GLOBAL ECONOMIC CRISIS: IMPACT, LESSONS AND RECOVERY

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GLOBAL ECONOMIC CRISIS: IMPACT, LESSONS AND RECOVERY

Ramakrishna Mission Vidyamandira
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CONTENTS

Introduction

Manas Ranjan Bhowmik, Convenor

Global economic crisis is not yet over. The 2007-8 financial crisis of USA eventually triggered a global economic crisis. And at present it is the Greece where the crisis is shifted. Now a days Eurozone crisis is threatening the whole World with its possible dangerous ramifications. In this UGC sponsored one day National seminar titled **'Global Economic Crisis: Impact, Lessons and Recovery'** we have tried to comprehend this unprecedented crisis from various perspectives. The keynote speaker Prof. Soumyen Sikdar has delivered an excellent overview about the germane issues. Also Prof. Sikdar has provided a candid picture of financial sector and its intriguing interactions with the regulators. Prof. Sidhartha Chattopadhyay has delivered an intriguing yet lucid lecture on theoretical issues concerning liquidity trap using a formal AD- AS model. Mr. Himadri Bhattacharya has delivered a charming lecture on the issues regarding managing foreign exchange reserves. He has discussed not only the basic issues and definitions but also touched upon the deeper issues of concern. Dr. G. Vijay has discussed elaborately about another dimension which is the impact of global crisis and globalization on the issues of labour. He has provided us an elaborate critique about the process of globalization and its impact on labour. He has mainly focused on the worsening conditions of workers in the post liberalization period. Prof. Partha Ray has talked about the recent crisis focusing on Greece. This is one of the burning issues of today. He has provided a balanced and coherent understanding about the problem. He has touched upon the issues like origin of the crisis, concept of austerity, possible impacts of austerity policies etc.

On the whole, this seminar has successfully brought in several interesting insights about the broad issue of economic crises. Hope all these ideas and insights will help us in our search of a way out from recurring economic crises.

★★★

Introductory Address

Debkumar Chakrabarti,HoD, Economics Department

We, the Department of Economics, feel ourselves privileged for being able to organize the seminar, thanks to the eminent speakers who have spared a part of their valuable time albeit a number of pre-occupations. The audience also deserves equal gratitude as their presence is a necessary pre-condition for success of any seminar.

Leaving aside the main frame of the global crisis, I shall focus here on some of my real life experiences during the pre and post crisis period that have appeared instrumental in shaping my perceptions about the crisis.

It was during the early years of 2000s when that art market flourished in India. It was the immediate consequence of the skyrocketing share indices that appeared to be a boon to a certain section of the society who thereafter entered the art market as a part of their diversification strategy. The booming art market provoked a number of my artist friends to leave their jobs and work as a full time painter. The whole thing turned upside down after the crisis. The art market crashed. Despite some recovery in current years the condition is still blink, forcing them to return to their earlier professions.

During the same span I also found a group of my friends becoming increasingly interested in purchase and sale of shares. I was quite astonished when I found them actively trading options. Given the fact that the complexity of option pricing was known to me, I questioned them and realized that they are guided by the local cable operator who has made quite a good amount of money from it. Informal discussion with the operator, who has hardly passed the secondary level, made me come to the conclusion that his knowledge on options have never surpassed his educational attainments! This is not the end of the story. The period also witnessed a marked

expansion of share terminals across our locality. To my utter surprise, I found one day one of such terminal owners, who incidentally also runs a school on share trading, telling that the NIFTY Index Futures has nothing to do with the shares of NSE!

As expected, such irrational exuberance leads to an unhappy ending. The global crisis acted as a catalyst in this regard. Therefore to me, borrowing from Dickens, it was the worst of times but it was the best of times as well. 'It was the age of wisdom, it was the age of foolishness; it was the epoch of belief, it was the epoch of incredulity; it was the season of light, it was the season of darkness; it was the spring of hope, it was the winter of despair.'

The situation was not much different worldwide. I can recall an incident depicted by Neil Ferguson in his book 'The Ascent of Money' where he stated that his caution about the dangers of unfettered expansion of finance was immediately nullified by a group of economists who, in turn, accused Ferguson for spreading unnecessary panic.

The Global Economic Crisis brought the entire discourse on economics at a perplexed situation. On the front of Development Economics the idea of a grand development paradigm has experienced a set back. At the same time the crisis acted as a serious blow on the flourishing literature on finance-led growth. On the policy front, to quote Lindaus and Pritchett (2002) 'Any push towards deepening market reforms will be seen as a continuation of the failed strategies of the present, while any strategy that calls for government intervention and leadership.... will be seen as a revision of the failed strategies of the past.' However, as stated earlier, within the winter of despair lies the spring of hope. I think the seminar will be able to enlighten us, at least partially, about the paths of the future.

★★★

GLOBAL IMBALANCES AND POLICY CHALLENGES IN THE POST CRISIS WORLD

Soumyen Sikdar, IIM, Calcutta

The global financial meltdown of 2008-09 following the housing market collapse in the USA is surely the most severe crisis in capitalism since the Great Depression of the 1930s. Christened the Great Recession, it has naturally caused a great deal of rethinking by economists and policy makers on a great variety of fundamental issues ranging from globalization, deregulation and financial management by central banks to the probity of highly paid company CEOs and the reliability of international credit rating agencies. Interesting, but not surprising, is the resurfacing of the ideas of Marx and Keynes. Symptomatic of the trend is the immense stir created by Thomas Piketty's book, Capital in the Twenty first Century. Complacence and certitude have received rude jolts across the world and the need has emerged to think afresh on numerous policy fronts. India's integration with the rest of the world is still comparatively low. Yet, she could not escape unhurt. Prompt policy measures were successful in cushioning the shock, the worst could be averted but the economy is yet to recover fully and get back to the track of pre-crisis performance in terms of growth.

Though it has no obvious connection with the global catastrophe, at the national level too India has experienced a major political change. For the first time in many years, a party has been voted to power with overwhelming popular support. The government is no longer shackled by the stringent compulsions of coalitional politics. In the past coalition management (the curse of Indian democracy) and legislative logjam often led to policy paralysis with all its seriously adverse consequences. This constraint no longer obtains in

India. So, the government has more freedom and flexibility to address the issues that have attained prominence in the post-crisis global scenario.

In National People's Congress in March 2007 the Chinese Prime Minister Wen Jiabao expressed concern that China is increasingly becoming 'unbalanced, uncoordinated and unstable.' These alarming adjectives capture India's situation equally well. They merit close attention from those in charge of making policies.

Now we take a look at a number of imbalances that have emerged (and are growing) both at the global and local levels. Long run stability of the world economic order is seriously under threat as a result of these developments. The stiff challenge that the crisis has thrown in the face of central bankers, a very important and powerful policymaking group, is also taken up.

Global Imbalance

The global economy has become too much dependent on a particular country, namely, the USA. It is American consumption that has become the motor of the world's prosperity. To give an idea of the motor's power, real consumption over the period 1993-2015 grew in the USA at an average rate of 4 per cent ,which is no less than three times the consumption growth of Europe and Japan combined. American consumption-income ratio reached the value of 72 per cent in 2007, an all time record. In absolute terms, for the sake of comparison, the values of consumption expenditure in that year were $ 9.5 trillion for the USA,$1 trillion for China and $ 650 billion for India.

The notion of Global Decoupling was greatly in vogue for a number of years preceding the recent catastrophe. The putative decoupling was between the USA and a collection of Asian and Latin American countries including India, Thailand,

Malaysia and Vietnam from Asia(but not China) and Brazil from South America. For these countries the importance of the USA as a trade partner has been gradually decreasing and it was hoped that they would be able to function as a relatively autonomous group in the near future. But the hope turned out to be illusory as consumption in the USA crashed after the crisis and one country after another was pulled down into the abyss. On more than one occasion Chairman Ben Bernanke of the Federal Reserves had earlier pointed to the 'saving glut' of Asia as a prominent sign of structural imbalance in the world. Actually, it is the consumption frenzy of the Americans which should be blamed in this context, rather than the so called Asian saving glut.

The message is clear. The degree of dependence of the rest of the world on any single country must not be allowed to rise beyond a limit.

Local Imbalance

The Indian economy could escape the Great Recession with relatively minor damage precisely because its linkage with the American economy is not very strong. After the worst year of 2008-09 recovery has been fairly quick. However, its own performance over the past quarter century reveals an extremely undesirable trait. Growth has been very unbalanced between the three major sectors- agriculture (primary), industry(secondary) and services(tertiary). Agriculture has suffered from secular stagnation, manufacturing barely manages to limp along, while services have grown at a very high rate. In the course of the last two decades agriculture's share has been declining continuously. It now stands at 16 per cent, while manufacturing has managed to maintain its share at an average of 20-24 per cent over 1980-81 to 2009-10. This is dwarfed by Thailand (36 per cent), South Korea (32 per cent), China (45 per cent) and Taiwan (30 per cent). India's

share of global manufacturing is a tiny 2.2 per cent, compared with China's 18.9 per cent. The services component of India's national income, on the other hand, has swelled and swelled and at present commands a share of nearly 60 per cent. Actually, our strong economic performance in recent (pre-crisis) years has been powered mostly by the growth in the export of services.

India's share in total global service exports is now almost 4 per cent. There was a marked slowdown in 2009-10 following the severe global crisis, but the damage was smaller than in merchandise exports. Recovery also was very quick and service exports are back at their pre-crisis levels. Given that it will be very difficult to compete with China in the field of manufacturing exports, our growing success as service exporter indeed augurs well for the future of the economy.

Two questions have arisen in this context. First, is India following an 'abnormal' trajectory deviating from the Kuznetsian sequence of primary-secondary-tertiary growth? The simple answer is that there is no fixed and predetermined development path that every country is destined to follow. The Indian experience of service-led growth may well become a unique model for the emerging market economies.

The second question is much more important. Is the current pattern of sectorally unbalanced growth sustainable over time? If it is not, then the economic impetus will soon peter out and we may slip back into the old days of stagnation or very sluggish growth.

Is it likely that external demand for our services may dry up in the near future? This is not a serious threat because the trend of outsourcing by corporates in the high wage advanced countries is not likely to be reversed soon. Services account for more than 60 per cent of global GDP at present and have high income elasticity. With global income recovering after the severe slump, demand for services, both as

production input and as final consumption, is likely to resume its steady growth.

Slackening of external demand may, however, arrive in the form of demand switch away from India. This will happen if there is a drop in our global competitiveness. Alarming signs are already noticeable. Decline in competitiveness may be due to relative wage inflation. That is, wages in our service sector rising faster than those of our competitors. The chief factor behind the rise in the remuneration of skilled workers in India is the widening gap between demand and supply. Several studies point to the fact that China, Vietnam, Indonesia and the Philippines are racing ahead of us in some crucial areas of skill formation. Our market share in business services may begin to shrink if we fail to maintain a steady rise in the supply of adequately trained workers. In that event growth of our GDP will take a nasty hit.

There is, therefore, an urgent need to bring our exports out of the very narrow spectrum within which they are confined at present. There is considerable scope for diversifying exports away from services in general and business services in particular into other types of activities. For that to happen our manufacturing cum export oriented infrastructure has to be expanded and improved. The incentive regime still favours the domestic market and protection of inefficient industries still persists, though at a lower level compared to the pre-reform days. Concerted attempt must be made to design and implement better policies and reverse the serious imbalance between the three major segments of the economy.

Imbalance is also growing among the states of India. Both FDI and BPO activities by MNCs show a marked regional bias, with some states (Gujarat, Karnataka, Maharashtra and Tamil Nadu) gaining disproportionately more

than the others. This regional disparity also needs to be addressed with urgency.

Inequality in Income and Wealth

Another very serious manifestation of imbalance is that in the distribution of income and wealth, both within and across countries. Gap between the rich and the poor is growing steadily both in India and China, though possibly at a faster rate in the latter. Our recent export success has been mostly confined to the IT sector which is intensive in the use of skilled labour and which does not have strong linkages with the rest of the economy. Its concentration in particular areas of the country has contributed to a widening of regional disparity. If the fruits of globalization continue to be enjoyed so unequally, the whole growth process becomes exposed to the risk of being disrupted by social disharmony and upheaval.

Wake up Call for Central Bankers

The latest crisis originated in the financial sector of the USA. It is now clear that flawed supervision and failure of regulation by the Federal Reserve Board (Fed) played a major role behind the catastrophe. That the Indian economy could escape relatively unhurt is in no small measure due to the prudential stance of the RBI.

How could the Fed (and other central banks of the advanced countries to a lesser extent) be remiss on such a big scale for so long? Apart from the possibility of outright insensitivity (or unholy nexus with Wall Street, which cannot be ruled out), what is at fault is a fundamentally flawed view of the duty of the monetary authorities. It is the view that inflation control is the one and only relevant policy objective of the central bank.

Inflation Targeting acquired prestige in the USA after the spectacular victory of Fed Chairman Paul Volcker over the

double digit inflation raging in the 1970s in the country. Subsequently it became enshrined as the official policy of the Fed. Since 1988, it has been explicitly adopted by several countries. New Zealand was the first to do so in 1989, followed by Canada and Israel(1991), the UK (1992), Sweden, Finland and Australia(1993) and Spain(1994). While the earlier policy of monetary targeting had been drawn up after intensive academic debate and discussion, inflation targeting was adopted ad hoc from the American model. 'Stability-oriented monetary policy' became virtually identified with keeping inflation under tight control. In the words of Ben Bernanke, another Fed Chairman, 'Low, stable inflation is monetary policy's primary long run goal.' As it happened, it quickly became the primary short run goal also. In the singleminded concentration on price stability the vital supervisory role of central bankers was completely ignored. In particular, the evil of unemployment ceased to be a matter of concern altogether. To quote Bernanke and his co-authors of *Inflation Targeting*, ' Contrary to what was believed thirty years ago, it appears that the benefits of expansionary policies (such as lower unemployment) are largely transitory, whereas the costs of expansionary policies (primarily the inefficiencies associated with higher inflation) tend to be permanent.' This is the legacy of a strong belief in the idea of the natural rate of output (and employment) towards which an unregulated economy tends automatically to gravitate.

It is now widely recognized that the market-friendly low interest policy stance of the Fed maintained quarter after quarter under the stewardship of Alan Greenspan was responsible in a big way for fueling and sustaining the asset bubble in the USA .Following the warnings of Robert Shiller who has intensively studied the behavior of stock markets over long periods, Greenspan talked of 'irrational exuberance' in asset markets in a speech of December 1996. The anticipation

that the Fed would initiate a tight money policy led stock markets around the world to fall sharply. In reaction Greenspan immediately backed off, believing that increase in interest rates will do significant damage to the economy. But he had other tools at his disposal. He could have increased capital requirements for financial institutions, limiting their capacity to borrow, take steps to check widespread fraud in the issuance of mortgages and insisted on greater transparency in the collateralized debt obligations (CDOs) and other novel products of innovative financial engineering. Believing in the power of the Invisible Hand of the free market to achieve efficiency unaided, he took none of these measures. However, after the catastrophic bursting of the bubble he admitted that there was indeed a serious policy mistake. But it was too late to undo the damage already done.

Under the Fed's sustained easy money policy there was hardly any attempt to control the unnatural and clearly unsustainable developments in the financial market and restore orderly conditions there. The crisis has once again highlighted the wisdom that without going for heavy handed intervention , central banks should constantly monitor developments in the asset markets and use the information as an essential input in monetary policy formulation. Everything's fine because inflation is close to 2 per cent, this patently absurd view should be given up once and for all. This is possibly the most important lesson for monetary authorities to come out of the colossal policy failure. Actually, in 2013 some members of the Fed including Janet Yellen, who would succeed Bernanke in 2014, began to call for more attention to the poor employment situation. One can only hope that this concern will continue to share equal weight with inflation control in future policy formulations of the Fed.

Over the recent past, RBI's policy too has been showing a tendency to drift towards inflation targeting.

Encouraging signs of change in favour of a more balanced approach have begun to appear.

Conclusion

The most severe economic crisis since the Great Depression has spawned an immense number of questions about the viable functioning of the global economy driven by the forces of unregulated capitalism. The path to the collapse originated in an ideological turn in the 1970s that blindly sought to eliminate the government rather than reform it. The influence of this biased ideology on the thinking of policy makers the world over is profoundly responsible for what has happened in the USA and the rest of the world. The rude shock seems to have induced a change in the mindset of policymakers including central bankers. It is now clear that there can be no substitute for intelligent governance freed of ideology. Financial markets, in particular, must be carefully supervised and regulated. Laissez faire in this sector is a recipe for disaster.

Over the past quarter century or more many serious imbalances-sectoral, regional, distributional- have been steadily on the rise across the globe. Unless effective measures are taken to check or reverse them quickly growth will inevitably become unsustainable and with high probability the entire superstructure will come crashing down once more.

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Vulnerabilisation as Uncivil Development; Unraveling New Industrial Labour Relations under Globalization

Dr. G.Vijay
School of Economics, University of Hyderabad

1. Introduction:

Globalization in its current phase has been dominantly the ('productive') exploitation and consumption of structural unevenness through institutionalized (predominantly structured by international financial institutions viz., The Fundbank and driven by the finance capital) forms of global circulation, that cause redistribution of factors and resources as well as costs and risks leading to social outcomes that are based on relative prices (monetary valuations)[1] that are mediated by global, national, regional and local political and social economy interfaces. Unevenness is in itself a

[1] While unevenness across nations have often been represented based on outcomes in terms of Structural transitions of the economy and growth indicators, alternative indicators such as Poverty and Inequality, R&D Investments/IPRs held, Environmental Indexes, HDI or Gender or Social Indexes of inclusivity, happiness indexes, leximetric indexes, cultural and tolerance indicators, human rights and transparency or corruption perception indexes etc., can also be used for International comparative developmental analysis. The meanings and interpretations of these indicators however remain controversial. The controversy centers around the causes for these outcomes, as to whether these outcomes are rooted in lack of economic development and require growth propelling changes or economic development is constrained by these conditions and growth without economic redistribution, social and political transformations will only accentuate unsustainable growth leading to social and political crisis. The causal construct can be seen as involving the politics of academic discourse and policy making.

fallout of long drawn historical processes[2]. An important aspect of this global exchanges permeating through unevenness is often analysed as a fall out of the existence of the so called 'imperfect markets'. In mainstream economics as well as policy, at least following the Keynesian contributions, it is recognized that 'uncertainty' is an intricately interwoven process of development itself. Following the rise of the neo-liberal era, a regime emphasizing faith in the ability of self-regulating free markets has emerged. This era, backed by a euphemistic 'end of history' perspective, soon pushed for major international institutional reforms, often extending into national level structural reforms dominantly interpreted as progressions in the direction of free and competitive global markets. Despite all its machinations this regime has had to face as the unresolved challenges from time to time of what have been termed as 'imperfections' and 'uncertainties'. Diabolically this regime in its current phase itself has emerged from a crisis; the oil shock of the 1970s. Thus, the question that stares in the face of the regime has ever since been, if 'imperfection' and much worse, 'uncertainties' is the reality in which the new phase of globalization has to be carved, how does this reality resolve itself with the faith in self-regulating free markets?

[2]Various scholars have emphasized on different reasons contributing towards heterogeneous developmental outcomes in different countries. Although not exhaustive these include; Geographical, natural and Environmental differences (Prasanna Parthasarathy), technological development (Schumpeter, Chandler), Cultural Orientations (Veblen, Max Weber, Gunnar Myrdal), Organisational Structures (Lazonick, Piore and Sabel), Institutional structures (Mancur Olsen, Douglass North, Hall and Soskice), Political Economy and Class struggles (Brenner) etc.,

The implication has been pretty straightforward; that different forms of capitals belonging to different nations have different sources of 'economies' (often derived out of those very 'imperfections') which they try to explore and exploit in order to cope with and even better succeed in accumulating in the face of what are often self-generated structural inescapable risks and uncertainties. While the mainstream thinking holds that it is mutual exploitation of the sources of 'economies' that resolves itself into the parable of 'win-win' outcomes for nations engaged in international trading that sanctify the global free markets, the reality is far more complex. The structurally generated uncertainties represent inescapable costs while the process of converting these uncertainties into risks is dependent on relative positions of domination and power in the international political economy. It is based on the positioning of a nation and through it, the specific form of capital in this conflicting hierarchy of domination (economic) and power (extra-economic) in accordance to which the global process of circulation distributes the risk of and for accumulation on to societies of individuals, households, communities etc., mediated by social structures including the State.

2. Convergence v/s Variety Debate:
   The development of institutions and norms alongside the current phase of globalization has been quite controversial. There have been varying approaches of which two schools polarized in different ways within the set of approaches that tend to be protagonists of capitalist development could be classified into the

convergence and the varieties of capitalism thinkers. The convergence school holds that:

The more capitalist economies at different stages of development become integrated in one world market, the more competition and the driver of capitalism as an economic system, will impose institutional convergence; {Thomas Hardy (2000); Edmund Phelps (2007); Barry Eichengreen (2007)}.

Some of these scholars maintain that: 'advanced capitalist economies will become more alike in their institutional make-up in order to compete successfully in a global economy, and that the deregulating neo-liberal political-economic model would ultimately trump the more coordinated and frequently more socially oriented continental European and South-East Asian economic development models'. Significant level of non-market coordination in capitalist economies – allowing economic and political elites to mobilse the resources associated with the need for fast growth in post-war era. Authoritarian central planning in France, Associational governance in Germany – is seen as having caused extensive growth with large variety of inputs leading to higher output efficiently brought-out through non-market coordination which is why it was seen as being advantageous. However eventually when growth turns from extensive to intensive – productivity of factors in volatile economic environment, then coordinated regimes fail.

However, the above hypothesis stands challenged by an alternative school which calls itself the varieties of capitalism school which holds that: Labour markets in Germany, Sweden and other countries in the north-western Europe, for example, are highly structured arrangements – strong employers

associations, trade unions and collective bargaining and Capital markets have organised themselves through banks and this despite the arrival of international investors.

Whereas in London and Wall Street and several Anglo-Saxon (Australia, Canada, New Zealand etc.,- but not continental Europe) – the labour markets are highly deregulated with firms enjoying the powers to hire and fire workers and capital is organised through highly dispersed shareholder systems. ***Therefore both these capitalism do not operate in the same capital or labour markets (Bob Hancke, 2009)***.

The VoC argues that:
This argument of 'institutional complementarities' implies that for a framework to have the desired strong effect, the constituent institutions in the different markets – between labour relations and corporate governance, labour relations and the national training system and corporate governance and inter-firm relations – reinforce each other. The tightness of the links between these institutional complementarities between institutional sub-systems determine the degree to which a political economy is 'coordinated'.

Coordinated Market Economies (CMEs) are characterised by the prevalence of ***non-market relations, collaboration, and credible commitments among firms***. The essence of its Liberal Market Economies (LMEs) anti-thesis is one of ***arms-length, competitive relation, formal contracting, and supply-demand price signaling***. In LMEs, fluid labour markets fit well with easy access to stock market capital, producing ***'radical innovator'*** firms in sectors ranging

from ***bio-technology, semi-conductors, Software, advertisement and corporate finance etc.,***

In CMEs long term employment strategies, rule-bound behavior and durable ties between firms and banks that underpin patient capital provision predispose firms to ***'incremental innovation'*** in ***Capital Goods industry, machine-tools and equipment etc.,*** While the logic of LME dynamics is centered on mobile ***'Switchable Assets'*** whose value can be realised when diverted to multiple-purposes; CMEs logic derives from '***Specific or Co-specific Assets***' whose value depends on the active cooperation of others.

The different logics of LMEs and CMEs create different incentives for economic actors generating different political economy of adjustment – in the face of exogenous shock threatening returns to existing activities – ***holders of mobile assets will 'exit' to seek higher returns elsewhere while holders of specific assets will exercise 'voice' in defense of existing activities. Holders of fluid assets seek more deregulations while holders of specific assets resort to cross-class coalitions to resist more competition – divergent adjustments***

Nature of innovation and asset formations for specializing in specific commodity segments having differentiated lag-times and life cycles thus become the basis for understanding the nature of the emerging labour relations.

A brief overview of interpreting this discourse without getting into an in-depth analysis about the detailed dynamics could be useful for analyzing the current experience later-on. While one may disagree with the analytical explanations offered by the VoC for the differences between the Anglo-Saxon and

Continental European models, that there are significant differences is a reality. What could be an alternative frame of understanding the differences? Following the second world war, based on the Bretton woods and the Marshall Plan, the Hegemony of the United States got well established for reasons linked to its economic and extra-economic positioning (strategic military and diplomatic might) within the capitalist camp. What prompts the VoC debate perhaps is partly linked to the advantages that United States has in terms of externalizing its risks and its capacity to therefore absorb greater uncertainty which continental Europe does not. Quite contrary to how VoC builds the causality, the civil society and Political mobilizations in Europe in fact have compelled capital to search for alternative modes of accumulation leading to perhaps particular kinds of commodity structures being chosen as complementarities. It was only in the late seventies and early eighties that Britain moved away from the larger European model. Following the collapse of the Soviet Union, Europe has been attempting to experiment with the European Union experiment with a view to taking advantage of its internal unevenness while the United States intensified the assertion of its model even through external aggression. Greece perhaps represents this new order where despite the social and democratic opposition to austerity, a policy prescription that clearly seeks to take advantage of the unevenness was forcefully imposed in the backdrop of the enigmatic loss of opportunities. Britain has remained outside the European Union as a consequence to its repositioning in eighties and tried partnering with the United States as what has been aptly described as a ‘second fiddle’.

The Indian ruling classes in post-independent India, confronted by a significant proportion of capital owners who opposed independence and having the ordeal of nation building and State building – broadly intertwined into the first phase of a modernization project for which it resorted to modes of accumulation that on one hand delimited capital and on the other tried building a strong legitimacy for the State. While this process was couched in the language of Nehruvian Socialism and internationally led to a strategic alignment with the Soviet Camp, the internal dynamics propelled the process in a different direction at least ever-since late-sixties onwards. With the collapse of the Soviet Union, the international political economic positioning of the Indian State was considerably weakened and capital took full advantage of the position to hoist its flag through the economic reforms. For various fears of developing confrontationist position with the United States, a weak ruling elite enthusiastically gave-in to this capture of the State by the Capital. Following this transition, the international political economy hegemony mediated by international monetary agencies have flung into action developing a strong open nexus between the capital belonging to the dominant imperial formations and the capital in India. Irrespective of the parties and political elites in power, the processes that strongly reinforce the nexus and the broad policy outlook and direction have not been much different. There have been differences only on the pace and mode of execution. While the inescapable structural crisis of accumulation resurfaced in 2008-09 in United States and again in 2010 in Europe its conversion into risk and distribution of it under the current international and national political economy

regime needs to be understood. This paper attempts at unraveling the implications of these processes for labour in the Indian context. We begin with an analysis of the international economic scenario facing India and in its backdrop understand the nature of the emerging production systems and labour relations with specific reference to the conditions of development in India.

3. The Fissures in Commodities and Capital Flows in India:

   The data on international trade in commodities suggests that India's market share in the total value of the international trade in merchandise during 2012 occupied an insignificant proportion of 1.6 percent as against 11.8 percent share held by China.

TABLE 12 Market Shares of Different Countries and Country Groups in World Merchandise Trade (in per cent)

Year	US	Europe	South and Central America	Asia	China	ASEAN	India	LDC
1994	11.85	44.12	2.94	28.40	2.80	6.06	0.58	0.43
1995	11.32	45.23	2.90	28.03	2.88	6.22	0.59	0.46
1996	11.57	44.81	2.99	27.12	2.80	6.31	0.61	0.50
1997	12.33	43.16	3.16	27.67	3.27	6.37	0.63	0.49
1998	12.40	45.69	3.01	26.38	3.34	6.02	0.61	0.46
1999	12.18	44.15	2.91	27.11	3.41	6.34	0.62	0.50
2000	12.11	40.80	3.06	28.46	3.86	6.69	0.66	0.56
2001	11.78	42.90	3.08	27.05	4.30	6.26	0.70	0.58
2002	10.68	43.74	2.97	27.85	5.02	6.28	0.76	0.62
2003	9.55	44.64	2.92	28.19	5.78	6.26	0.78	0.60
2004	8.84	43.95	3.12	28.78	6.44	6.17	0.83	0.66
2005	8.59	41.90	3.48	29.16	7.26	6.25	0.95	0.79
2006	8.47	41.05	3.65	29.51	7.99	6.35	1.01	0.85
2007	8.19	41.39	3.62	29.56	8.71	6.18	1.07	0.92
2008	7.98	40.09	3.78	29.28	8.86	6.13	1.21	1.04
2009	8.42	40.02	3.75	31.02	9.58	6.49	1.31	1.02
2010	8.37	36.89	3.85	33.25	10.33	6.89	1.48	1.06
2011	8.11	36.22	4.11	32.74	10.40	6.80	1.67	1.11
2012	8.44	34.78	4.09	33.35	11.18	6.84	1.60	1.12

Source: Parthapratim Pal (2014)

TABLE 13 Market Shares of Different Countries and Country Groups in World Trade in Commercial Services (in per cent)

Year	US	Europe	South and Central America	Asia	China	ASEAN	India	LDC
1994	18.50	49.65	3.00	20.36	1.53	4.86	0.56	0.48
1995	17.94	49.67	2.95	21.09	1.57	5.27	0.55	0.51
1996	18.31	48.61	2.84	21.47	1.58	5.64	0.55	0.50
1997	18.85	47.62	2.94	21.50	1.81	5.44	0.67	0.49
1998	18.94	50.00	3.10	18.94	1.71	4.25	0.84	0.47
1999	18.84	49.55	3.09	19.45	1.83	4.51	1.01	0.49
2000	19.00	48.11	3.17	20.44	2.00	4.53	1.10	0.47
2001	18.20	49.32	3.10	20.18	2.18	4.52	1.13	0.48
2002	17.36	50.28	2.82	20.43	2.42	4.61	1.18	0.48
2003	15.64	52.43	2.72	19.85	2.48	4.27	1.27	0.45
2004	14.96	52.47	2.60	20.91	2.72	4.64	1.67	0.46
2005	14.69	51.68	2.82	21.41	2.90	4.65	2.05	0.46
2006	14.51	51.09	2.83	22.00	3.17	4.75	2.40	0.46
2007	14.12	51.39	2.77	22.42	3.50	5.05	2.49	0.48
2008	13.74	50.85	2.86	23.17	3.76	5.05	2.74	0.53
2009	14.58	49.85	2.96	23.20	3.72	5.32	2.67	0.57
2010	14.36	47.09	3.08	25.91	4.46	5.77	3.23	0.58
2011	14.13	47.30	3.13	25.96	4.32	6.00	3.23	0.61
2012	14.31	46.29	3.16	26.51	4.32	6.24	3.35	0.62

Source: WTO database, last accessed on 10 November 2013.
Note: LDC—Least developed countries.

From: Parthapratim Pal (2014)

Given this scenario there is a strong view that India's share can be and needs to be improved. This view partly emerges also from an underlying compulsion to avert a potential stress if not an imminent crisis scenario towards which the Indian economy seems to be heading.

While it is observed that 'India's trade deficit has jumped from US $ 91.5 billion in 2007-08 to US $ 189.8 billion in 2011-12. In 2011-12, the trade deficit was around 10.2 percent of the GDP' (Parthapratim Pal, 2014). Despite this, India's BoP has seen an increase by US $ 13441 million.

This reserve is seen as a consequence to the flows to the capital account. However, within the capital account, the Portfolio investments are far greater than the FDIs. This could be a very risky strategy in the event of adverse speculations. Taking the scenario to be given and ideologically being steadfast on deregulation, the options before the policy makers are very limited. It is in this backdrop that the 'make-in India' campaign has been launched. However, if we interrogate the situation pertaining to the trade deficit, we can have some insights into how this situation has evolved.

With reference to imports, it is pointed out that 'India's imports have been growing at a high rate. They have increased from US$24 billion in 1990-91 to US$489 billion in 2011-12. For the period 2003-04 to 2011-12 imports grew at an annual average rate of 25.8 percent'. It is further pointed out that ***'the most important component in India's import is fuel including crude petroleum, natural gas and coal. According to import data of 2011-12, fuel worth US$173 billion was imported in that year. This was***

around 35 percent of India's total imports. The second largest import is of gold. India imported gold worth more than US$56 billion in 2011-12. Fuels and gold together account for more than 46 percent of India's total imports' (Parthapratim Pal, 2014).

Chaudhuri (2013) points out that chemicals other than pharmaceuticals, aircraft, specialized industrial machinery, telecommunications equipment and parts, general industrial machinery and computers (automatic data processing machines), metalworking machinery, electrical machinery, ships and boats and measuring instruments have contributed to a rise in manufacturing trade deficit of which electrical apparatus, Project goods, mineral and chemical fertilizers, automatic data processing machines and parts and accessories of motor vehicles are India's top import items which were valued at US$26 billion and US$33 billion during 2010-11 and 2011-12 respectively.

To make a broad submission, it seems as if elite consumption on one hand and high valued import dependent technology driven industries (for lack of adequate domestic capacity as a consequence to lack of efforts to encourage domestic manufacture through domestic procurement policy) that do not seem to be adding to employment opportunities on the other seem to have weighed significantly on the current trends causing concern.

Sudip Chudhuri (2013) further points out with specific reference to telecom equipment manufacture that ***'with no compulsion on the part of the private sector operators to buy from the local sources, they started importing from abroad, often facilitated by the availability of cheap credit arranged by overseas***

suppliers. The procurement policy of the public sector too was changed. The clause in the tenders that the suppliers will have to be "Indian manufacturers" was amended to "Indian manufacturers /suppliers". Thus, public sector service providers BSNL and MTNL started buying from Indian suppliers who were not manufacturing but merely importing and supplying to them. The existing manufacturers – ITI and MNCs – too started trading activity, importing and supplying equipment to service providers'. The call for 'make in India' comes as a substitute for correcting the lacuna in the current policy framework.

The 'make in India' essentially would be an attempt to address the predicament of a growing trade deficit and a volatile BoP reserves scenario (owing to the dominant share of portfolios) in future without altering the consumption of the elites and without encouraging Indian manufacturers as against the middlemen trader suppliers of capital goods. This represents the emerging nature of the State, the nature of the ruling classes as well as the nature of the Capital. But what is the impact of these processes on the nature of development of the manufacturing industries? This can be addressed by inquiring into the manufacturing industries that are actually contributing to the increased exports and its impact on employment and labour relations? The following section attempts at inquiring into these dimensions.

4. The Manufacturing Exports from India :

The data pertaining to exports from India suggests that there has been a significant change in the shares of different industries In the total exports of India between 1991-02 to 2000-01 and 2011-12. While

Agriculture and allied goods, Ores and Minerals, Textiles, Leather and Leather Manufacture and Handicrafts have seen a decline in shares, Gems and Jewelry has almost retained its share. The massive increases to the shares have been witnessed in Engineering goods, Petroleum, Chemicals and related Products and other Manufactured goods.

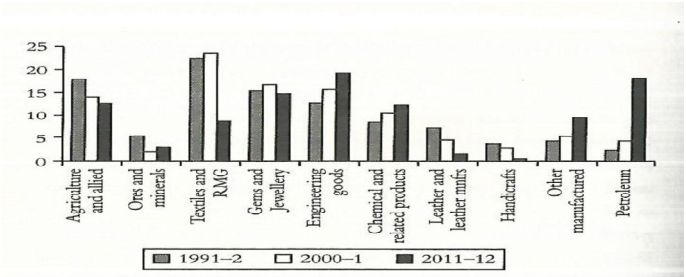


FIGURE 14 India's Export Composition (share in total exports) for 1991–2, 2000–1, and 2011–12
Source: RBI (2012).

Parthapratim Pal (2014)

While claims to a process of convergence of institutions exists, this has a restrictive application in reality. The international trade regime has differentiated institutional structures for regulation of product standards as against the regulation of the process standards (Stewart, Richard.B, 1993). This uneven structure of norms finds its justification in both efficiency arguments (Lawrence Summers as in John Bellamy Foster, 2002) and in equity arguments (Hans, Chr. Bugge, 1996). The process standards involve the prescription of the norms pertaining to several important dimensions –especially the environmental and labour standards. It is the process standards that become the means by which uncertainties are converted into risk and get distributed across various social actors.

Bringing back the reference to alternative sources of economies to withstand competition and market uncertainties, the strategies adopted by the dominant imperial economies are formally differentiated into – the Anglo-Saxon innovation strategy, the continental European cooperation and flexible specialization strategy (Lazonick, Piore and Sabel,). With reference to the countries like India, critical analysis has suggested that the Indian strategy to expand in the international markets can be best described as Informalisation /Flexibilisation/cost cutting strategy /low road strategy/accumulation by dispossession/social structures of accumulation strategy /Vulnerabilisation Strategy/ Accumulation through extra-economic force (Jan Breman, K.V.Ramaswamy, Schwab, David Harvey, Guha, Barbara Harriss White, G.Vijay, Lerche, Levine).

In an international economic hegemony and development thinking context where deregulation rather than norm setting is seen as meaningful, the existence of norms have come to be standards and norms have come to be dubbed as rigidities and disincentives in the development discourse. Norms and standards clearly are a constraint to the possibilities for a flexible distribution of risk top-down from the imperial regimes to the actors lying below the national economic hegemons. It is therefore that several studies motivated by the ideology of convergence have developed frameworks of analysis wherein the impact of the labour standards and norms on production systems and their development have been closely scrutinized. Some of the important contributions to this effect have been of Besley and Burgess (2004); Dougherty,S (2008) and Ritam Chaurey (2014). Rahul Suresh Sapkal presenting the analysis of Besley and Burgess notes:

'To address the main research question, the study exploits variation in EPL and enforcement intensity, across thirty one Indian states, for the period 2000-2007. The

EPL measure corresponds to the labour regulation index constructed by Besley and Burgess (2004) (the BB index). It is based on state-level amendments to the IDA of 1947 for the period 1958-1992. This index captures the inter-state variation in labour regulation over time. The index on labour regulation is valued as follows: Pro-worker (1); Pro-employer (-1) and Neutral (0). The index on enforcement intensity is measured in terms of human capacity number of labour inspectors per one thousand workers. This index corresponds to Annual Survey of Industry years and is obtained from the appendix sections of the Pocket book of Labour Statistics published by the Labour Bureau, Ministry of Labour and Employment of Government of India (GoI). The study used the dataset on temporary contract workers and other related variables from various reports of the Annual Survey of Industries, Government of India. The unit of analysis is state-industry pair and the dataset is harmonised and comparable across states. The study uses a rich set of control variables at the level of each state and industry.

The study reports the following conclusions: First, the average effect of strict (*Employment Protection Laws)* EPL and enforcement intensity on the incidence of temporary contract workers is positive and statistically significant across Indian states. The positive and statistically significant result prevails, even after controlling for the state-time specific fixed effects. The average effect is strong for enforcement intensity than EPL. This implies that strongly enforced legal rights for regular workers increases the demand for temporary contract workers relative to strict EPL.

Second, I find that compared to firms in more flexible labour regimes, those in an increasingly restrictive labour regimes hire differentially a higher number of temporary contract

workers (not covered under IDA) as response to variable enforcement intensities.

Finally, the study report that the demand for temporary contract workers is rising in almost all labour intensive industries and their presence is almost ubiquitous across all states. However, the magnitude of the growth is slightly higher in inflexible states as compared to flexible states. Therefore, we conjecture that firms located in a stricter EPL regime hire differentially larger number of temporary contract workers in response to variable enforcement intensity to circumvent firing and overall compliance costs as stipulated by Indian labour laws' (as in Rahul Suresh Sapkal, 2015).

The above concerns flow from the Industrial Disputes Act because:

'*As per the provisions contained in Chapter V-B of the Industrial Disputes Act, 1947, establishments employing 100 persons or more are required to seek prior permission of the appropriate Government in the prescribed application form before effecting closure, retrenchment or lay-off*'.

The irony of the situation and the above analysis becomes evident if one actually looks at the structure of the manufacturing industry for instance. The policy framework document as suggested by the taskforce constituted by the Planning Commission submitted its suggestions in a report titled the 'Manufacturing Plan' of 2012 and this report argues that:

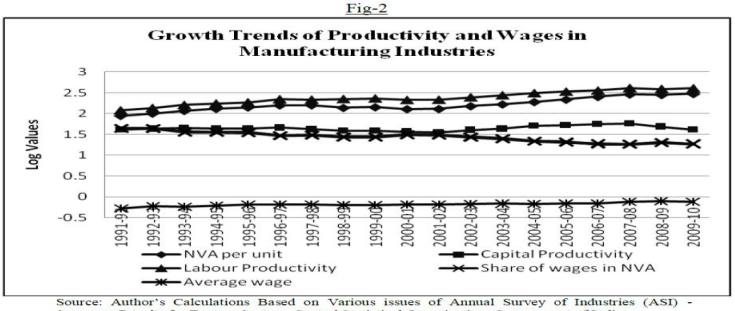
'*The Micro, Small and Medium Enterprises (MSME) sector has emerged as a highly vibrant and dynamic sector of the Indian economy over the last few decades. MSMEs not only play crucial role in providing large employment opportunities at a comparatively lower capital cost, they also contribute significantly in manufacturing output. Since they are widely spread in rural & backward areas, they help in reducing the migration of workforce in urban areas.* ***MSMEs are***

complementary to large industries as ancillary units and provide various items & consumables and support services to sustain in the competitive market. It is estimated that this sector contributes about 45% of manufacturing output and 40% of total exports of the country and employs about 69 million persons in over 29 million units throughout the country. There are over 6000 products ranging from traditional to hi-tech…More than 94% of MSMEs are unregistered with most of them being in the informal/unorganized Sector. *The Task Force has commented that' in addition to the growth potential of the sector and its critical role in the manufacturing and value chains, the heterogeneity and the unorganized nature of the Indian MSMEs are important aspects that need to be factored into policy making and programme implementation. The Promotion and programmes of the Micro & Small Enterprises in the unorganized sector would need to address their survival strategies and should be in the direction of providing livelihood alternatives such as social security, skill formation and credit. On the other hand, policies/programmes for the larger sized MSMEs need to address issues relating to growth, marketing, access to raw material, credit, development and technology upgradation. The Government policy must focus its attention to ensure support to the MSMEs to prosper as also to provide an enabling atmosphere for the MSMEs in the unorganized sector to flourish and progressively integrate with the organized sector'.*

The sector (unorganized) which the critiques of norms and standards consider as an indicator of constraint to growth, the policy makers think is a 'dynamic and vibrant sector'. Both the perspectives are strategic modes of developing a discourse, the outcome of which however point to the same direction in different languages and from different vantage points. The actual capacity of the working class to bargain for norms and

standards as a collective is in fact far more weaker today than ever in the past.

Fig-2



Source: Author's Calculations Based on Various issues of Annual Survey of Industries (ASI) - Summary Results for Factory Sectors, Central Statistical Organization, Government of India.

as in K.V.Ramaswamy and Tushar Agrawal (2012)

Trade Unions Data

Period	Total Registered Unions	Total Membership** (000)
1996-98	60547	6753
1999-2001	65832	5900
2002-04	72532	5549
2005-07	87563	8518
2008-10	41843	7050
*2011-12	13516	8301

Source: Indiastat.org, Annual Data Converted to three year averages, * Two years average, ** Based on Reported Information of Registered Trade Unions.

We observe from the above data that although capital productivity has declined and labour productivity has increased, the average wage rate has not seen much change and share of wages in the Net Value Added has in-fact declined. The distribution one may contend therefore has not been explained by economic factors.

Several other indicators tell us that this trend is a result of a declining bargaining power of the workers as a

consequence to the coerced legal reforms that are capital friendly and labour unfriendly brought about by international and national corporate lobbies. Often these interests come couched in the form of contributions of the academia, intelligentsia, mass media etc., However, when one probes into the analytical frameworks, these analysts often have premises that do not have substantive basis in the reality and are derivatives of deductionist frameworks driven by interests, ideologies, value premises and belief systems rather than having any 'scientific', 'objective' basis (the mythical fact-value dichotomy, intellectuals as representative of classes and not a class in themselves, reality as construction etc., are different ways of stating that no such 'objectivity' or 'scietificism' can actually exist).

3.80 The total number of strikes and lockouts and mandays lost during the period 2009-2014(P) are as follows: -

Year	Strikes	Lock-outs	Total	Mandays
2009	167	178	345	17622055
2010	199	172	371	23130527
2011(P)	179	191	370	14483013
2012(P)	260	179	439	12727973
2013(P)	178	20	198	3654361
2014(P) (Jan-Sep)	88	16	104	18232773
Source: Labour Bureau, Shimla (P): Provisional				

Ave Strikes: 178; Ave Lock Outs: 126 – for every single strike there is 0.70 of lockouts.

Closure

3.83 The number of units effecting closure in both Central and State sphere during the last five years are as follows:-

Closures and workers affected during 2009-2014(P) (both in Central and State spheres)		
Year	Closures	Workers affected
2009	68	3571
2010	42	2401
2011(P)	89	4274
2012(P)	45	1603
2013(P)(Jan-Nov)	92	3785
2014(P) (Jan-Sep)	23	1049
Source : Labour Bureau, Shimla (P): Provisional.		

Ave: Closures: 60; Ave Affected Workers: 2780; for every single strike there are 0.33 closures

the number of workers affected due to lay-off during 2009-2014 (P) were as follows:-

Lay-offs and workers affected during 2009-2014 (P) (both in Central and State spheres)		
Year	Lay-Off	Workers Affected
2009	49	14425
2010(P)	23	1494
2011(P)	17	1991
2012(P)	8	1767
2013(P)	59	8418
2014(P) Jan-Sept	17	1782
Source : Labour Bureau, Shimla (P): Provisional.		

Source: Annual Report 2014-15, Ministry of Labour and Employment,

Ave: Lay-offs – 29; Ave Affected Workers: 4979; Workers Affected Per Lay off - 172

Definition: Lay-off can be defined as the failure, refusal or inability of an employer to give employment to a workman whose name is borne on the muster rolls of his industrial establishment and who has not been retrenched. Supply side bottlenecks such as shortage of power, raw materials, accumulation of stocks or breakdown of machinery etc. as well as seasonal fall in demand may result in lay-offs.

3.88 The number of units effecting retrenchment and workers retrenched therein during the period 2009-2014(P) are as follows: -

Retrenchment and workers affected during 2009-2014(P) (both in Central and State spheres)		
Year	Retrenchment	Workers Affected
2009	29	2693
2010(P)	13	559
2011(P)	8	47
2012(P)	19	1237
2013(P)	22	1297
2014(P) (Jan-Sep)	9	467
Source : Labour Bureau, Shimla (P): Provisional.		

Source: Annual Report 2014-15, Ministry of Labour and Employment

Ave Retrenchments: 17; Ave Workers Affected: 1050; Workers Affected per Retrenchment: 62

The overall scenario suggests that for every single strike (a proxy for representing the power of organized/Unionized labour), there is 1.14 (lockouts, closures and retrenchments; a proxy for the power of capital) all of which constitute a threat of permanent loss of current employment, especially in the 'privileged' organized sector (considering the grave deprivation and the difficulty of finding a similar alternative employment).

And despite what the above statistics state, the manufacturing plan policy document about two aspects viz., Flexibility and Costs of Compliance and Unions states the following:

Flexibility and Costs of Compliance:

5.2.4.1 Inducing job creation by reducing the cost of generating employment: There are two major barriers to employment generation: limited flexibility in managing the workforce and cost of complying with labour regulations. Both these barriers must be removed in order for jobs to be created at a much faster rate i. Limited flexibility in managing the workforce: Flexibility to manage the number of jobs in the enterprise is regulated by the Industrial Disputes Act which defines when and how employers can retrench employees while employee benefits are regulated by the Minimum Wage Act which defines the lowest wage that can be paid for various services. Management of flexibility is impacted by collective bargaining institutions as well, as it should be. The recommendations to increase the level of flexibility while ensuring fairness are:

Companies should be allowed to retrench employees (except categories such as 'protected workmen', etc.) as long as a fair severance benefit is paid to retrenched employees. *This severance benefit should be higher than what is currently mandated – this is to make sure that the policy is fair to retrenched employees and that retrenchment is not a knee-jerk response from employers – and the value should be arrived at through tripartite dialogue between government, employers' associations and employees' associations. In order to ensure that there is sufficient liquidity to pay the severance benefit to the retrenched employees,* ***a mandatory loss-of-job insurance program could be put in place.***

This will especially be useful in situations where the retrenchment is due to bankruptcy or exit of the employer and will reduce the justification for requiring prior permission to shut down businesses. The threshold level of employment for the Chapter VB of the Industrial Disputes Act and ***the threshold for applicability of the Factories Act should be reconsidered****. The process of engaging contract labour should be reformed – employers should be allowed freer• use of contract labour while ensuring that the rights of contract workers are protected, which is not the case at present.*

ii. Cost of complying with labour regulations: The traditional enforcement approach which is based on inspection-prosecution-conviction creates incentives for rent-seeking behaviour, especially if the laws are complex or have provisions that are contradictory. The complexity of compliance impacts smaller enterprises much more. They cannot bear the high administrative costs. Recommendations to improve compliance and also contain the cost of complying with labour regulations are: Simplification of labour laws: The implications of labour laws should be detailed through a series• of ready reckoners that are easily available and regularly updated so that inspectors and employers have a common set of rules to look at. Improvement of administration: Higher investment should be made in the training of inspectors• to ensure that they are able to efficiently identify incidences of actual non-compliance rather than harass employers Facilitating easier filing: Filing of reports should be made a once a year activity with an online• option. As far as possible, the interface between enterprises and government should be computerized to increase transparency and efficiency and remove scope for rent seeking.

Developing a self-certification model: While ensuring that regulations governing labour welfare must be complied with, a self certification model should be developed where

appropriate. Additionally, fiscal incentives to encourage permanent job creation should also be considered, after evaluating their implications and potential impact.

Unions:

The multiplicity of unions in the same enterprise for the same type of workers can lead to inter union rivalries and can weaken collective bargaining. Therefore legislation that enables one union per enterprise is strongly recommended. The union leadership should also be held accountable for any illegal behaviour by union members during negotiations. The practice of withholding recognition of unions should be discouraged. Strong gain-sharing systems can help to improve productivity.

Source: Manufacturing Plan, 2012.

5. Informalisation and Contractualisation of Labour:

Alongside the weakening of the organized sector there are significantly important developments that have hampered the conditions of labour. While the table below on organized and unorganized employment suggests that the organized sector has marginally improved, this would be misrepresenting the reality without considering the nature of employment of these workers.

Table 1

Organised and Unorganised Sector Employment

Sectors	Total Employment	Employment In Non-agriculture
	2009-10	
Unorganised	387.3 (84.2)	145.3 (67.4)
Organised	72.9 (15.8)	70.1 (32.6)
Total	460.2 (100)	215.4 (100)
	2004-05	
Unorganised	394.9 (86.3)	142.1 (71.6)
Organised	62.6 (13.7)	56.4 (28.4)
Total	457.5 (100)	198.5 (100)
	1999-2000	
Unorganised	342.6 (86.4)	110.4 (69.4)
Organised	54.1 (13.6)	48.7 (30.6)
Total	396.7 (100)	159.1 (100)

Note: Figures in parentheses are percentage shares.
Source: Computed from NSS 66th Round for 2009-10, and NCEUS, 2007, for 2004-05.

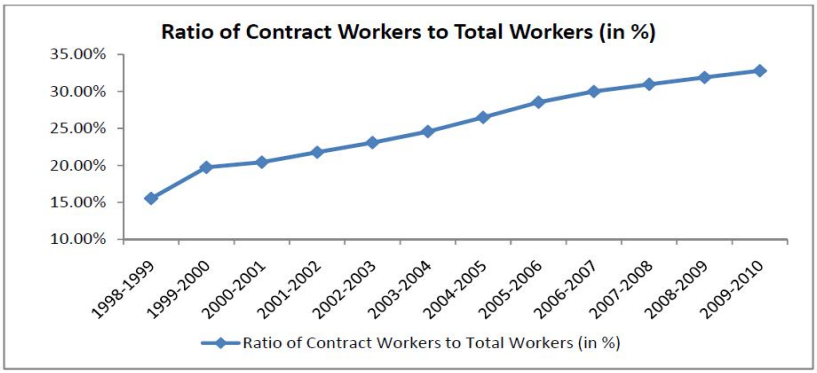
Source: **Santosh Mehrotra, Ankita Gandhi and Bimal Kishore Sahoo, (2012)**

Age-Specific Distribution of Worker Status in Manufacturing and Services: 1999-2000 and 2009-10

Age Group	1999-2000				2009-2010			
	SE	RWS	CW	Total	SE	RWS	CW	Total
	Manufacturing							
Male								
15-30	26.41	37.36	36.23	100.00	21.19	42.57	36.24	100.00
31-50	31.1	45.03	23.87	100.00	29.55	38.98	31.47	100.00
Above 51	40.9	40.87	18.23	100.00	39.41	37.50	23.09	100.00
Total	30.03	41.24	28.73	100.00	26.97	40.37	32.66	100.00
Female								
15-30	51.83	23.36	24.81	100.00	53.90	21.76	24.34	100.00
31-50	53.67	18.84	27.5	100.00	57.45	14.72	27.83	100.00
Above 51	74.46	9.31	16.23	100.00	57.94	12.61	29.45	100.00
Total	54.57	20.12	25.31	100.00	56.04	17.41	26.55	100.00

Source: K.V.Ramaswamy and Tushar Agrawal,(2012)

And from within the organized manufacturing sector the trends in labour market suggested a systematic process of contractualisation of employment without minimum social security protections .



Source: Praveen Jha et.al (2013)

Whether contractualisation of employment has happened because of regulation or whether its an outcome of the lack of it, is a futile debate since it comes with a false premise that contractualization is a phenomenon associated with the unorganized sector alone, and that the unorganized sector is a fall-out of regulation. The mutual-interpenetration of organized and unorganized sectors as production systems has been a peculiar feature of the Indian development scenario and has been well evidenced by scholars like Jan Breman, Barbara Harriss White, Schwab, K.V.Ramaswamy and others. Contractualisation has been the reality in the organized sector in as much as it is a characteristic of the unorganized sector with reference to nature of employment. While some scholars have been of the view that contractualisation has been much more in labour intensive manufacturing, it is also observed that high automation industry (Logic Process Control Technologies), Seasonal manufacturing activities (textiles) and manufacturing involving very low, to low, to medium skilled activities (where learning by doing time extends from– a few weeks to one year) can also have large number of contract workers (G.Vijay, 1999; G.Vijay, 2005). The problem with

contractualisation is not only about income insecurity and lack of minimum social security protections. With reference to the nature of contractualisation, the impact that this process has on the social fabric, the civil society, voice functions and institutional functioning and nature of political processes and democratic character of development in almost every realm of the society need to be understood.

The ***Marxist formulation that the nature of production relations constitutes the base for analyzing and understanding the determination of the nature of social relations and the nature of institutions of a society has immense analytical significance to the understanding of development.*** While the determinism aspect of the formulation may be debated, the interconnection and influence to whatever degree is undeniable. Unless the market itself offers a range of choices or institutional co-ordinations mediated by state or other social and political organizations exist, what is the nature of institutional complimentarity that is emerging and what social consequences do such processes entail? While this mode of employing workers might help churn-out more productivity, the undermining of the costs has ideological rather than analytical origins. In what follows we attempt at probing into the dimensions usually neglected in mainstream treatment of the labour market analysis.

6. Handling the Labour Resource; The Social Firms:

It needs to be recognized that the trend in the rise of contractualisation of employment in the organized sector has come along with a rise in the inter-state migration. The table below presents evidence suggesting this. It is also interesting to observe from the map given below that tries to identify the net migration from different regions of the country. What becomes interesting is that while one observes a

phenomenon of circulation rather than migration with people moving-in and moving-out from the same region, the peculiarity emerges with specific reference to the areas marked in red. The red regions are predominantly in the eastern part and together with the yellow areas these states suggest on the whole different levels of intensity of net outmigration. What needs to be noted is that if one were to analyse this pattern of migration in the backdrop of the composite education index of India, we find that the regions from where there is net outmigration are amongst some of the states having least levels of education. Thus, the mobility is not of skilled workers but that of 'unskilled' and semi-skilled workers who have very little capacity to bargain. Further, the patterns of concentration of the catchment areas also must be understood in the backdrop of several case studies that show that recruitment of contract workers happens through middlemen contractors and networks. This mode of recruitment has immense social significance.

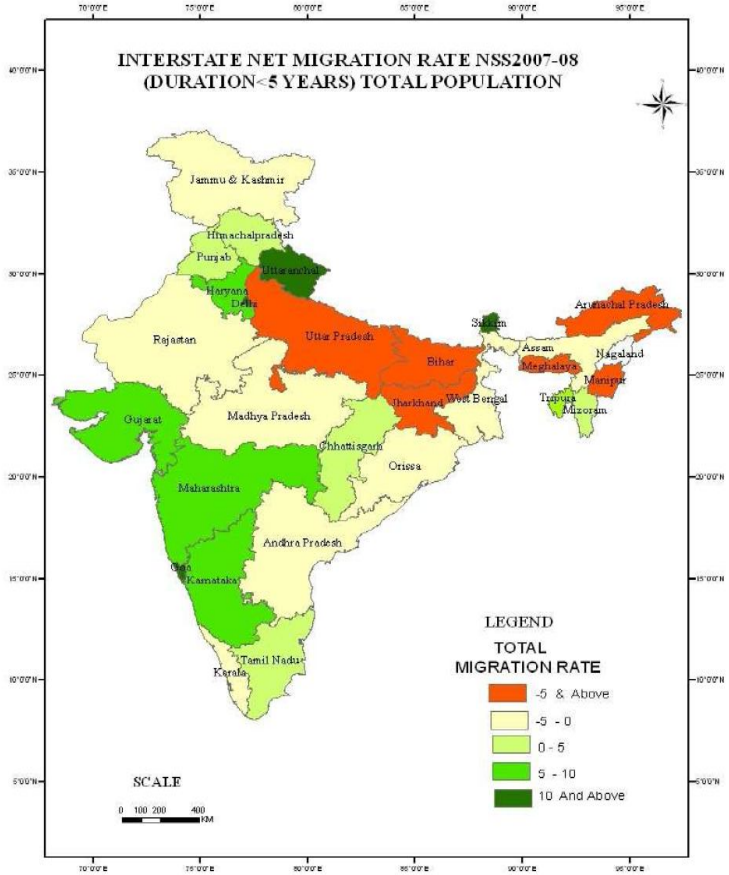
Table-2: Percentage distribution of migrants in different distance categories, NSS, 1999/00 & 2007/08

(Duration<5yr)

Types of migration	Total		Rural		Urban	
2007/08	M	F	M	F	M	F
Intra-district	37.59	59.05	52.5	69.57	27.71	38.32
Inter-district	34.71	30.33	27.77	24.15	39.31	42.51
Inter-state	26.27	10.33	17.77	6.07	31.9	18.72
International	1.43	0.29	1.95	0.21	1.08	0.45
1999/00						
Intra-district	47.78	63.09	59.84	71.98	37.77	43.47
Inter- district	30.94	26.64	23.06	21.18	37.47	38.67
Inter-state	19.72	9.94	15.08	6.53	23.57	17.46
International	1.56	0.34	2.01	0.31	1.19	0.4

Source: Author's Calculation from various NSS rounds

(as in Sandhya Rani Mahapatro, 2012)



Source: **Sandhya Rani Mahapatro, 2012**

State-wise Ranking on Composite Educational Development Index (Primary and Upper Primary) in India

(2007-2008 to 2009-2010 and 2012-2013)

States / UTs	2007-08		2008-09				2009-10				2012-13	
	Index	Rank Composite	Primary Level	Upper Primary Level	Composite Primary and Upper Primary		Primary Level	Upper Primary Level	Composite Primary and Upper Primary		EDI (Composite Primary & Upper Primary Level)	Rank (Composite Primary & Upper Primary Level)
Andaman and Nicobar Islands	0.707	15	0.664	12	0.809	4	0.736	7	0.663	5	0.829	4	0.746	4	0.598	16
Andhra Pradesh	0.74	11	0.657	15	0.746	11	0.702	14	0.561	17	0.762	12	0.662	14	0.579	23
Arunachal Pradesh	0.485	34	0.512	29	0.519	31	0.516	30	0.328	35	0.62	25	0.474	31	0.587	19
Assam	0.515	31	0.446	35	0.519	32	0.483	33	0.386	31	0.503	32	0.445	32	0.527	32
Bihar	0.406	35	0.48	32	0.447	35	0.463	34	0.375	32	0.466	35	0.421	35	0.532	30
Chandigarh	0.763	6	0.688	10	0.756	9	0.722	10	0.665	7	0.814	5	0.735	6	0.597	17
Chhattisgarh	0.57	29	0.554	26	0.6	25	0.577	26	0.439	26	0.558	27	0.498	27	0.582	22
Dadra and Nagar Haveli	0.656	20	0.594	22	0.64	22	0.617	22	0.493	22	0.71	19	0.602	20	0.612	13
Daman and Diu	0.75	8	0.654	17	0.801	5	0.728	9	0.612	9	0.782	10	0.697	9	0.645	7
Delhi	0.78	4	0.701	6	0.762	7	0.732	8	0.651	8	0.79	8	0.72	8	0.627	11
Goa	0.716	14	0.658	14	0.697	17	0.678	17	0.602	11	0.783	9	0.692	10	0.520	33
Gujarat	0.748	9	0.698	7	0.706	16	0.702	13	0.584	13	0.73	18	0.657	15	0.591	18
Haryana	0.755	7	0.714	4	0.789	6	0.752	4	0.59	12	0.77	11	0.68	11	0.585	20
Himachal Pradesh	0.695	17	0.611	21	0.746	12	0.679	16	0.567	16	0.741	16	0.654	17	0.626	12
Jammu and Kashmir	0.678	18	0.586	24	0.661	21	0.623	21	0.404	30	0.621	24	0.512	25	0.602	15
Jharkhand	0.491	32	0.449	34	0.464	33	0.456	35	0.363	34	0.5	34	0.431	34	0.452	35
Karnataka	0.743	10	0.693	8	0.723	15	0.708	12	0.569	15	0.743	15	0.656	16	0.661	5
Kerala	0.791	2	0.689	9	0.822	3	0.756	3	0.7	3	0.844	3	0.772	3	0.603	14
Lakshadweep	0.788	3	0.773	2	0.851	2	0.812	2	0.704	2	0.887	2	0.795	2	0.712	1
Madhya Pradesh	0.59	26	0.571	25	0.585	26	0.578	25	0.433	27	0.54	28	0.486	30	0.552	28
Maharashtra	0.727	13	0.66	13	0.74	14	0.7	15	0.576	14	0.75	13	0.663	13	0.635	8
Manipur	0.611	24	0.464	33	0.63	24	0.547	27	0.411	29	0.627	23	0.519	24	0.632	9
Meghalaya	0.556	30	0.498	31	0.522	30	0.51	31	0.365	33	0.501	33	0.433	33	0.576	24
Mizoram	0.705	16	0.686	11	0.741	13	0.714	11	0.544	19	0.738	17	0.641	18	0.627	10
Nagaland	0.653	23	0.633	20	0.675	20	0.654	20	0.549	18	0.699	20	0.624	19	0.569	26
Odisha	0.572	28	0.553	27	0.537	29	0.545	28	0.468	23	0.524	30	0.496	28	0.565	27
Puducherry	0.808	1	0.797	1	0.884	1	0.841	1	0.736	1	0.891	1	0.813	1	0.696	2
Punjab	0.732	12	0.714	5	0.76	8	0.737	6	0.656	6	0.803	7	0.73	7	0.647	6
Rajasthan	0.653	22	0.587	23	0.636	23	0.612	24	0.458	25	0.629	22	0.544	22	0.572	25
Sikkim	0.656	21	0.657	16	0.683	18	0.67	18	0.608	10	0.748	14	0.678	12	0.672	4
Tamil Nadu	0.771	5	0.747	3	0.753	10	0.75	5	0.677	4	0.811	6	0.744	5	0.683	3
Tripura	0.609	25	0.501	30	0.577	27	0.539	29	0.415	28	0.567	26	0.491	29	0.545	29
Uttar Pradesh	0.586	27	0.654	18	0.573	28	0.614	23	0.534	21	0.511	31	0.523	23	0.508	34
Uttarakhand	0.66	19	0.643	19	0.679	19	0.661	19	0.538	20	0.636	21	0.587	21	0.585	21
West Bengal	0.488	33	0.528	28	0.459	34	0.494	32	0.467	24	0.54	29	0.503	26	0.527	31

Source: Indiastat.org

7. The Conditions of our Labour

The informal workers working in the organized manufacturing sector are working in different forms of informal employment. It is very important to inquire into the working conditions of these workers which will reflect the nature of the employment relations with a special focus on inter-state contract workers. This is done on the basis of a case study. This case study has been done in a new industrial township of Kothur. The case study was initially done during 1999-2001. And again there was field study conducted during 2012-2013, almost a decade later[3]. During this time interval, some new industries have come up and some old industries considered as sample industries for study during 1999-2001 were closed down. To the extent possible with reference to the industries that were still functioning the data can be seen as manufacturing unit level panel data (but not at the household level, since labour is a flow, but similar stratification for types of employment remain and the households studied in 2012-13 are very similar therefore to the ones studied in 1999-2001). The Sample of Manufacturing Units consists of Owens Fiber Glass Industry (earlier called Saint Goben Vetrotex), Vinayak Steels, Kedia Textile Mill, Koya Pipes, which were also part of the 1999-2001 study. Himanshu Food Processing unit has been introduced to replace NCL Klayman a medium Scale China Clay based crockery manufacturing unit which has been closed down. Sangfroid a multi-product firm is yet another industry that was surveyed in 1999-2001 which however has been closed down. In 2012-13 survey an unorganized sector like a brick manufacturing unit in the same town was included to see the gap that seems to be decreasing between certain

[3] The Field Study was conducted by students belonging to the School of Economics, University of Hyderabad as part of the Economics of Labour Course.

organized and unorganized forms of employment with reference to certain conditions of employment and conditions of living indicators. The sample of workers from the brick manufacturing unit is only 6 workers. There are limitations to this extent with reference to comparability between the 1999-2001 and 2012-13.

However, this survey does give an insight into the recent trends in labour relations in New Industrial Towns. The Sample size in 2012-13 has been 192 households. Of these households, the social profile of the households is as follows:

Regional Composition

Region	Total Number from Sample	Percentage	Comparison with 1999-2001
Local Workers	**75**	**39**	**81**
Long Distance Migrant Workers	**117**	**61**	**19**
Total	**192**	**100**	

Source: 2012-13 primary household level survey

Gender Composition

Gender	Total Number from Sample	Percentage	Comparison with 1999-2001
Male Workers	**189**	**98**	**45**
Female Workers	**3**	**2**	**55**
	192	**100**	

Source: 2012-13 primary household level survey

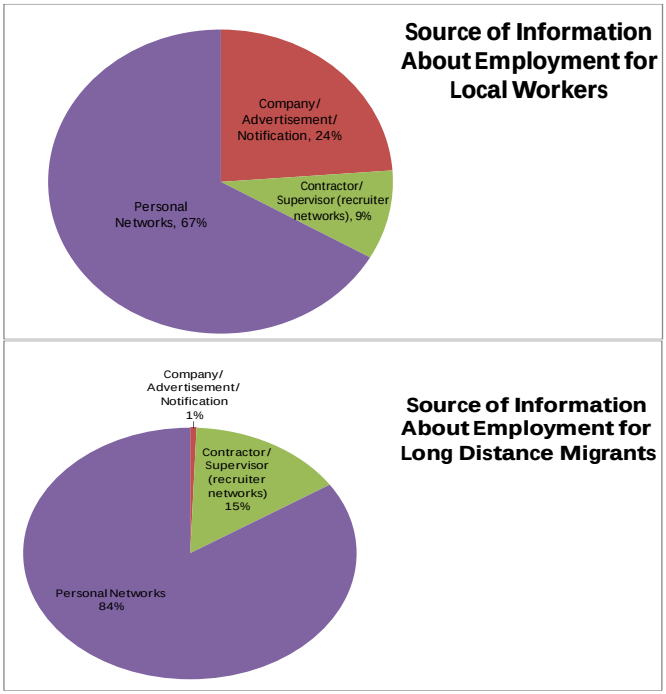
Caste Composition

Category	Total Number from Sample	Percentage	Comparison with 1999-2001
Sc	**31**	**16**	**NA**
ST	**18**	**9**	**NA**
OBc	**111**	**58**	**NA**
OC	**32**	**17**	**NA**
	192	**100**	

Source: 2012-13 primary household level survey

It is important to note that the modes of migration into the industrial employment cannot be treated as constituting ordinary 'labour markets'. Far from being labour markets the modes of mobility operate in the realm of networks. This is especially so in the case of long distance migrant workers rather than the local workers who could be moving into industrial employment from other rural farm or non-farm employment. Workers have secured jobs on the basis of information flows from family, relatives, friends, neighbours

etc., Only a small segment of workers (24% in case of Locals and only 1% in case of Long Distance Migrants) have found jobs on the basis of notifications and advertisements which could be seen at least as an impersonal mode of information flow if not as a mode accessible to all the workers in the labour market. The labour mobility is thus mediated by personalized networks. The networks in turn could be recruiter driven, in which case the jobber/contractor/supervisor operates through his network or through the personalized networks of the workers themselves.



Source: 2012-13 primary household level survey

Further, it is interesting to observe that the largest proportion of the long distance migrants (70%) come from Uttar Pradesh, Odisha, Bihar and Madhya Pradesh. These are some of the most backward regions of the country. The macro data has already suggested that the educational levels attained by these states are very poor. The micro-data further points to the specific levels of education of the workers. We find that a large segment of the workers migrating to the new industries do not have even secondary level education (53%).

State of Origin of Sample Workers

State of Origin	Number of Workers	Percentage
Local (Telangana and Andhra Pradesh)	**75**	**39**
Bihar	**20**	**10**
Odisha	**23**	**13**
Uttar Pradesh	**35**	**18**
Madhya Pradesh	**4**	**2**
Maharashtra	**18**	**9**
Tamil Nadu	**12**	**6**
Kerala	**5**	**3**
Total	**192**	**100**

Source: 2012-13 primary household level survey

Levels of Educational Background

Educational Background	Total Number from Sample	Percentage	Comparison with 1999-2001
Illiterate	**59**	**31**	**NA**
Primary School	**22**	**11**	**NA**
Middle School	**21**	**11**	**NA**
Secondary School	**73**	**38**	**NA**
Intermediate Education	**13**	**7**	**NA**
Under Graduate	**4**	**2**	**NA**
Above Under Graduation	**-**	**nil**	**NA**
Total	**192**	**100**	

Source: 2012-13 primary household level survey

That people having low educational qualifications could become employed in manufacturing sector, may not be in itself a problem. If such mobility could genuinely cause diversification of employment and inclusion in the development process, it might well be a desirable process. However, the industries that are employing these workers with some exceptions, do not invest in the training of the workers. The skill sets of the workers are not likely to give them stability, sustainability, dignity, bargaining power or mobility with reference to incomes or activity sets.

The Skill Sets of Workers

Time to Learn Skill	Local Workers	Long Distance Migrant Workers	Percentage
< 1 Month	12 (16%)	24 (20)	19
1 month to 7 months	51 (68%)	48 (41)	51
>7 months to 3 Years	11 (15%)	44 (38)	29
> 3 Years	1 (1)	1 (1)	1
Total	75	117	

Source: 2012-13 primary household level survey

70% of the skills can be learnt by doing activities in a period ranging between few weeks to a maximum of 7 months. This makes the workers easily dispensable with very low replacement costs. Thus the skill sets of workers are not a source of development in any substantive sense of the term.

Not only is the manufacturing employment in new industries to be identified with poor skill sets, a section of the workers suffer what is usually suffered by the worst quality unorganized sector employment; new forms of bondage. Although it constitutes only a small section of the workers, yet these workers could also be identified as workers caught in new forms of bondage despite being employed in manufacturing sector . this happens as a consequence to the well known phenomenon of borrowing advances from their contractors and then they repay the advances borrowed by attaching them to their wage payments in the form of outstanding debt.

Received Advance Payments

Indicator	Local	Long Distance Migrants	Percentage
Received Advance	**2 (2%)**	**19 (16%)**	**11**
Did not Receive Advance	**73 (98%)**	**98 (84%)**	**89**

Source: 2012-13 primary household level survey

However, a large section of the workers could be described as workers who have chosen to migrate as a coping strategy. This becomes even more evident from the nature of the employment conditions in the manufacturing units in the place of destination. We find that in the table given below the long distance migrants perform extremely poor on seven of the eight indicators which go to suggest the poor quality of employment. While 88-95% of long distance migrant workers do not have any evidence to suggest that they are employed by the industries, 70-80% of the workers do not have the minimum social security or accident coverage.

Working Conditions Indicators

Category Of Workers	Local Workers %		Long Distance Migrant Workers %		Total (192 workers)
Indicator	Yes	No	Yes	No	
Were you Given Appointment Letter	36	64	5	95	100
Do you Have ID Card	61	39	12	88	100
Do you get Over Time Wages	59	41	44	56	100
Do you have Promotion Avenues	31	69	8	92	100
Do you have Holidays or Leaves with Pay	79	21	21	79	100
Do you Have ESI Coverage	54	46	30	70	100
Do you Have PF	82	18	23	77	100
Do Workers in your Company get Accident Compensation	18	82	20	80	100

Source: 2012-13 primary household level survey

Number of Hours of Work

Working Day	Number of Workers		Percentage
	Locals	Long Distance Migrant Workers	
8 hours	69 (91%)	19 (16%)	46
10 hours	2 (3%)	5 (5%)	3
12 hours	2 (3%)	86 (73)	46
>12 hours	2 (3%)	7 (6%)	5

Source: 2012-13 primary household level survey

From the above data it is evident that not only is the quality of employment poor, the number of hours of work far exceed the legal norms and considering the fact that a significantly large number of workers do not receive any overtime payment, this work could be characterized as involving drudgery and constitutes exploitation.

Perception about Hazard Prone Work

Category of Hazard	Local	Long Distance Migrants
Hazardous Activity	17 (23)	20 (17)
Minor Accident Prone	44 (59)	58 (49)
No Risk	14 (18)	39 (34)
Total	75	117

Source: 2012-13 primary household level survey

It is interesting to observe that the perception about the hazard involved in the activity of local workers exceeds that of the long distance migrants. The actual minor and major accident cases prove otherwise. This then suggests that the long distance migrants have greater preparedness to take risk to be employed, given their conditions, than the local workers. Unlike risk taking behavior of investors, the risk taking behavior amongst workers suggests a different social behavior and therefore would represent an undesirable social condition rather than become a development indicator. The quality of employment and labour relations amongst different segments of the informal workers suggests that a process of ***vulnerabilisation*** seems to explain the trends. Vulnerabilisation can be identified as a process where conscious recruitment of workers belonging to low socio-economic positioning happens into a manner where they lack access to *voice* with a view to reduce resistance to profit maximization through cost cutting strategies involving a

deterioration in employment quality, labour relations setting-in a systematic downward spiral in labour standards. Consequently, employment avenues which are generally perceived as dignifying (like the organized manufacturing sector employment in urban/peri-urban regions), seem to be increasingly becoming reduced to having perceptive and symbolic value in terms of mobility of workers, which is attainable through diversification of employment. This diversification is often caused by distress and deprivation driven survival and coping strategies complimented for social security provisioning in places of destination not by citizenship/rights based institutions but by personalized networks or arbitrary patronage systems controlled by Owner-Managers, Contractor-Supervisors etc., These patronage systems are also highly personalized and rest on performance-loyalty complex driven perceptions of the employers. The problem in its most reductionist construction would be that of reduced possibility of a worker to engage in a fair bargain and a fair contract with the employers. Its social and political consequences could be of serious concern.

Given the quality of employment, drudgery and risk involved in the activity, what recourse do the workers have to represent themselves? From a range of formal and informal institutions, the data suggests patterns of access available to different groups. This patter suggests a peculiar mode of institutional convergence that is aiding the workers who are predominantly dealing with distress or coping with deprivation. A small section of workers are also engaging in organized collective action (unionized workers) but their numbers and influence have been dwindling (also in conformity with macro data).

[4]Access to Institutions

Caste	Nature of Employment	Family	Relatives	Friends	Neighbours	Colleagues	Shop Keepers	Local Leaders	Managers/ Owners	Contractors	Trade Unions	Labour Officials
Sc	P	7	5	7	4	7	3	-	1	-	6	-
	RC	-	-	-	-	-	-	-	-	-	-	-
	RCO	-	-	-	-	-	-	-	-	-	-	-
	DC	-	-	-	-	-	-	-	-	-	-	-
	DCO	2	-	-	-	1	1	-	-	-	-	-
ST	P	-	-	-	-	-	-	-	-	-	-	-
	RC	-	-	-	-	-	-	-	-	-	-	-
	RCO	-	-	-	-	-	-	-	-	-	-	-
	DC	3	2	1	-	-	-	-	-	1	-	-
	DCO	-	1	-	-	-	-	-	-	-	-	-
OBc	P	25	19	22	10	16	2	-	1	3	15	-
	RC	7	6	7	4	4	-	-	-	-	2	-
	RCO	3	-	2	3	2	3	1	1	2	-	-
	DC	-	-	-	-	-	-	-	-	-	-	-
	DCO	4	-	3	-	-	4	-	2	-	1	-
OC	P	2	1	1	-	1	1	-	1	-	-	-
	RC	-	-	-	-	-	-	-	-	-	-	-
	RCO	-	-	-	-	-	-	-	-	-	-	-
	DC	-	-	-	-	-	-	-	-	-	-	-
	DCO	-	-	-	-	-	-	-	-	-	-	-
Minority	P											
	RC											
	RCO											
	DC											
	DCO											
Sc	P	1	-	1	1	-	1	-	-	-	-	-
	RC	1	-	1	-	1	1	-	1	-	-	-
	RCO	8	6	10	2	4	9	-	4	6	-	-
	DC	-	-	-	-	-	-	-	-	-	-	-
	DCO	-	1	-	-	1	1	-	-	1	-	-
ST	P	-	1	1	-	1	-	-	-	-	1	-
	RC	1	-	-	-	-	-	-	-	-	-	-
	RCO	7	7	4	3	3	2	-	3	3	-	-
	DC DCO	-	-	-	-	-	-	-	-	-	-	-
OBc	P	3	1	3	3	3	-	-	-	-	3	-
	RC	8	2	5	1	4	1	-	2	4	-	-
	RCO	10	8	11	7	8	6	3	5	7	-	-
	DC	1	-	1	2	1	2	-	-	-	-	-
	DCO											
OC	P											
	RC	5	4	4	4	4	2	1	2	2	-	-
	RCO	1	1	3	1	2	2		1	1		
	DC	5	5	5	3	5	1	-	1	1	-	-
	DCO	1	1									
Minority	P											
	RC											
	RCO											
	DC											
	DCO											
		101(54)	71(38)	92(49)	48(25)	68(36)	42(22)	5(3)	25(13)	31(16)	28(15)	-

Source: 2012-13 primary household level survey

8. The Extra-Economic Force and the Anatomy of Un-civility :

India ranked 135th from among 187 countries in the HDI rankings of the UNDP in 2014. India ranked 114th from among 142 countries in 2014 in the Global Gender Gap Index

[4] Sc- Scheduled Castes, ST-Scheduled Tribes, OBc-Other Backward Castes, Oc-Other Castes, P-Permanent Workers, RC-Regular Casual Workers, RCO-Regular Contract Workers, DC-Daily Casual Workers, DCO-Daily Contract Workers (for detailed description of types of employment see G.Vijay, 2005).

rankings of the Global Economic Forum. A World Values Survey conducted by Swedish scholars places India in the 2nd rank on a index list of countries that are least racially tolerant in 2013. The World Economic Forum and World Justice Projects based Corruption Index places India in the 85th rank out of 175 countries in 2014. An Environmental Performance Index by scholars from Yale University places India at 155th rank out of 178 countries in 2014. The Institute for Economics and Peace constructs the Global Peace Index on which India is ranked 143rd amongst 162 countries in 2013. The French Commission constituted under the chairmanship of Joseph Stiglitz and in which eminent scholars like Amartya Sen and Fittousi were members came up with report, aptly titled Misrepresenting Development. The scholars while acknowledging the utility of traditional growth based macro-indicators have called for a more comprehensive analytical framework of development on the basis of non-commensurable multiple indicators. This commission was in response to the 2008 Global Economic Crisis which mainstream economics failed to predict. That India is growing very fast on account of the reforms does not therefore mean anything if it is performing miserably on several other indicators suggesting a brewing social and political crisis. A convergence of the growth story is a very peripheral and ill informed guide to development unless societies also become more tolerant and enlightened, egalitarian and solidarity based, environmentally clean and flourishing; an honest, participative, accountable and harmonious (not by silencing or manipulating dissent through exercise of threat or through perverse incentives but through a genuine creative political process) social process of development.

Far from in any desirable direction of development, the current processes of development are being driven by profit maximizing capital which resorts to cost

cutting strategies and a State which overtly through amendments to labour laws (and other regulatory laws) as well as through use of force and covertly through laxity in effective regulation compliments such a process. A condition of distress and deprivation in the rural hinterlands have caused massive outflows of workers especially from backward regions, ill equipped with skills and relying on personalized networks embedded in identities of caste, community, ethnicity etc., While such personalized social networks have been seen as social capital, such a mode of functionality remains uninformed about the underlying processes of segmentation and barriers to entry propelled by hierarchisation and control, prejudice, discrimination, marginalization, closure, exclusion etc., In as much as such personalized resources become modes of inclusion, in the face of insecurity and instability, these resources become targets for social groups (like for instance in the case under consideration the local workers) who find themselves rivaled for opportunities. Regional[5], caste, communal, ethnic identities have thus become, resources, modes of control as well as targets of aggression. While accumulation sets in, it strengthens personalized modes, leaving the people coping in insecure opportunities and when crisis sets in and insecurity deepens it causes intensified social fragmentation and gets articulated in social fragmentation and conflict. The mobility of labour seems to be intended not as a measure of inclusion but operates like a displacement from a favorable social niche and transplantation of communities into

[5]The three-judge bench comprising Chief Justice K G Balakrishnan, and Justices R V Ravindran and Markandey Katju observed, "It [attack on North Indians] is a very dangerous tendency. What is happening there [Mumbai], we can understand. These [who were attacked] are innocent people. We understand the situation there [in Maharashtra] and what is happening. This is one country and we will not accept son-of-soil theory. We will not permit Balkanisation of this country." (source: Rakesh Bhatnagar (22 February 2008). "Supreme court rap for Raj Thackeray". Daily News & Analysis).

social isolations. Even after long spells of circulation, labour do not find themselves getting assimilated into the place of destination. The condition of mobility of a worker is not in turn used to convert personalized social actors into citizens, progressively linked to impersonal generalized social processes (which is what mainstream market analysis assumes). The State and its policy is responsible for these adversities in as much as the so called civil society and enlightened political mobilizations have either not been able to or permitted to wedge this social gulf as of now. And each time the risky international economy strategy of short term investments and borrowings magnifies into an economic crisis, it brews a social conflict and a condition sets-in which is used to reiterate the need for a strong and decisive leadership in the State to reinstate order, leading to authoritarian tendencies actively complimented by Imperialism because its' Corporate pursuits for cost cutting and cost shifting aimed at overcoming its own crisis rests on both the social personalization/isolation of the working class and enhanced force of the State. And an authoritarian State is forcefully thrusting further reforms which cause the disorder in the first place. The degeneration of institutions (not just deregulation) and accentuation of social fragmentation and conflict are both a condition and a consequence to the new mode of accumulation. The economic, social and political spirals are linked and thus become different forms of structural as well as extra economic force and violence (David Harvey; Barbara Harriss White; Micael Levine; Tathatagata Sengupta and G.Vijay)

If at all complementary institutions for development have to be imagined, the development of institutional complementarities between the migrant populations and the local workers against capital and political elites seems to be the need of the hour.

★★★

Euro Area Crisis: Is it A Curse of the Optimum Currency Area?

Partha Ray[6], IIM, Calcutta

The euro area crisis has generated huge interest among economists, politicians and common man alike. After the birth of euro in January 1999 and circulation of euro notes and coins since 2002, the euro area was looked as an economic superpower. However, within seven years, a severe debt crisis engulfed several euro area member countries like Greece, Ireland, Portugal, or Spain in 2009. Suddenly questions are raised about the continued existence of an area which till recently was seen as an of economic excellence. What went wrong? Was it bad policy or bad luck or both together? This short note looks into some of these questions.

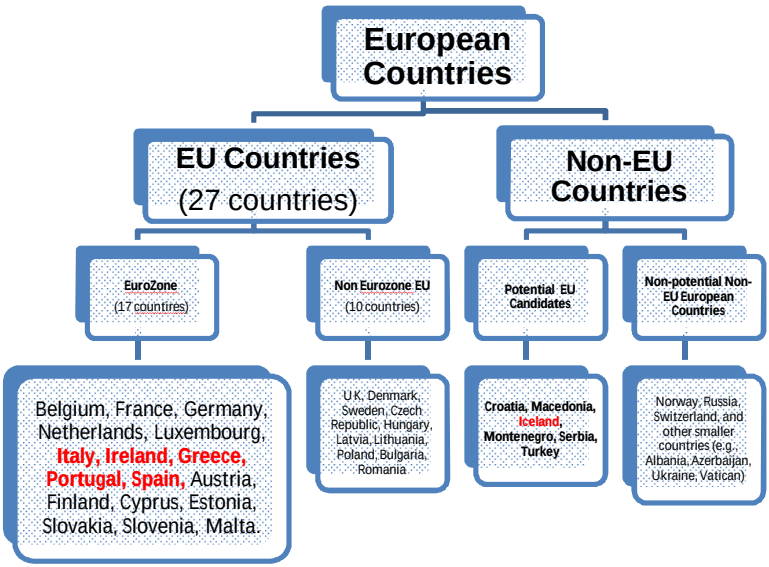
To begin with, it needs to be noted that the crisis has not affected the whole of Europe but a subset of countries which has used euro as their currency (Figure 1). This makes one apprehensive and promts one to ask the question: Is there something inherent in the currency that made them amenable to the crisis?

In this context, it is useful to review the contribution of Robert Mundell, a Nobel Laureate in 1999, on what he termed as, "optimum currency area" (OCA).[7] The question Mundell asked was the following: under what condition it makes sense for a group of countries to give up their own currencies and adopt a common currency?

[6] Professor of Economics at the Indian Institute of Management Calcutta.

[7] Mundell, Robert A. (1961): "A Theory of Optimum Currency Areas", *American Economic Review*, Vol. 51, No. 4, pp. 657-665.

Figure 1: Composition of Europe and the Crisis Countries



Source: Reddy, Narayan and Ray (2014)

An illustration will make the basic point of Mundell clear. Suppose today, India and Bangladesh decide to give up their own currencies (rupee and taka, respectively) and adopt a common currency named *Ind-Taka*, also suppose that suddenly there is some business cycle disturbance that has affected Bangladesh negatively and India positively. In normal open economies a negative shock would have led to a depreciation of the Bangladeshi taka and positive shock would have led to an appreciation of Indian rupee. But now there is no taka or

rupee in the economy now but there is this amorphous synthetic currency called *Ind-Taka*, which may not experience similar movements in its value. In absence of inability of exchange rate to do their job, which economic variable can act as an equilibrator? Mundell emphasized labour mobility and wage flexibility. Note that as a result of a negative shock unemployment in Bangladesh would have gone up and India's unemployment would have gone down. In such a case, if Bangladeshi labour could have moved to India, then Bangladesh's unemployment problem would have been solved, at least partially. Alternatively, if there is no labour mobility then wage rate in Bangladesh could have gone down to make room for the additional unemployment. But suppose neither labour mobility nor wage flexibility is there, then in absence of exchange rate adjustments Bangladesh's economy would have continued to be in a jam. Now if hypothetically one replaces India by Germany and Bangladesh by Greece then one can get a sense of the euro area crisis – of course in a caricatured manner. The absence of perfect labour mobility across euro area and presence of a hugely unionized Greek labour force could be the conditions that affected the efficacy of euro area as an OCA. The moot point is: presence of perfect labour mobility and wage flexibility makes a currency union optimum.

But these two are not the only criteria that make a currency union to be optimum. Subsequent literature emphasized a number of other features such as financial integration; degree of economic openness; inter-industrial factor mobility; diversification in production and consumption; similarity in inflation rates and inflation rate preferences; fiscal integration and fiscal transfers between regions; effectiveness and credibility of common monetary policy; similarity in labour market institutions and business cycle synchronization. A look at the euro area economies makes it clear that many of

these are absent in the constituent countries. In fact, Martin Feldstein rightly noted that,

> "The creation of the euro should now be recognized as an experiment that has had a number of substantial economic costs. The emergence of sovereign debt crises just a dozen years after its creation in 1999 was not an accident or the result of bureaucratic mismanagement but the inevitable consequence of imposing a single currency on a very heterogeneous group of countries, a heterogeneity that includes not only economic structures but also fiscal traditions and social attitudes".[8]

What would have happened if in our illustration one replaces countries like India and Bangladesh by constituent provinces of India like West Bengal and Tamil Nadu? Admittedly, if West Bengal suffers from a negative shock, since it does not have an independent currency, the issue of depreciation of the currency of West Bengal does not arise and hence, technically West Bengal could have faced similar problem like Bangladesh. But in West Bengal's case, the Union Government at Delhi could have given a fiscal transfer with which West Bengal could have tide over the crisis. In a manner of speaking, had Germany been sufficiently large hearted then it could have given a fiscal grant to Greece with which Greece could have handled the crisis effectively. But Greek people do not elect German government and hence there is no question of Germany being so generous to people of a country who are not its own citizens. The key lessons are two. First, a currency union cannot compensate for absence of a common fiscal policy. Second, the common fiscal policy is

[8] Feldstein Martin S. (2011): "The Euro and European Economic Conditions", *NBER Working Paper No.* 17617.

associated with statehood and thus, it is almost impossible to give up own fiscal policy without a political union.

Two caveats are in order.

First, this is not to mean that all the crisis countries are alike. Like proverbial unhappy families in Tolstoy's Anna Karenina the countries of euro area have attributes of distinctiveness.[9] While Greece could have suffered from Sovereign debt problem, Portugal's malaise had been lack of productivity. The problems of Ireland and Spain, on the other hand, could have been huge exposure to housing loans.

Second, in the standard popular discourse, often the governments of many of these crises countries are seen as villains in the sense these countries have lived beyond their means and their extravagant policies have made the public finance of these countries unsustainable. While there could be some elements of truth in such popular perception, the private financial sector cannot wash their hands from the genesis of these crises. Illustratively, when Greece joined euro area the interest rates on its Sovereign bonds reduced dramatically. Private financial sectors (e.g., big banks in Germany and France) jumped in the fray and bought huge amounts of Greek debt. While the official version was now that Greece has joined the euro area their public finance would improve dramatically, the market grapevines knew all the time that faced with a crisis, Greek government would be rescued by the their big brothers and sisters in the euro area. It is this lure of a possible and eventual rescue of these countries that could have perhaps prompted these banks to subscribe to debt instruments of governments with questionable public finance. Again, the absence of a fiscal union would have costed all the parties dearly in this case.

[9] See Y V Reddy, Narayan Valluri, and Partha Ray (2014): *Financial and Fiscal Policies: Crises and New Realities,* Delhi: Oxford University Press, for a detailed country-specific discussion on the crisis.

But whatever is the distinctiveness of the source of crises or the role of private sector banks in these countries, in some sense all of them suffered from the curse of optimum currency area. Till the time conducive conditions are created for mimicking a fiscal union, this curse could continue to be there. Till then light at the end of the tunnel seems faint and one perhaps needs to be cautiously pessimistic about the future of the euro Area!

★★★

'Management of External Reserves – Principles, Issues and Recent Global Trend'

Himadri Bhattacharya
Former Chief Investment Officer, RBI

What are reserves?

The precise definition of external reserves and the understanding of its economic significance have evolved over the last four decades or so. And two relevant documents published by the International Monetary Fund (IMF) provide best narratives in this regard:

'Reserves consist of official public sector foreign assets that are readily available to and controlled by the monetary authorities. Reserve asset portfolios usually have special characteristics that distinguish them from other foreign currency assets. First and foremost, official reserve assets normally consist of liquid or easily marketable foreign currency assets that are under the effective control of, and readily available to, the reserve management entity. Furthermore, to be liquid and freely useable for settlements of international transactions, they need to be held in the form of convertible foreign currency claims of the authorities on nonresidents.'

'Reserves remain a critical liquidity buffer for most countries. They are generally associated with lower crisis risks (crisis prevention) as well as space for authorities to respond to shocks (crisis mitigation). While other instruments such as official credit lines and bilateral swap lines are also external buffers, for most countries they principally act as a complement to their official reserves. For countries with sound fundamentals and a good policy framework, reserves provide policymakers with considerable space to respond to transitory shocks. However, this space diminishes as fundamentals

deteriorate and the existence of adequate reserves does not, by itself, eliminate the risk of market pressures.'

Put simply, external reserves refer to the total amount of foreign currency and gold assets held by the public sector of one country which can be in the form of deposits held with banks and financial institutions abroad, government securities, short-term & long-term bonds of foreign countries and the claims on non-residents which can be utilized as financing resources, should a need arises in this regard.

In most countries, central banks hold and manage the country's external reserves. However, the external position of a central bank need not necessarily correspond to the total external net assets of a country. Abolition or substantial reduction in capital controls in many countries over the last four decades has caused many countries' external assets to be held by the private sector. This is significant considering that the outflow of central bank external reserves should decline in countries with large external assets not held by the central bank. In such cases, management of external reserves is fundamentally different from countries in which the private sector is the net external borrower and the central bank reserves tend to come under pressure.

In the case of India, the proportion of external assets other than reserves to gross external assets has been increasing over the last ten years or so, aided by progressive relaxation of capital controls on outflows. As of December 31, 2014, this ratio was 34.6%. The corresponding figure as of December 31, 2012 was 33.4%.

Motives of holding reserves

Central banks admit to a range of motives for holding external reserves of foreign currency assets (FCA) and also gold. These may usually be divided into transactions and precautionary motives. For countries with restrictions on convertibility on the

capital account, and partial openness to international capital inflows, the level of external payments, including debt-service, and the seasonal cyclical variability in external payments are important considerations in the transactions motive. From this angle, reserves are viewed as providing an assurance that the country can meet its external obligations on the current as well as capital account, even if it were to be denied access to trade and other types of credits for a time, or suffered an unexpected fall in exports or invisibles earnings, it has the means to meet its payment calls on time.

The precautionary motive stems mainly from the desire to have a cushion against an unforeseen capital outflow. The strength of this motive depends on such factors as the share of volatile capital flows in the total and the availability of external financing, notably access to international capital markets in a crisis situation. Most central banks pay a good deal of importance to the ratio of short-term debt to reserves. Many reserve managers believe that reserves can enhance international creditworthiness.

Another, quite similar, classification of reserve needs distinguishes between (i) working balances, held to meet and settle normal transactions, emphasizing the liquidity factor in reserve, and (ii) investment balances intended to meet future capital flows or simply to generate income. Whichever classification is used, issues of national confidence, the degree of a nation's creditworthiness, the strength of its currency and its ability to follow an independent monetary policy are often mentioned in discussions of reserves management policy.

It is clear that most governments do want to influence their exchange rates from time to time and see reserves as useful for that purpose. Other countries look to reserves mainly to enhance confidence. Consciousness of the importance of reserves tends to be especially alive among central banks of countries that suffered from currency crisis in the past.

The availability of external reserves is viewed as signaling a nation's capacity to defend its currency, in in line with a given policy position. Government policies around the world are generating continuing and large reserve accumulation, even if this is seldom their declared objective.

As mentioned before, some central banks view reserves as a useful source of income. However, there is also a cost of holding reserves and the true benefit is often impossible to calculate.

Gold reserves are taken into account by credit-rating agencies in judging a country's creditworthiness, but are seen mainly by such agencies as an offset to external debt – i.e., as part of the longer term asset, rather than as part of the liquid resources available to defend the currency in the short run. India successfully used a portion of its gold reserves in 1991 to raise loans to recoup a loss of foreign currency assets. In that episode, mobilizing gold for this purpose had the advantage that it put pressure on the authorities to take appropriate stabilization and structural measures.

In the case of India, transaction needs have reduced very significantly since the onset of structural reforms in the early 1990s. Payments for import of crude oil by public sector companies and debt service payments of the central government which constituted two major transaction items were routed to the interbank foreign exchange market by 1995. Right now, both the inflows and outflows in respect of FCA are on account of market intervention by RBI.

A survey country authorities conducted by IMF in 2012-13, *inter alia*, revealed that around 75% saw precautionary motive as the critical reason for building reserves, with around 40% holding reserves to manage either exchange rate volatility or levels.

Quite clearly, other things being equal, intervention need will be high in countries with fixed exchange rate and low in

countries with flexible exchange rate. Countries with intermediate exchange rate regimes will fall somewhere in between.

Reserves adequacy issues

What quantum of external reserves is adequate for a country? Are there any metrics in this regard that can be applied across countries?

Under the Bretton Woods system, adequacy of reserves was measured by months of imports – the so-called import cover: the prevailing rule of thumb considered four months of imports to be reasonable coverage. This perspective fitted well in a world with limited financial integration, in which trade openness reflected a country's vulnerability to external shocks. In the absence of reserves, balance of payment deficits would have to be corrected through a reduction in aggregate expenditures, imposing macroeconomic adjustment costs, manifested in sharp contractions of investment and consumption, thereby inducing recessionary pressures. As greater trade openness increased the exposure to trade shocks, minimizing adjustment costs required higher reserve holdings. An intriguing development since the 1960s has been that, despite the proliferation of greater exchange rate flexibility, international reserves/gross domestic product (GDP) ratios have increased substantially. Reserve holdings have trended upward; at the end of 1999, reserves were about 6% of global GDP, 3.5 times what they were at the end of 1960 and 50% higher than in 1990. In 2014, the ratio of international reserves (US$ 12.03 trillion – August, 2014) to global GDP (US$ 77.3 trillion –projected) was 15.5%. Practically all the increase in reserves/GDP holding has been by emerging market and oil-rich economies. For India, this ratio was a little over 16% end-December, 2014.

In the early literature on external reserves as buffer stock, the optimal quantum balances the macroeconomic adjustment costs incurred in the absence of reserves with the opportunity cost of holding reserves.
The model developed in this regard predicts that average reserves depend negatively on adjustment costs, the opportunity cost of reserves, and exchange rate flexibility, and positively on GDP and reserve volatility, driven frequently by the underlying volatility of international trade. Overall, the literature of the 1980s supported these predictions. Post Asian Crisis (1997-98), trends in reserves accumulation, particularly in Asian countries gave rise to a fresh debate, because the buffer model could not explain why reserves should increase in the face of higher exchange rate flexibility.

As an indication of excess hoarding, some observers noted that developing countries frequently borrow at much higher interest rates than what they earn on reserves.

More recent literature provided several interpretations for these puzzles, focusing on the observation that the deeper financial integration of emerging market countries has increased exposure to volatile short-term inflows of capital (the so-called "hot money"), subject to frequent sudden stops and reversals. The precautionary and self-insurance motives for holding reserves get prominence under this framework of analysis and interpretation.
A version of self-insurance and precautionary demand for international reserves views external reserves as output stabilizers. Accordingly, reserves can reduce the probability of an output drop induced by a sudden stop and/or the depth of the output collapse when the sudden stop materializes. This argument is in line with the Guidotti-Greenspan rule of thumb of the 1990s - countries should hold liquid reserves equal to

their foreign liabilities coming due within a year. This rule reflects the shifting focus from reserve adequacy measured in terms of trade flows of goods to flows of assets. The BoP crisis in India in 1990-91 was accompanied by a sudden stop of even short-term external finance, including trade credit. The crisis was followed by a year of almost stagnant GDP. As per some estimates, the ratio of short-term external liabilities to reserves is high at 70% in the case of India.

In a significant research published as a IMF Working Paper in 2006 (*The Optimal Level of International Reserve for Emerging Market Countries: Formulas and Applications*), a simple model for the optimal level of reserves was constructed based on the assumption that the main benefits of reserves is to smooth domestic absorption against the disruption induced by sudden stops in capital flows. This work generally validated the Guidotti-Greenspan rule as a benchmark for adequacy.

For the Asian countries following 1997-98, the model suggested that the build-up in reserves was excessive. A possible caveat in this regard is that the Asian Crisis may have led to a upward revision in the size of the sudden stops or of the output loss resulting from sudden stops. Anecdotal evidence suggests that this was indeed the case. The present author recollects a conversation with the head of reserve management function of the central bank of a major NE Asian country, who argued that the upper limit of reserves for adequate self-insurance was indeed very high for his country.

Recent studies done at IMF on adequacy of reserves bring out several important conclusions: (i) There is no one-size-fits –all parameter for assessing adequacy, (ii) The need for reserves ultimately reflect the maturity, depth and the underlying liquidity of a country's market as well as the flexibility of its economy , (iii) Prudent ranges of reserve buffers depend on the underlying characteristics of each economy, (iv) Actual

reserve holdings are challenging to model, (v) Large reserves holdings are associated with relatively high cost.

Reserve currencies and asset classes

British pound (GBP) was the major reserve currency till the Second World War. In the post WWII period, US dollar, which was designed to serve as the pivot for the Bretton Woods System replaced GBP. Apart from US dollar, the other major convertible currencies for deployment of external reserves are euro, GBP and Japanese yen (JPY). These four currencies constitute the synthetic currency (Special Drawing Rights – SDR) which is promoted by IMF as a reserve currency. Australian dollar, Canadian dollar and Swiss franc are also used for this purpose, in a limited way, though. About 63% of foreign currency reserves are currently held in US dollar, around 22% in euro and 4% each in JPY and GBP, according to IMF data as of March 31, 2015.

Over the last several years, Chinese authorities have been pursuing policies for internationalizing its currency – yuan or renminbi (RMB).

RMB is already an informal reserve currency. According to the Society for Worldwide Interbank Financial Telecommunications (SWIFT), which monitors international currency flows, RMB is the second most used currency in global trade. It is reported that 40 central banks hold a part of their reserves in the RMB.

In the current 5-yearly review of the basket composition of SDR by IMF, RMB is a candidate for inclusion. RMB already satisfies the first of the two conditions for inclusion, viz. importance in world trade. On the second condition involving its status as a 'freely useable' currency, IMF seems to have not come to a decision yet. Hence, a decision in this regard has been deferred till October, 2015. IMF has reportedly advised China to be more flexible in its management of its exchange

rate to qualify for inclusion as a reserve currency. Some experts believe this to be one of the reasons for the unexpected announcement of a 1.9% depreciation of RMB against US dollar by Chinese authorities on August 11, 2015.

Some experts are of the view that once RMB is formally included in the SDR as a reserve currency by IMF, about 10-15% of the global reserve currency composition will shift and gradually over time 50% of external currency reserves would be held in RMB.

Reserve assets are generally fixed income instruments, including securities, which are essentially debts in character. Central banks tend to have low appetite for credit risk. Hence most of their deployments are in the form of deposits with top-rated banks and international financial institutions and debt securities, including treasury bills of top-rated sovereigns and supra-national organisations. Some central banks invest in corporate debt, a small number even in equities. RBI Act does not permit investment of reserves in equities.

The proportion of gold in the forex reserves vary widely across countries. Countries such as Switzerland, Russia, France and Lebanon traditionally have higher proportion of gold. In the case of India, the ratio rose from 8.8% in 2000 to a high about 10% in 2012. Now it is a little above 5%.

Recent reserves management trends

According to a recent survey conducted by Central Banking Publications and Royal Bank of Scotland, some central banks are reportedly moving into ‘non-traditional' currencies; growing number of reserve managers investing, or considering investing, in equities. This has been occasioned by extremely low yields on US and European sovereign bonds.

The decade-long surge in foreign-currency reserves held by the world’s central banks is coming to an end. Global reserves declined to US$11.6 trillion in March, 2015 from a record US$

12.03 trillion in August 2014, halting a five-fold increase that began in 2004. While the drop may be overstated because the strengthening US dollar reduced the value of other reserve currencies such as the euro, it still underlines a shift after central banks - with most of them located in emerging market countries like China and Russia - added an average US$ 824 billion to reserves each year over the past decade.

Beyond being emblematic of the US dollar's return to its role as the world's dominant reserve currency, the drop in reserves has several potential implications for global markets. It could make it harder for emerging-market countries to boost their money supply and shore up faltering economic growth; it could add to declines in the euro; and it could reduce demand for U.S. Treasury bonds. Some experts believe this will also induce further volatility in global currency markets.

China, the world's largest reserve holder, together with a few commodity producing countries sold US dollars in market interventions to offset capital outflows and shore up their currencies. According to Bloomberg, emerging-market currencies have depreciated 15% against the US dollar over the past year.

China's reserves fell to US$ 3.8 trillion in December, 2014 from a peak of US$ 4 trillion in June, 2014. Russia's reserves tumbled 25% over the past year to US$ 361 billion in March, 2014 while Saudi Arabia, the third-largest holder after China and Japan, has spent US$10 billion in reserves since August, 2014 to US$ 721 billion.

The trend is likely to continue as oil prices stay low and growth in emerging market countries remains weak, reducing the US dollar inflows that central banks used to build reserves. Such a development is detrimental to the euro, which had benefited from purchases in recent years by central banks seeking to diversify their reserves.

The euro's share of global reserves at 22% in 2014 was the lowest since 2002, while that of US dollar at 63% was a five-year high.

China and oil-producing countries in the Middle East are likely to face ongoing pressures to further run down reserves over the next few years. This will cause further selling pressure on euro.

The euro has declined against 29 of 31 major currencies this year as the European Central Bank stepped up monetary stimulus to avert deflation. The currency tumbled to a 12-year low of $1.0458 in March this year.

As mentioned before, central banks in emerging market countries started to build up reserves in the wake of the Asian financial crisis in the late 1990s to safeguard their markets for periods when access to foreign capital dries up. They also bought US dollars to limit appreciation in their own exchange rates, quadrupling reserves from 2003 and boosting their holdings of U.S. Treasuries to US$ 4.1 trillion from US$ 934 billion.

The reserve accumulation adds money supply to the financial system Monetary base in China and Russia, as measured by M_0, grew at an average 17% annually in the decade through 2013. The expansion rate fell to 6% in 2014.

While central banks have other ways of expanding money supply, such moves without the backing of increased foreign reserves could end up weakening their currencies further. Also, a fall in emerging market asset prices is likely as a regime of loose money suddenly comes to an end.

★★★

Liquidity Trap in a Simple AD-AS Model

Siddhartha Chattopadhyay
Department of Humanities and Social Sciences
IIT Kharagpur

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Abstract

This paper explains the dynamics liquidity trap using the simple AD-AS model of Mankiw (2012). The model is solved and impulse response is analyzed under large and persistent demand shock. Following Mankiw (2012), the model is solved under non-rational expectation so that it remains accessible and still be able to communicate key results easily to beginners.

JEL Classification: E63, E52, E58

Keywords: New-Keynesian Model, Inflation Target, Liquidity Trap

1 Introduction

Chapter 15 of Mankiw (2012) presents a very simple dynamic AD-AS model for the beginners. Mankiw (2012) provides an analytical solution of the model under both demand and supply shock. Moreover, impulse response of the model has also been analyzed in Mankiw (2012) under demand shock. However, zero lower bound of interest rate and effect of liquidity trap has not been analyzed in Mankiw (2010). Buttet and Roy (2014) has shown how to introduce zero lower bound to nominal interest rate and also analyzed the significance of liquidity trap using the simple AD-AS model. They have shown that liquidity trap produces an additional long-run equilibrium. The equilibrium is unstable and can lead to deflationary spiral. A full blown dynamics of the model under liquidity trap is analyzed here. Following Mankiw (2012), the model is solved under non-rational expectation to keep it accessible to the beginners.

We know liquidity trap as a Keynesian policy prescription from our undergraduate days. It produces a deflationary equilibrium with zero nominal interest rate and output below its full employment level. Simple static AD-AS model suggests that, monetary policy is completely impotent and we have to take help of fiscal policy when economy is in liquidity trap. Liquidity trap has been considered as a mere theoretical curiosity for long. However, it becomes a hard-core reality after the experience Japan since 1995 and US since 2008. As a result, liquidity trap is a key area of research in modern monetary economics.

Sticky price New Keynesian DSGE model is the work horse of modern monetary economics.[1] However, a full blown analysis of liquidity trap under sticky price New Keynesian DSGE model is beyond the scope and also not the objective of the paper.[2] The paper is written for the beginners, intending to pursue higher studies and research in monetary economics. As a result, entire analysis has been done using simple AD-AS model under non-rational expectation so that the it remains accessible to the beginners. This paper seems to be a good introduction to the main stream cutting edge research in monetary economics. The paper proceeds as follows. Section 2 explains the model. Section 3 gives the solution of the model. Impulse response is analyzed Section 4 and Section 5 concludes.

[1] See, Woodford (2003) and Walsh (2010) for a detail description of sticky price New Keynesian DSGE model.

[2] See, Cochrane (2013) for a detail analysis of liquidity trap under sticky price model.

2 The Model

The demand side of the economy is given equation (1) below.[3]

$$y_t = -\sigma\left[\iota_t - E_t\left(\pi_{t+1}\right)\right] - u_t \tag{1}$$

Here, y_t denotes the deviation of output from its long-run value. Here, the long-run value of output is assumed to be zero. π_t is inflation rate; $\iota_t = i_t - i$ denotes the deviation of the nominal interest rate from its long-run value given as $i = r = \frac{1-\beta}{\beta}$,with r defined as the long-run real interest rate; σ represents the intertemporal elasticity of substitution with $\sigma \geq 1$. The demand curve shows that, output gap depends negatively on deviation of real interest rate from its long-run value, given by $\widehat{r}_t = \iota_t - E_t\left(\pi_{t+1}\right)$. As a result, the demand equation can also be called the IS equation. Moreover, $\beta \in (0,1)$ denotes the discount factor; and u_t represents demand shock. We assume, u_t to follow a deterministic dynamics as given below,

$$u_t = \rho^{t-1}u_1, \rho \in (0,1)$$

Here, E_t is the conditional expectation operator and $\rho \in (0,1)$ is the persistence of the demand shock. We assume that, economy gets hit by a large adverse demand shock of magnitude u_1 such that $r_t^n = i - \sigma^{-1}\rho^{t-1}u_1 < 0$ for $t = 1, 2, ..., T_{\min}$ and $r_t^n = i - \sigma^{-1}\rho^{t-1}u_1 > 0$ for $t = T_{\min} + 1, T_{\min} + 2, ...$

Note, the demand curve does not have any dynamics. The entire dynamics of the model is governed by the supply equation given by equation (2) below.

$$\pi_t = E_{t-1}\left(\pi_t\right) + \kappa y_t \tag{2}$$

Here, $\kappa > 0$ is the slope of the supply equation. The supply is equation is also called as Phillips curve in the literature.

The nominal interest rate is the instrument of the monetary authority, determined by a Taylor rule (Taylor, 1993) given below.

$$\iota_t = i_t - i = E_t\left(\pi_{t+1}^*\right) + \phi_\pi\left(\pi_t - \pi_t^*\right) + \phi_y\left(y_t - y_t^*\right) - \sigma^{-1}u_t \tag{3}$$

The Taylor rule given above is assumed to follow Taylor principle such that $\frac{\partial i}{\partial \pi} > 1$. Taylor principle is satisfied when $\phi_\pi > 1$ and $\phi_y \in (0,1)$. π_t^* in the Taylor rule is inflation target and output target is y_t^* Note, at steady state when $\pi_t = \pi_t^*$, equation (2) determines

[3]Mankiw (2012) assumes, long-run output $\overline{Y}_t > 0$. I assume $\overline{Y}_t = 0$ in my paper.

$y_t^* = 0$. Therefore, the Taylor rule becomes,

$$\begin{aligned} \iota_t &= i_t - i = E_t\left(\pi_{t+1}^*\right) + \phi_\pi\left(\pi_t - \pi_t^*\right) + \phi_y y_t - \sigma^{-1} u_t \\ i_t &= r_t^n + E_t\left(\pi_{t+1}^*\right) + \phi_\pi\left(\pi_t - \pi_t^*\right) + \phi_y y_t \end{aligned} \tag{4}$$

This completes the description of the model.

3 Solution of the Model

Following Mankiw (2010) we solve the model under non-rational expectation by assuming $E_t\left(\pi_{t+1}\right) = \pi_t$, $E_t\left(\pi_{t+1}^*\right) = \pi_t^*$ and $E_{t-1}\left(\pi_t\right) = \pi_{t-1}$.[4] We assume that, economy is in liquidity trap till period T. This implies, $i_t = 0$ for $t = 1, 2, ..., T$ and $i_{T+1} > 0$ for $T + 1$ onwards. The key equations of the model with above assumptions are,

$$\begin{aligned} y_t &= -\sigma\left[\iota_t - \pi_t\right] - u_t \\ \pi_t &= \pi_{t-1} + \kappa y_t \\ u_t &= \rho^{t-1} u_1, \rho \in (0, 1) \\ i_t &= 0, \text{ for } t = 1, 2, ...T \\ i_t &= r_t^n + \pi_t^* + \phi_\pi\left(\pi_t - \pi_t^*\right) + \phi_y y_t, \text{ for } t = T+1, T+2, ... \end{aligned}$$

The model is solved in two parts. The time period when economy is in liquidity trap and when economy is out of liquidity trap.

3.1 During Liquidity Trap

Appendix shows that, till period T the demand curve is positively sloped and given by equation (5) below.

$$y_t = \sigma r_t^n + \sigma \pi_t \tag{5}$$

The supply curve is also positively sloped and governs the entire dynamics of the model. The equation of supply is given by (6) below.

$$\pi_t = \pi_{t-1} + \kappa y_t \tag{6}$$

[4]Such simplification of expectation formation is made to keep the model accessible to the beginners. The model can be solved easily under rational expectation as well.

We have to solve equation (5) and (7) simultaneously with initial condition $y_0 = \pi_0 = 0$. Appendix shows that the forward looking solution of equation (6) with $\pi_0 = 0$ gives,

$$\pi_t = \kappa \sum_{k=1}^{t} y_k \tag{7}$$

Solving equation (5) and (7) we have,

$$\begin{aligned} y_1 &= \frac{\sigma}{1-\sigma\kappa} r_1^n \\ \pi_1 &= \frac{\sigma\kappa}{1-\sigma\kappa} r_1^n \end{aligned} \tag{8}$$

and,

$$y_j = \frac{\sigma}{1-\sigma\kappa} r_j^n + \frac{\sigma\kappa}{1-\sigma\kappa} \sum_{k=1}^{j-1} y_k, \text{ for } j = 2, 3, ..., T \tag{9}$$

$$\pi_j = \kappa \sum_{j=2}^{T} y_j, \text{ for } j = 2, 3, ..., T \tag{10}$$

Note, $r_t^n = i - \sigma^{-1} u_t = i - \sigma^{-1}\rho^{t-1} u_1$ is known for all $t = 1, 2, ...$ As a result, we can calculate y_1 and π_1 from equation (8). Moreover, both $y_1 < 0$ and $\pi_1 < 0$ since, $r_t^n < 0$ for $t = 1, 2, ..., T$. So, there is recession and deflation when economy falls into liquidity trap due to large adverse demand shock. Once, y_1 is known, y_t for $t = 2, 3, ..., T$ can be solved from equation (9). Moreover, with known y_t for $t = 1, 2, ..., T$, equation (10) solves π_t for $t = 2, 3, ..., T$.

3.2 After Exit from Liquidity Trap

Economy gets out of the liquidity trap at $t = T + 1$. Now we solve the model for $t = T + 1$ onwards. Note, nominal interest rate is determined by Taylor rule when economy is out of trap. Equation (1) after substituting Taylor rule (equation (**??**)) for i_t gives the demand curve as,

$$y_t = -\frac{\sigma(\phi_\pi - 1)}{(1 + \sigma\phi_y)} \pi_t + \frac{\sigma(\phi_\pi - 1)}{(1 + \sigma\phi_y)} \pi_t^* \tag{11}$$

Also note, demand curve is negatively sloped when Taylor principle is followed with $\phi_\pi > 1$ and $\phi_y \in (0,1)$. Now, substituting equation (11) to equation (6) gives,

$$\pi_t = \mu\pi_{t-1} + z\pi_t^* \tag{12}$$

where, $\mu = \frac{1}{1+\frac{\sigma\kappa(\phi_\pi-1)}{1+\sigma\phi_y}} < 1$ and $z = \frac{1}{1+\frac{1+\sigma\phi_y}{\sigma\kappa(\phi_\pi-1)}}$. Since, $\mu < 1$, we can solve equation (12) backward with given initial condition $(y_T.\pi_T)$. The backward solution of equation (12) gives,

$$\pi_{T+j} = \mu^j\pi_T + z\sum_{k=0}^{j-1}\mu^k\pi_{T+j-k}^*, \text{ for } j = 1,2,... \tag{13}$$

Now, substituting equation (13) to equation (11) gives,

$$y_{T+j} = -\frac{\sigma(\phi_\pi-1)}{(1+\sigma\phi_y)}\left(\mu^j\pi_T + z\sum_{k=0}^{j-1}\mu^k\pi_{T+j-k}^*\right) + \frac{\sigma(\phi_\pi-1)}{(1+\sigma\phi_y)}\pi_{T+j}^*, \text{ for } j = 1,2,... \tag{14}$$

Once, y_t and π_t are known for $t = T+1, T+2, ...$ nominal interest rate for $t = T+1, T+2, ...$ is calculated as,

$$i_t = r_t^n + \pi_t^* + \phi_\pi(\pi_t - \pi_t^*) + \phi_y y_t \tag{15}$$

3.3 Determination of T

T is determined as follows. First, determine $T_{\min}$ as the last period when $r_t^n < 0$. Second, solve the model numerically for different $T \geq T_{\min}$. Third, exit time from liquidity trap is the time period such that $i_{T+1} > 0$ and Taylor rule becomes applicable for the first time. This determines the exit time T. Note, exit time is endogenously determined in the model.

4 Impulse Response

Note, inflation target, π_t^* is chosen by monetary authority.[5] Moreover, solution of the model given above shows that, we get different equilibrium solution of y_t and π_t for different values of inflation target. Therefore, multiple equilibria are indexed by inflation. This is an important feature of New Keynesian model. We have analyzed impulse response

[5]Inflation target can be chosen to minimize loss function of the monetary authority. See, Jung, Teranishi and Watanbe (2005), Werning (2013) and Chattopadhyay and Daniel (2014) for optimal policy without uncertainty. See, Adam and Billi (2006, 2007), Eggertson and Woodford (2003) and Nakov (2008) for optimal policy under uncertainty in a sticky price model.

of the model for $\pi_t^* = 0$ for all t. Following Taylor (1993), we also set, $\phi_\pi = 1.5, \phi_y = 0.5$. Following literature of New Keynesian model, we also set, $\sigma = 1, \beta = 0.99$ and $\kappa = 0.057$ for our analysis. These parameterization is used to generate quarterly impulse response in the literature. Moreover, we also set, $\rho = 0.9$ and $u_1 = 2.4\%$ so that impulse response can capture experience of Japan and US who are in liquidity trap respectively since 1995 and 2008. The impulse response is portrayed in Figure 1.

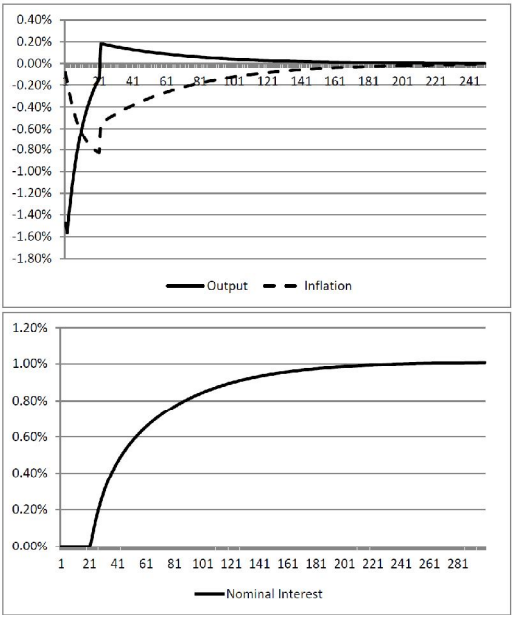

Figure: 1

The impulse response shows that, liquidity trap initially puts the economy into recession. Then, the economy goes to boom and then output gap gradually converges to zero long-run equilibrium. The movement of output gap portrayed in Figure: 1 can be easily explained from equation (8), (9) and (14). Note, equation (9) determines output gap as a weighted sum of natural rate of interest rate and past values of output gap. The natural rate of output changes sign at $T_{\min}$ from negative to positive. As a result, output gap is

negative and economy goes to recession initially. However, the economy moves to boom as natural rate of interest becomes positive after $T_{\min}$. Note, as soon as the natural rate of interest becomes positive, the second term of equation (9) is also getting less negative. This dual impact makes output gap positive and puts the economy into boom. Moreover, the dynamics of output gap is determined by equation (14) as soon as the economy gets out of liquidity trap. Since, we set inflation target zero, the output gap gradually moves to zero with persistence μ as shown in equation (14).

However, Figure: 1 also shows that though economy moves from recession to boom before converging to zero long-run equilibrium, it remains in deflation throughout the period. The dynamics of inflation rate portrayed in Figure: 1 can be explained by equation, (8), (10) and (13). Note, since dynamics of inflation rate given in equation, (8), (10) gets determined by sum of current and output gap, it remains negative even if economy moves to boom. Moreover, the dynamics inflation rate is determined by equation (13) as soon as the economy gets out of the liquidity trap. As a result, since inflation target is set to zero, inflation rate converges to long-run equilibrium with persistence μ as soon as the trap gets over.

The dynamics of nominal interest rate portrayed in Figure: 1 is self explanatory. It remains zero as long as the economy is in liquidity trap but follows Taylor rule given in equation (15). Since, economy is in liquidity trap till $T = 21$, nominal interest rate portrayed in Figure: 1 is zero till $T = 21$, and becomes positive after after that.

5 Conclusions

This paper analyzes liquidity trap using a simple AD-AS model of Mankiw (2010). The objective of the paper is to introduce a dynamic analysis of liquidity trap to the beginners. Therefore, the paper is written using non-rational expectation so that the analysis remains accessible to the beginners. Though, the simple model under non-rational expectation is used, the paper is able to communicate some important concepts of liquidity trap. The impulse response shows that a large and highly persistent demand shock causes an economy to be into liquidity trap for more than 5 years. The impulse response also shows that, though economy goes to boom after initial recession, it remains in deflation through out the time period before convergence to zero long-run equilibrium. The simple model, solved under non-rational expectation cannot match the *stylized facts* of output gap and inflation rate but the analysis presented in this paper is definitely a good beginning to the main stream cutting edge research in monetary economics.

6 Appendix: Solution Hint

1. The Demand Curve:

$$\begin{aligned} y_t &= -\sigma r_t - u_t \\ &= -\sigma\left(\iota - E_t\left(\pi_{t+1}\right)\right) - u_t \\ &= -\sigma\left(i_i - \bar{\iota} - \pi_t + \sigma^{-1}u_t\right) \\ &= -\sigma\left(i_i - r_t^n - \pi_t\right) \end{aligned}$$

$$\begin{aligned} r_t^n &= \bar{\iota} - \sigma^{-1}u_t \\ &= \bar{\iota} - \sigma^{-1}\rho^{t-1}u_1 \end{aligned}$$

For $i_i = 0$ we have,

$$y_t = \sigma r_t^n + \sigma\pi_t$$

$$\begin{aligned} \pi_t &= E_{t-1}\left(\pi_t\right) + \kappa y_t \\ &= \pi_{t-1} + \kappa y_t \end{aligned}$$

2. Forward Solution of Supply Curve:

$$\pi_t = -\kappa\sum_{k=t+1}^{\infty} y_k$$

Therefore,

$$\pi_0 = -\kappa\sum_{k=1}^{\infty} y_k$$

Therefore,

$$\pi_t - \pi_0 = \kappa\sum_{k=1}^{t} y_k$$

Setting, $\pi_0 = 0$ gives,

$$\pi_t = \kappa\sum_{k=1}^{t} y_k$$

3. The Taylor rule:

$$\begin{aligned}\widehat{\imath} &= E_t\left(\pi^*_{t+1}\right) + \phi_\pi\left(\pi_t - \pi^*_t\right) + \phi_y\left(y_t - y^*_t\right) - \sigma^{-1}u_t \\ &= \pi^*_t + \phi_\pi\left(\pi_t - \pi^*_t\right) + \phi_y\left(y_t - y^*_t\right) - \sigma^{-1}u_t \\ &= \phi_\pi\pi_t + \phi_y y_t - \left(\phi_\pi - 1\right)\pi^*_t\end{aligned}$$

4. Inflation after Exit:

$$\pi_{T+1} = \mu\pi_T + z\pi^*_{T+1}$$

$\Rightarrow$

$$\begin{aligned}\pi_{T+2} &= \mu\pi_{T+1} + z\pi^*_{T+2} \\ &= \mu\left(\mu\pi_T + z\pi^*_{T+1}\right) + z\pi^*_{T+2} \\ &= \mu^2\pi_T + z\pi^*_{T+2} + \mu z\pi^*_{T+1}\end{aligned}$$

$\Rightarrow$

$$\begin{aligned}\pi_{T+3} &= \mu\pi_{T+2} + z\pi^*_{T+3} \\ &= \mu\left(\mu^2\pi_T + z\pi^*_{T+2} + \mu z\pi^*_{T+1}\right) + z\pi^*_{T+3} \\ &= \mu^3\pi_T + z\pi^*_{T+3} + \mu z\pi^*_{T+2} + \mu^2 z\pi^*_{T+1}\end{aligned}$$

$\Rightarrow$

$$\pi_{T+j} = \mu^j\pi_T + z\sum_{k=0}^{j-1}\mu^k\pi^*_{T+j-k}, \text{ for } j = 1, 2, ...$$

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