that their needs of real expenditure are large, rather due to their fiscal management (Mukhopadhyay and Das, 2003). Another issue with the local government in India is Vertical imbalances. Singh and Vasishtha (2004) state that India's federal system is well known by assignments of tax and expenditure for which there exist vertical fiscal imbalances and consequently, central government transfers are made to state governments. Some central issues relating to vertical and horizontal imbalances in federal fiscal transfer can be solved by achieving the equity and efficiency in the various recommendations given by finance commission. Bagchi (1990) raises an important question that "whether the recommendations of finance commission take care of the vertical and horizontal imbalances, revenue deficit and redress the regional disparity?" The federal transfer system in India faces obstacles in India in providing mechanism for addressing the vertical and horizontal imbalances because of two components. At first, finance commission's approach in undertaking the tasks and secondly the government's budget plan and non-plan divisions (Bagchi, 1995). The inequalities of the funds transfer also results in the growth of imbalance between centre-state fiscal relationships (Chakraborty, 1998). To locate on the public finance map of India significantly, the local government needs an inclusive and equitable growth for better horizontal equity. Another vital consideration in regard to public finance restructuring is the need for real functional mapping and role of state and local government as well. No state in India except Kerala has done this properly. For this, there is the need of substantial improvement in case of data availability at the local level (Oomen, 2005). An efficient system of intergovernmental transfer will correct the vertical and horizontal imbalance which will help in economic development (Hajra Rakhe and Gajbhiye, 2008).

Rout and Sahu (2013) focus on the importance of *grama sabha* in strengthening local self-governance in Odisha. They are of the view that there exists the problem of how the

concept of local governance can be worked out effectively, as a result of which the people could play an important role in the decision making process. In this context, Mahatma Gandhi stated that 'True democracy could not be worked out by some men sitting at the top; it had to be worked out from below by the people of every village''. While coming to the effective participation of local representatives, Sekhon (2006) states about the female participation in Maharashtra Local governance that even if the constitutional amendment has reserved 33% of total seats for females, the participation from them at the grass root level is not satisfactory, because there are many constraints such as social, political and economic ones which push them backward. Verma and Kumar (2016) also find the same issue in case of Madhya Pradesh, where the female participation rate was not satisfactory at all; they were continued to depend upon their husbands to perform the role of the local representatives.

In this context, the previous studies were basically focused on the shortcomings of decentralization; basically they laid emphasis upon the vertical and horizontal imbalances, centre-state fiscal relations and intergovernmental transfers. Many of them worry about the fund transfer only. There are also studies which reflect the effective participation in India. But there are few studies available with respect to Odisha. The present study examines three research questions: (1) To what extent has the government of Odisha devolved power to the PRIs and ULBs? (2) What is the revenue position of the PRIs and ULBs in Odisha? 3) What is the nature of participation of elected representatives in the decision making of PRIs? Therefore, in this context, the present study focuses upon the extent of devolution of funds, functions and functionaries in Odisha.

3. Data and Method

To examine the extent of devolution of power by the government of Odisha to the PRIs and ULBs and to analyse the revenue position of the PRIs and ULBs, the study uses secondary data from finance accounts of Odisha, reviews the reports of state finance commission and various reports published by the Panchayati Raj Department and Department of Housing and Urban Development, government of Odisha. The study has used both primary and secondary data sources to examine the devolution of power, functions and the participation of elected representatives in the decision making of PRIs. For this, a survey was carried out in Odagaon Panchayat of Nayagarh district of Odisha state, which was selected through random sampling method. One systematically designed interview schedule was administered to each of the twenty-five ward members of the concerned panchayat.The secondary data were collected from the Panchayat Office itself

and District Panchayat Office (DPO). Descriptive analysis is used to substantiate the objectives.

4. Analysis and Findings

Extent of devolution of power by the government of Odisha to PRIs and ULBs

The 73rd constitutional amendment Act, 1992 opened the gates for reforming the local governance in India by empowering the PRIs. The Schedule XI makes a list of 29 subjects to be transferred to the PRIs, out of which only 21 subjects have been transferred by the government of Odisha to 11 departments of PRIs, which is given in **Appendix**, that shows that the government of Odisha transferred the powers to panchayati raj department which were directly regulated by all panchayats of the state. Out of twenty-nine subjects of the 73rd constitutional amendment Act, twenty-one have been transferred to the department and all of them are working under the panchayats. But the other eight subjects are not transferred to the panchayats, for which the government takes initiatives in implementation through different organizations. 74th constitutional amendment was brought in the year 1992, for improvement of ULBs by assigning various responsibilities to municipalities and strengthening municipal governance. Government of Odisha has recognized 103 ULBs. The study has used achecklist of powers transferred to ULBs as per the 74th constitutional amendment (18 subjects in the Schedule-XII) given in **Appendix**, which shows that the Odisha government transferred the eighteen subjects of the (Article-243W) twelfth schedule of constitution to the ULBs.

Devolution of funds to PRIs and ULBs

The funds were allocated both by state and central governments to the PRIs and ULBs. The study will discuss both forms of devolution in the following section.

State transfer

Table 1. Transfer of funds by the state government to PRIs and ULBs (Rs. in crore)

Sl.No.	Commissions	PRIs	ULBs	Total
1	II SFC	1458.30	458.20	**1916.50**
2	III SFC	2920.00	2128.10	**5048.10**
3	IV SFC	7705.07	1506.21	**12740.08**

Source: State finance commission report, statefinance commission of Odisha

Table1 represents a clear picture of the devolutions of funds to the local bodies in different years. It can be observed that the allocation of resources grows over the periods. The PRIs are getting more resource than the ULBs because the proportion is greater on their part as decided by the government. Similarly, the government also provides the compensation and assistance to the local bodies which changed over the periods as per the requirements of the PRIs and ULBs.

Central transfer

Table 2. Recommended Grants by the Central Finance Commission to the PRIs and ULBs of All States (RS. in crore)

Sl.no.	Commissions	PRIs	ULBs	Total
1	X-CFC	4380.93	1000	5380.93
2	XI-CFC	8000	2000	10000
3	XII-CFC	20000	5000	25000
4	XIII-CFC	63051	23111	86162
5	XIV-CFC	200292.2	87143.8	287436

Source: Finance commission report, finance commission of India

Table 2 shows the variation of grants recommended by the Central Finance commission. It shows the increasing trend of the grants over the years.The above comparative statement clearly reflects the growth of amount which was granted to the local bodies increasing day by day. If we estimate the growth rate, then the thirteenth finance commission increased around 85% in comparison to the eleventh finance commission. Likewise, the amount also increased around 70% in the fourteenth finance commission in comparison to the previous finance commission. It shows a good sign of progress in developing the situation of the local bodies.

Income generation by PRIs and ULBs

The PRIs have three tier system; i.e. Grama Panchayat, Panchayat Samiti and Zilla Parishad. But only the Gram Panchayat is authorized to levy and collect tax, fees, and toll and settle Gram Panchayat property through lease. It is admitted that the income generation capacity

of the G.P.s is very limited. The following tables indicate the position of PRIs in own revenue generation from different sources.

Table 3.Own Revenue resources of PRIs in terms of Tax and Non-Tax Revenues

Year	Vehicle Tax	Water Tax	Light-ing Tax	License Fees	Total Tax Revenue	Market Fees	Ferry Ghats	Piscicul-ture Tank	Orchard	Others	Total Non-Tax Revenue	Total Income of all GPs.
2010-11	6.923	0.870	2.282	26.358	36.433	584.717	134.207	820.618	22.641	441.011	2003.194	2039.627
2011-12	11.150	0.910	2.432	37.594	52.086	618.082	143.237	888.652	33.694	461.684	2145.349	2197.435
2012-13	8.605	0.930	2.525	30.017	42.077	693.535	135.106	903.774	26.546	505.193	2264.154	2306.231

Source:*Fourth state finance commission report*

The above table shows the revenue generation of the rural local bodies in terms of both the tax and non-tax revenue which shows a very narrow income base of gram panchayats. It is observed that the income earning capacity has declined over the years compared to the earlier period.

Likewise, the ULBs also generate income from different sources. The revenue generation of ULBs is given in table 4.ULBs, under the 74th Constitutional amendment, are required to discharge a large number of functions. Generation of revenue by these bodies from their own sources is limited, though the number of functions to be implemented by them is large and elastic in nature. The following table shows the size of revenue generation by the ULBs in Odisha.

Table 4. Status of Revenue generation by ULBs (Rs. In crore)

ULB Category	Years	Tax Revenue					Non Tax Revenue				Total
		holding	Lighting	Advertisement	other	Total tax revenue	Rental Income from properties	User/ Hiring charges etc.	Other non-tax revenue	Total non-tax revenue	Total revenue
Municipal Corporation	2010-11	14.6	7.32	4.55	10.34	36.81	2.16	12.47	56.35	70.98	107.79
	2011-12	12.91	6.58	9.8	7.36	36.65	2.43	27.55	61.09	91.07	127.72
	2012-13	14.18	7.12	10.83	6.54	38.67	3.29	17.83	77.53	98.65	137.32
Municipalities	2010-11	4.67	2.34	0.86	10.46	18.33	7.07	2.99	51.7	61.76	80.09
	2011-12	5.03	2.8	1.12	10.35	19.3	8.6	4.06	61.53	74.19	93.49
	2012-13	5.47	3.09	1.25	11.36	21.17	6.53	3.66	80.14	92.33	113.5
NACs	2010-11	1.45	0.95	0.06	5.41	7.87	3.22	2.12	21.41	26.75	34.62
	2011-12	1.53	0.93	0.1	5.8	8.36	3.75	2.52	25.89	32.16	40.52
	2012-13	1.69	1.08	0.11	6.76	9.64	4.77	2.77	30.58	38.12	47.76
Total		61.53	32.21	28.68	74.38	196.8	43.82	75.97	466.22	586.01	782.81

The above table shows the revenue generations of the ULBs. There are many sources of earning the income for them. The data shows that both in case of own tax and non-tax revenue, the ULBs achieve a high growth.The ULBs should try to increase its revenue earning capacity so that the financial position of the ULBs will improve.

Findings from the field survey

Devolution of Power

The situation of Panchayati raj system in Odisha is analysed through the case study of Odagaon Panchayat in Nayagarh district of Odisha. The rural local bodies were assigned with powers and function on 29 subject heads under 73rd constitutional amendment act 1992, out of which 21 subjects were transferred to the panchayat in Odisha as stated by the third finance commission. The powers that are transferred to the Odagaon panchayat are listed in table-1(**Appendix**).The study found that only 11 subjects weretransferred in the Panchayat.

Devolution of funds

Grants by State Finance Commission

The funds are allocated by the state finance commission to the blocks and panchayat used for specific purposes. The funds are allocated under different headings like Honorarium, Dearness Allowances or seating fees of elected representatives, Staff Subsidy, Kendu leaf Grant, Sairat, Surcharge on Entertainment Tax, cess to the Blocks, panchayat, panchayat samiti. The trend of grants in aid to the block and panchayat, panchayat samiti from 2008-14 are shown in table 5, table 6 and table 7.

Table5. Grants in aid to Odagaon Block by State Finance Commission

Sl. No.	Year	Honorarium	DA/SF	Staff Subsidy (Remuneration)	K.L.Grant	Sairat	Surcharge on Entertainment Tax	Cess	Total
1	2008-09	294400	298650	451000	93596	42003	6094	426652	1612395
2	2009-10	369000	407460	95735	95793	42550	6094	530870	1547502
3	2010-11	409794	314280	19800	64320	41580	6222	372372	1228368
4	2011-12	312000	529928	3771	128640	41580	6237	186072	1208228
5	2012-13RE	448000	1042920	0	114240	41635	6244	379882	2032921
6	2013-14BE	537600	0	0	114944	0	0	284227	936771
	Total	2370794	2593238	570306	611533	209348	30891	2180075	8566185

Source: *District Panchayat Office (DPO), Nayagarh District*

Table 6. Grants in aid to Odagaon Panchayat by State Finance Commission

Sl. No.	Year	Honorarium	DA/SF	Staff Subsidy (Remuneration)	K.L.Grant	Sairat	Surcharge on Entertainment Tax	Cess	Total
1	2008-09	6900	6980	780	9318	1383	1722	13492	40575
2	2009-10	12000	18720	0	8257	1383	5970	29495	75825
3	2010-11	12600	14040	0	2010	2160	324	19653	50787
4	2011-12	21000	23400	0	4020	2160	324	9704	60608
5	2012-13RE	14000	46020	0	3570	2653	401	24362	91006
6	2013-14BE	16800	0	0	3592	0	0	18217	38609
7	Total	83300	109160	780	30767	9739	8741	114923	357410

Source: District Panchayat Office (DPO), Nayagarh District

Table 7. Distribution of Grants-in-Aid to the Panchayat Samiti of Different Blocks in Nayagarh District

Sl.No.	Block	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Total
1	Bhapur	97100	120800	83463	51568	90823	70831	514586
2	Daspalla	95800	120209	82290	50987	89637	69943	508868
3	Gania	37600	48779	31071	26912	40556	33218	218139
4	Khandapada	103000	131835	88932	54028	95837	74582	548218
5	Nayagarh	136280	167174	117891	67807	123931	95601	708689
6	Nuagaon	87680	121004	75726	47565	82659	64723	479363
7	Odagaon	157676	201638	136905	76474	141591	108813	823104
8	Ranpur	152960	208622	134436	74967	138527	106520	816040
9	Total	868096	1120061	750714	450308	803561	624231	4616980

Source: District Panchayat Office (DPO), Nayagarh District

From the above three tables, it is observed that the trend of resource needs and transfer was rising over the periods by the state finance commission.Table 7shows the distribution of grants to different blocks of Nayagarh district. If we estimate the share of Odagaon block to total fund allocation, then 18% of the total grant-in-aid was distributed in the block. Both central and state finance commissions were providing sufficient amount of fund to the local bodies; now it is the job of the local government to allocate it properly.

Grants by Central Finance Commission

The Thirteenth Finance commission released the funds basically in two or three phases during a year. In 2013-14 the commission funded the grant in the first phase.Its statistical reports for eight blocks are described in the given table-8. It shows that the thirteenth Finance Commission transferred the resources for the following purposes.

## Table 8.Thirteenth Finance Commission Grants to Different Blocks

Name of the Block	A. Operation and Maintenance :-Drinking water supply system, Sewerage and Solid Waste Management(Rural Sanitation)				B. Repair/Maintenance Of 20 Seaters Digital Data Base Management System in Each Block			
	2010-11	2011-12	2012-13	2013-14	2010-11	2011-12	2012-13	2013-14
Bhapur	6732600	6732600	9649500	5854900	20000	20000	20000	10000
Daspalla	6668800	6668800	9759300	5810800	20000	20000	20000	10000
Gania	2797600	2797600	4094000	2433500	20000	20000	20000	10000
Khandapada	7405800	7405800	10836900	6454700	20000	20000	20000	10000
Nayagarh	9221400	9221400	13489000	8022000	20000	20000	20000	10000
Nuagaon	6947200	6947200	10168400	6047000	20000	20000	20000	10000
Odagaon	11234800	11234800	16439300	9777700	20000	20000	20000	10000
Ranpur	11909400	11909400	17923200	10667600	20000	20000	20000	10000
Total	62917600	62917600	92559600	55068200	160000	160000	160000	80000

Name of the Block	C. Maintenance of Computers, Printers etc. in all Gram Panchayats(Rs. 500 per Month per G.P)				D. Maintenance Of Accounts in all Gram Panchayats (Rs.1500 per Month per G.P)			
	2010-11	2011-12	2012-13	2013-14	2010-11	2011-12	2012-13	2013-14
Bhapur	114000	114000	114000	57000	342000	342000	342000	171000
Daspalla	114000	114000	114000	57000	342000	342000	342000	171000
Gania	48000	48000	48000	24000	144000	144000	144000	72000
Khandapada	126000	126000	126000	63000	378000	378000	378000	189000
Nayagarh	156000	156000	156000	78000	468000	468000	468000	234000
Nuagaon	120000	120000	120000	60000	360000	360000	360000	180000
Odagaon	192000	192000	192000	96000	576000	576000	576000	288000
Ranpur	204000	204000	210000	105000	612000	612000	630000	315000
Total	1074000	1074000	1080000	540000	3222000	3222000	3240000	1620000

Name of the Block	E. Construction of Roads and Bridges					
	No. of Project	Amount	No. of Project	Amount	No. of Project	Amount
Bhapur	2	1592357	4	1687898	5	1815286
Daspalla	6	1592357	5	1687898	6	1815286
Gania	5	1592357	6	1687898	6	1815286
Khandapada	2	1592357	6	1687898	5	1815286
Nayagarh	4	1592357	6	1687898	4	1815286
Nuagaon	2	1592357	5	1687898	5	1815286
Odagaon	5	1592357	4	1687898	6	1815286
Ranpur	5	1592357	5	1687898	6	1815286
Total	31	12738856	41	13503184	43	14522288

Source: District Panchayat Office (DPO), Nayagarh District

From the primary surveyed Panchayat, the study also analysed the status of revenue position in that period.Fig.1depicts that both income and expenditure are highest in the year 2010-11.After that, it has declined because of the low own income generation of the panchayat which is a major issue over there.

Fig.1 Comparison of Income and Expenditure of last five year
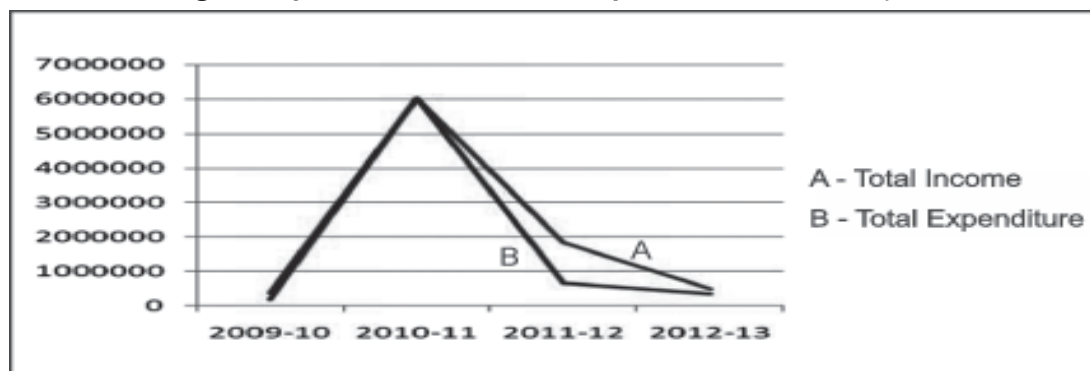
Source: Odagaon Panchayat Office, Nayagarh District

Devolution of Functionaries

The Panchayat consists of elected members and government recruited staff. As per the data, it shows that the elected body comprises one sarpanch and twenty-five ward members. The Government has appointed one Executive Officer (EO), one Grama Rozgar Sebaka (GRS).There are two Self Employed Mechanics (SEM) working for the Panchayat who come under the Rural Water Supply & Sanitation (RWSS) department. But here the study focuses upon evaluating the participation of the electoral body, who are the local representatives and the Panchayat consists of 25 ward members.

Socio economic profile of the functionaries of the Panchayat

The study traces out the function of the functionaries in the form of evaluating their participation in the system. The local representatives were elected directly by their territorial constituencies. In the surveyed Panchayat, among 25 ward members, 13 are male and 12 are female. So the ratio (13:12) of the ward members shows that there existsequal distribution of power in the panchayat. The study found that more than 90% ward members were literate which shows that all are capable of taking decisions and are efficient. Similarly, the occupation of the ward members also plays an effective role in this case. It reflects the picture of their livelihood. While doing the case study, it was found that the representatives were largely dependent upon agriculture, business, daily labour work, home chores and other activities.Data shows that 100% female ward members are home makers and among total ward members, it was 48%.

Another interesting finding is that women ward members are usually engaged in their household chores and they have lack of time for other things; so their husbands supervise

all the works done in the village. This reflects that less employment opportunities drive the people to play the de facto roles in the panchayats,as a result of which the number of de facto members keeps increasing day by day, and this raises a serious issue in the local system.

Participation in panchayat work

If we observe the data sources, then it will not be wrong to say that the male participation is more than the female. As it is already stated, the women are unaware about the positional value in the panchayats and engaged in the household chores, and as a result the husbands of lady ward members and sarpanch are performing all duties in the panchayat on their behalf. Table-4 presents the participation strength in Percentage terms.

Table 9. Participation of ward members in panchayat work (in percentage)

If actively participated = Yes,		Not participated= No	
Male(13)		**Female(12)**	
Yes	**No**	**Yes**	**No**
11(84.6%)	2(15.4%)	3(75%)	9(25%)

It shows that total active participation is 14(56%) and individually, the male participation is 11 (78.6%) and female participation is 3(21.4%). It was clearly observed from the above table that the female participation is much less than that of the male.

Key problems and challenges in the local governance

There is need of immediate attention for the effective functioning of local government as local units of self-governance in India. Though the fund transfer to the local level is continuous, now there is need of monitoring accountability of the system. Mainly, the psychological factor of the local representatives especially of the women, lack of understanding of the rules and regulation, responsibilities and their role largely affect the participation in the rural governance structure. In spite of the regular fund devolution from state and central finance commission, the panchayat has still not achieved its actual position of self-governance. The panchayat is having limitations from both governing bodies and people's side. In case of functionaries during the field survey, it was observed that the gram panchayat suffers from number of problems, because of the lack of availability of staff, inactive participation of the elected representatives, unawareness of power as an

elected member especially in case of the females, honorarium irregularity. The female members were also compelled to do politics as a result of which the number of de facto members was increasing day by day.

5. Conclusion and policy implication

Regarding functioning and functionaries of the local bodies, the government of Odisha has taken all the steps which were assigned by the constitution. If we look into the fiscal scenario, then there is a drastic change felt in the state. The local governments are improving in their status. People are enjoying the basic amenities of life. The revenue positions of the local bodies are rising, compared to the early periods. If we examine the sufficiency of the funds, then it may not be wrong to say thatthe state and central governments have allocated enough funds in developing the financial position of the local government. Now it is the duty of the local authorities on how to allocate them efficiently so that this will be best optimized.The local governments were also suffering from low own income generation capacity which may be the first priority. Besides the revenue position, periodical evaluationand regular monitoring of different programs will help the local government to improve in their deficient area.

In the study area, the role of the representatives is not justifiable because the performance of the elected representatives was unsatisfactory especially where the participation of female representatives was more. It's a matter of great concern that in a democratic country like India, where half of the population is women, full empowerment of women is still a distant call for many women. Even if the women participation in electoral process which is not that low compared to men, their participation and representation in decision making process is still disappointing. This reflects that they need an immediate attention for training and capacity building workshop to understand their rights and duties of the roles of local representatives. It will help in enlarging their individual efficiency level and enhancing their capacity in decision making.It also requires a change in the social institutions, people's mind-set, and far more determined effort on the part of the women representatives, NGOs, officials and policy makers concerned.

The study also implies further study on the effective participation and its implications towards the welfare of people, effectiveness of the capacity building programmes whether it will improve the efficiency of the representatives. How far will it be beneficial for the development of the local representatives? Though the government has made provision

for no gender discrimination, still the issue continues to prevail at the grass root level; so the authority must focus in this respect and further research also be made to find the real problems. Therefore, the local government can achieve its objective to reach the people at the grass root level and perform better than before. Then only the system of decentralization will be successful in India.

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Appendix

Table-1 Powers assigned to the Odagaon Panchayat

Sl.no	Subjects	Remarks
1	Agriculture, including agricultural extension	
2	Land improvement, implementation of land reforms, land consolidation and soil conservation	
3	Minor irrigation, water management and watershed development	
4	Animal Husbandry, dairying and poultry	
5	Fisheries	**Yes**
6	Social Forestry and Farm Forestry	
7	Minor Forest Produce	**Yes**
8	Small Scale industries, including food processing industries	
9	Khadi, village and cottage industries	

10	Rural Housing	**Yes**
11	Drinking water	**Yes**
12	Fuel and Fodder	
13	Roads, Culverts, Bridges, Ferries, Waterways and other types of Communication	**Yes**
14	Rural electrification, including distribution of electricity	
15	Non-conventional energy sources	
16	Poverty Alleviation Programme	**Yes**
17	Education, including primary and secondary schools	**Yes**
18	Technical Training and vocational education	
19	Adult and non-formal education	
20	Libraries	
21	Cultural activities	
22	Markets and Fairs	**Yes**
23	Health and sanitation, including hospitals, primary Health Centers and Dispensaries	
24	Family Welfare	
25	Women and Child Development	
26	Social Welfare, including welfare of the handicapped and mentally retarded	**Yes**
27	Welfare of the Weaker sections, and in particular, of the Scheduled Castes and the Scheduled Tribes	**Yes**
28	Public distribution System	**Yes**
29	Maintenance of Community Assets	

Table-2 Devolution of 29 subjects of Schedule-XI to PRIs by the government of Odisha

Sl.No	Subjects	Department	Activity	Designation of functionaries who will be accountable to PRIs	Sanction of casual Leave
1	Agriculture, including agricultural extension	Agriculture	1)Kharif, Rabi 2) Soil Conservation. Horticulture. 3)Watershed	i)District Agriculture Officer ii)District Soil Conservation Officer iii)District Horticulture Officer	President, Zilla Parishad
				Junior Agriculture Officer	Chairman, Panchayat Samiti
		Co-operation	1.Credit 2.Risk Management	Dy. Registrar/ Asst. Registrar of Cooperative Societies	President, Zilla Parishad
2	Land improvement, implementation of land reforms, land consolidation and soil conservation	Agriculture		i)District Agriculture Officer ii)District Soil Conservation Officer iii)District Horticulture Officer	President, Zilla Parishad
				Junior Agriculture Officer	Chairman, Panchayat Samiti
3	Minor irrigation, water management and watershed development	Water Resources Department	1.Development of MI(Ayacut up to 100 acres)system, Drainage system, Water Harvesting Structures and Water Management 2.Water Management	Junior Agriculture Officer	Chairman, Panchayat Samiti
4	Animal Husbandry, dairying and poultry	Fisheries and Animal Resources Development	1.Development of Live Stock 2.Veterinary Services 3.Feeding and Fodder including support during Drought 4.Dairy Development	District Fisheries Officer	President, Zilla Parishad
				Assistant Director, Fisheries	-
				Chief District Veterinary Officer	President, Zilla Parishad
				Veterinary Asst.Surgeon	Chairman, Panchayat Samiti
				Live Stockman	Sarapanch will report attendance of Live Stock Inspector to Chairman and Veterinary Assistant Surgeon

5	Fisheries	Fisheries and Animal Resources Development	1.Developing of Inland Fisheries 2.Development of Marine Fisheries 3.Development of Marketing processing infrastructure 4.Welfare Measures	District Fisheries Officer	President, Zilla Parishad
				Assistant Director, Fisheries	-
				Chief District Veterinary Officer	President, Zilla Parishad
				Veterinary Asst.Surgeon	Chairman, Panchayat Samiti
				Live Stockman	Sarapanch will report attendance of Live Stock Inspector to Chairman and Veterinary Assistant Surgeon
6	Social Forestry and Farm Forestry	NT	NT	NT	NT
7	Minor Forest Produce	Food Supplies & Consumer Welfare Department	1.Regenration of MFP species 2.Training 3.MFP collection 4.Processing and Marketing Charges	Civil Supplies Officer	President, Zilla Parishad
8	Small Scale industries, including food processing industries	NT	NT	NT	NT
9	Khadi, village and cottage industries	NT	NT	NT	NT
10	Rural Housing	Food Supplies & Consumer Welfare Department	1.Approval of PS's plan and Sanctioning of Fund For rural Housing Schemes 2.Supervision and monitoring of rural housing Schemes	Civil Supplies Officer	President, Zilla Parishad
11	Drinking water	R.D Department	NA	Executive Engineer, RWSS	President, Zilla Parishad
12	Fuel and Fodder	NT	NT		
13	Roads, Culverts, Bridges, Ferries, Waterways and other types of Communication	Food Supplies & Consumer Welfare Department	1. Development of road network and accessibility 2. Improvement And maintenance of the existing roads/culverts and bridges 3. Development of waterways, ferrying, ferry services etc.	Civil Supplies Officer	President, Zilla Parishad
14	Rural electrification, including distribution of electricity	NT	NT	NT	NT

15	Non-conventional energy sources	Food Supplies & Consumer Welfare Department	1.Assesment of Districts Energy Requirement 2. Promoting non-conventional sources of energy including installations of solar panels, wind mills and gobar gas plants and extension education.	Civil Supplies Officer	President, Zilla Parishad
16	Poverty Alleviation Programme	Food Supplies & Consumer Welfare Department	1.Planning and Implementation of poverty alleviation programmes 2.Wage employment programmes	Civil Supplies Officer	President, Zilla Parishad
17	Education, including primary and secondary Schools	School and Mass Education	1.Expansion and development of educational facilities 2. Establishment and maintenance of hostels, and other welfare measures for target group studies	C.I/D.I of School Headmaster of Primary School	President, Zilla Parishad Sarapanch.
18	Technical Training and vocational education	NT	NT	NT	NT
19	Adult and non-formal education	School and Mass Education	1.Planning and implementation of adult and non-formal education total literary campaign	C.I/D.I of School	President, Zilla Parishad
20	Libraries	NT	NT	NT	NT
21	Cultural activities	NT	NT	NT	NT
22	Markets and Fairs	Food Supplies & Consumer Welfare Department	1. Identification of location and development of market Yards. 2. Regulating wholesale and retail markets, supervision and monitoring of marketing activities	Civil Supplies Officer	President, Zilla Parishad
23	Health and Sanitation, including hospitals, primary Health Centres and Dispensaries	Health & Family Welfare Department	1.Health care	Chief District Medical Office Medical Officer in charge of PHC/Hospitals Village Level Health Worker/ANM	President, Zilla Parishad Chairman, Panchayat Samiti Sarapanch or Naib-Sarapanch whoever is a woman.
24	Family Welfare	Health & Family Welfare Department	1.Maternal and Child Health (MCH) Centers	Chief District Medical Office Medical Officer in charge of PHC/Hospitals Village Level Health Worker/ANM	President, Zilla Parishad Chairman, Panchayat Samiti Sarapanch or Naib-Sarapanch whoever is a woman.

25	Women and Child Development	Women and Child Development	1. Socioeconomic Development of women 2. Integrated Child Development 3. Welfare of the Disabled. Adoption of Children as per prescribed law/rules.	District Social Welfare Officer	President, Zilla Parishad
				CDPO,ICDS/ Anganwadi Workers	Chairman/Vice Chairman whosoever is a woman
26	Social Welfare, including welfare of the handicapped and mentally retarded	Women and Child Development	1.Welfare of the Aged	District Social Welfare Officer	President, Zilla Parishad
				CDPO,ICDS/ Anganwadi Workers	Chairman/Vice Chairman whosoever is a woman
27	Welfare of the Weaker sections, and in particular, of the Scheduled Castes and the Scheduled Tribes	ST & SC Development Department	1. Eradication of untouchability 2. Curbing Atrocity against SC/ST 3.Educational Development SC/ST 4.Economic Development	District Welfare Officer	President, Zilla Parishad
				Headmaster of Seveshram	Sarapanch.
28	Public distribution System	Food Supplies & Consumer Welfare Department	1. Distribution of PDS Commodities 2. Identification Of beneficiaries and distribution of ration cards 3. Linking PDS with Poverty Alleviation Programmes and Employment Generation Schemes	Civil Supplies Officer	President, Zilla Parishad
29	Maintenance of Community Assets	P.R Deptt.	NA	NA	NA

NT: Not Transferred, NA: Not Available Source: http://www.odishapanchayat.gov.in

Table-3 Checklist of Powers Transferred to ULBs as per the 74th Constitutional Amendment

Sl.No.	Subjects	Department
1	Urban planning and Town Planning	Housing & Urban Development Department
2	Regulation of land use and construction of buildings	Housing & Urban Development Department
3	Planning for economic and social development	Housing & Urban Development Department
4	Roads and bridges	Housing & Urban Development Department
5	Water Supply for domestic, industrial and commercial purposes	Housing & Urban Development Department
6	Public Health, Sanitation conservancy and solid waste management	Housing & Urban Development Department
7	Fire services	Housing & Urban Development Department

8	Urban Forestry, Protection of the environment and promotion of ecological aspects	Housing & Urban Development Department
9	Safeguarding the interests of weaker sections of society, including the handicapped and mentally retarded	Housing & Urban Development Department
10	Slum improvement and up gradation	Housing & Urban Development Department
11	Urban Poverty Alleviation	Housing & Urban Development Department
12	Provision of Urban amenities and Facilities such as parks, gardens, playgrounds	Housing & Urban Development Department
13	Promotion of cultural, educational and aesthetic aspects	Housing & Urban Development Department
14	Burials and burial grounds; cremations, cremation grounds and electric crematoriums	Housing & Urban Development Department
15	Cattle Pounds; prevention of cruelty to animals	Housing & Urban Development Department
16	Vital Statistics including registration of births and deaths	Housing & Urban Development Department
17	Public amenities including street lighting, parking lots, bus stops and public conveniences	Housing & Urban Development Department
18	Regulation of Slaughter houses and tanneries	Housing & Urban Development Department

Source: *http://urbanorissa.gov.in*

Human Development in Odisha:
An Inter-District Analysis

Jayanti Behera[1], Lipishree Das[2] and Dukhabandhu Sahoo[3]

Abstract

This paper discusses the inter-district variation of HDI by using secondary data for the year 2011. It uses coefficient of variation and Lorenz curve to draw relevant information.The result shows that Jharsuguda occupies the first position with a HDI value of 0.735 followed by Angul, Sundargarh, Jagatsinghpur and Balasore where as Balangir ranks at the bottom with a HDI value of 0.406. Though the inter-district variation of HDI in 2011 has declined as compared to 2004-05, the inter-district variation in income is very high. This is reflected in the overall HDI scores as districts like Jharsugada and Angul with mining and industrial activities top the ladder while their counterpart districts with agrarian base languish at the bottom. Therefore, the policy makers need to design appropriate policies to improve the performance of agragrian and allied sectors, so that the gap between the better performer and poor performer can be bridged.

Keywords: Human development, inter-district variation, Odisha, MANUSH, coefficient of variation

JEL Classifications: O15,R12, P25, C02

1. Introduction

Traditionally, a country's economic development is measured in terms of gross domestic product (GDP). The greater the quantity of GDP per capita, the higher is the country's economic development and prosperity, but it ignores the welfare aspect of the people. It is also true that a high GDP per capita does not always generate well-being for the people,

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but its distribution matters much for the well-being of the people (Gopalakrishna, 2008). However, to become a developed country, only economic growth is not enough. Due to the occurrence of inexplicable social problems in many developed countries, it is essential to have a good correlation with human development. So, the human development index (HDI), which measures socio-economic development levels of a country, was developed (Demir, 2006). Human development is concerned more with people than economic growth. It is a process of increasing people's choices and opportunities, which can be infinite and vary over time. At all levels of development, these choices and opportunities are necessary for the people to live longer and healthier lives, to gain knowledge, and to maintain a decent standard of living (HDR, 1990).

Human development has six pillars such as equity, sustainability, productivity, empowerment, cooperation and security. Equity ensures fairness to every person, both men and women, in the distribution of any items; everyone has the right to education and health care. Sustainability gives the right to live a long and sustained life. Productivity states complete participation of people in the income generation process. Empowerment refers to the freedom of the people to determine development and decisions which affect their lives. Besides this, human development helps in increasing social and political stability. It is also closely associated with the physical environment such as deforestation, desertification and soil erosion. They will decline when poverty declines and this is possible through achieving human development index (Mishra, 2014).

2. Concept of Human Development

The Human Development Index (HDI) was developed by economists Mahbub ul Haq and Amartya Sen. The first human development report, which had been commissioned by the United Nations Development Program (UNDP),was published in 1990.There are two methods for measurement of human development Indexsuch as old and new.

Old methodology of HDI (1990-2009) includes three dimensions: health, income and education. For the dimension of health, the life expectancy at birth is used as a proxy with lower limit of 20 years and upper limit of 82.5 years. For the dimension of income, GDP per capita is used along with general logarithmic. The idea to use logarithmic of GDP per capita is to give emphasis on the diminishing marginal utility of transforming income into human capabilities. The lower limit of income is $100, while the upper limit is $40,000. Similarly, the knowledge index is formed by assigning two-third weight to adult literacy and one-third weight to the gross enrolment ratio (GER). The old methodology uses the arithmetic mean

in computing the HDI. Symbolically, the old HDI is written as

HDI = 1/3 (h + e + y)

where, h- health index, e-education index and y- income index.

The new methodology of HDI (2010 index onwards) was developed on 4th November 2010 and includes three dimensions, just as the old methodology: health, income and education. Symbolically, the new HDI is written as

$$HDI = \sqrt[3]{h * e * y}$$

where, h- health index, e-education index and y- income index.

For the dimension of health, the new index also uses the life expectancy at birth, again as old HDI, where in the lower limit of life expectancy at birth is 25 years and the upper limit is 85 years. The lower limit of life expectancy is created on the basis of long-run historical trends whereas the upper limit on the observed values of Japan (2010). GNI per capita with natural logarithm (ln) is used instead of GDP per capita for income dimension. The lower and upper limits are \$163 and \$108,211, respectively. However, the replacement of GNI per capita does not affect the value of the income index much.

The main aim of human development is to enhance the level of well-being of the citizens. Economic development is possible if human beings develop their capabilities through creativities. In this connection, it is essential to assess the status of human development in Odisha and to study the inter-district variation in human development as limited studies have been done in this area.

3. Review of Literature

Kumar (1991) has carried out a study with the objective to compute the HDI for 17 states of India and rank them along with the HDI computed countries which were estimated in the year1987 and cited in the UNDP's human development report, 1990. The result shows that the HDI is low i.e. 0.292 in Uttar Pradesh and high i.e. 0.651 in Kerala. Kerala is exceptional in the achievement of high HDI though it has low per capita incomes.

Dholakia (2003) has examined the trends in regional disparity in the economic and human development in India in terms of HD indicators over the last two decades and has discussed their causality by taking the secondary data. It is observed that there is no significant trend for rising or falling of regional disparity in per capita income (PCI), but 19 out of 25 HDI

indicators (Such 19 indicators are HDI, inflation and inequality-adjusted per capita consumption expenditure (IIAPCCE), unemployment rate (UR), proportion of population below poverty line (PPBPL), literacy rate (LR), adult literacy rate (ALR), drop-out rate for class (DRC), death rate (DR), etc.) show a declining trend. There also exists a two-way causality between economic and human development as per the Indian regional data. When per capita income is the cause and HDIs are the effect, the structure of the estimated equations becomes stable over time but it fluctuates when HDIs are the cause and PCI is the effect. Furthermore, HDIs take eight years to influence the PCI, but PCI takes only two years to influence the HDIs. He argues that the Finance Commission and Planning Commission are not given much focus on the inequality in human development at the regional level due to the diminishing trend in regional disparity in human development.

Pradhan (2008) has studied the performance of human development in Odisha at the inter-state and inter-district level by using the secondary data. To measure human development, the methodologies like Alternative Composite Index of Human Development (ACHDI) and Variance-Covariance matrix are used. It is found that the performance of Odisha in human development is very bad and it ranks 13th among the 14 non-special category states of India. Dimension-wise, Odisha miserably fails in all the spheres except education, which is relatively better than that of the other states of India. It is also found that the performance of human development in the different districts of Odisha is relatively very poor. Purohit (2012), in his paper, depicts the disparity in terms of health and human development between rich and poor sections and between rural and urban strata of 19 major Indian states. In addition, the paper suggests appropriate policy measures to reduce the disparity between rural and urban areas by increasing public spending on health, improving the use of existing public facilities, and popularizing health insurance schemes which are mainly meant for the poor.

In his paper, Mishra (2014) identifies the key determinants of human development for the rural areas of Odisha by using the household level data and multivariate factor analysis, particularly Principal Component Analysis (PCA). It is found that economic, basic amenities, enrolment level, literacy and general education, child education and higher education are the key determinants in rural areas of Odisha in influencing the level of human development. They are the highest level of education attainment, household employment status, etc. Therefore, the above-stated findings will be useful to the government of Odisha for formulating plans and policies to raise the level of human development and to address the difficulties.

Mishra and Nathan (2014) in their paper, evaluate three aggregation methods of estimating HDI by using monotonicity, anonymity, normalization, uniformity, shortfall sensitivity and hiatus sensitivity (MANUSH) axioms. But this paper does not discuss the reason behind the selection of the three dimensions and their measurement. These dimensions are taken as common or given, while evaluating all the aggregation methods. The old linear average approach satisfies three axioms of MANUSH such as monotonicity, anonymity, and normalization (or MAN) axioms whereas the new geometric mean approach satisfies the axioms of monotonicity, anonymity, normalization and Uniformity (MANU) axioms. But the alternative measure of HDI proposed by the authors satisfies MANUSH axioms. In this method, HDI is the additive inverse of the distance from the ideal. The displaced ideal method is an advantage over the linear average and geometric mean methods, because by taking shortfall sensitivity axiom, it gives importance to the neglected dimension which should be at least in proportion to the shortfall and by taking hiatus sensitivity, higher overall attainment must simultaneously lead to a reduction in the gap across dimensions.

Mohanty et al. (2016) analyse the spatial inequalities in human development and in infrastructural facilities across 30 districts of Odisha and examine the effect of infrastructure on human development in the state. The methods like principal component analysis (PCA), panel data regression, F test, pooled regression, Lagrange multiplier (LM) test, likelihood ratio (LR) test, Hausman specification test and causality test are used. The result shows that there is regional variation in the level of human development as well as in infrastructural development in Odisha.

3 Objectives

1. To assess the status of human development in different districts of Odisha.

2. To study the inter-district variation in human development in the state.

3.1 Hypothesis

H_0: There is no inter-district variation in human development in Odisha.

H_1: There is inter-district variation in human development in Odisha.

3.2 Sources of Data

The study is purely based on secondary data. The data have been collected from HDRs of UNDP, Ministry of Human Resource Development (MHRD), Odisha Human Development Report 2004, Directorate of Economics and Statistics, Government of Odisha, Odisha Primary

Education Programme Authority (OPEPA) office, Annual Health Survey Factsheet Odisha, census of India and from Statistical Abstract of Odisha, 2012.

4. Methods

For objective one, Mishra and Nathan's displaced ideal methodology has been used because it satisfies the MANUSH axioms. The old methodology of UNDP (i.e. HDR, 1990) is not taken because it satisfies only the first three axioms of MANUSH but not all axioms. The latest methodology of UNDP HDR 2010 satisfies only the first four MANUSH axioms but not all. So, Mishra and Nathan's displaced ideal methodology is an advantage over the two methodologies (such as HDR, 1990 and HDR, 2010) because it satisfies the shortfall sensitivity (the importance on the neglected dimension should be at least in proportion to the shortfall), and hiatus sensitivity to level (higher overall attainment must simultaneously reduce the gap across dimensions). The method is given as follows:

$$HDI_{DI} = 1 - (\sqrt{((1-h)^2 + (1-e)^2 + (1-y)^2)}/\sqrt{3})$$

Where $\sqrt{((1-h)^2 + (1-e)^2 + (1-y)^2)}$ is the Euclidean distance from the ideal, anddividing the same with "3 normalizes it in the three-dimensional space (Mishra and Nathan, 2014). The computation of human development in different districts of Odisha is made for the year 2011 because the data is available up to this year. Cohort analysis is used to categorise the districts as developed, moderately developed and less developed in human development.

❖ Developed: Mean value +the value of standard deviation.

❖ Less Developed: Mean value –the value of standard deviation.

❖ Moderately developed: Between the developed and less developed.

To substantiate the second objective i.e. to study the variation in human development in different districts of Odisha, coefficient of variation and Lorenz curve are used.

4.1 Indicators of HDI

In this study, gross district domestic product (GDDP) per capita at 2004-05 prices, i.e. real DDP per capita is used as a proxy for standard of living.Health attainment is measured by infant mortality rate (IMR) because data on life expectancy at birth is not available at the district level.Educational attainment is measured by combining the literacy rate (two-third weights) and combined gross enrolment ratio (6–14 years) (one-third weight).In order to

compute the three-dimension indices, minimum and maximum goal-posts are chosen.The basis of chosen values for the health, education and income parameters for HDI is as follows:

- IMR is lowest in Goa (11 during the year 2011) among the states of India and therefore, selected as the minimum value for the health parameter. Balangir IMR is highest in 2011(i.e. 97) among the districts of Odisha. Hence, 100 is taken as the maximum value for the health parameter. Therefore, the health index for Balangir is not equal to zero.

- The minimum value used for combined gross enrolment ratio (GER) is zero and the maximum value is 115 because Sundargarh has the highest GER i.e. 112 among the districts of Odisha. So the education index for Sundargarh is not equal to zero.Similarly, the minimum value for the overall literacy rate is zero and the maximum value is 100.

- The maximum and minimum goalposts for income are selected on the basis of the latest UNDP's HDR 2016 methodology.

By defining the minimum and maximum goalposts, the dimension indices are computed as follows:

Dimension index= (actual value-minimum value)/ (Maximum value-minimum value)

In order to make the health index unidirectional, the difference between the maximum and the actual value is taken in the numerator.

5. Analysis and Findings

5.1Status of Human Development in Odisha

The table given below presents the computation of the human development index for all the 30 districts of Odisha. The value of HDI for the state as a whole is 0.672 which may be called a medium level of human developmentat national level. Income index takes the highest weight i.e. 0.865 among the three indices whereas the health index takes the lowest weight i.e. 0.494 and the education index lies in between them i.e. 0.779.

Jharsuguda, with a health index of 0.652, education index of 0.848 and income index of 0.918 ranks first in HDI (0.776) among all the districts while Jagatsinghpur ranks the second in HDI(0.744) with a health index of 0.584, education index of 0.887 and income index of 0.894. As far as the district Sundargarh is concerned, it ranks third with a HDI value of 0.742 followed by Angul (0.735), Balasore (0.734), Jajpur (0.732) and Sambalpur (0.731). The HDI

values for the districts like Jharsuguda, Angul and Sundargarhare high because they are largely mining and industrialised districts and therefore, have very high income index. They also have a very high health index relative to the state average. The appearance of Jagatsinghpur (no.4) among the top five districts is mainly due to a very high education index (i.e. 0.887). Its health and income indices are also close to the state average. Balasore (no.5) which is a coastal district,also has a very high health index relative to the state average but its income index and education index are close to the state average. On the other hand, Balangir ranks at bottomwith anHDI value of 0.413.The other districts Kandhamal, Puri, Rayagada, Dhenkanal and Khordha are the poor performer districts. These districts are primarily reliant on agriculture and have very low health index; therefore, they remain in the bottom positions.In addition, Rayagada, Kandhamal and Balangir have very low education index relative to the state average.

Table 1: Human Development Index for 30 districts of Odisha in 2011

Sl. No.	Districts	Health Index	Education Index	Income Index	HDI	HDI Rank
1	Angul	0.584	0.808	0.994	0.735	4
2	Balasore	0.618	0.805	0.836	0.734	5
3	Bargarh	0.45	0.786	0.825	0.644	21
4	Bhadrak	0.584	0.841	0.803	0.719	8
5	Balangir	0.034	0.735	0.823	0.413	30
6	Baudh	0.483	0.765	0.799	0.652	17
7	Cuttack	0.494	0.875	0.889	0.692	12
8	Debagarh	0.45	0.778	0.837	0.645	20
9	Dhenkanal	0.371	0.823	0.856	0.614	26
10	Gajapati	0.494	0.644	0.836	0.63	23
11	Ganjam	0.494	0.764	0.845	0.665	15
12	Jagatsinghapur	0.584	0.887	0.894	0.744	2
13	Jajpur	0.584	0.843	0.864	0.732	6
14	Jharsuguda	0.652	0.848	0.918	0.776	1

15	Kalahandi	0.517	0.687	0.813	0.651	18
16	Kandhamal	0.202	0.722	0.875	0.507	29
17	Kendrapara	0.472	0.841	0.795	0.66	16
18	Keonjhar	0.528	0.743	0.917	0.686	13
19	Khordha	0.371	0.876	0.918	0.627	24
20	Koraput	0.584	0.646	0.867	0.675	14
21	Malkangiri	0.584	0.607	0.785	0.647	19
22	Mayurbhanj	0.596	0.712	0.824	0.696	10
23	Nabarangapur	0.562	0.599	0.769	0.632	22
24	Nayagarh	0.573	0.805	0.786	0.702	9
25	Nuapada	0.45	0.699	0.818	0.623	25
26	Puri	0.281	0.87	0.817	0.565	28
27	Rayagada	0.472	0.615	0.845	0.612	27
28	Sambalpur	0.596	0.784	0.914	0.731	7
29	Sonepur	0.573	0.759	0.794	0.693	11
30	Sundargarh	0.596	0.814	0.952	0.742	3
31	Odisha	0.494	0.779	0.865	0.672	

Sources: Computed

5.2 Trends of Human Development in Odisha

The following figure reveals the trends of human development in Odisha. Here, five time periods,1993, 1997, 2004, 2007, and 2011are taken covering 30 districts of Odisha. Before 1993, Odisha had 13 districts, and it got restructured into30 districts in 1993. Hence, this study assumes the year 1993 as the starting point for the analysis (Mohanty*et al.*, 2016).

The HDI value for Odisha has increased from 0.493 in 1993 to 0.672 in 2011. The districts like Balasore, Nabarangapur, Nayagarh and Sonepur have been consistently increasing in HDI over time. But there are some fluctuations in HDI for the remaining districts.

Figure: 1 Trends of human development of the State
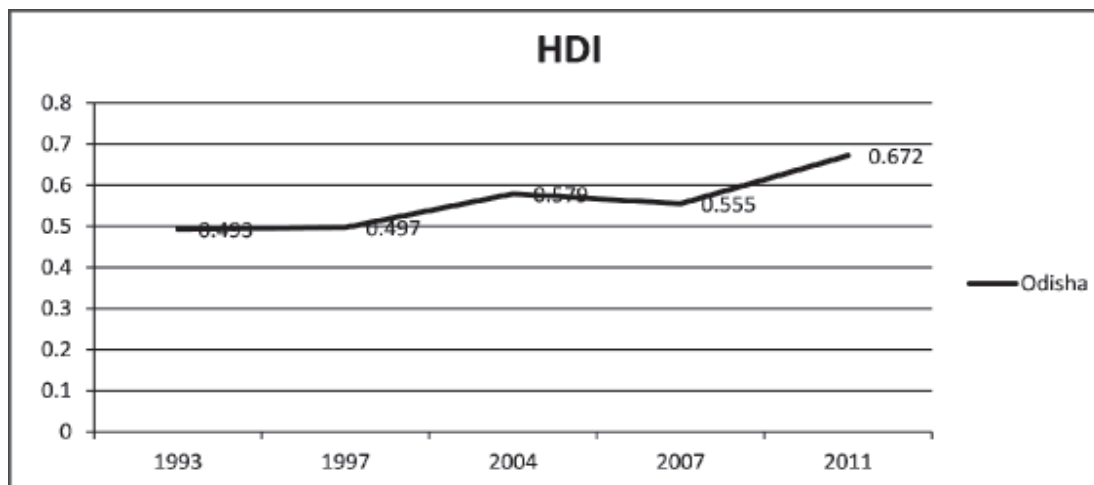
Source: Compiled from Mohanty et al. (2016)

5.3 Classification of Districts in Odisha on the basis of Cohort Analysis

By using cohort analysis, districts have been classified into three groups such as developed, moderately developed and less developed ones. The three groups are based on human development values for the years 1993, 1997, 2004, 2007 and 2011.

Table: 2 Classification of districts in Odisha based on HDI

Years	Developed	Moderately developed	Less developed
1993	Anugul, Cuttack, JSpur, Kendrapara and Sundargarh	Balasore, Bargarh, Bhadrak, Balangir, Baudh, Debagarh, Dhenkanal, Gajapati, Jajpur, Jharsuguda, Keonjhar, Khordha, Mayurbhanj, Nayagarh, Puri and Sambalpur	Ganjam, Kalahandi, Kandhamal, Koraput, Malkangiri, Nabarangapur, Nuapada, Rayagada and Sonepur
1997	Cuttack, Jharsuguda, Kendrapara, Khordha, Puri and Sundargarh	Anugul, Balasore, Bargarh, Bhadrak, Balangir, Baudh, Debagarh, Dhenkanal, Ganjam, Jagatsinghpur, Jajpur, Kalahandi, Keonjhar,	Kandhamal, Koraput, Malkangiri, Nabarangapur, Rayagada and Gajapati

		Mayurbhanj, Nayagarh, Nuapada, Sambalpur and Sonepur	
2004	Cuttack, Debagarh, Jharsuguda, Khordha and Sundargarh	Anugul, Balasore, Bargarh, Bhadrak, Balangir, Baudh, Dhenkanal, Ganjam, Jagatsinghpur, Jajpur, Kalahandi, Kendrapara, Keonjhar, Mayurbhanj, Nayagarh, Nuapada, Puri, Sambalpur and Sonepur	Gajapati, Kandhamal, Koraput, Malkangiri, Nabarangapur and Rayagada
2007	Cuttack, Dhenkanal, Jharsuguda, Puri and Anugul	Balasore, Bargarh, Bhadrak, Balangir, Baudh, Debagarh, Ganjam, Jagatsinghpur, Jajpur, Kalahandi, Kandhamal, Kendrapara, Keonjhar, Khordha, Mayurbhanj, Nayagarh, Nuapada, Sambalpur, Sonepur and Sundargarh	Gajapati, Koraput, Malkangiri and Rayagada
2011	Anugul, Jagatsinghpur, Jharsuguda and Sundargarh	Balasore, Bargarh, Bhadrak, Baudh, Cuttack, Debagarh, Dhenkanal, Gajapati, Ganjam, Jajpur, Kalahandi, Kendrapara, Keonjhar, Khordha, Koraput, Malkangiri, Mayurbhanj, Nabarangapur, Nayagarh, Nuapada, Rayagada, Sonepur and Sambalpur	Balangir, Kandhamal and Puri

Source: Computed

Regional variations in human development are new and have become very popular with the introduction of the first human development report in 1990. The variation in human development is mainly focused on the level of human development index and on its indices. An attempt is made here to identify the variations in human development among the districts of Odisha during 2004-05 and 2011-12.

5.4 Hypothesis

H_0:There is no inter-district variation in human development in Odisha.

H_1 : There is inter-district variation in human development in Odisha.

Table: 3 District wise variation in HDI in 2004 and 2011

HDI in Odisha			
Sl. No.	Districts	2004	2011
1	Anugul	0.663	0.735
2	Balasore	0.559	0.734
3	Bargarh	0.565	0.644
4	Bhadrak	0.646	0.719
5	Balangir	0.546	0.413
6	Baudh	0.536	0.652
7	Cuttack	0.695	0.692
8	Debagarh	0.669	0.645
9	Dhenkanal	0.591	0.614
10	Gajapati	0.431	0.63
11	Ganjam	0.551	0.665
12	Jagatsinghapur	0.557	0.744
13	Jajpur	0.540	0.732
14	Jharsuguda	0.722	0.776
15	Kalahandi	0.606	0.651
16	Kandhamal	0.389	0.507

17	Kendrapara	0.626	0.66
18	Keonjhar	0.530	0.686
19	Khordha	0.736	0.627
20	Koraput	0.431	0.675
21	Malkangiri	0.370	0.647
22	Mayurbhanj	0.639	0.696
23	Nabarangapur	0.436	0.632
24	Nayagarh	0.571	0.702
25	Nuapada	0.581	0.623
26	Puri	0.657	0.565
27	Rayagada	0.443	0.612
28	Sambalpur	0.589	0.731
29	Sonepur	0.566	0.693
30	Sundargarh	0.683	0.742
31	Odisha	0.579	0.672
	CV	**16.95**	**11.2**

Source: HDR 2004 Odisha.

It is found that the inter-district variaton in HDI values is low in Odisha. In 2004, the inter-district variation in HDI is low (i.e., CV of 16.95) which has further declined to 11.2 in 2011. This is because there is a bunching of 18 districts in terms of their HDI values (lying between 0.6 and 0.7)around the state mean (0.672).

5.5 Variations in Health

In order to analyse the differences in variations of health indicators like infant mortality rate (IMR), Lorenz curve has been used. The inter-district variation in IMR is also shown with the help of the Lorenz curve as follows and it shows less variation.

Figure: 2 Variations in Health
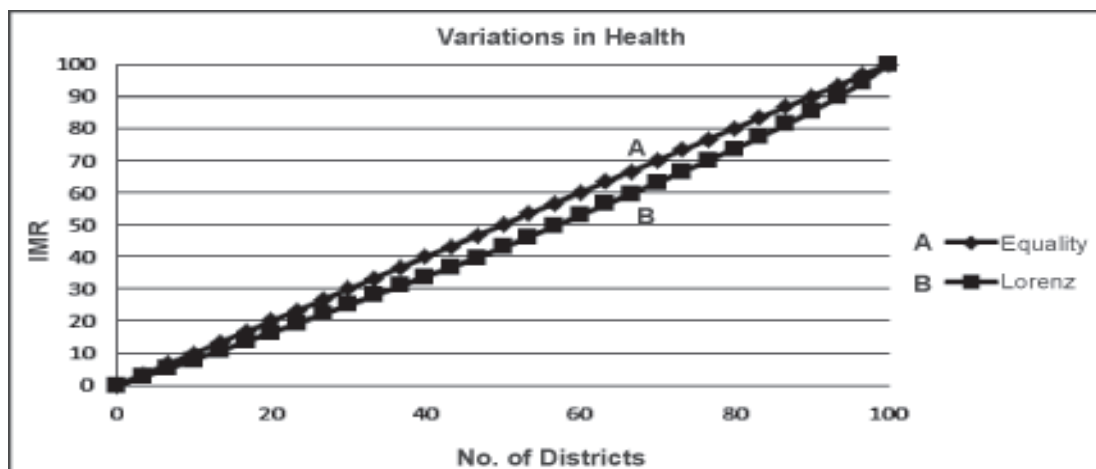
Source: Statistical Survey of Odisha, 2011-12

5.6 Variations in Education

Education is the most intrinsic instrument for changing the socio-economic status of an individual and society as a whole. The literacy rate is regarded as one of the important indicators of education. There lies a significant difference between a literate person and an illiterate person with respect to overall attitude and decision making. Therefore, to know the differences in variation in literacy rate among the districts of Odisha, the Lorenz curve has been used. It is evident from the following figure that the overall variation in literacy rate is low i.e. 17.64 among the districts of Odisha in 2011-12 in comparison to 2004-05.

Figure: 3 Variations in Education
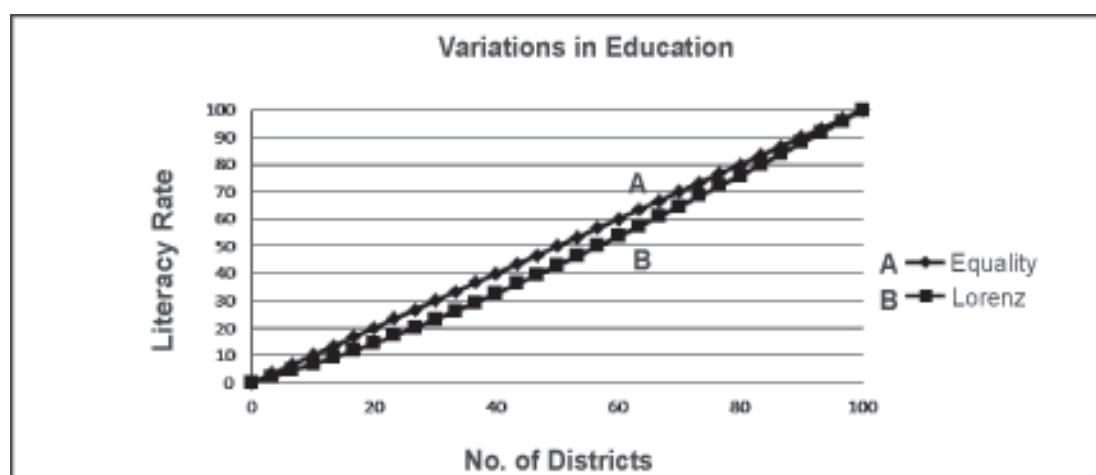
Source: OPEPA Odisha 2011-12

5.7 Variations in Income

Though Odisha's economic growth has increased from 7.4 percent in 2017-18 to 8.4 percent in 2018-19 (Odisha Economic Survey, 2018-19), there is a question of whether all the districts of Odisha have equally enjoyed per capita gross district domestic product (PCGDDP). In order to know the inter-district variations in income of the state, techniques like the Lorenz curve are applied.

By looking into the shape of the Lorenz curve, it is found that there exists inter-district variations in income of Odisha. The districts with high income are Angul, Sundargarh, Jharsuguda, Khordha, Keonjhar and Sambalpur while Nabarangpur, Malkanagir, Nayagarh, Sonepur and Kendrapara have been registered as low income districts.

Figure: 4 Variations in Income
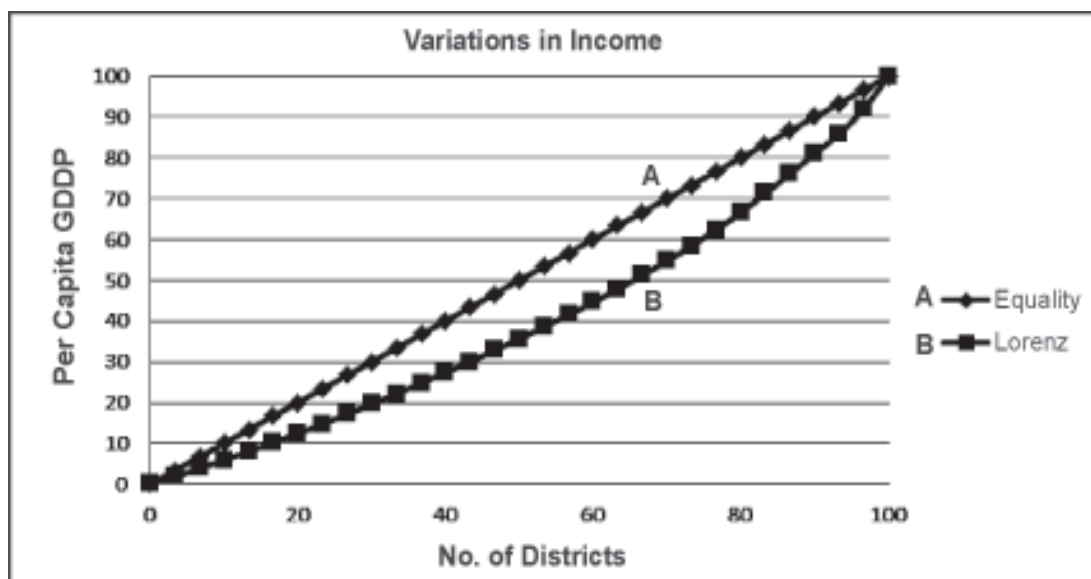
Source: Directorate of Economics and Statistics, Government of Odisha

6. Conclusion and Policy Suggestions

It is concluded that the status of human development has increased in Odisha over time. Though the inter-district variation of HDI in 2011 has decreased in comparison to 2004-05,the inter-district variation in income is very high. This is reflected in the overall HDI scores as districts like Jharsugada and Angul with mining and industrial activities top the ladder while their counterpart districts with agrarian base languish at the bottom. Therefore, the policy makers need to design policies to improve the performance of agragrian and

allied sectors, so that the gap between better performers and poor performers can be bridged. Besides, Government may implement various health related plans and programmes like awareness program, health insurance, free medical facilities, free health camp, etc. to improve the health status of low ranked districts like Balangiri, Kandhamal, Khordha and Puri, as a result of which the gap in HDI between the high ranked districts and low ranked districts can be reduced.

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Evaluating the Trends and Policies of External Commercial Borrowings (ECBs) in India

Surjya Narayan Tripathy[1]

Abstract

External commercial borrowings (ECBs) are commercial loans raised by eligible domestic entities from abroad, following certain prescribed parameters. As such, ECB framework has been incrementally standardised by expanding the list of eligible borrowers, recognizing more entities as lenders, expanding end-uses, etc. In recent years it is remarkable that there is the dwindling of external assistance in India's external debt with a gradual relaxation of controls over the years in ECBs policy. The present study emphases predominantly on ECBs, its flows and trends at the macroeconomic level; encompasses the pre and post global crisis period in the context of the financial crisis and emerging market slowdown (2008-16.)

1. Introduction:

With regard to flow of private capital it originates primarily through three channels or forms, namely, foreign direct investment, portfolio investments and commercial borrowings. India's external debt currently predominantly comprises of private debt, widely known as ECBs. The ECBs denotes the borrowing by an eligible resident entity from outside India.Thus, ECBs boost in the borrowings is a strong indication of robust investment demands overseas as well as from within the country.NRI deposits also represent the most prominent debt

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related inflows. Dependence on external debt emerges due to insufficiency in capital resources to meet the economic and financial requirements of the country. India can borrow from recognized lenders like international banks, multilateral financial institutions and international capital markets. It is significant to look at the issue of ECBs because mounting debt in developing countries has become a major concern for the stability of the global financial system. Further, the International Monetary Fund (IMF) has constantly pointed out that growing global debt poses high risk to global financial markets in medium term. Thus, in the context of ECBs- if managed judiciously and within reasonable levels it can play a decisive role in the macroeconomic development of a country. Apparently, excessive debt or inadequately hedged foreign currency debt has a detrimental effect on the economy. The ECBs account for approximately 38 percent of external debt outstanding in India (please refer to table-1).

ECBs provide an additional source of funds for the Indian Corporates and public sector undertakings (PSU's) for the purpose of expansion of the existing capacity as well as fresh investment when domestic sources fail to meet the requirements of funds for such purpose.

Large access to ECBs is also indicative of greater trade linkages and an enhanced exposure of firms to foreign currency transactions. Liberalisation of capital controls by developing countries coupled with a rising appetite for asset diversification by international investors has also created an environment for firms from developing countries to increasingly access the international capital markets.

ECBs have emerged as a significant item of the capital account in India's BoP and are a key channel in facilitating access to foreign capital by Indian corporates. ECBs are commercial loans in the form of bank loans, buyers' credit, suppliers' credit or securitized instruments availed from non-resident lenders, and can be obtained through two routes, the automatic route and approval route. ECB regulations in India are monitored by the Reserve Bank of India (RBI) in consultation with the Ministry of Finance, Government of India, and are guided by the broad guidelines that govern the capital flows to India and fall within the framework of the Foreign Exchange Management Act, 1999 (**FEMA**).

2. Review of literature:

In Indian perspective, studies on ECBs have been made in macroeconomic framework more specifically in the context of capital flows. A number of Committees have reviewed different aspects of ECB and emphasised comprehensive review of the framework. The recommendations of these experts make out a robust case for review of the existent

framework of ECB to simplify the present regulations and improve their predictability and neutrality. The framework needs to be reviewed to make it simple, neutral, principle based, and non-discretionary while addressing the systemic concerns. We briefly outline some of the studies in order to identify the gap in the literature.

Taylor and Sarno (1997) focused on the determinants of the large portfolio flows from the United States to Latin American and Asian countries during January 1988 to September 1992. As country specific factors, they took country credit rating and black market exchange rate premium. For global factors, they took long-term nominal interest rate - the Treasury bill rate and the government bond return and the level of the real U.S. industrial production. They estimated a parsimonious error correction model in the panel data framework for the purpose. They establish the bond flows to be relatively more strongly determined by global factors than by domestic factors, while equity flows to be relatively more responsive to changes in country specific factors. Change in the U.S interest rates enlightened the dynamics of bond flows better than the other global factor considered in their study, i.e., the growth of the U.S. industrial production. Moreover, interest rates were found to be a more significant short-term determinant of portfolio flows in Latin American countries than in Asian countries.

Bird and Rajan (2000) studied the East Asian case for their analysis where an interest rate advantage persisted. The authors concluded that financial liberalization led to an increase in the domestic interest rates and capital was 'pulled' and not 'pushed', in other words, the persistent interest rate advantage in favour of East Asian economies was connected to mounting domestic interest rates rather than falling world interest rates.

S. Edwards (2001) unfolds the relationship among exchange rate, capital flows and derived lessons from the crisis situation of Mexico, Brazil, and Russia. A higher rate of interest in domestic countries promoted a large amount of capital and portfolio investments in the early 1990s in many developing countries, which facilitated in financing major part of current account deficits. However, the crisis of 1990s changed the view of many economists and researchers.

Further, the paper highlighted various problems and challenges relating to exchange rate regime and it suggested that countries should follow one of the 'two options': either freely floating exchange rates or super fixed exchange rates. Further, it is said that under appropriate policy conditions, floating exchange rates are efficient and control of capital inflows is an effective way to prevent currency crisis.

Gordon and Gupta (2003) illustrated factors affecting portfolio equity flows into India using multivariate regression on monthly data for the period 1993-2001. They found that portfolio flows were affected by both external and domestic factors, and quantitatively both were found to be equally significant. Among external factors, an increase in external interest rate adversely affected ECBs flow into India; while the performance of emerging stocks positively influenced ECBs flow. Among domestic factors, lagging stock market returns, credit rating downgrades and depreciation of the exchange rate were devised to affect ECBs flows negatively. The existence of negative relationship between lagged domestic stock return and ECBs flows and positive relationship between portfolio flows and expected domestic returns has been described by the authors in terms of ECBs being bargain hunters (i.e. "buying on the dips"). Otherwise, the authors have elucidated this in terms of global investors allocating a fixed share of their portfolio to India, which results in ECBs selling after the market rises and buying after the market falls. To test the robustness of this relation they estimated a VAR model using daily data of ECBs flows, BSE returns and forward exchange rate. They found the coefficient of the lagged stock market return with respect to the ECBs flows to be negative.

Ralhan (2006) did a cross-sectional study of eight countries, viz. Australia, India, Indonesia, Argentina, Brazil, Chile, Colombia and Mexico using Non-linear Seemingly Unrelated Regression (SUR) analysis for determinants of capital flows. He established gross foreign exchange reserves as one of the significant factors affecting capital flows in all of the countries considered, regardless of any region or group. The level of gross domestic product was another factor influencing capital flows, although this seemed to be more pertinent for countries in the non-Latin American group. Growth in the size of an economy could lead to an increase in capital flows because of growing investors' confidence. But LIBOR turned out to be insignificant in this study.

Singh (2007) enlightens us on ECBs. covering the pre-crisis period only and concentrates predominantly on domestic factors such as interest rate, activity in the real sector and credit constraint in the domestic economy influencing overseas borrowing behaviour by Indian corporates. He further pointed out that Indian corporates have used ECBs to augment the scarce domestic resources, which over time have assumed critical magnitude as a significant channel of capital flows to India.

The Raghuram Rajan Committee Report[1] (2008), while making a case for modifying the extant framework, noted that lack of predictability of regulations and ceilings on ECB makes it hard for corporations to plan borrowing, and even to service old loans that need to be

refinanced. This creates additional uncertainty and risk, and drives up the cost of financing. It advocated a steady liberalisation of constraints on ECB. It recommended that the end-use stipulations should be done away with as these are hard to monitor (Committee on Financial Sector Reforms, 2008, p. 37).

Singh (2009) in a different study unfolds the changing contours of capital flows to India. He observed that although ECBs were primarily influenced by the state of domestic real activity, interest rate differentials and global credit market shocks also had a significant impact.

Akyuz (2013) examined the behaviour of private capital flows and financial spill over in light of the Eurozone crisis. He contended that financial spill overs impacted other countries' capital flows, exchange rate, and asset prices. He recommended rebalancing of domestic and external forces of growth. He further proposed that over-dependence on foreign capital and or foreign markets need to be regulated in the light of self-sufficiency.

The Government of India (2015) with regard to the flow of ECBs in its report pointed out that "the objective of the ECB framework should be to allow Indian firms an effective option to borrow in foreign currency subject to systems in place to address systemic risks emanating from unhedged foreign currency exposure of a large number of firms and volatility in global risk tolerance. The country needs resources to promote and sustain economic growth. The firms need resources at the lowest possible cost to be globally competitive and provide goods and services at the lower cost to citizenry. The country as well as the firms must have effective access to raise resources through all possible sources, including ECB. Any unwarranted restriction on firms' access to ECB limits the growth and prosperity of the economy unjustifiably" (Report of the Committee to Review the Framework of Access to Domestic and Overseas Capital Markets, 2015, p62).

Ray et al (2017) in their recent study remarked that the growth differential between India and the international economy will be a key driver influencing ECB flows to India. Sound economic policies, supporting sustained economic growth, addressing the domestic vulnerabilities, and fostering financial sector development will be the key, especially when the growth prospects in the advanced economies are disheartening. They suggested development of financial markets, which will facilitate in stabilizing the net capital flows.

From the above studies, it is observed that there are studies on the debt flows to India, and the factors determining such flows, without throwing insights on the trend and policy of ECBs of recent years. Hence, there is a rationale for the present study.

3. Objectives:

The specific objectives of the paper are:

(i) To evaluate the flow of ECBs to India and to analyse its trends at the macroeconomic level;

(ii)To examine various policies adopted in the context of ECBs and recent policy paradigms

4. Methodology and data

The methodology for collection of data is exclusively secondary sources. The data accumulated from published sources mainly research, RBI sources, Government publications, Committee Reports, etc. have been used for this write up.

4.1 Evaluating the dependence on external borrowings:

In the wake of planned development, India depended largely on external assistance in the form of aid and concessional loans from multilateral institutions and other governments. By July 1958, India's Balance of Payments deficit was witnessed to be in a precarious situation, such that, it was anticipated that, the foreign exchange reserves would be wiped out by the end of the said year. Sensing the need for an urgent action, Mr. Eugene Black, the then President of the International Bank for Reconstruction and Development (the World Bank), initiated a discussion with Mr. Dillion, the then US under Secretary of State for Economic Affairs. The World Bank had proposed a congregation of countries that would offer aid to India. As a sequel to the meeting, a wider consultation was scheduled by inviting Germany, Japan and the United Kingdom. Deliberations during this and subsequent meetings with wider participation including India's representative resulted in the formation of what was called the "Aid India Consortium" (hereinafter 'the Consortium').

The charter members of the Consortium were the United States, Germany, the United Kingdom, Japan, Canada and the International Bank for Reconstruction and Development (IBRD). The membership expanded over the course of time, by the inclusion of France, The Netherlands, Australia, Italy, Belgium, Denmark and the International Development Association (IDA). The International Monetary Fund and India were represented in the meetings of the consortium.Under the auspices of the Consortium and several rounds of consultations and reviews, India received continuous flow of external assistance in the form of aid.

4.2 The 1980s – beginning of the era of External Commercial Borrowings:

The rising access of the emerging market firms to international capital markets reflects the transformation of corporate financing led by cross-border movement of capital, deepening of global financial markets, strong inter-linkage across markets and institutional developments, particularly the mechanisms for risk assessment. Large access to international borrowings is also indicative of greater trade linkages and an enhanced exposure of firms to foreign currency.

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A historical account of India's approach to external commercial borrowings (ECBs) reveals that during the period 1950s to the early 1980s, the domestic firms' reliance on international capital markets was confined to bilateral and multilateral assistance. The oil price shock of the late 1970s had a severe effect on India's Balance of Payments (BoP) during the beginning of 1980s. At the same time, exports were shrinking due to sluggish demand and increasing protectionism. Thus, India was heading towards another severe shortage of foreign exchange reserves. India could not afford to solely rely on external aid to meet her foreign exchange and investment requirements. At the same time, another development that happened due to the effect of oil price shock was, the oil exporting countries started accumulating their revenues in the form of foreign currency deposits. This resulted in increased liquidity in the international banking system, resulting in world-wide rise in syndicated loans. Thus, there existed a right momentum for India – she confronted deficiency of foreign exchange over and above what external aid could support, and the availability of liquidity in the international market at the same time.

Euro-currency financing was arranged for the National Aluminium Company Limited and the Oil and Natural Gas Corporation Limited, during the financial year 1980-81. Paradip Steel Plant and a major thermal power project were also candidates for External Commercial Borrowings during that period. In addition; two major external financing, private companies were also allowed to borrow from sources abroad on a selective basis. Oil exporting developing countries were allowed to invest in equities and to lend to industrial projects, hotels and hospitals. Thus, this phase heralded the era of external commercial borrowings in India.

By mid-1980s, the availability of Official Development Assistance to developing countries, including India started declining. This further strengthened the case for borrowing on commercial terms from the international market. The Government of India allowed more number of Indian firms to tap external commercial borrowings to meet their investment needs. Most of the firms were Public Sector Undertakings such as the Oil and Natural Gas Corporation Limited, the National Aluminum Company Limited, the Bharat Heavy Electricals Limited, MarutiUdyog Limited and the Air India and even allowed some selected private firms.

In terms of policy administration for commercial borrowings during the 1980s, the Department of Economic Affairs scrutinized potential deals for lending and borrowing and sent for the approval of the Reserve Bank of India under the Foreign Exchange Regulation Act, 1976 (FERA). The key considerations for approval of external commercial borrowing were potential for export promotion or import substitution as well as consideration towards Development Financial Institutions such as the IDBI, ICICI and the IFCI.

In the 1980s, in the context of the widening current account deficit, the traditional external sources of financing were found to be inadequate and were supplemented with commercial borrowings from international markets including short-term borrowings. By late 1980s, the international market shifted from syndicated loans to securitized instruments. Indian borrowers too adapted to this change, by tapping Japanese market for Shibosai and Samurai bonds, the D.M. Public Bond market, the Swiss Franc public market and the Eurodollar fixed rate bond market.

4.3 ECBs during the 1990s: Balance of Payment Crisis and the New Economic Policy:

In the 1990s, the Indian corporates' access to international capital markets increased with the liberalisation of the external borrowings policy, the gradual withdrawal of capital account restrictions and improved credit ratings. During the current decade (2000s), the sustained growth of overseas borrowings and the overall private capital flows to India reflects the momentum in domestic economic activity, resilient corporate performance, a positive investment climate, a long-term view of India as an investment destination and the better sovereign risk. Besides these factors, the prevailing higher domestic interest rate coupled with a higher growth rate has moderated the risk perception and created arbitrage opportunities.

This period is marked by the balance of payments crisis in1991. It was realized that an unstable current account deficit, inappropriate exchange rate regime and rise in short-term debt

were the causes of these crisis. The year 1991 was a milestone in the economic history of India as it introduced the New Economic Policy, which liberalized the economy. At the dawn of the decade, the country encountered severe crisis on the external sector in terms of extreme shortage of foreign exchange reserves, owing to the payment obligations towards the previously growing commercial borrowings as well as the Gulf crisis. The Balance of Payments crisis had to be dealt with by means of several immediate and long-term solutions. One of the policy actions was to liberalize various controls on the inflow of foreign exchange. The Reserve Bank of India devalued the Rupee twice during 1991. Considering the country's severe Balance of Payment deficit situation, India's credit rating in the international market was significantly lowered. In addition, the overall savings in the developed economies was also low during the early 1990s, thus reducing international liquidity. As a result, approval of External Commercial Borrowings at the beginning of the decade was much lower than the late 1980s.

The difficulties confronted at the dawn of the 1990s shaped policies during the decade. Besides ushering in the era of liberalization, on the external sector, numerous schemes were introduced to promote exports and to attract foreign exchange. At the same time, while external commercial borrowings bring in foreign exchange, it was dealt with prudently, as ECBs are debt creating obligations, considering that the country's international credit rating was already not at a favourable level. Given the Balance of Payments situation, the Government decided to lessen the share of short-term borrowings. As a result, not only did the fresh approvals of commercial borrowings shrink, but also bulk of the borrowings during the early 1990s.

Following the balance of payments (BoP) crisis of 1991, the flow of funds from global commercial banks and bond markets virtually receded in response to a down grading of sovereign ratings by the credit rating agencies. The problem that emerged was related to the access of Indian entities to international markets rather than the cost of borrowings. As a consequence, a prudent external debt management policy was pursued to bring the external debt situation to a more comfortable level. During the 1990s, in the period following the balance of payments crisis of 1991 and the introduction of economic reforms, external assistance ceased to be an essential element of capital inflows with the ascendancy of private capital flows- a phenomenon observed across the developing countries. As a consequence, net capital flows to India increased to 2.2 per cent of GDP in the 1990s and 3.7 per cent in the 2000s (2000-08), after remaining at around 1 per cent of GDP during the period 1950-1980. This, however, masks the magnitude of cross border capital flows to India

as in gross terms, which increased five-fold from 7.2 per cent of GDP in 1990-91 to 36.4 per cent in 2007-08. In tandem, commercial borrowings, after experiencing some slowdown after the BoP crisis, also rose significantly in the latter half of the 1990s, responding to the strong domestic investment demand, favourable global liquidity conditions, upgrade of sovereign credit rating, lower risk premium on emerging market bonds and an upward phase of capital flow cycle to the EMEs. During this period, ECBs constituted about 30 per cent of the net capital flows to India. Towards the late 1990s and the early 2000s, the demand for ECBs remained subdued due to a host of factors such as global economic slowdown, reversal of a rising phase of capital flows to developing countries and lower domestic investment demand. The period beginning 2003-04 marked the resumption of debt flows to developing countries, which was a combined outcome of the higher interest rate differential emanating from ample global liquidity and the robust growth expectations and a low risk perception towards the emerging markets. During this period, Indian corporates also increased their recourse to ECBs, which contributed to about 25 per cent of the net capital flows to India[1].

The policy towards ECBs was to retain a prudently calibrated approach. The overall policy was to permit ECBs within an overall annual ceiling at the country level and to allow utilization of borrowings only to finance foreign currency capital expenditure except for power projects. In terms of sectoral focus, infrastructure sector was given priority access to external commercial borrowings. From the mid-1990s, considering improved domestic demand and improved credit rating, and policy limits towards amounts, maturity and eligible borrowers were gradually relaxed. While the economic environment started displaying some improvement by mid-90s, the East Asian Crisis of 1997 had its impact on availability of international funds to Indian borrowers. Moreover, certain economic sanctions imposed on India following the nuclear testing in Pokhran in 1998 curtailed availability of external commercial sources of funds.

To tide over the difficulties encountered during 1990s, Government of India attracted funds from Non-Residential Indians by issuing bonds at commercial rates targeting the diaspora. These bonds being issued at commercial rates fall within the domain of External Commercial Borrowings. Thus, the disbursement of ECBs during 1998-99 and 2000-01 is largely on account of USD 4.2 billion towards Resurgent India Bonds (RIBs) and USD 5.5

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[1] A committee constituted by the Government of India in 2007 chaired by Raghuram Rajan for proposing the next generation of financial sector reforms in India, is known as the Raghuram Rajan Committee on Financial Sector Reforms.

billion towards India Millennium Bonds (IMDs)(India's External Debt as at the end of March 2009, RBI Report, Press Release, 30th June, 2009). The period thereafter, until 2008 proved to be golden years for international capital flows as well as for the domestic economic activity, reflecting in increased flow of External Commercial Borrowings. The period also witnessed significant policy changes. The fundamental law that governed foreign exchange transactions-Foreign Exchange Regulation Act, 1976 was repealed and a new law, 'Foreign Exchange Management Act, 1999' came into force. As the name suggests, the approach of the law changed from 'regulation' to 'management', signalling a new epoch in dealing with foreign exchange reserves. With specific reference to ECBs, hitherto scattered policy guidelines were consolidated and a new range of policy guidelines were issued on January 31, 2004.

External Commercial Borrowings became an attractive channel of mobilization of funds by Indian corporates during this period. Stimulated by favourable exchange rate and increased international liquidity, many Indian firms started raising funds through ECBs. More specifically, the Foreign Currency Convertible Bonds (FCCBs) became an attractive instrument during this period. FCCBs are debt instruments that carry the option of being converted into equity upon maturity.

4.4 Appreciation in Exchange Rate and the post-crisis era (2008-2016):

Lower domestic investment demand, recession in capital flows to developing countries and economic slowdown resulted in decline in ECBs in early 2000s but the period 2003-04 marked their continuation. The ECBs took a different turn and underwent an abrupt decline during the early 2009 and started recovery after 2010.

Indian corporates' access to foreign borrowing was limited to bilateral and multilateral arrangements during the initial three decades post-independence. However, in the 1980s, when external assistance was not preferred because of the burgeoning debt, ECBs evolved as a preferred medium.

As India embarked on the path of globalization and liberalization following the BoP crisis in the early 1990s, the composition of capital flows witnessed a paradigm shift from official transfers to private capital inflows and ECBs emerged as the prime component of debt creating capital flows.

The RBI had notified the Foreign Exchange Management (Borrowing and Lending) Regulations, 2018 (**Regulations**), on December 17, 2018. In continuation, the RBI on January

16, 2019, revised the extant ECB framework. This signifies a major change in policy from the government. The Regulations define "External Commercial Borrowings (ECB)" as borrowing by an eligible resident entity from outside India in accordance with framework decided by the RBI in consultation with the Government of India.

Wider Pool of Eligible Borrowers

The erstwhile regulations restricted eligible borrowers to manufacturing companies, special economic zone units, software companies, non-banking financial companies, etc. Service companies and trading entities were not eligible for ECB. The definition of 'eligible borrowers' has now been expanded to include all entities that are eligible to receive foreign direct investments and other specified entities like port trust, units in an SEZ, start-ups, etc. This would indicate that Limited Liability Partnerships trading entities, etc. would now also be allowed to avail the ECB facility. One of the most important considerations for determining if ECB was a viable option for raising offshore debt was whether the proposed borrower was eligible to raise ECB. This was often considered to be a substantial obstacle, considering that the ECB framework also provided for end-use restrictions in terms of the funds raised through the ECB.

The financial crisis that started in the US in 2008 made its impact across the world due to various transmission channels. One of the crucial impacts was the decline in global capital flows, which had its bearing on flow of External Commercial Borrowings. Therefore, the financial year 2009 recorded a significant decline in the flow of ECBs. However, as a crisis-response, the advanced economies, especially the US resorted to easy money policy (Quantitative Easing), by bringing down interest rates with a view to boost monetary liquidity (chart-1).

Correspondingly, the Reserve Bank of India too relaxed certain policy restrictions to facilitate flow of ECBs or to assist refinancing or buy-back of Foreign Currency Convertible Bonds (FCCB). The FCCB buy-back became a necessity due to reversal in the trend of exchange rate appreciation following the crisis as well as approaching maturity of bonds issued earlier. As a consequence, several borrowing firms encountered a critical situation of unfavourable pay-outs towards foreign investors. In order to assist such borrowers who may want to mitigate such a risk by buying-back the previously issued Foreign Currency Convertible Bonds, the Reserve Bank of India permitted fresh ECBs towards meeting FCCB buy-back.

Moreover, in view of the highly restricted liquidity in the international market, as one of the crisis response measures, the RBI withdrew the hitherto prescribed All-in-Cost ceiling on

ECBs (after a gradual rise during the crisis period). The All-in-Cost ceiling is a percentage ceiling above LIBOR, which places an upper limit on the pricing of ECBs. Thus, ECB flows during the period after the financial crisis record an initial decline, then rise and again another decline due to slow-down in output growth across Emerging Market and Developing Countries (Chat-2).

Chart-1: US Fed Funds Rate (average for Fiscal Year ending March 31)
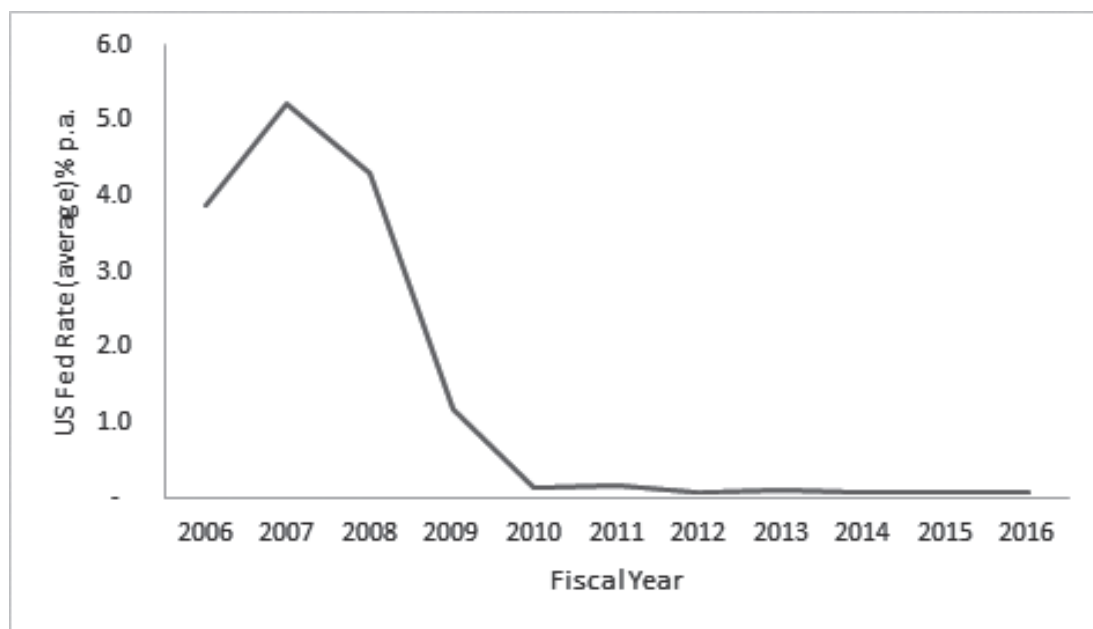
Source: *St. Louis Fred Economic Data, average calculated for the Fiscal Year*

Moreover, implementation of macroeconomic reforms by several developing countries since 1980s to recent years, and positive externalities emerging out of information technology provided further impetus to cross-border movement of finance.

Table-1 depicts the share of different components of total external debt over the period 2012- 2017, which unfolds the in shares of multilateral debt, bilateral debt, IMF, rupee debt, export credit and short term debt and rise in shares of commercial borrowings and Non-Resident Indian (NRI) deposits at end March 2017, as compared to end-March 2012. The share of long term debt has augmented in this period, while that of short term debt has declined.

Table-1: External Debt by Creditor Category (per cent) by the end of March

Sl. No.	Category	2012	2013	2014	2015	2016	2017
1	Multilateral	14.0	12.6	12.0	11.0	11.1	11.6
2	Bilateral	7.4	6.1	5.5	4.6	4.6	4.9
3	IMP	1.7	1.5	1.4	1.2	1.2	1.1
4	Export Credit	5.3	4.3	3.5	2.7	2.2	2.0
5	Commercial Borrowings	33.3	34.2	33.5	38.0	37.3	36.6
6	NRI Deposits	16.2	17.3	23.3	24.3	26.2	24.8
7	Rupee Debt	0.4	0.3	0.3	0.3	0.3	0.3
8	Total Long Term (1 to 7)	76.6	78.3	76.4	82.0	82.8	81.3
9	Short-Term	20.4	21.7	23.6	18.0	17.2	18.7
10	Grand Total (8+9)	100	100	100	100	100	100

Source: India's external debt as at end-December 2017, P.6

Chart-2: ECB approvals 2008-2016
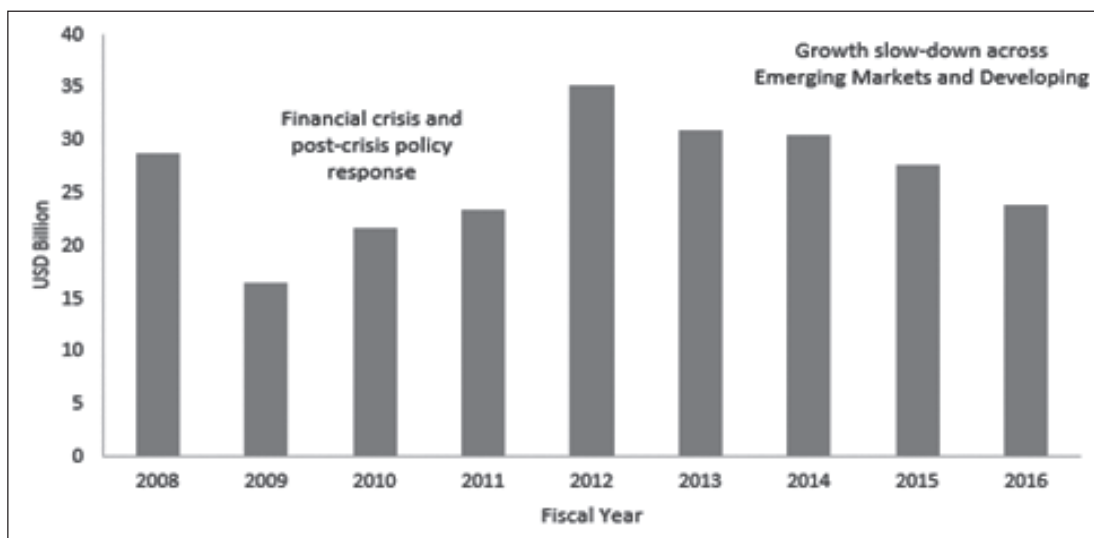
External debt by residual maturity as reflected from the table-2 that as at end-March 2017, short term debt (residual maturity) of upto one year occupies a major share (41.5 per cent) in total debt, followed by 'more than 3 years' category (40.5 per cent), '1 to 2 years' (9.7 per cent) and '2 to 3 years' (8.3 per cent). Among the components, commercial borrowings are the major component followed by NRI deposits, sovereign debt and short term debt by original maturity. Among NRI deposits, NR (E) RA has a lion's share.

Evolution of ECBs policies:

An examination of various policy changes over the years demonstrates that, the policy approach towards External Commercial Borrowings has been one of gradually liberalizing. In brief, the policy regime can be enumerated as follows (table-3).

Table-2: Residual Maturity of External Debt Outstanding as at End-March 2017

(US$ billion)

Component	Short-term up to one yea	Long term 1 to 2 years	Long term 2 to 3 years	Long term More than 3 years	Total (2 to 5)
1. Sovereign Debt (long-term) $	4.6	6.4	6.9	77.8	95.7
2. Commercial Borrowings	24.0	22.6	22.3	102.5	171.3
3. NRI deposits (i)+(ii)+(iii)	79.3	16.6	10.2	10.7	116.9
(i) Foreign Currency Non-Resident Bank Deposit (FCNR(B))	11.4	5.7	2.5	1.3	21.0
(ii) Non-Resident (External) Rupee Account (NR(E)RA)	57.4	10.0	6.8	9.0	83.2
(iii) Non-Resident Ordinary Account (NRO)	10.5	0.9	0.8	0.4	12.7
4. Short-term Debt (Original maturity)	88.0				88.0
Total (1 to 4)	**195.9**	**45.6**	**39.3**	**191.1**	**471.9**

Short-term debt (Residual maturity as per cent of total external debt)   41.5

Short-term debt (Residual maturity as per cent of Reserves)   52.9

Source: India's external debt: a status report 2016-17, (Table 2.10), P.14

Some of the important policy changes originate from the recommendations of the following committees:

i.   Committee on Capital Account Convertibility, 1997 (Tarapore Committee – I)

ii. Committee on Fuller Capital Account Convertibility, 2006 (Tarapore Committee -II)

iii. Committee on Financial Sector Reforms, 2007 (RaghuramRajan Committee)

iv. Committee to Review the Framework of Access to Domestic and Overseas Capital Markets (Phase II, Part II: Foreign Currency Borrowing), 2015 (Sahoo Committee)

The Tarapore Committee –I and II investigated the overall approach towards establishing a convertible regime on the Capital Account recommended phased liberalization of policies towards External Commercial Borrowings. The recommendations are to relax controls on amounts of foreign currency borrowings, sectoral limits and end use restrictions gradually in three phases. The gradual liberalization of ECB policies are more or less in tandem with the phased approach recommended by the two Committees. The Raghuram Rajan Committee and the Sahoo Committee pointed out the plethora of policy changes and the absence of predictability in policies.

According to the Sahoo Committee, the fundamental principle of the policy should be to address 'market failure', i.e. to safeguard the system from collapsing due to moral vulnerability effect emerging out of unhedged foreign currency exposure by a large number of borrowers. It recommended that, the policy should concentrate exclusively on addressing 'market failure'. Thus, the Sahoo Committee recommended to ensure simplification of policies by removing plethora of restrictions still in force and also to ensure predictability in policy.

Table-3: Evolution of ECB policies

Period	Policy Regime
1981-1990	Selective permission, largely public sector
1990-1995	Strict controls in order to manage Balance of Payments crisis; New Economic Policy
1995-2003	Relaxation specifically towards infrastructure sector; Special initiatives by issuing diaspora bonds to meet foreign exchange requirements; Enactment of Foreign Exchange Management Act

2004-2008	Consolidation and simplification of procedure; gradual relaxation of sectoral limits with specific focus on infrastructure.
2009-2016	Relax controls as measure of response to global financial crisis; widen sector coverage and increase per borrower annual limits; focus on infrastructure; Permit Rupee external borrowing; Monitor hedging.

On the basis of Sahoo Committee's recommendations, the Reserve Bank of India introduced two key changes in the ECB policy: (i) it has now been made mandatory for the borrowers to report hedging of risks to the RBI; and (ii) to permit borrowing in Rupees from external lending sources.

With a view to harmonising the extant provisions of Foreign Currency and Rupee ECBs and Rupee denominated bonds (RDBs), it has been decided to stipulate a uniform all-in-cost ceiling of 450 basis points over the benchmark rate. The benchmark rate will be 6 months USD LIBOR[1](or relevant benchmark for respective currency) for Track I and Track II, while it will be prevailing yield of the Government of India securities of corresponding maturity for Track III (Rupee ECBs) and RDBs.

Currently, ECB borrowings can be done under the automatic and the approval routes but are subject to an upper limit, maturity period and specified end-use requirements like import of capital goods. Under the automatic route, the maximum amount of ECB that can be raised by a corporate other than those in the hotel, hospital and software sectors is $750 million during a fiscal year. Banks and financial institutions can also raise funds through ECBs subject to RBI approval.

Table 4 : Sources of variation in Foreign Exchange Reserves

(Amount USD billion)

		Items	2014-15	2015-16
I.		Current Account Balance	-26.9	-22.2
II.		Capital Account (net) (a to f)	88.3	40.1
	a.	Foreign Investment (i+ii)	73.5	31.9

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[1] *LIBOR stands for London interbank offered rate. It is a benchmark rate used internationally to price loans. It reflects how much it costs banks to borrow from each other. In other words, the US Dollar LIBOR interest rate is the average interbank interest rate at which a large number of banks on the London money market are prepared to lend one another unsecured funds denominated in US Dollars.*

		(i) Foreign Direct Investment	31.3	36
		(ii) Portfolio Investment	42.2	-4.1
		Of which:		
		FII	40.9	-4
		ADR/GDR	1.3	0.4
	b.	Banking Capital	11.6	10.6
		Of which: NRI Deposits	14.1	16.1
	c.	Short term credit	-0.1	-1.6
	d.	External Assistance	1.7	1.5
	e.	**External Commercial Borrowings**	**1.6**	**-4.5**
	f.	Other items in capital account	0	2.2
III.		Valuation change	-24	0.6
		Total (I+II+III)	**37.4**	**18.5**

Source: Reserve Bank of India, press release, June 16, 2016

It is evident that commercial borrowings occupy only a narrow band of inflows when compared to portfolio investments, direct investments and NRI deposits. This is reiterated by RBI's data on sources of variation in foreign exchange reserves, shown in table 3. However, ECBs occupy an important and dominant role in India's external debt. From the mid-2000s, ECBs continuously hold the largest share in India's external debt, close to 40 percent.

A prolonged period of low interest rates has created a massive global burden of debt. According to a CNBC report quoting the Bank for International Settlements, global corporate and household debt reached 138 percent as a share of GDP in 2016, compared to 115 percent in 2007, before the start of the economic downturn. The 2016 figure for advanced economies was 195 percent. Many developing countries like China and India have also reserved the advantage of this prolonged period of easy money to amass significant amount of external debt. The level of debt in China has reached alarming proportions and given the importance of China in the global financial system, any major problem with debt servicing in that country is likely to have global fallout. On the other hand, the external debt-GDP burden has been

far more modest for India. In case of India, the external debt to GDP ratio has stayed below the 25 percent mark. This level of external debt is manageable and is unlikely to create any major macroeconomic panic in the system. But as monetary tightening is gradually being introduced in developed markets, rising indebtedness and increase in market risk do pose some threat for India.

Moreover, performance indicators of the corporate sector have not been very encouraging in the recent past. Earning and profitability numbers have been modest, exports have not shown any major improvement over the past few years, and some of the key sectors like real estate, Information and Communication Technology (ICT) and Pharmaceuticals are going through difficult times. Many of these sectors have fairly high external borrowings. If a shock arises, some firms in these sectors may face problems in managing the dual burden of interest rate and exchange adjustments. While on a macro level, India does not seem to be facing a real 'Minsky moment' in near future, some firms in the more difficult sectors may face challenges in financing and repaying their external debt.

5. Conclusions

It has been observed that, the policy towards ECBs is being gradually relaxed, in line with various committee reports or to be in line with the market conditions. The continued policy thrust is on the infrastructure sector. While ECBs may occupy a small proportion of changes in foreign exchange reserves, ECBs play an imperative role, by occupying the largest share in external debt.

To sum up, ECBs of India is largely supply-driven, contributes positively to economic growth, but not as potential as direct investments and the cost of foreign debt; on the contrary, ECB has potential risk due to exchange rate fluctuations and correlated defaults by borrowers and debt overhang.

The problem has been further aggravated in recent years due to unpredicted changes in the interest rates charged on these loans and an unexpected decline in the value of the rupee. It implies that the borrowers will have to pay back more money than what they had estimated previously in order to repay the debt by converting rupees into dollars.

In view of the above, it is imperative to mention that unless India maintains a high growth rate so as to sustain debt obligations and maintains sufficient domestic investment, an indefinite cycle of external debt could have a very detrimental effect on the economy's growth and overall welfare of the public.

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Growth and Problems of Dalit Entrepreneurship in India

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Abstract

The growth of entrepreneurship among Dalits (SCs) is very slow. The practice of covert socio-economic discrimination by caste Hindus has stood on the path of entrepreneurship development of Dalits. Caste rigidities in rural India have been compelling the educated Dalit youths to either enter low-paying occupations like cobbling, automobile repair, selling vegetables and concentrating themselves in age old family occupations or migrating to other states as industrial workers. Basing on secondary data, this paper tries to unearth the trend of ownership of enterprises by SCs in India in four economic censuses, from 1990 to 2013. To substantiate the findings, three focused group discussions were conducted in Kalahandi district of Odisha. It is found that of all the agricultural enterprises, only 12.2 percent are owned by SCs and 8.6percent by STs as against 45.6per cent in the case of OBCs and 33.7percent share of other caste people. The share of SCs and STs in non-agricultural enterprises is 11.4per cent and 5.4per cent, respectively. Factors like lack of leadership, training on entrepreneurship and management of business units, paucity of family capital and support, need of quick earning to shoulder the family burden, lack of collateral etc. account for their low share in ownership of both agricultural and non-agricultural proprietary establishments.

Key Words: Dalit, Entrepreneurship, Caste, Business enterprises, Capital

1. Introduction

The rapid industrialization and entrepreneurship development initiatives of governments at the national and sub-national levels have helped to lessen the social immobility of people to a great extent. Rural people are now able to migrate to cities, both in and outside their states of origin, with a view to earning livelihoods (Pramod and Mavoothu,2016). The SCs

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and STs have also benefitted a lot through this process. But it is observed that more is the migration of these people, particularly the head or educated members of a family, greater are chances of their deprivation and underdevelopment. It is equally true that the under representation of Dalits in enterprises (Iyre et al. 2013) has forced them to migrate to cities.

With a view to making easy availability of capital for business investment, both the Central and State Governments in India have established financial institutions for promoting entrepreneurship among SCs and STs. The National Safai Karamcharis' Finance & Development Corporation (NSKFDC), a Government of India undertaking under the Ministry of Social Justice & Empowerment, was set up in 1997 and the National Scheduled Castes and Scheduled Tribes Finance and Development Corporation (NSCSTFDC)was set up by the Government of India in 1989 as not-for-profit companies under Section 25 of the Companies Act, 1956. Now these two schemes are included under Section 8 of the Companies (not-for-porfit) Act, 2013.

Further, the Government of India set up the Dalit Indian Chamber of Commerce and Industry (DICCI) in 2005 with the vision to "instill the spirit of entrepreneurship and developing business leadership among Dalit youths, thus empowering them to walk in steps with the world". Its mission is *'Be job givers, not job seekers'*. The very objective of setting up DICCI was to *'Fight Caste with Capita'*. Besides, the DICCI plays a major role in establishing the Micro Units Development and Refinance Agency (MUDRA) Bank in India in 2015-16. This bank gives priority to SC and ST enterprises in lending. The National Scheduled Caste and Scheduled Tribes Hub (NSCSTH), an initiative of the Government of India, started with an initial allocation of Rs. 490 crores for the period 2016-2020 by the Ministry of Micro, Small and Medium Enterprises (M/o MSME), has been established in 2016 for developing a supportive ecosystem, and for providing professional support to SC and ST entrepreneurs. The Hub would also work towards the development of new entrepreneurs to participate in procurement process leveraging on the 'Stand up India' programme and to fulfill the obligations under the Central Government Public Procurement Policy for Micro and Small Enterprises Order 2012. Selected entrepreneurs would be provided with support and mentoring by industry experts, central public sector enterprises (CPSEs) and incubators.

These efforts are targeted towards giving a new dimension to the Dalit people in Indian society and to re-establish the beauty of Indian society that continues to fade away due to the horrible prevalence and practice of rigid caste system. The upper caste people(non-Dalits) do not like Dalits being in the business (Jodhka, 2010)as a result of which all efforts of

the government have not been fully effective in increasing the shares of ownership of Dalit enterprises as per their population ratio. The pertinent questions are: Do the Dalits have a very low share in owning business enterprises? What are the factors responsible for low share in owning business enterprises? Does caste stand on the development of Dalit enterprises in India?

Considering all these aspects, the present paper makes an attempt to examine the development of entrepreneurship among Dalits in India and the possible obstacles faced by these communities in establishing business units at present. This paper uses the term Dalit for SCs only, who are untouchable, depressed and outside of the Hindu caste system. However, the term Scheduled Tribes (STs) is used frequently along with Dalits(SCs) for comparison as they are socio-economically poor and marginalised people in India.

2. Review of Literature

The study of association between caste and entrepreneurship has not been adequately researched by social scientists across India. The 5th Economic Census of India revealed that the SCs and STs were lagging far behind in owning different business enterprises in comparison to their share in total population in the country. In 2005, the SCs owned 9.8per cent and STs owned 3.7per cent of all enterprises, well below their 16.4per cent and 7.7per cent respective shares in the total population. The low representation of Dalits in India's business world is also noticed in states having large industrial establishments. The importance of Dalit owned enterprise is well recognised as it will help them to accomplish self-esteem in the society by running business enterprises independently and to break the age old traditional family businesses like leather works, palm leaf works, bamboo crafts, etc. It will help them to utilise the wide business opportunity in the market (Planning Commission, n.d.). Astonishingly, the rapid growth of the Indian economy during the early 21st century has impacted very little on improving their share of owning enterprises (Iyer et al., 2013).

The caste based discrimination in entrepreneurship has been a treacherous problem (Nisargapriya, 2018) which results in low productivity, wastage of resources, unemployment and has discouraged the Dalit youths to set up an enterprise. Most of Dalit entrepreneurs (66.6per cent) in Tamil Nadu face the infrastructural facility problems(Paramsivan, 2016).A study by the Planning Commission of India revealed that 23.4per cent of the Scheduled Castes enterprise owners had set up own business enterprises owing to failure of getting a suitable job in job markets (both public and private sectors) and only 12.3per cent owned

enterprises as it has wide opportunity to grow while11.8per cent of them think of running independent business than working under others. As per the findings of the study, 27.5per cent of young entrepreneurs admitted that lack of social support is the main cause of their failure in enterprises while 46.9per cent failed due to steep competition in the market (Planning Commission of India, n.d.). Another study on the capital investment and the nature of enterprises undertaken by the Dalit youths in early 21st century concluded that 95.3per cent of total sample entrepreneurs have invested less than one lakh rupees out of which 47.1per cent of entrepreneurs have initially investedRs.25000 rupees to run their business. The main reason for low initial capital investment is the paucity of own fund and difficulties in availing credit from financial institutions (Challa, 2016). An all India micro study on problems of Dalit entrepreneurship found that the Dalit enterprises mainly concentrated in traditional works and are manual work based in which they receive very low wages as self-employment activities (Thorat, 2007). Some studies also found that the existing overt and covert caste practices among Indian people stand on the path of the growth of Dalit entrepreneurship in India. Jodhka and Gautam (2008) summed upthe caste factor as the super enemy for Dalit upliftment and entrepreneurship development in the following words:

"Despite several positive changes, caste continues to play a role in the urban economy, and for the Dalit entrepreneurs (studied), it was almost always negative. Dalits lacked economic resources, but even when they had economic resources, they were crippled by a lack of social resources".

Though the above studies were made with different objectives on different sources of data, their broad conclusion is that Dalit entrepreneurship is less developed and the caste practice is either directly or indirectly obstructing their progress. It is therefore imperative to explore the present status of proprietary establishments of Dalits and to suggest measures for increasing Dalit entrepreneurship in India.

3. Objectives

This paper tries to find out the position of SCs and STs in ownership of different enterprises in India. It also makes an attempt to unearth the trend of ownership of enterprises by SCs and STs in four different economic censuses, from 1990 to 2013. Besides,an attempt has been made to know the problems of lowownership of enterprises by SCs and STs in India and suggest measures to overcome them.

4. Methodology

The study is based on secondary data collected from different sources like annual reports and census reports of Government of India. To substantiate the findings and to ascertain the problems confronted by the Dalit entrepreneurs for starting up their business, three focused group discussions were conducted in Kalahandi district of Odisha. Besides, information has also been collected from the key informants like the Dalit entrepreneurs and the managers of woodcrafts clusters in Kalahandi. The data have been analysed by applying simple statistical tools like percentages, tables, graphs and diagrams.

5. Results and Discussion

The study takes the help of a micro study of the Khairpadar Wood Craft Cluster located near Dharmagarh sub-division of Kalahandi district where both Dalits and other backward caste people work as artisans. In Khairpadar Village, the Dalit artisans face a lot of difficulties to start their wood craft enterprises, because the upper caste people and STs are reluctant to work under Dalits. Besides, the lack of training among Dalit and tribal youths on modern wood carving has led to the shortage of skilled manpower. During focused group discussions, it emerged that the political meddling and dominance of upper caste Hindus play a vital role in the distribution of shops and market places for business in urban centres of the district. The Dalit entrepreneurs are very backward in lobbying which obstructs them to set up their business units in town. The locations with low density of urban population and less demanded market places are normally allotted to Dalits. Even though they register complaint for such discrimination, nobody listens to them. The higher rents relative to business in less demanded market area results in losses in business and ultimately, they either switch over to other occupations or shut down their businesses. The access to credit is also a serious problem. For a macro analysis, the 6th Economic Census (2013) data of India published in 2016 has been considered and social group-wise information on agricultural and non-agricultural proprietary establishments is presented in Table-1.

Table-1: Broad Activity-wise Distribution of Proprietary Establishments by Social Group of the owner

Sl. No	Broad activity	SCs	STs	OBCs	Others	All Social Groups
1	Activities relating to agriculture other than crop production & plantation	63933 (10.5)	39003(6.4)	291719 (47.7)	216720 (35.4)	611375 (100.0)
2	Livestock	1340188 (12.0)	706291 (6.3)	5212297(46.6)	3930413 (35.1)	11191189(100.0)
3	Forestry and Logging	62259 (11.0)	320166 (56.4)	113199 (19.9)	72394 (12.7)	568018(100.0)
4	Fishing and aqua culture	95747(19.8)	33320 (6.9)	238416 (49.4)	115443 (23.9)	482926(100.0)
	Subtotal : Agricultural Activities	1562127 (12.2)	1100780 (8.6)	5855631(45.6)	4334970 (33.7)	12853508(100.0)
5	Mining and quarrying	8799 (12.0)	6489 (8.9)	28485 (38.9)	29397 (40.2)	73170(100.0)
6	Manufacturing	1125759(11.5)	466592 (4.8)	4415553(45.2)	3766411 (38.5)	9774315(100.0)
7	Electricity, gas, steam and air conditioning supply	2664 (9.2)	945 (3.0)	8942 (28.6)	18479 (59.2)	31230(100.0)
8	Water supply, sewerage, waste management and remediation activities	20109(15.5)	3898 (3.0)	44388(34.3)	60989 (47.1)	129385(100.0)
9	Construction	183022(19.6)	47920 (5.1)	310930(33.3)	391744 (42.0)	933616(100.0)
10	Whole sale trade, retail trade & repair of motor vehicles & motor cycles	80494(8.6)	29518 (3.2)	377779 (40.5)	444683 (47.7)	932474(100.0)
11	Whole sale trade (not covered in item-10 above)	67109(7.8)	32099 (3.7)	253963(29.6)	505034 (58.8)	858225(100.0)
12	Retail trade (not covered in item-10 above)	1642154(10.9)	693525 (4.6)	5779080(38.3)	6977154 (46.2)	15091913(100.0)
13	Transportation and storage	388181(13.7)	135410 (4.8)	1016466(35.9)	1288047 (45.5)	2828104(100.0)
14	Accommodation and Food service activities	220667 (10.0)	99251 (4.5)	904079 (41.0)	980819 (44.5)	2204816(100.0)
15	Information & communication	23735(8.7)	8664 (3.2)	91401 (33.4)	149934 (54.8)	273734(100.0)
16	Financial and insurance activities	27188(7.1)	10251 (2.7)	125964 (32.9)	219071 (57.3)	382474(100.0)
17	Real estate activities	31076 (7.5)	14978 (3.6)	141308 (33.9)	228906 (55.0)	416268(100.0)
18	Professional, scientific & technical activities	39337(8.3)	11316 (2.4)	144779(30.7)	276855 (58.6)	472287(100.0)
19	Administrative and support service activities	58214 (9.2)	21986 (3.5)	248720 (39.2)	305694 (48.2)	634614(100.0)
20	Education	49386 (6.7)	17915 (2.4)	169572 (23.1)	498529(67.8)	735402(100.0)
21	Human health & social work activities	55507 (8.2)	15008 (2.2)	207036 (30.8)	395580 (58.8)	673131(100.0)
22	Arts entertainment, sports & amusement and recreation	25968 (16.4)	5542 (3.5)	51541 (32.5)	75382 (47.6)	158433(100.0)
23	Other service activities not elsewhere classified	360975(12.7)	90765(3.2)	1152873(40.7)	1228811(43.4)	2833424(100.0)
	Subtotal : Non -Agricultural Activities	4410544(11.2)	1712072(4.3)	15472880(39.2)	17841519(45.2)	39437015(100.0)
	Total	5972671(11.4)	2812852(5.4)	21326511(40.8)	22176489(42.0)	52290523(100.0)

Source: All India Report of Economic Census, 2016 Government of India, Figures in parentheses indicate percentage

It may be read off the table that among the people owning agricultural enterprises, SCs have a share of 12.2 per cent and STs have 8.6 per cent share against 45.6 per cent for the OBCs and 33.7per cent in the case of other category people. Since cultivation is the main occupation of SCs and STs and they are also involved in collection of forest products, rearing of livestock and fishing, it is expected for them to have a greater share of agricultural enterprises. But they have a disproportionately lower share in agricultural proprietary establishments. Their ownership of non-agricultural business enterprises is also very low in comparison to their share of population as the SCs have an11.4 per cent share and STs have a share of 5.4 per cent in the total non-agricultural business enterprises. In owning education establishments like schools, colleges and coaching/training centres, the Dalit finds difficulties as it requires government approval, huge amount of capital investment and social acceptance. Specifically, opening up of a coaching centre by a Dalit educated youth in a rural area is quite difficult due to their surname. It is also a big issue in urban areas because the success of coaching business is determined, to a great extent, by surname brands.

During focused group discussion among young Dalit entrepreneurs in Kalahandi, it came out that factors like lack of leadership and entrepreneurship training, ignorance of techniques ofmanagement of business units, paucity of family capital and support, need of quick earning to shoulder the family burden, lack of collateral etc. account for their low ownership in non-agricultural proprietary establishments.

Large skill gap among the Dalits vis-a-vis the non-Dalits is noticed both in rural and urban areas. The obstacles like social taboos and lack of training for skill enhancement and nurturing the young minds for honing entrepreneurship are mostly responsible for low start-up of new business. The poor share of Dalits in ownership of enterprises is evident from data presented in Tables 2 and 3.

Table-2: Percentage Distribution of ownership of Micro, Small and Medium Enterprises by social groups in rural and urban areas

Locations	SCs	STs	OBCs	Others	All Social Groups
Rural	15.37	6.7	51.59	26.34	100.0
Urban	9.45	1.43	47.80	41.32	100.0
All	12.45	4.10	49.72	33.74	100.0

Source: Annual Report 2017-18, Ministry of Micro, Small and Medium Enterprises (MSMEs), Government of India.

It may be seen from Table 2 that only 12.45 percent of micro, small and medium enterprises are owned by the scheduled caste people and a still lower i.e. 4.10 percent are owned by the scheduled tribe people. Unsurprisingly, the share of SCs and STs in urban areas is much lower in comparison to rural areas. It is customary that the urban people, irrespective of social category, have a greater opportunity of easy access to knowledge, education, training and credit than the rural people. It is also easy to start up small or micro businesses in an urban area. But SCs and STs cannot compete with the entrepreneurs of OBC and other category people as the later have better access to credit, use their own capital and can easily acquire the appropriate place for starting up of a new business. The OBCs owned 51.59 percent of MSMEs in rural areas and 47.80 percent in urban areas while the other caste people owned 26.34per cent and 41.32per cent in rural and urban areas, respectively.

Table3: Percentage Distribution ownership of MSM Enterprises by social groups

Category of enterprises	SCs	STs	OBCs	Others	All Social Groups
Micro	12.48	4.11	49.83	33.58	100.0
Small	5.50	1.65	29.64	63.21	100.0
Medium	0.0	1.09	23.85	75.07	100.0
All	12.45	4.10	49.72	33.74	100.0

Source: Annual Report 2017-18, Ministry of Micro, Small and Medium Enterprises, Government of India

A cursory look at Table 3 indicates that the non-Dalits have shares in ownership of MSM Enterprises that are much higher than those owned by Dalits. This holds in respect of micro, small and medium enterprises considered both as sub-categories and as a whole.

A diagrammatic exposition of the social category wise ownership of agricultural establishments and employment therein in India is given in Fig. 1 and 2.

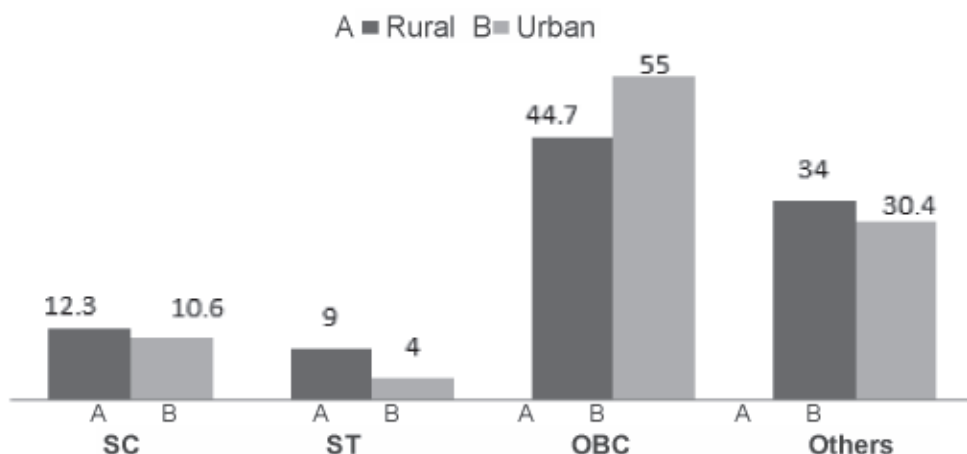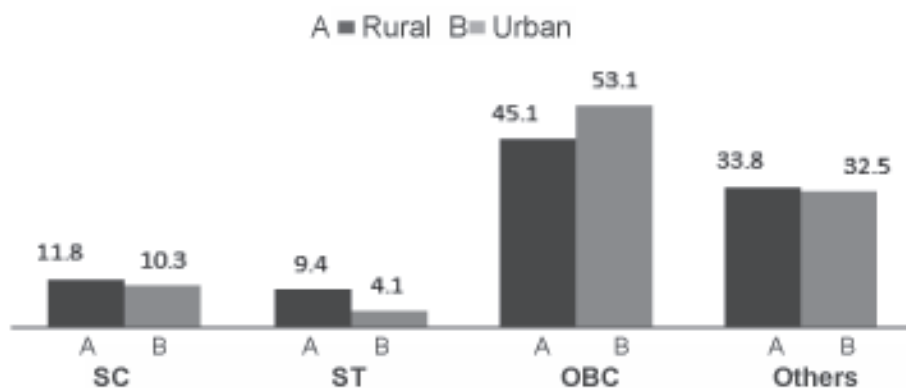Fig.1: Social category wise ownership of Agricultural establishments in India (in%)

A ■ Rural B■ Urban

	SC		ST		OBC		Others	
	A	B	A	B	A	B	A	B
	12.3	10.6	9	4	44.7	55	34	30.4

Fig. 2: Social category wise employment in Agriculture establishments in India (in%)

A ■ Rural B■ Urban

	SC		ST		OBC		Others	
	A	B	A	B	A	B	A	B
	11.8	10.3	9.4	4.1	45.1	53.1	33.8	32.5

In the focused group discussions conducted in two villages in Kalahandi district of Odisha, the participants were mostly wood craft and stone craft artisans from different social categories. It is observed that the OBCs and other caste people face no difficulty to start the woodcraft and stone craft business as they have easy access to raw material and credit market and are aware about the benefits of own business. They run family businesses by setting up workshops in their own house. But the SCs and STs find difficulty in collecting

raw materials, arranging credit, acquiring technical know-how and, most importantly, family support, as a result of which the young SC and ST artisans work as labourers in enterprises owned by upper caste people.

The trend of social group-wise population share, share of enterprise ownership and share of employment in India is given in Table-4.

Table4: Share of population, Enterprise Ownership and Employment by Social Groups, 1990- 2013

Attributes	Social group	1990	1998	2005	2013
Population share	SCs	16.6	16.5	16.4	19.7
	STs	7.6	7.7	7.7	8.5
	Others	75.8	75.8	75.9	71.9
	All Social Groups	100.0	100.0	100.0	100.0
Share of enterprise ownership	SCs	9.9	8.5	9.8	11.4
	STs	2.6	4.2	3.7	5.4
	Others	87.5	87.3	86.4	83.2
	All Social Groups	100.0	100.0	100.0	100.0
Share of employment	SCs	7.4	6.9	8.1	10.0
	STs	2.0	3.8	3.4	5.0
	Others	90.6	89.4	88.5	85.0
	All Social Groups	100.0	100.0	100.0	100.0

Source: Retrieved from

*https://pdfs.semanticscholar.org/a9e8/3fbfac4416b8a00670d1a989a911146943aa.pdf and http:// www.indiaenvironmentportal.org.in/files/file/Allper cent20Indiaper cent20Reportper cent20ofper cent20Sixthper cent20Economicper cent20Census.pdf on dt.10.11.2018*

It is clear from the table that the SCs owned 9.8per cent enterprises and got 8.1per cent employment opportunities against their 16.4per cent share of India's population in 2005. This problem is very similar in the case of STs. Looking at figures on proportionate shares across social groups given in the table, it is revealed that OBCs and others have ample opportunities to own enterprises and employment opportunities in comparison to their respective population shares. The practice of covert untouchability among caste Hindus has stood on the path of entrepreneurship development and change of attitude of Dalits towards a lucrative business. Caste rigidities in rural India have been compelling the educated Dalit youths to either open up low-paying occupations like cobbling, automobile repair shops, selling vegetables and concentrating in age-old family occupations or migrating to other states as industrial workers. However, due to concentrated efforts of the

government through protective legislation, urbanization, credit and training provisions, and market assurance for new enterprises, there has been a gradual improvement in both vertical and horizontal occupational mobility of the people belonging to the Dalit groups.

In 2013, 11.4per cent of total enterprises are owned by SCs and only 5.4per cent by STs.A more or less similar picture is discernible across the four economic censuses. The share of other castes in ownership of enterprises is much higher in comparison to SCs and STs in the four economic censuses under study. It has become obvious that between SCs and STs, the former have a greater share in the ownership of enterprises among those owned by the two groups taken together. This has been depicted in Fig.3.

Fig.3: Trend of enterprise ownerships in India on basis of social category wise
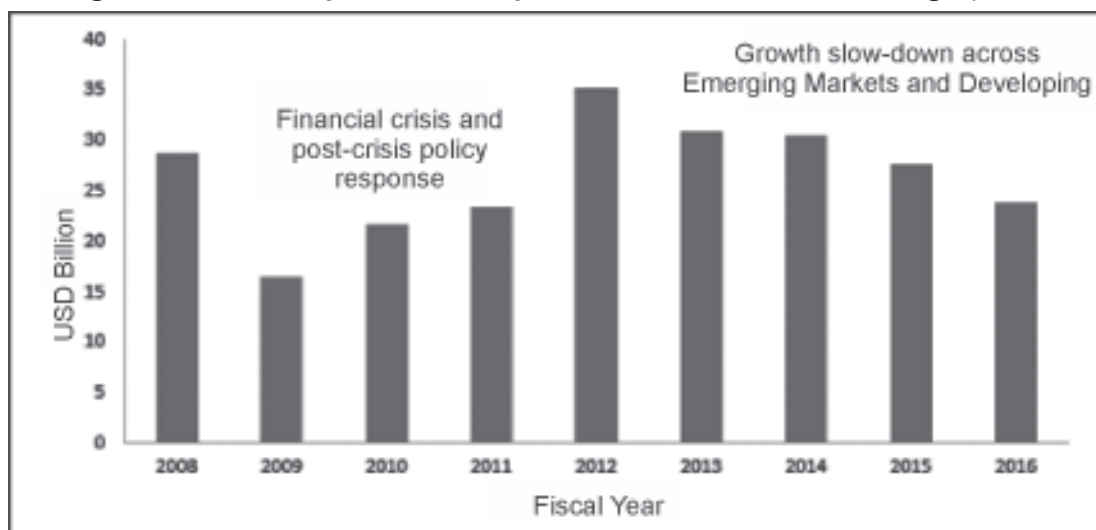
Another disquieting aspect is the existence of glaring interstate disparities in the ownership share of SCs and STs in the country. Relevant data are given in Table-5 which depicts data on ownership of enterprises among SCs and STs in different states of India.

Table 5: Top 10 states in India with ownership of Enterprises among SCs and STs (2004-2007)

Rank & State Name	No. of SC Enterprises (Thousands)	Rank & State Name	No. of ST Enterprises (Thousands)
1. Tamil Nadu	18.12	1. Madhya Pradesh	7.02
2. Karnataka	16.58	2. Karnataka	5.82
3. Uttar Pradesh	14.14	3. Chhattisgarh	3.52
4. Madhya Pradesh	13.65	4. Mizoram	3.51
5. Punjab	6.35	5. Gujarat	3.47

6. Bihar	6.20	6. Meghalaya	2.81
7. Kerala	6.17	7. Tamil Nadu	2.46
8. Gujarat	4.90	8. Maharashtra	1.50
9. Maharashtra	4.88	9. Uttar Pradesh	1.47
10. Rajasthan	4.47	10. Rajasthan	1.45

Source: Milind Kamble's presentation, DICCI, Government of India

It can be seen that Tamil Nadu tops the list among states in respect of ownership of 18.12 thousand during 2004-2007 enterprises among SCs. But Maharashtra, which is otherwise a highly industrialised state, has only 4.88 thousand SC-owned enterprises. This means that a state like Maharashtra in which education and awareness even among SCs is supposed to be higher, fails to groom more entrepreneurial spirit among them. Even in Kerala, a state with the highest human development index (HDI) and considered as a champion of safeguarding and promoting socio-economic wellbeing of Dalits and minorities in India, only 6.17 thousand of SC enterprises were found during 2004-07. Unsurprisingly, Madhya Pradesh having a very high concentration of tribal population tops the list with 7.02 thousand ST-owned enterprises while the other tribal dominated states like Jharkhand, Odisha and Bihar have failed to create opportunities and groom entrepreneurship among STs. These states accommodate more tribal population but probably state policy is not quite favourable for creating a strong business environment in favour of SCs and STs. Rajasthan is at the bottom of the list of 10 top states in respect of ownership of enterprises among SCs and STs.

6. Major Findings

The study found that the growth of Dalit entrepreneurship is very slow as compared to the growth of enterprises of other caste people in India. Besides, the growth of entrepreneurship among Dalits is confined mainly to primary sectors. Dalits are still lagging behind in accumulating capital. They have strong business opportunities in low cost family enterprises like fish and dry fish business, meat and leather business, weaving and carpentry, rice husking, etc. But they have not succeeded in capitalizing on these business opportunities even after 72 years of independence of the country. They have also not done well in vegetable and fruit selling businesses. The Dalit entrepreneurs face a lot of difficulties starting from credit and market to family support. They confront several challenges in accessing financial capital due to their limited collateral and resistance in accessing market. This is mainly due to the prejudiced mind-set of people and business elephants. Besides, they have the challenges in accessing latest technologies, information

about market conditions, cheap and quality source of raw materials, management strategies and so on. Above all these, they lack in skills and are not provided with proper and regular training on accounts, management and entrepreneurship development.

7. Summary and Conclusion

The Dalits constitute around one fifth of the total population in India. The socio-economic development and wellbeing of this section of population is an imperative. The proprietary establishments through entrepreneurship by Dalits count a lot for the overall upliftment of these people. This study focuses on reformulating the state's socio-economic policy for attracting more Dalit youths to owning, operating and managing business enterprises. No doubt, both central and state governments have enacted several legislations to promote business enterprises of Dalits but the lack of effective implementation of these schemes contributed a lot to the slow growth of entrepreneurship among these people. The development of business enterprises of Dalits is far less than their share of population in the country. The social stigma and ugly caste practices still stand as effective barriers to their proprietary endeavours. This study has its own limitation as it is banking more on secondary data. Future research based on primary data is needed to provide more useful and reliable information. It is recommended that both governmental and non-governmental organizations should take necessary steps in imparting quality education, vocational training, and career counselling to Dalit youths and generate awareness on leadership and entrepreneurship among them so that they can start risky and profit oriented enterprises in rural and urban areas. Awareness camps should be organized in Dalit villages to create an attitude among them for establishing and successfully running micro and small businesses.

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Monetary Policy Transmission: Evidence from India[1]

Sarat Malik[2]

What is Monetary Policy?

Monetary policy is concerned with changes in the supply of money. India's monetary policy is about financing of economic growth. In 1980's the Indian economy was suffering from a big economic crisis, and to meet the crisis India approached World Bank and International Monetary Fund (IMF) for loan and World Bank granted the loan. Afterwards India introduced the new economic policy in July, 1991. The policy was introduced with the aim to slowing down monetary expansions and controlling inflation.

Monetary policy refers to the policy of the central bank with regard to the use of monetary instruments under its control to achieve the goals specified in the Act. The Reserve Bank of India (RBI) is vested with the responsibility of conducting monetary policy. This responsibility is explicitly mandated under the Reserve Bank of India Act, 1934.

The goal(s) of monetary policy

The primary objective of monetary policy is to maintain price stability while keeping in mind the objective of growth. Price stability is a necessary precondition to sustainable growth. It facilitates economic growth and control the supply of money. Every year Reserve Bank of India changes the cash reserve ratio (CRR), statutory liquidity ratio (SLR), repo rate, reverse repo rate to control the money supply of the country.

In May 2016, the Reserve Bank of India (RBI) Act, 1934 was amended to provide a statutory basis for the implementation of the flexible inflation targeting framework.

The amended RBI Act also provides for the inflation target to be set by the Government of India, in consultation with the Reserve Bank, once in every five years. Accordingly, the Central Government has notified in the Official Gazette 4 percent Consumer Price Index

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[1]   *Views expressed are personal of the author and not of the organization where he works*

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(CPI) inflation as the target for the period from August 5, 2016 to March 31, 2021 with the upper tolerance limit of 6 percent and the lower tolerance limit of 2 percent.

The Central Government notified the following as factors that constitute failure to achieve the inflation target:(a) the average inflation is more than the upper tolerance level of the inflation target for any three consecutive quarters; or (b) the average inflation is less than the lower tolerance level for any three consecutive quarters.

Prior to the amendment in the RBI Act in May 2016, the flexible inflation targeting framework was governed by an Agreement on Monetary Policy Framework between the Government and the Reserve Bank of India of February 20, 2015.

The Monetary Policy Framework

The amended RBI Act explicitly provides the legislative mandate to the Reserve Bank to operate the monetary policy framework of the country.

The framework aims at setting the policy (repo) rate based on an assessment of the current and evolving macroeconomic situation; and modulation of liquidity conditions to anchor money market rates at or around the repo rate. Repo rate changes transmit through the money market to the entire the financial system, which, in turn, influences aggregate demand – a key determinant of inflation and growth.

Once the repo rate is announced, the operating framework designed by the Reserve Bank envisages liquidity management on a day-to-day basis through appropriate actions, which aim at anchoring the operating target – the weighted average call rate (WACR) – around the repo rate.

The operating framework is fine-tuned and revised depending on the evolving financial market and monetary conditions, while ensuring consistency with the monetary policy stance. The liquidity management framework was last revised significantly in April 2016.

The Monetary Policy Process

Section 45ZB of the amended RBI Act, 1934 also provides for an empowered six-member monetary policy committee (MPC) to be constituted by the Central Government by notification in the Official Gazette. Accordingly, the Central Government in September 2016 constituted the MPC as under:

1.   Governor of the Reserve Bank of India – Chairperson, ex officio;

2. Deputy Governor of the Reserve Bank of India, in charge of Monetary Policy – Member, ex officio;

3. One officer of the Reserve Bank of India to be nominated by the Central Board – Member, ex officio;

4. Shri Chetan Ghate, Professor, Indian Statistical Institute (ISI) – Member;

5. Professor PamiDua, Director, Delhi School of Economics – Member; and

6. Dr. Ravindra H. Dholakia, Professor, Indian Institute of Management, Ahmedabad – Member.

The MPC determines the policy interest rate required to achieve the inflation target. The first meeting of the MPC was held on October 3 and 4, 2016 in the run up to the Fourth Bi-monthly Monetary Policy Statement, 2016-17.

The Reserve Bank's Monetary Policy Department (MPD) assists the MPC in formulating the monetary policy. Views of key stakeholders in the economy, and analytical work of the Reserve Bank contribute to the process for arriving at the decision on the policy repo rate.

The Financial Markets Operations Department (FMOD) operationalises the monetary policy, mainly through day-to-day liquidity management operations. The Financial Markets Committee (FMC) meets daily to review the liquidity conditions so as to ensure that the operating target of monetary policy (weighted average lending rate) is kept close to the policy repo rate.

Before the constitution of the MPC, a Technical Advisory Committee (TAC) on monetary policy with experts from monetary economics, central banking, financial markets and public finance advised the Reserve Bank on the stance of monetary policy. However, its role was only advisory in nature. With the formation of MPC, the TAC on Monetary Policy ceased to exist.

Instruments of Monetary Policy

There are several direct and indirect instruments that are used for implementing monetary policy:

Repo Rate: The (fixed) interest rate at which the Reserve Bank provides overnight liquidity to banks against the collateral of government and other approved securities under the liquidity adjustment facility (LAF).

Reverse Repo Rate: The (fixed) interest rate – currently 50 bps below the repo rate – at which the Reserve Bank absorbs liquidity, on an overnight basis, from banks against the collateral of eligible government securities under the LAF.

The LAF consists of overnight as well as term repo auctions. Progressively, the Reserve Bank has increased the proportion of liquidity injected under fine-tuning variable rate repo auctions of tenors ranging between overnight and 56 days. The aim of term repo is to help develop the inter-bank term money market, which in turn can set market based benchmarks for pricing of loans and deposits, and hence improve transmission of monetary policy. The Reserve Bank also conducts variable interest rate reverse repo auctions, as necessitated under the market conditions.

Marginal Standing Facility (MSF): A facility under which scheduled commercial banks can borrow additional amount of overnight money from the Reserve Bank by dipping into their Statutory Liquidity Ratio (SLR) portfolio up to a limit [currently two per cent of their net demand and time liabilities deposits (NDTL)] at a penal rate of interest, currently 50 basis points above the repo rate. This provides a safety valve against unanticipated liquidity shocks to the banking system.

The MSF rate and reverse repo rate determine the corridor for the daily movement in the weighted average call money rate.

Bank Rate: It is the rate at which the Reserve Bank is ready to buy or rediscount bills of exchange or other commercial papers. The Bank Rate is published under Section 49 of the Reserve Bank of India Act, 1934. This rate has been aligned to the MSF rate and, therefore, changes automatically as and when the MSF rate changes alongside policy repo rate changes.

Cash Reserve Ratio (CRR): The average daily balance that a bank shall maintain with the Reserve Bank as a share of such per cent of its NDTL that the Reserve Bank may notify from time to time in the Gazette of India.

Statutory Liquidity Ratio (SLR): The share of NDTL that banks shall maintain in safe and liquid assets, such as, unencumbered government securities, cash and gold. Changes in SLR often influence the availability of resources in the banking system for lending to the private sector.

Open Market Operations (OMOs): These include both outright purchase and sale of government securities for injection and absorption of durable liquidity, respectively.

Market Stabilisation Scheme (MSS): This instrument for monetary management was introduced in 2004. Surplus liquidity of a more enduring nature arising from large capital inflows is absorbed through sale of short-dated government securities and treasury bills. The cash so mobilised is held in a separate government account with the Reserve Bank.

Financial Development and Monetary Policy Transmission across Financial Markets

Financial system of any country is "a complex, well-integrated set of sub-systems of financial institutions, markets, instruments, and services which facilitates the transfer and allocation of funds, efficiently and effectively"*(Pathak, 2010).* In the words of *Goyal (2014)*"It is a composition of various institutions, markets, regulations and laws, practices, money managers, analysts, transactions, claims and liabilities. It functions as an intermediary and facilitates the flow of funds from the areas of surplus to the areas of deficit". The financial systems of most of the developing countries are designated by the coexistence and cooperation among the formal and informal financial sectors. According to *Pathak (2010)*"India's financial sector can also be broadly divided into formal (organized) and informal (unorganized) sectors". The formal financial system consists of four major segments or components. These are: Financial Institutions, Financial Markets, Financial Instruments and Financial Services.

The process of financial development in any emerging economy would involve the intimately interlinked developments of both financial institutions as well as financial markets. It is well-known that transmission of monetary policy, to begin with, takes place via financial markets. Financial market developments and extent of market integration across various segments of domestic financial markets play a key role in this context. The more integrated financial markets are, in all likelihood the more would be the strength of monetary transmission across financial markets.

These constituent parts of financial system are interdependent and work complementary to each other. Financial system of any country contributes to growth and development by channelizing the savings into most efficient way. It mediates between the ultimate savers and investors, acting as a mobilizer of credit and finance. To wit *Report on Currency and Finance, 2004-05*"Central bankers around the world recognize that a well-functioning financial market enables efficient use of market based instruments of monetary policy by improving interest rate signals in the economy".

According to the report "Apart from enhancing the efficiency of monetary policy, deep and well-functioning financial markets promote mobilization   of domestic savings and

improve the allocative efficiency of financial intermediation, and enhance the necessary conditions to emerge as an international financial centre". The level of financial development is indicated by the extent of mobilization and dispersion of funds i.e. the financial intermediation process.

Dhal and Bhoi (1998) in one the early studies on the subject studied the extent of domestic financial market in the initial years of reforms (viz., over April 1993 – March 1998). Using monthly data, they found that although fully competitive environment was yet to emerge, several segments of the financial market have achieved operational efficiency. In particular, India's financial markets were getting increasingly integrated at the short-end of the market, such as, money market, credit market, Government securities market. However, capital market is least integrated with the rest of the financial sector; there were also early indications about integration of money market and forex market. However, integration of domestic and overseas financial markets has not been found to be robust. Similar results are obtained by others as well *(e.g., Pattnaik and Vasudevan, 1999). Nag and Mitra (1999)* got similar results using the technique of Artificial Neural Network.

Channels of Transmission of Monetary Policy to the Stock Market

Monetary policy is likely to influence stock market prices through four mechanisms:

First, changes in the money supply may be related to unanticipated increases in inflation and future inflation uncertainty and hence negatively related to the share price.

Second, changes in the money supply may positively influence the share price through its impact on economic activity.

Third, portfolio theory suggests a positive relationship; an increase in the money supply is likely to shift the portfolio from non-interest bearing money to financial assets, including equities *(Humpe and Macmillan 2009).*

Finally, changes in the money supply may positively influence the share price by raising the expected inflation and expected price of shares, hence raising the present demand for purchasing shares and present share prices.

There are three channels related to the transmission of monetary policies to the commodities market and capital market, which are the interest rate channel, exchange rate channel, and inflation channel.

Changes in the central bank's policy rate impact the economy with lags through a variety of channels, the primary ones being:

   (i)   interest rate channel,

   (ii) credit channel,

   (iii) exchange rate channel, and

   (iv) Asset price channel.

(i) Interest Rate channel: The immediate impact of a change in the monetary policy rate is on the short-term money market rates (such as call money rate, certificates of deposits, commercial papers, treasury bills), key financial markets (exchange rate, equity prices), and also on medium and long-term instruments (yields on dated government securities and corporate bonds). The impact is typically quick and broadly one-to-one from the policy rate to short-term money markets rates such as the call money rate which is the unsecured or uncollateralized inter-bank lending rate: A bank will be willing to part with its reserves overnight to another bank only if it earns at least the rate that it could earn by parking these funds with the central bank; and, if banks compete adequately for such lending, then the rate will in fact track closely the central bank's policy rate. The impact of the policy rate on other market rates varies across tenors and instruments depending upon the liquidity conditions and other factors such as how interest rates vary at different maturities.

(ii) Credit Channel: In turn, the central bank's changes in its policy rate are expected to impact the banks' cost of funds, both the rates they would pay to depositors and the rates they would demand for making loans. For example, when a central bank reduces the policy repo rate with the intention to support aggregate demand in the economy, the expectation is that there would be a reduction in the banks' cost of funds and lending rates, and in the spectrum of market interest rates (and vice versa when the policy rate is increased). Lower lending interest rates of banks provide a boost to demand for bank credit from various segments of the society, for instance, from individuals and households for loans for consumer durables (such as automobiles) and for housing; and from entrepreneurs for new or increased investment in plant and machinery. An increased demand for automobiles, housing, and machinery generates increased demand for the inputs including labour in these industries, and hence, an increase in overall demand, incomes, and output in the economy. ***As this process continues, it eventually puts upward pressure on wages***

of labor and prices of inputs, and this way, raises inflation. A central bank mandated to maintain stable prices while taking account of growth thus faces a trade-off while lowering or raising its policy rate. The implicit assumption here is that bank balance sheets are strong and in a position to step-up quickly the supply of credit in response to lower funding cost and higher demand for credit – the bank lending or the *credit channel of transmission*.

Cross-country evidence indicates that monetary transmission is greatly hindered if bank balance sheets are weak in that they do not have much loss-absorption capacity to deal squarely with their problem loans – indeed, the evidence suggests that there might be ever-greening of bad loans, and increased 'zombie' lending, lending to distressed firms at subsidized rates to kick the can of loan defaults down the road, resulting in misallocation of resources, productivity losses and weak growth. This way, attempts to stimulate growth with aggressive policy rate cuts when there are bank balance-sheet problems get wasted and can even backfire in the form of malinvestments, creating false hopes of a growth boost and relaxing the pedal on deeper balancesheet and structural reforms of the banking sector.

(iii) **Asset Price**: Lower interest rates also boost asset prices such as housing and equity prices as these can now be purchased at cheaper borrowing costs. The resulting boost to household / corporate wealth and improved cash flows on the back of lower interest rates also add to the demand impulses. This is the **asset price channel** of monetary transmission. Higher asset prices can enhance the value of the collateral or net worth of the borrowers, interacting with the bank lending or credit channel, enhancing the capacity to borrow more and at competitive rates, reinforcing the impulses to aggregate demand.

(iv) **Exchange Rate**: Finally, lower domestic interest rates could lead to a depreciation of the domestic currency, on the one hand making exports more competitive in the global market and adding to domestic demand and economic activity, but on the other hand, could also have a direct upward impact on the domestic currency prices of imported inputs, making imports (for example, crude oil) costlier. This is the **exchange rate channel** of transmission.

All these channels are not stand alone channels; rather, these work at the same time, and may reinforce or interact with each other, so that their individual impact is difficult to disentangle. It also needs to be recognised that the transmission mechanism is complex.

The speed and strength at which the central bank's policy rate changes travel to the rest of the economy could vary widely from country to country depending on the structure of the economy and the state of its financial system.

The available empirical evidence for India suggests that monetary policy actions are felt with a lag of 2-3 quarters on output and with a lag of 3-4 quarters on inflation, and the impact persists for 8-12 quarters. Among the channels of transmission, the interest rate channel has been found to be the strongest.[2] Given that monetary policy impacts output and inflation with long (and often variable) lags, it is critical for monetary policy actions to be forward-looking, i.e., monetary policy needs to respond to expected output and inflation developments.

Policy transmission during H1:2018-19 was nearly complete in all segments of the money market. The three policy announcements during this period, the maximum impact was felt after the June policy which signalled both a rate cut and a change in the stance from neutral to accommodative – particularly at the longer end of the money market spectrum(Table IV.1). Thus, both the announcement effect of repo rate cuts and the liquidity effect of surplus conditions were instrumental in securing policy transmission.*(Monetary Policy Report, October 2019)*

Table IV.1: Policy Transmission in the Money Market

(Basic points)

H1: 2019-20	Change in Rates						
	Repo	WACR	Tri-party Repo	Market Repo	3-month CD	91day T-bill	3-month CP (NBFCs)
April 3 to June 4	-25	-32	-43	-37	-33	-16	-5
June 6 to August 6	-25	-24	-18	-25	-48	-44	-80
August 7 to September 30	-35	-23	-28	-32	-6	-38	20
Cumulative (April 3 - September 30)	-85	-79	-89	-94	-87	-98	-65

Sources: RBI; CCIL; FBIL and Bloomberg

Easing interest rates increase the demand for credit and increase aggregate demand, including the demand for investing in the capital market. *Keynes (1936)* examined the effects of lowering interest rates on aggregate demand. Expansionary monetary policy reduces

the interest rate. When the interest rate is lower than the marginal productivity of capital, it broadens investment demand until the marginal productivity of capital is equalized to the lower interest rate. The expansion of investment creates an accelerator–multiplier effect, causing aggregate demand to expand. The expanded aggregate demand also reflects in stock market. This expansion of demand for stock market shares puts pressure on prices. In the end, this process leads to increased stock market prices. In other words, lower interest rates will make borrowing cheaper, and this will push up the demand and prices.

The second channel is through the exchange rate. The effect of monetary policy on exchange rates has been the subject of a large body of empirical research since the early 1990s, as studied among others by *Sims (1992),* Clarida and *Gali (1994), Eichenbaum and Evans (1995),* and *Bagliano and Favero (1999).* **Several of these empirical studies found that a tightening of US monetary policy is associated with an appreciation of the dollar, while a loosening is associated with dollar depreciation.** Using a vector auto-regression (VAR) methodology, *Eichenbaum and Evans (1995)* found that contractionary shocks to monthly values of the federal funds rate, the ratio of non-borrowed reserves to total reserves, and the *Romer and Romer (1989)* index over the 1974–1990 period led to a sharp increase in the differential between US and foreign interest rates and to a sharp appreciation in the dollar.

Nevertheless, there is a big puzzle surrounding the stock prices and exchange rate interplay. The interrelationship between the two can be investigated from two different directions. On the one hand, when the domestic currency depreciates against foreign currencies, export product prices will decrease for foreigners and, consequently, the volume of the country's exports will increase *(Fama 1981).***This would benefit companies whose product markets are overseas, which will be reflected by an increase of their stock price.** On the other hand, currency depreciation will increase the importing expenditures of raw materials for domestic manufacturers, which is expected to have a negative impact on their cash flow and on stock prices. Thus, the net effect of the exchange rate variation on stock prices is undetermined. There is a large empirical body of literature supporting the linkage between stock returns and exchange rates.

Transmission from Policy rate to Bank Lending Rate – Performance and Issues

The Indian financial system remains bank-dominated, though the share of non-bank finance companies (NBFCs) and markets (corporate bonds, commercial paper, equity, etc.) in overall financing of the economy is steadily rising. Hence, the overall efficacy of monetary transmission in India hinges critically on the extent and the pace with which banks, taking a

cue from – and induced by – the changes in the policy repo rate, adjust their deposit and lending rates and meet adequately the economy's demand for credit. Overall, data suggests that the pass-through from policy rate changes to bank lending rates has been slow and muted. This lack of adequate monetary transmission remains a key policy concern for the Reserve Bank as it blunts the impact of its policy changes on economic activity and inflation.

RBI has transited from the prime lending rate (PLR) system (1994) to the benchmark prime lending rate (BPLR) system (2003), the base rate system (2010), and the present marginal cost of funds based lending rate (MCLR) system (2016). With banks required to determine their benchmark lending rates taking into account the marginal cost of funds [unlike the base rate system where banks had the discretion to choose between the average cost or the marginal cost (or blended cost) of funds], lending rates were expected to be more sensitive to the changes in the policy rate under the MCLR system vis-à-vis its predecessor (the base rate). The actual lending rate is based on MCLR plus a spread (business strategy and credit risk premium). The expected benefits of the MCLR system – better transparency, more flexibility and faster transmission – have, however, continued to elude.

The factors that have prevented the efficient transmission of policy rates to lending rates are:

- First, a sizeable legacy loan portfolio of banks is still linked to the base rate (about 30 per cent of the outstanding bank loans). Lending rates under the base rate system are relatively stickier than the loans linked to MCLR. During the current easing cycle of monetary policy, as against 200 bps cumulative cut in the repo rate, the base rate has declined by about 80 bps. Since the introduction of the MCLR in April 2016, as against the cumulative cut in repo rate by 50 bps, the base rate has declined by just about 20 bps. The banks deviated in an ad hoc manner from the specified methodologies for calculating the base rate and the MCLR to either inflate the base rate and MCLR or prevent the base rate and MCLR from falling in line with the cost of funds

- Second, spreads charged by banks over MCLR were adjusted to offset the changes in MCLR, thereby impacting the overall reduction in lending rates

One plausible underlying reason is the rate rigidity on the liability side of banks caused by several factors. In India, about 90 per cent of total liabilities of banks are in the form of deposits. Bank deposits are predominantly at fixed interest rates, thereby imparting rigidity to the transmission process. Furthermore, the deterioration in banking sector health due to

worsening of asset quality over the past 2-3 years and the expected loan losses in credit portfolios also seem to have induced large variability in spreads in the pricing of assets. Finally, the competition that banks face from alternative instruments of financial savings – such as mutual funds and small saving schemes – also seems to have made banks hesitant in varying the interest rates on term deposits in consonance with policy rate signals.

RBI's Study Group has suggested a number of steps to enhance transparency and transmission from monetary policy signals to the actual lending rates which include:

a) The switchover to an external benchmark needs to be pursued in a time-bound manner.

b) The decision on the spread over the external benchmark could be left to the commercial judgment of banks, with the spread remaining fixed all through the term of the loan, unless there is a credit event

c) The periodicity of resetting the interest rates by banks on all floating rate loans, retail as well as corporate, be reduced from once in a year to once in a quarter to expedite the pass-through from the monetary policy signal to the actual lending rates.

d) To reduce rigidity on liabilities side, banks be encouraged to accept deposits, especially bulk deposits, at floating rates linked directly to the selected external benchmark.

Impact on Stock Prices

Indian stock market has witnessed spectacular change in the recent decades. The market has undergone huge reform in the past few years. The economic instability in the global and national context has made its influence on the market movement. The linkage of stock market with macroeconomic variables has always been an area of interest among investors and policy makers. The Indian stock market is prone to the macro economic uncertainty in the country.

The Indian authors have examined the relationship between Indian stock market index (BSE Sensex) and five macro-economic variables namely WPI, IIP, money supply, exchange rates, it is observed that stock prices relate to money supply positively but relation to inflation is negative and bidirectional causality exists between industrial production and stock price and unidirectional causality from money supply to stock price.

Foreign authors have investigated interest rate changes on sectoral stock returns and also identified the impact of monetary policy on stock market and concluded that expected and unexpected interest changes is negative and significant, in future, stock market could be an effective channel in transmitting monetary policy rather than traditional credit channel.

Stock prices are closely monitored asset prices in the economy and it is regarded as highly sensitive to economic conditions. In the context of the transmission mechanism through the stock market, monetary policy actions affect stock prices, which themselves are linked to the real economy through their influence on consumption spending (wealth effect channel) and investment spending (balance sheet channel). The stock prices depend on the key interest rates of RBI. If RBI increases CRR the interest rates of the bank will increase. Hence all firms may not borrow money from banks which results in reduction in the production of goods and services. Due to this imports will increase and exports will decrease, which causes the reduction of Gross Domestic Product of the country.

In stock market a cut in interest rates will cause positive impact. If CRR rates will decrease the bank savings will be unattractive. Thus, depositors may move to the stock market, which results in a boost in the security prices. The liquidity in the stock market is generated by the central bank with monetary policy. Stock market volatility is depends on the monetary policy rates. So, any fluctuation in the monetary policy will be having direct impact on stock market returns and overall economy of the nation.

Monetary Policy and the Stock Market: Some International evidence

Central bankers and stock market participants should be aware of the relationship between monetary policy and stock market performance in order to better understand the effects of policy shifts. Monetary authorities in particular face the dilemma of whether to react to stock price movements, above and beyond the standard response to inflation and output developments.

A number of alternative methodologies have been used to examine the relationship between monetary policy and stock prices in the United States. Using a VAR system that includes monthly equity returns, output growth, inflation, and the federal funds rate, it is found that monetary policy shocks, have a greater impact on smaller capitalisation stocks.

Monetary Policy and Economic Development

Monetary policy plays a stabilizing role in influencing economic growth through a number of channels. However, the scope of such a role may be limited by the concurrent pursuit of

other primary objectives of monetary policy, the nature of monetary policy transmission mechanism, and by other factors, including the uncertainty facing policy makers and the stance of economic policies. In addition, the concurrent target of intermediate goals may have implications on the attainment of the ultimate objective of achieving sustainable growth.

Monetary policy promotes economic development through:

a) **Price Stability:** The contribution that monetary policy makes to sustainable growth is the maintenance of price stability. Since sustained increase in price levels is adjudged substantially to be a monetary phenomenon, monetary policy uses its tools to effectively check money supply with a view to maintaining price stability in the medium to long term. Theory and empirical evidence in the literature suggest that sustainable long term growth is associated with lower price levels. In other words, high inflation is damaging to long-run economic performance and welfare.

Inflationary pressures adversely affect the propensity to save and divert investible resources into unproductive channels. Sometimes, it has been noticed that inflationary increase leads to frequent devaluation of the domestic currency and fluctuating exchange rate also creates chaos in the internal trade. Consequently, it applies to the rate of economic growth.

So, monetary authority keeps a vigil on the movements of prices and takes steps to control the same accordingly. It also tries to maintain exchange stability. In other words, monetary policy may employ qualitative and quantitative methods of credit control to check inflationary trend in the economy and further to gear the process of economic growth.

b) **Availability of Credit and Boost in Consumption:** Monetary policy has far reaching impact on financing conditions in the economy, not just the costs, but also the availability of credit, banks' willingness to assume specific risks, etc. It also influences expectations about the future direction of economic activity and inflation, thus affecting the prices of goods, asset prices, exchange rates as well as consumption and investment.

A monetary policy decision that cuts interest rate, for example, lowers the cost of borrowing, resulting in higher investment activity and the purchase of consumer durables. The expectation that economic activity will strengthen may also prompt banks to ease lending policy, which in turn enables business and households to boost spending.

In a low interest-rate regime, stocks become more attractive to buy, raising households' financial assets. This may also contribute to higher consumer spending, and makes companies' investment projects more attractive. Low interest rates also tend to cause currency to depreciate because the demand for domestic goods rises when imported goods become more expensive. The combination of these factors raises output and employment as well as investment and consumer spending.

c) **Bridging the Balance of payment deficit:** Monetary policy in the form of interest rate policy plays an important role in bridging the balance of payments deficit. In developing economies to establish infrastructure like power, irrigation, transport, etc. and directly productive activities like iron and steel, chemicals, electrical, fertilisers, etc., developing countries have to import capital equipment, machinery, raw materials, spares and components thereby raising their imports. But exports are almost stagnant. They are high-priced due to inflation. As a result, an imbalance is created between imports and exports which lead to disequilibrium in the balance in payments. Monetary policy can help in narrowing the balance of payments deficit through high rate of interest. A high interest rate attracts the inflow of foreign investments and helps in bridging the balance of payments gap.

d) **Controlling business cycles:** Boom and depression are the main phases of business cycle. Monetary policy puts a check on boom and depression. In period of boom, credit is contracted, so as to reduce money supply and thus check inflation. In period of depression, credit is expanded, so as to increase money supply and thus promote aggregate demand in the economy.

e) **Deepening Financial Markets**: There exists vast non-monetised sector in developing economies which is not responsive to changes in the quantity of money and interest rates and such, this sector remains outside the effective control of the Central Bank. This being the case all out efforts must be made by the monetary authority to extend the sphere of the monetised sector to make monetary policy a success.

For the attainment of the objective of growth with stability, the monetary authority of developing economies, therefore, has to play a positive role in creation, working and expansion of banking and other financial institutions and extend credit facilities where needed.

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Comatose Education and Geriatric Delivery: Redefining Institutional Existence

Mukti Kanta Mishra[1]

As a warning to readers, this article is my perception and expression based on the 14 years of direct and intrinsic experience in skill development ecosystem, blending skill into traditional higher education and not based on academic research and rigor. Since I was asked and pursued by a friend, which I had presumed to die down overtime, but in vain; hence, I decided to honor her request to write this experience-sharing note.

Let me confess, I have three Masters Degrees and PhD, yet I can vouch with authenticity that I did not have appropriate level of competence commensurate to the degrees. I acquired competency when I was exposed to real life situation. I had done fairly well in examinations in every Degree but felt extremely inadequate when I was selected on the basis of my education to join corporate world. In fact, when I joined my first job, I learnt most of my skills from a person who had 11th Pass Certification. In 1987, I had started questioning my own Degrees, but went on adding a few more over next 15 years.

The lack of competency blurs the clarity, creativity and confidence in every walk of life where one ingratiates himself/ herself on the basis of academic background. Many high achievers in academics are biggest failures in real life.

The educational institutional mechanism has evolved around ranking and grading which are mostly determined by parameters like highest, average and lowest salary, number of PhD holders in the institute, building, publications, research, currently number of patents and so on. We do not bother if the research has benefitted society, ecology, fellow humans or any one. It is just about the number game what I term as quantity hallucination.

Never is it being asked or considered, if the institution has influenced, supported and shaped communities around it, which is quantifiable, sustainable and scalable. Has the institute acted as the anchor point as a change agent?

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The relevance of an institute for the locality and community should be the fundamental parameter for any kind of assessment and accreditation, but that is the most ignored and obliterated parameter. Most institutions irrespective of size, age, influence, maturity, deliveries and existence in Indian context, stand in isolation, devoid of any interests to engage with the surroundings. The so called presence of local/ community in the Governing Boards/Executive Councils are for mere paper work, optics and ticking the compliance boxes.

The next most unnerving one is the existential issue. The courses offered in colleges are in vogue since time immemorial and suffer from the syndrome of one-size-fits-all wrapped in relevance and change resistance. Yes, Government is trying to bring in policy and process changes but again it is a top-down approach. For example, recently Government of Odisha has introduced mandatory physical presence and biometric attendance in colleges but will mere presence add or create any significant value addition?

Will this change make any difference to learning quality? Will teachers and students feel incentivized to move from learning resistance to learning responsible zone? Will teachers develop a sense of purpose - a purpose of skilling themselves to deliver better than what they were doing yesterday?

With peripatetic technology on every hand, the tsunami of information, the attention span, intent and incentive to learn in the classroom is seriously compromised. Most of the information is available at the press of the finger. The teacher-student relationship, as knowledge seeker and knowledge provider has gone through a devolution. The bonding and connect is now replaced with transaction and encounters, which are linked to the ultimate outcome which plays in the minds of students, i.e. grade points. If one asks any student about his or her aim and objectives in any academic institute, the most repeated response is to score marks and the obsession for examination is all-pervasive, especially in Indian context.

The issue has been a design fault in our education delivery value chain. Till 80s, jobs irrespective of sectors were mostly manual/ human dominated and in our daily living the interface with the corporate world was limited and the impact was non-existent or negligible. Hence, teaching as a profession was valued and treated with deference and teachers were revered. The design fault in India of not treating teaching at par with bureaucracy or corporate jobs, made education institutions a shelter home for failed ones.

During my college days, all my teachers were toppers or best of their batches, but today if

we take the example of my University in India/ overseas who have joined teaching, I can guarantee and take a safe bet on the percentage of toppers or best of the class, joining teaching as a profession would be less than five percent. My friends, who have daughters of marriageable age, look for grooms in corporate and Government jobs, and teachers as that profession irrespective of level of institutes is the least priority for them. I do joke, if you fail in getting any job, you can become a teacher to create vicious circle of frustration, negativity and cynicism.

The other mega challenge is that in earlier days due to limited communication one would not know what his friend is doing or earning but now, we being in the world of social media frenzies, everyone knows everything about everyone and anyone; hence, forgetting his/her competency and enjoying the profession, many teachers crib about how ill-fated they are to be teachers while their friends are in luxury without even knowing the ground reality.

The pride in being a teacher is minimal or non-existent. This leads to the following iteration in education delivery.
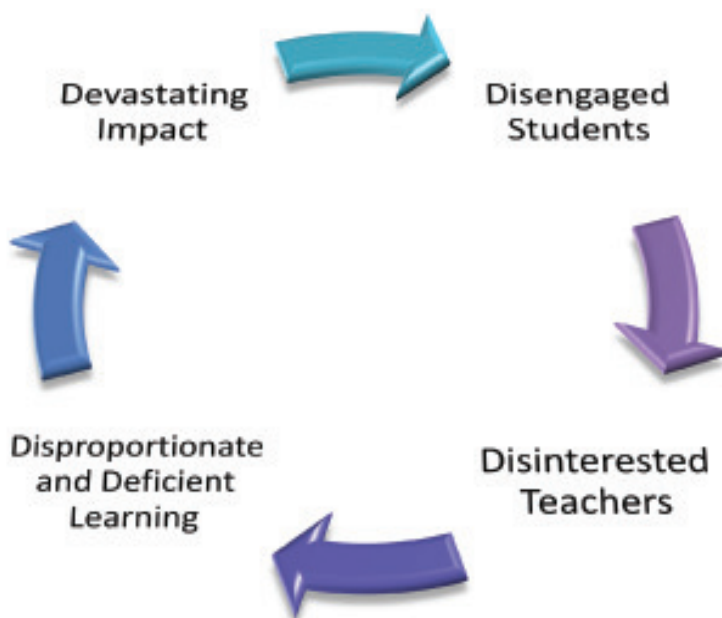
I know a couple friends in the USA, who are senior academics, who shared the story of their son who is getting married as I write this article, and is facing indifference from his would-be in-laws since he is a teacher. It seems that the girl's parents are unhappy for their daughter not picking some more materially rich or to-be rich. So, teaching as a profession has devolved instead of evolving in the entire world and more so in India.

The other challenge is social-ness versus commercial-ness of education as a product. As I understand, the market perception is now driven by the price parity; higher the price, better is the education. Education per say and education as secular and common good is heavily compromised in every parameter. This has led to stakeholders who have conviction and belief about education as a social/ common good to look like minimally exceptional and their opinion treated as outlandish.

In the prevailing context, how could someone, an education provider, justify that he/she is genuine, believes in honesty, transparency and integrity in education delivery for larger benefit of learners? Like politicians, anyone can become an education provider and the only criteria is if there are monetary resources to acquire ticking-the-box capacity and quantitative compliances.

The worst part is that none of the accreditation and grading parameters consider social synergy, community connect, financial fairness, personal integrity and governance gravity. I have been championing for a policy where HRD Ministry, Government of India or Higher Education Department, State Government should appoint third party agencies for a surprise verification of finances of all private/ deemed universities across India. Since it has not generated any interest among policy makers, I am currently engaging with the State Government to introduce a non-mandatory acceptance of Government-instituted audit but I am far away from any tangible output.

It is worthwhile for Government to consider to start as non-mandatory compliance with external independent audit and there should be 100 credit points for the institute to carry for any future accreditation. The education which is supposed to be not-for-profit, trust or society bodies as provider, is the most profit-oriented with highest level of mistrust and heavily a-social.

Do I have water-tight solutions for all these challenges? The answer is most certainly, "no" and none has either. Then, what do we do?

In my individual capacity as an education provider, I have strived, strategized and succeeded in bringing in some changes, administering new models, re-designing the education delivery and reversing the value chain to some extent. To me a University, at least newly enacted ones, must have a universal approach to education delivery. Universities must accept and adapt to cater to school dropouts to PhD, whoever wants to be self-dependent/ independent for livelihood using learning to aspire and grow.

The Universities have been too examination-oriented all across the world and for centuries. While the world has changed, the fundamental and foundations of education have remained almost status quo and agility deprived. One-size-fits-all education delivery model is not only inappropriate and irrelevant, but also time-expired. So also the attitude and rigidity of Universities and institutions to maintain water-tight control over education. As a product, education is the output of democratic minds and thinking, but the educators by themselves are autocratic and dictatorial.

The model Centurion has put into practice and redefined its delivery DNA as of out-of-the-square and circle.

While CUTM has traditional courses which are put to test through radical reforms, the University has massive programs for the category of youth, "Not in education nor employed, nor in training, nor interested (NEETI)" and defined the pathway to acquire competency linked to degree. This is depicted in *Figure 1*.

Instead of just examination-based education CUTM has restructured Education to be linked to Employment, Employability and Entrepreneurship for which it has adopted six-dimensional learning as depicted in *Figure 2*.

To navigate the six-dimensional learning, the methodology and method followed is to create an iteration process of Traditional Learning + Applied Learning + Action Learning where examination is a continuous process of evaluation on learning outcome, students take pride in showcasing linear learning and seeking recognition. *Figure 3* explains the model in action at Centurion University.

The entire education delivery process trajectory to move from examination-based teaching to competency-based learning which CUTM is blending into the DNA of the University is represented through *Figure 4*. The complexity, kind, depth and breadth of learning is evaluated in terms of six skill sets to remain appropriate and relevant in the delivery.

To maintain the currency of providing an alternative pathway (skill/ competency blended education) as against the traditional exam-based education, which is designed, developed and delivered in CUTM, the iteration process the University follows is depicted in *Figure 5*.

Like human beings, institutions also have dreams and aspirations, especially education institutions where millions of dreams are dreamt and shaped. I, personally, am convinced that universities must be epitome of growth and youthfulness, but unfortunately most universities are in comatose state. CUTM, to remain agile, active and aspirational to provide

an integrated education model in an inclusive environment has formalized and signed off the destination as given in *Figure* 6, which represents the commitment of Centurion University to keep striving to provide disruptive education model.

The best and biggest boost has been the recent recognition and notification of Government of India recognizing Centurion University as "Centre of Excellence" - https://www.msde.gov.in/assets/images/Notification/CoE.pdf.

If Universities fail to and resist to acknowledge, accept and adapt to societal need and change, these institutions would be irrelevant and driven to demise. There are millions of human beings who are exceptionally productive, but do not possess any degree(s) and there are millions of degree holders without any semblance of productivity.

If examination oriented degrees would have done any good, the world would not have been in such a crisis in every sphere, i.e. politics, economy, Governance, ecology, society and even human-to-human relationship.

We have run out of time, but it is never too late to revisit or rethink our delivery models in Universities. I, as an education provider, shall strive to make a difference in education delivery and shape the University to remain in sync with current and prospective changes.

Though the intent is to accomplish six-sigma for a new age teaching and learning eco-system as depicted in the Figure 5, the University capacity is being developed and built for the same. The date line being a full-fledged University with a difference would be achieved by 2022.

Figure 1: Training Life Cycle @ Gram Tarang – Centurion University

Figure 2: Essential Dimensions of Learning On Which All Courses Are To Be Designed

6 Entrepreneurial Skills: Encouraging students to gain hands on experience & through live production & incubating them to become nano/mini/micro entrepreneurs.

5 Life Skills : Abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands and challenges of work life & employment like IT literacy, financial literacy & legal literacy, financial planning for self and family, health, health, hygiene & sanitation.

4 Professional Skills : The key behaviors, actions and thinking processes necessary to build a successful career like values, ethics, integrity, teamwork, communication, planning, time management & leadership etc.

6 ENTREPRENEUR-SHIP SKILLS
1 NUMERACY SKILLS
5 LIFE SKILLS
GTET
2 LITERACY SKILLS
4 PROFESSIONAL SKILLS
3 TECHNICAL DOMAIN SKILLS

1 Numeracy skills : Ability to use mathematical understanding and skills to solve problems and meet the demands of the job e.g. workshop measurement, calculation & basic arithmetic.

2 Literacy skills : Capacity to read, understand and appreciate various forms of communication including spoken language, printed text and digital media required for the industry & trade.

3 Technical domain skills : Trade specific technical or core knowledge & practical skills required for expertise in a trade.

Figure 3: Three phases of learning – our training methodology

PHASE I: TRADITIONAL LEARNING

1

TEACH ME
Traditional learning methods of building a foundation for the course which will involve develop specific knowledge, literacy, numeracy & technical skills.

2

SHOW ME
Learning through practical demonstration in workshop or work environment where trainees will obs procedures being completed, making notes along the way and understand SOPs.

PHASE II: APPLIED LEARNING

3

LET ME PRACTICE
As the saying goes... practice makes perfect! Industry specification machines & production environ on learning and working on the practical elements of doing the job.

PHASE III: ACTION LEARNING

4

ASSESS ME & TELL ME HOW I AM DOING
Assessment is a continuous process with daily assessment of practical learning on dimensions of accur time taken.

5

LET ME SHOW YOU WHAT I CAN DO
Trainees turn to demonstrate learning and independently practice the learning from doing jobs & producing a good or service of social-economic value in a live production environment.

6

RECOGNIZE ME
Skill championship to build competitive spirit and recognize the high performers of each batch. Inde party assessment through Sector Skill Councils or NCVT for final certification of a new "**professional**"

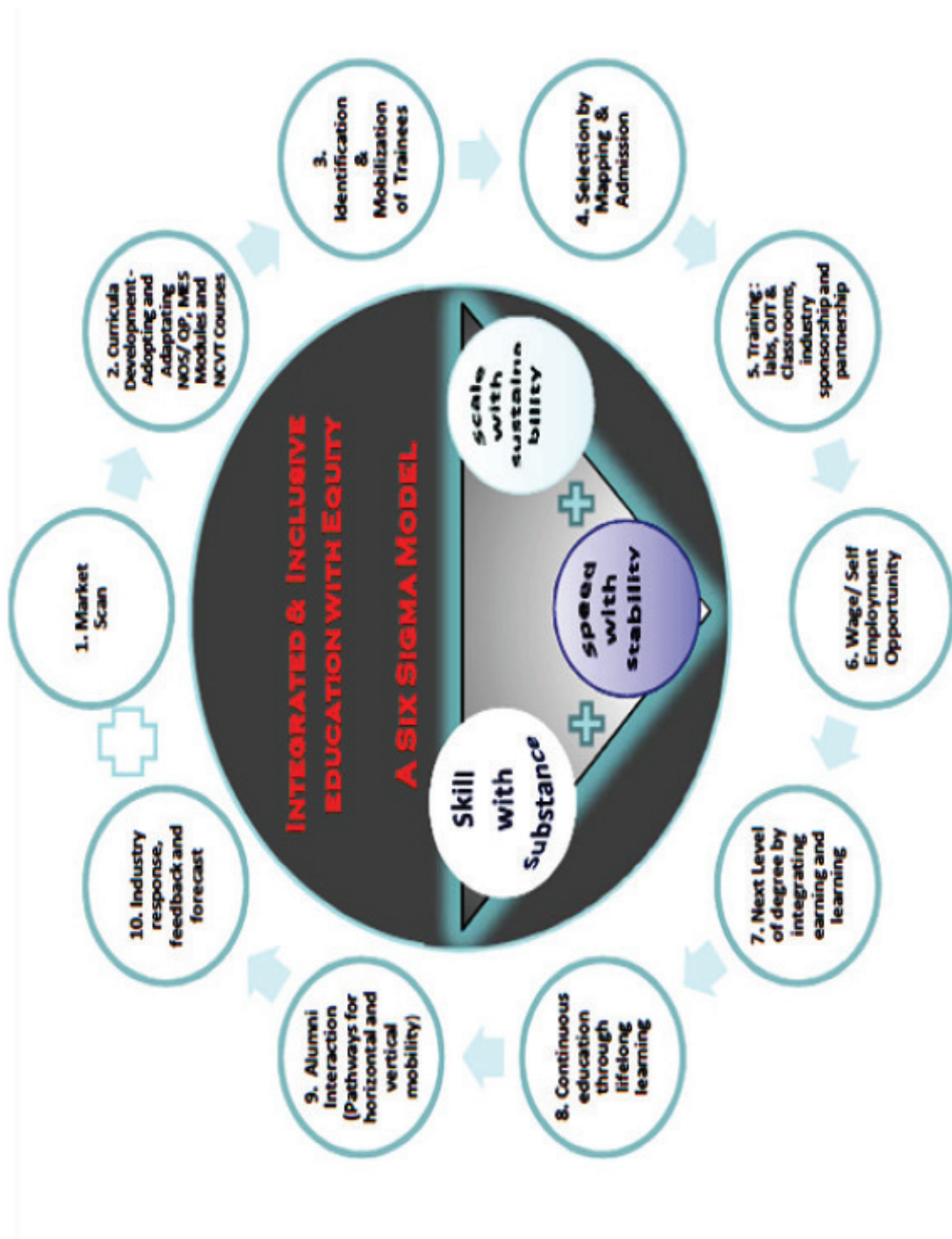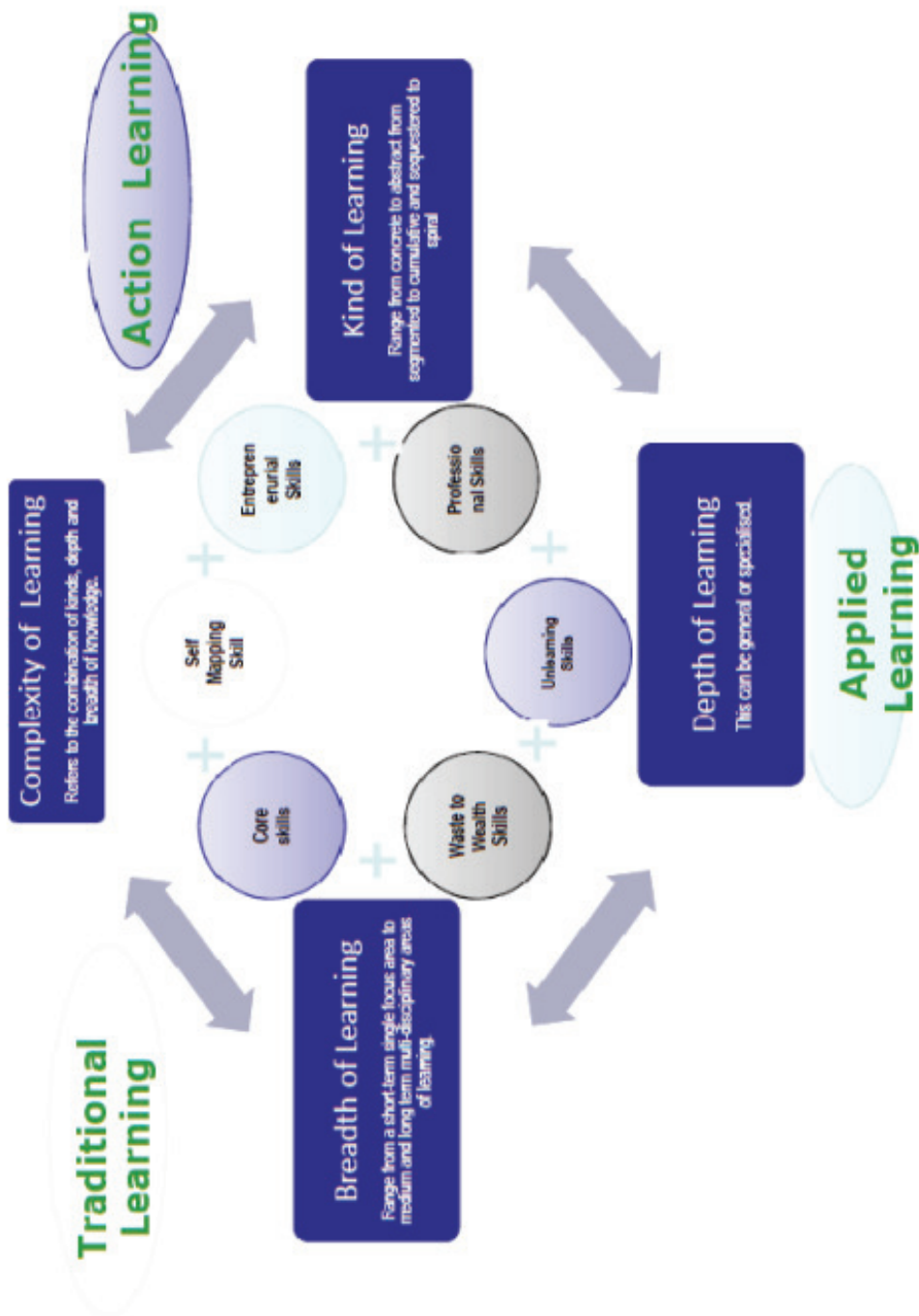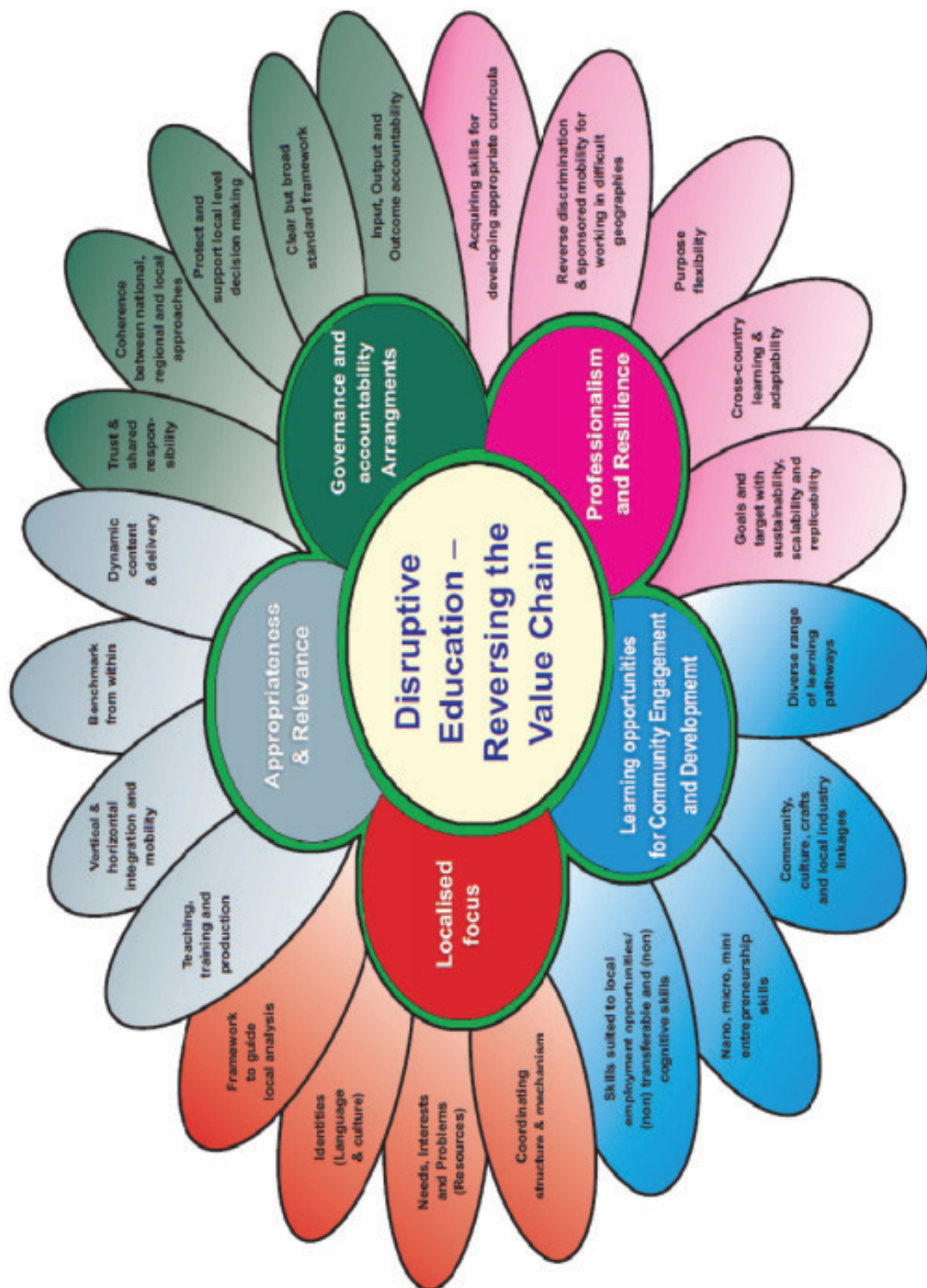## Figure 4: Centurion Learning Iteration Process

Figure 5: Centurion University Iteration Process in Practice

Notes to the Contributors

The editorial board of the journal calls for original research papers related to Odisha Economy and Indian Economy for publication in the relevant issues. Authors who have presented the paper in the last annual conference should submit the revised paper in the appropriate format for publication in issue I. All other papers will be considered for the Issue II of the journal.All papers should be sent only in electronic version. Authors should send the **word/text file** of the research papers to the editor of the journal by email (editoroej@gmail.com). The paper should be organized as follows:

Organizing the Paper

File one	File Two
1. Title of the Paper: Title of paper should be limited within 14 words	1. Title of the Paper
2. Authors Name and Institutional Affiliation with Email id	2. Introduction
	3. Review of Literature and Research Gap
3. An Abstract within 250 words	4. Objectives
4. Key words with JEL Classification	5. Methodology and Data
	6. Analysis and Findings
	7. Summary and Conclusions
	8. References

Length of the paper: Maximum 8000 words including tables, references and notes

Font: Authors should use Times New Roman font size 12.

Line Spacing: Double spacing

Referencing Style

Text citations

All references in the text and notes must be specified by the authors' last names and date of publication together with page numbers for direct quotations from print sources.

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