Comparative analysis of labour market inequality in Brazil and India: Concepts and methods of analysis

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Abstract
In many parts of the world there has been a growth in economic inequality in recent years. High levels of inequality not only undermine efforts to reduce poverty and promote a general increase in living standards; they also raise questions of social justice, of social solidarity, of the role of public policy and of the acceptability of economic systems. Brazil and India have different histories with respect to economic inequality. The difference in trends in inequality between these two countries is of considerable interest for both research and policy. Among the reasons, patterns of work and employment play an important role – differential access to jobs, inclusive or exclusionary labour market institutions, differences in wages and wage shares, patterns of organization and industrial relations. But the relationships are complex and are embedded in the histories and social structures of each country. This paper explores the historical patterns in the two countries and their consequences for inequality over time, and the characteristics and determinants of inequality between different groups of the population in more recent periods. The paper examines specific dimensions of inequality, in terms of gender, caste, education, region, occupation and other factors relevant in the labour market and analyses studies the economic and social relationships that are responsible for these cleavages.

Keywords: economic transformation, economic and social institutions, inequality, state policies, formal and informal institutions, historical framework

CEBRAP-IHD research project on labour market inequality in Brazil and India

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In many parts of the world there has been a growth in economic inequality in recent years. High levels of inequality not only undermine efforts to reduce poverty and promote a general increase in living standards; they also raise questions of social justice, of social solidarity, of the role of public policy and of the acceptability of economic systems.

This CEBRAP-IHD project on labour market inequality is investigating these issues in India and Brazil in a comparative framework. Brazil and India have different histories with respect to economic inequality. Brazil has long been one of the most unequal countries in the world, and remains so today, despite some success in reducing inequality in recent years. Inequality in India, although deeply rooted, was lower than Brazil's in the past, but has been rising rapidly. This difference in trends in inequality between these two countries is of considerable interest for both research and policy. Among the reasons, patterns of work and employment play an important role – differential access to jobs, inclusive or exclusionary labour market institutions, differences in wages and wage shares, patterns of organization and industrial relations. But the relationships are complex and are embedded in the histories and social structures of each country. The project will explore both the historical patterns in the two countries and their consequences for inequality over time, and the characteristics and determinants of inequality between different groups of the population in more recent periods.

The present paper considers the conceptual and methodological issues that need to be addressed in this project, and suggests research methods that can be applied.

- The first section considers concepts of inequality, with particular reference to its labour market dimensions. It looks at how inequality has been conceived and analysed in the past, and the main perspectives that are in common use today. And it considers some of the principal forms of inequality found in the labour market
- The second section puts the analysis of inequality in historical context. Its main aim is to set the theoretical frame for the analysis of inequality in the process of economic transformation, by examining the relevance of existing literatures on development and change
- The third section examines the main specific dimensions of inequality, in terms of gender, caste, education, region, occupation and other factors relevant in the labour market. It looks into the economic and social relationships that are responsible for these cleavages
- The fourth section considers the effects of a range of social institutions and state policies on inequality. Both formal and informal institutions are considered, and both policies that aim to directly change labour market outcomes, and the indirect effects of wider economic and social interventions

- The fifth section explores the statistical and quantitative tools that are available for the analysis of inequality, principally in cross-section. It considers alternative decomposition methods as well as the construction of causal regression models.
- The sixth and final section considers the role of dialogue with key social actors as part of the research design.

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I. Conceptualizing inequality and its labour market dimensions

1. Why inequality?

Amartya Sen starts his book on "Inequality re-examined" (Sen, 1992) with two interdependent questions: Why inequality? And inequality of what? We have to answer the same questions in the project on labour market inequality in Brazil and India.

Why is inequality a concern? There are many possible answers, of course. The principle of equality is embedded in much political discourse, and many would regard it as an ethical imperative. There are also much more pragmatic approaches, so that some would consider equality as a sort of welfare optimum, for if the value at the margin of whatever metric we are interested in, a measure of satisfaction or utility for instance, declines as you have more of it, then the sum total of welfare is maximized when all have the same. But even without a belief in the desirability of perfect equality, inequality may be a concern if it reaches unacceptable levels. Societies may readily accept that some have more than others, and find all sorts of legitimate reasons why this may be justified, but refuse to accept that some can have enormously more than others. So there is outrage today when we discover that the chief executives of large companies are paid hundreds of times more than the workers in the enterprises that they manage; but if they are paid 10 or 20 times, the opposition is much more muted. These are subjective perspectives, which sometimes seem arbitrary. Some societies are much more at ease with high levels of inequality, which they justify in terms of effort or personal worth, than others – the United States versus Sweden for instance. In the end the notion of fairness, or perhaps of social justice, may be more compelling as a general principle than the notion of equality.

But as the preceding paragraph makes clear, in posing the question, "why inequality?", we are already embarking on the question, "inequality of what?". Because there are many different spaces within which equality can be defined or sought. And the extent to which inequality is a concern depends to a large extent on what it is that is unequally distributed. There is a tendency for the discourse on inequality to be dominated by notions of living standards, in the sense of incomes or consumption levels. But of course equality can also refer to health or education, to public services, to employment opportunities, to democratic participation, to citizenship, to rights and freedoms and to many other domains. What is more, equality in one dimension may be incompatible with equality in another. Thus the liberty of enterprise, if it is shared by all, may well be at the cost of equality of welfare, for some will be more successful than others.

Our project is concerned mainly with labour market inequality, which narrows the scope, but still leaves these complexities. Certainly our point of departure is some measure of economic welfare, and so in the first place we are interested in inequality of earnings. But there are many other dimensions: inequalities of skills and capabilities, inequalities of security and protection in work, inequalities in opportunities for work, inequalities in the productivity of work, inequalities in organization of workers and so on. Many of these dimensions can be expressed as equal freedoms – the freedom to organize, to work more or less, to develop and apply skills. In any case, however they are phrased, it is easy to make the case that labour market inequalities are a central concern both for participants in those markets and for society as a whole. Many workers make a pittance, while others do extremely well. There are great variations in opportunities among different groups – women and men, social categories, young and old – that are difficult to justify in any moral framework. There is exploitation and vulnerability, there is unfairness and injustice, there are extremes of wealth alongside extremes of poverty. So it is not difficult to justify the topic of our project. Nevertheless we have to be careful not to take a simplistic view of inequality, nor to start with too rigid a normative framework – "inequality is bad". It is rather a question of understanding where different types of inequality come from, the functions and interests they serve and their compatibility with broader social and economic goals; then it becomes possible to ask how unacceptable inequality can be reduced.

2. Changing perspectives

A concern with inequality is nothing new but the dominant concepts have evolved over time.

Class and the functional distribution of income

Structural models of inequality dominated thinking in the 19th century and the first half of the 20th century. The fundamental inequality of capitalist development lay in its class structure, and in the extraction of surplus from the labour of the working class. Inequality was therefore to be understood mainly as the distribution of value between wages, profits and rents, and the consequent unequal incomes and wealth of classes of workers, capitalists and rentiers (Dobb, 1973). This of course remains a central issue today, and the functional distribution of income plays a central role in Keynesian or Kaldorian models of growth and distribution, in which profits are saved and wages are spent, so the profit share in value added plays a central role in the structure of demand and the pace of accumulation. In neo-classical economics the functional distribution of income was reduced to a technologically determined outcome, dependent on the shape and parameters of the production function. Indeed, it was regarded as a rather stable feature of particular production systems. However, recent evidence of large changes in the share of wages in many economies over the last two or three decades, coinciding with the intensification of market forces in the global economy (Harrison, 2005), have again made it a central part of the debate on inequality.

Colonialism, dependency and dualism

Within the early development literature, the central focus was on international rather than national inequality. A considerable literature on colonialism and dependency addressed the issues of international exploitation and its consequences for incomes and welfare in the dependent countries (Roy, 2006; Furtado, 1973; Prebisch, 1988). These systems had clear implications for internal inequality too, notably through the creation of national elites with an interest in the persistence of the systems of exploitation. Thus in India, the zamindari system of rent extraction from land, largely created by the British to facilitate taxation, led to the creation of a oppressive, semi-feudal class of landlords, who defended their privileges bitterly after Independence. In Brazil, on the other hand, the number of landless wage-earners had increased since the 1950s when long-standing tenant relations were replaced by other labour relations, such as informal and temporary labour contracts, and more recently labour cooperatives. Of course there was also some concern with poverty in the colonies, but this was not a priority for government action.

The first major shift of emphasis towards inequality within the national economy took the form of the analysis of dualism, in which a modern, productive, growing advanced sector coexisted with a traditional subsistence sector. The latter provided unlimited supplies of labour at a subsistence wage to the modern sector, where it held down the wage and permitted accumulation. Higher incomes were obtained by a small, skilled labour force in the modern sector, but above all by the owners of modern capital. This model, first popularized by W.

Arthur Lewis in the 1950s and later formalized by Gus Ranis and John Fei, continues to influence thinking today (Lewis, 1954; Fei and Ranis, 1971). In China there is frequent reference in academic papers to the Lewis turning point, where unlimited supplies of labour are exhausted and wages in the modern sector start to rise. In fact, this model, in various forms, continues to influence the understanding of inequality wherever there is an informal sector that absorbs surplus labour. It is now generally accepted that a wage differential emerges between the modern and the subsistence sector, for a variety of reasons (so in practice the modern sector pays above the "subsistence" wage), but the idea that dualism is a fundamental mechanism driving inequality persists.

The other income differential that generated a great deal of attention concerned regional differences. The polarization of economic development, so some regions grew rapidly while others stagnated, was an element in much development theory (Myint, 1964). One dimension was urban-rural differences, which largely coincided with the Lewis modern-traditional division, but wide regional inequalities were also observed in many larger developing countries. The Brazilian case became the most celebrated example, with the gap between the North-east and the South and South-east becoming a major policy concern. This gap generated very different patterns of labour market opportunity and income in the two regions, and in consequence substantial migration flows. This issue too remains on the agenda today as a major dimension of inequality, which has been addressed with varying degrees of success. For instance India today has a very unbalanced pattern of development, concentrated in the West and South, which leads to huge migration flows.

Kuznets and after

Simon Kuznets' series of studies in the 1950s and 1960s, using household survey data on income and consumption to explore patterns of inequality across countries, rapidly became a key reference point for work on inequality (Kuznets, 1955, 1973). His most famous result was the U-shaped relationship between inequality and development, with inequality first rising and then falling as overall incomes rose. This could be connected with models of dualism. The growth of a small, high income, urban sector at first increased inequality; once the "Lewis turning point" has been passed, incomes would start to rise in the rest of the economy, thus reducing inequality again.

Whatever the merits of this model, it had the important effect of turning the attention of researchers to the overall measurement of inequality in terms of income or expenditure on the basis of household survey data, along with the use of aggregate measures such as the Gini coefficient. The two key consequences were, firstly that analysis of inequality tended to be dominated by income or consumption as measures of overall welfare; and secondly, research was focused on continuous distributions at the household level rather than on structural economic differences. These two features continue to dominate economic research into inequality today. Income or consumption is sometimes extended to encompass wages or wealth, but general analysis tends to concentrate on monetized indicators of welfare. And the use of continuous distributions has led research into particular econometric directions, in particular the development of a variety of measures of inequality that capture different aspects of the overall distribution in statistical terms rather than in terms of the underlying economic or social structures.

The assumption that income or consumption is a good indicator of overall wellbeing is often challenged, for it does not allow for differences in needs, misses out many public services, and does not allow for the well-being that is derived from assets such as housing. We return to this below.

Poverty

The other major aspect of distribution that has been a focus of attention in both research and policy is poverty. In the conventional, traditional sense, which has informed planning in India in particular, poverty is not about overall inequality, but only with that part of the distribution that falls below the poverty line. This line has, traditionally in India at least, but in many other places too, been treated as fixed, reflecting nutritional norms and minimum consumption of other goods (Dandekar and Rath, 1971). So concern with poverty in this sense can be considered as a concern with a particular part of the overall distribution of consumption. The question is what percentage of the population (usually, in practice, counted in households) falls below the poverty line, and what policies might bring them above that line. The distribution of consumption above the poverty line is not of interest, except insofar as it needs to be redistributed to those below the line.

In India interest in inequality was, at least until recently, almost exclusively focused on poverty. In Brazil, although overcoming poverty has been a major goal for all the federal administrations since the mid 1980s, inequality has been of great concern as well. This is because of the adverse effect of high inequality on economic growth, and its contribution to the erosion of social cohesion and to the increase in violence. The key indicator was in the percentage of households below the poverty line, and since average incomes rose and the poverty line was fixed, that percentage declined over time, despite worsening inequality, and during some periods declining nutritional intakes (Deaton and Dreze, 2002; Sen and Himanshu, 2004). However, in recent years a controversy has developed over the level at which the poverty line is set. The opinion is widely expressed that it is unrealistically low. But the poverty line has not changed in absolute terms: it is unrealistically low today because standards have risen. An acceptable poverty line in say 1960 or even 1980 is no longer acceptable to the bulk of the population today, in part because the capacity of the Indian economy has increased, in part because rising incomes have changed people's perceptions.

In fact, when examined closely, poverty lines are always relative, that is they are defined in relation to a social standard. In many countries poverty lines are regularly revised upwards, a process which is much disliked by politicians because they feel that this is moving the goalposts. In some places the relative nature of poverty is recognized more explicitly. In the European Union, the poverty line is usually set at 60 per cent of median income. In this case, to reduce poverty, it is necessary to reduce inequality (Gordon and Townsend, 2000).

Social exclusion and relative deprivation

More recently, there has been an increasing effort to address more specific issues of social deprivation and exclusion. These, like poverty, concern only the lower part of the overall distribution; but unlike poverty, they tend to invoke more direct analysis of the structural factors responsible.

The notion of relative deprivation sets inequality and poverty in a concrete context: "individuals, families and groups in the population can be said to be in poverty when they lack the resources to obtain the types of diet, participate in the activities, and have the living conditions and amenities which are customary, or at least widely encouraged or approved, in the societies to which they belong." Peter Townsend's work on poverty in the UK developed and applied this notion, which he himself thought as another way of describing class differences (Townsend, 1979). Among the elements of relative deprivation were included not only conventional components of poverty such as food intake and housing, but also conditions of work and the general social environment (security, recreation, etc.). Deprivation could be a way of describing poverty, but also a way of identifying a process by which people are actively deprived of their rights.

The notion of relative deprivation is quite closely related to social exclusion, another way of conceptualizing inequality. Originating in the French sociological literature, this approach started to be applied in low income countries in the 1990s (Rodgers et al, 1995). Social exclusion, like relative deprivation, captured the extent to which different groups lacked access to the core elements of a normal life in a particular society. It could be applied to political and social participation, to citizenship rights, to adequate education, to a decent level of income and of consumption. The mechanisms of exclusion were different in different societies. In some, a mainstream ("republican") way of life provided the reference point for all, and social exclusion was a way of characterizing those who did not have access to this central way of life. Other societies were structured in distinct groups, in a hierarchy, so that inclusion in one group might well imply exclusion from benefits available to another (a caste model comes to mind). In a more neoliberal model, exclusion occurred when individuals failed to obtain the attributes necessary for inclusion, leading in the extreme to the view that the excluded were excluded because of their individual failure to achieve inclusion. In India, notions of social exclusion have mainly been applied to caste, where the process is particularly visible, but the idea is much wider. Today the rhetoric has been turned around, so the slogan is "inclusive growth" – but you only need this slogan if there is otherwise a risk of exclusion. In Brazil after the political democratization a new Federal Constitution has defined clear principles and practices for social inclusion. The enforcement of the recent Main Law (1988) plus the higher well being of the population and the democratic environment have amplified the consciousness of the differences between public and private spaces. This is something new compared with the past. In Europe goal of social inclusion has been used to support policies aimed at raising the capabilities and promoting the integration of particular population groups – unemployed youth in the suburbs of major cities, itinerant groups such as the Roma – but the rhetoric has usually been stronger than the action.

One important qualification on the approach to inequality through exclusion is we need to think more about what it means to be included. Included in what, and on what terms? Inclusion in the labour market may imply participation in precarious, ill-paid work. That is inclusion of a sort, it is hardly the solution to problem of unequal access.

Identity and discrimination

While the notion of social exclusion has only spread relatively recently, concern with inequality as a group phenomenon has a much longer history. Historically, in many societies an ethnic or cultural difference has been a fundamental divide in opportunities and living standards, and at the extreme, the belief in the validity of such differences has led to the most atrocious massacres and genocides in human history. The present day successors of such horrors may be less bloody, but few if any societies escape from their realities. Discrimination is very deeply rooted, and concerns a wide variety of groups – not only the widely recognized categories of caste, tribe, religion, race or gender, but also migrants in cities, homosexuals in homophobe societies, and many other groups.

Frances Stewart has made the case that the general phenomenon is one of "horizontal" inequalities (Stewart, 2002), and that these need to be treated as a category of inequality which is much more important than its apparent statistical contribution to inequality of income or consumption overall. She is talking of groups that have an identity as such – people in the group feeling that they belong to a community – but also groups which have some characteristic by which they can be singled out – skin colour, sex, accent – and so may be subject to discrimination (Piore, 1995).

Be that as it may, concern with such discrimination has been a widespread driver of policies to reverse it, often involving discriminatory preference in favour of deprived groups, for instance through the reservation of places in schools or jobs, access to public services or support, etc. India has been among the countries that have used such policies most widely. The extent to which these policies succeed in reducing inequality is a much debated issue – they often have some impact at the margin, without changing the structural underpinnings of discrimination. In any case, effective or not, such policies remain a central element of much action to reduce inequality (Thorat and Newman, 2007).

Justice, rights and related issues

John Rawls' much celebrated book, *A Theory of Justice* (Rawls, 1971), introduced a number of new elements into the discussion of inequality. Rawls' difference principle that inequality needs to be justified in terms of the gains for the least-advantaged members of society may not often be applied in the real world, but it is clearly related to the frequent argument that inequality is needed to provide incentives and so to generate a dynamic of production and development. The other important idea of Rawls for conceptualizing inequality is the "veil of ignorance" – a particular level of inequality is only fair if it would be chosen by individuals who have no knowledge of where in that distribution they will be situated. The key word here is probably fairness rather than equality.

These are contributions to the understanding of inequality and its relationship to social choice, though they have perhaps influenced philosophers more than politicians. But a related line of reasoning has given rise to a rights-based approach, in which action against inequality is grounded in the assertion of rights to food, to education, to different aspects of citizenship. In India today this approach is being used rather effectively by proponents of greater equality (Roy and Nikhil, 2002; Sengupta et al, 2005).

Capabilities and functionings

Finally, under this heading, we must refer to the concepts of capabilities and functionings found in the writings of Amartya Sen (Sen, 1990, and in many other publications) and subsequently others. This too is about inequality, because it is about the failure of large groups of the population to obtain the capabilities they need to achieve the functionings they value. Capabilities here may refer to something as simple as literacy, but extends to a wide variety of skills and entitlements, including less familiar ones such as social recognition or legal identity. Sen expresses capabilities in the language of freedoms. And while this approach may sound abstract, it has been a major influence on policy debate because it has given rise to the notion of human development, promoted by the UNDP and now embedded in political discourse in most parts of the world if not yet in the reality of people's lives.

The notion of capabilities is particularly important for the analysis of inequality, because outcomes for any individual or group depend on them. So gender inequality depends on the socially recognized roles of women and men, as well as the skills to which they have access, the treatment they receive from others, and so on. In some sense, the analysis of inequality has to be grounded in these capabilities. It is not enough to simply measure inequality (of income, of wealth, or other dimensions); we need to understand the factors and forces which are responsible. Differing capabilities may not be the ultimate drivers of inequality, because the acquisition of capabilities in turn reflects the distribution of economic and social power. But they are an important mechanism, whether defined narrowly (human and social capital) or broadly, as Sen does.

3. Some important considerations

This overview of different perspectives on inequality, and how they have evolved over time, highlights the need to go beyond quantile distributions and address some of the underlying structural factors. But before looking at how this might be applied to the analysis of labour market inequality, some general considerations need to be evoked.

Heterogenous populations have different needs
One fundamental problem in analysing inequality is that "human beings differ from each other in many different ways", as Sen puts it (Sen, 1992). Perfect equality of, say, household income would be far from a welfare optimum because households are of different sizes, have different obligations, are at different stages in their life cycle, and so on. Individuals may have disabilities or disadvantages that need to be compensated. Some people may simply have greater needs for consumption, for recognition or for creativity than others. So equality in different spaces may not coincide, indeed in general will not coincide.

One way to avoid this problem is to avoid giving inequality any normative or welfare content. One might then be interested in inequality of, say, wages, without making any judgement as to the implications for the welfare of those concerned, i.e. not assuming that higher wages are associated with better lives. Yet, as we say above, it is because we make those judgements that the issue of inequality takes on its political importance.

A related point is that the outcomes reflect differences in behaviour between individuals, households and communities, so inequality in outcomes also reflects their behaviour. If one person (or one community) works harder than another, then (other things equal, and depending on the economic environment of course) he or she will have a higher income. But of course, this says nothing about whether both are equally "happy".

These basic philosophical concerns should not prevent us from analysing inequality in whatever terms is possible, but must make us cautious in interpreting the results.

Inequality of opportunity and inequality of outcome: Equity versus equality
A point which is related to the previous one has been much in vogue in recent years. The basic idea is that observed inequality has two components. The first reflects inequality of opportunity – different individuals face different economic and social opportunities by virtue of the group to which they belong (cf. the discussion of identity and discrimination above); but they also vary in the extent to which they take advantage of these opportunities. The World Bank World Development Report, 2006 discusses these issues in some depth. In summary, as an ADB report puts it, "Inequality of opportunity, not of outcome, should inform the design of public policy. According to this view, public policies need not necessarily eliminate or reduce all outcome inequalities but may instead focus on reducing inequalities that arise from unequal opportunity. Thus, a just society is one that provides equal opportunity to all" (Son, 2012).

Implicit in this view is the idea that if people do not make the effort to take advantage of their opportunities, we should not be concerned about the consequent inequality (provided opportunities are equally distributed). This is of course a highly debatable proposition. First, while opportunities may exist in theory, the extent to which individuals can take advantage of them may be conditioned by the same factors that lead to inequality of opportunity. So in some sense this is blaming the victim. Second, inequality of outcome may be a concern in its own right if it is too large, generates a growing social divide or leads to people falling below a decent standard of living. Behind this apparently innocuous distinction, there lies an ideological debate, for this distinction between opportunity and outcome can be used to separate "neutral" market mechanisms (which turn opportunities into outcomes) from underlying patterns of unequal capability. The danger here is to accept uncritically the market mechanisms that are driving the unequal outcomes.

Transitory and permanent inequality
An issue that does not get much attention in the literature, but which is of some importance for the interpretation of inequality, concerns the time frame. There are both static and dynamic aspects of inequality, and they do not have the same implications. In particular, the extent to which people are socially or economically mobile affects the interpretation of inequality at a point in time.

An obvious starting point is the life cycle. As households go through different stages of life, their capacity for work and their needs vary. Households with children, and households with more old members, will have greater needs and/or less work capacity. But insofar as all households pass through the same cycle, the consequent inequality between households may not be a source of great concern, or may be readily easily dealt with through inter-household transfers or community solidarity.

Perhaps of more concern is the intergenerational transmission of inequality. Hereditary wealth (including productive wealth in the form of capital and land) is the most obvious mechanism, but there is also the inheritance of knowledge and of networks, a transmission of wealth through investment in education and other mechanisms that carry prevailing inequalities of caste, of race, of class, of nationality and other dividing lines from one generation to the next. A society in which successive generations may move up or down the income scale is clearly in some sense less unequal than one in which inequality is transmitted, even if the overall level of inequality is the same (Tilly, 1998). There is much research to show how inequality persists across generations, despite myths to the contrary in the United States and elsewhere. Recent research in the US suggests that intergenerational mobility is in fact low and declining (Beller and Hout, 2006).

Apart from these embedded mechanisms there are many other factors - the economic cycle, shocks, health issues, etc – that can cause fluctuations in incomes or wealth, and so create inequality over time. There is also path dependency, in that short term fluctuations may lead to a vicious or virtuous spiral for those concerned. Some aspects of these fluctuations can be treated as a question of income security, but the issue is wider than this.

Inequality, participation and power
Inequality is sometimes considered as if it were a technical issue, a question of the functioning of markets and the structures of production systems. But of course, fundamentally it is a question of power. Extreme inequality is surely only possible when the people at the bottom of the scale are powerless and those at the top are powerful – power here including

both economic power (control over production) and social and political power (which may come from some democratic process but is likely to be embedded in social institutions).

This applies across the board. The rate of return on education, in the sense of differential wages to those with different qualifications, may reflect supply of and demand for skills and the investment in human capital that delivers those skills. But it is also about how educational qualifications are recognized and who has access to them, about arbitrary differentials in wages that are grounded in social hierarchies rather than in productivity differences. It is necessary to be alert to the power of vested interests in looking at differences in opportunities and incomes between groups, or the reasons for the exclusion of some and the inclusion of others. In fact, the study of inequality is in the end essentially an exercise in political economy. By its very nature it is about the study of differing interests and the mechanisms that are deployed to defend those interests.

4. The specifics of labour market inequality and its consequences

Most of the issues discussed above have a labour market dimension. Some are almost exclusively concerned with labour market structures and mechanisms. Others are influenced by labour market forces and labour institutions. Here we discuss how these connections, most of which are explored in more depth in later sections of this paper.

Empirical research into inequality tends to focus on the overall distribution of household income or consumption. In the labour market the corresponding variable is earnings or wages, and the starting point for much work on labour market inequality is the overall distribution of wage or earnings. This is frequently analysed in much the same way as income or consumption, but there are several important differences. The most obvious is that earnings usually concerns individuals, not households, so the relationship between the distribution of earnings and the distribution of income or expenditure then depends on household size, structure and dependency. Second, especially in developing countries, self-employment provides an important share of earnings, but the distribution of income from self-employment is very different from the distribution of income from wages. Omitting the self-employed from the analysis is therefore misleading, especially since in the informal economy people move between wage and self-employment, or household income has components of both. Third, overall income includes not only income from work, but also from capital and rent (which of course may also form part of the earnings of the self-employed). Capital income and rent typically form a higher proportion of high incomes, so measured labour market inequality will in general be lower than overall income inequality. Fourth, and perhaps most important, the labour market is heterogeneous and highly structured. Analyzing wage inequality as a continuous distribution is therefore likely to miss important features and determinants.

The structure of the labour market: Segmentation and informality
The labour market is a market, in the sense that there is supply and demand of labour, and a wage which is to some degree influenced by the balance of supply and demand. But it is a market with very special characteristics. Unlike bananas or smartphones, labour can organize and demand rights, can collaborate or resist, can deliver more or less productivity. Labour is embedded in social relations, which regulate its supply and the conditions under which work is performed, both formally (through the state) and informally.

Much work on labour market inequality, however, ignores these key institutional factors, and focuses on the market relationship. This is usually true of earnings functions, which estimate the return to various capabilities and characteristics of workers, assuming that this is a proxy for productivity differentials. Wage inequality is then the result of inequality in these individual characteristics on the one hand and of inequality in labour productivity on the other. But returns to education, which is perhaps the most commonly analysed relationship, may as well reflect position in the social hierarchy. Moreover, within an integrated production system, productivity is as much the characteristic of jobs as of the workers who occupy them.

There is therefore a strong case for first searching for the key variables that structure the labour market. In practice, this means first understanding segmentation. Labour markets have a tendency, for a variety of reasons – economic, social and technological – to divide into distinct sub-markets where different groups of workers have different conditions of work and different wages. The first step in understanding labour market inequality is understanding these segmentations. Often labour market segments may be identified by the characteristics of the worker concerned - sometimes caste or race, or migrant status, or sex, will be the key variable. Education may also play this role. But labour markets can also be segmented, and workers be trapped in particular segments, without this being based on visible differences in worker characteristics. This is not discrimination in a unified market, but rather a fragmentation of the market, in which a similar labour market mechanism may be based on different criteria in different places (race in one place, gender in another, age in another).

The literature on labour market segmentation is large, but in developing countries it has tended to overlap with the literature on informality – in Latin America the pioneering work on labour market segmentation was in fact about the informal sector (Tokman, 1992 and other publications from PREALC, the ILO Regional Employment Programme for Latin America and the Caribbean). In industrialized country segmentation studies are more concerned with separate labour markets within the formal sector (Doeringer and Piore, 1971). In fact, in developing countries the formal-informal divide is really the first and most important component of labour market segmentation, and the gap in capabilities, incomes and consumption levels between formal and informal workers is a central aspect of inequality (Rodgers, 1993). It is true that the concept of informality that is most common in Brazil (whether or not workers have a signed labour card) is quite different from that in India (which is mainly about the "unorganized" sector, defined in terms of the characteristics of enterprises; NCEUS, 2009). But in both cases the segmentation is clear. Research into this aspect of inequality issues should address some of the issues raised above: whether there is mobility between formal and informal work; what forces promote exclusion from formal work; the differences in skills and capabilities, and how far they explain differences in earnings – for instance, where similar skills are remunerated differently in formal and informal work.

Labour market segmentation, in a broader sense, also extends to other ways in which labour markets are separated and conditions of work and of pay differentiated. Urban-rural and regional differentials are an obvious example, as are sectoral differentials within the same location.

The quality of work

Inequality in work is not only about wages. It is also about the conditions under which work is performed.

A first and basic inequality concerns the security of work. There is a growing literature on precarious work, which tends to encompass both work without an employment contract, and short term work with no long term guarantees of continued employment. In India, the statistical category of casual work is generally used as a proxy for precarious work, since it is by definition daily paid (although in reality much casual work continues for weeks or even months). So the distribution of the workforce between regular and casual work is a first indicator of security. In Brazil workers without a signed labour card may be in a somewhat similar situation to casual workers in India.

A second aspect of inequality is in the conditions of work. This is a huge subject, covering the degree of social protection, the working environment, the risks of death or disease, stress, the possibility to develop and apply skills, and a variety of other issues. In the literature on inequality relatively little reference is made to this subject, but it is an important aspect of labour market inequality, which overlaps with the issue of segmentation discussed above but is not identical to it, since there are large variations even within formal work (the most obvious being the divide between blue and white collar workers). An important constraint on work in this field will be measurement. Some things can be measured (e.g. the mortality or morbidity rate) but many are subjective or ill-defined. The actual hours of work may be one useful indicator – but a complex one, because inequality may be reflected in both excessive hours of work, and insufficient hours of work (the underemployed) (Lee et al., 2007).

Organization and the power of workers

Analysis of labour market inequality in terms of class differences inevitably addresses power relations and the overall distribution of the benefits of production. The share of profits and wages in total value added is an important indicator of inequality, and one which is clearly affected by the relative power of capital and labour in the market. Widespread declines in the labour share around the world are often attributed to a weakening of labour in the face of the forces of globalization.

In general, the basic hypothesis is that trade union organization raises wages and the wage share of the organized group. But the effect this has on the overall distribution of income depends on the size of the organized group and the wage differentials concerned. It is often argued that in India trade unions defend the interests of a small and relatively privileged group of workers. In any case this is an important relationship that needs to be explored (Bhowmik, 2012).

Beyond the question of the organization of workers, there can be sectoral differences which also reflect power relations and differences, and the ability of groups of workers to capture a share of rents. This may be true of some industrial sectors compared with others, especially technologically advanced sectors. And it can also be true of public-private sector wage differentials, which are quite large and rising in India, though whether this is the result of power relations or of some bureaucratic process is not clear.

Discrimination and exclusion

Discrimination is, as noted above, is one of the factors driving labour market inequality, affecting access to jobs and the wages of those employed. In neo-classical economic models this is sometimes expressed as a preference of employers for one type of worker rather than another. But a considerable literature has shown how this is a structural issue, connected with the issue of segmentation discussed above.

The concept of social exclusion can also be usefully applied to labour markets. The strongest form of exclusion, i.e. complete exclusion from labour markets, can show up either in low labour force participation rates among the groups concerned, or in open unemployment. Both phenomena need to be taken into account in considering labour market inequality.

Unemployment is not usually treated as an aspect of inequality, but of course it is in one sense the result of unequal access to jobs. It is therefore particularly important to consider the distribution of unemployment across different population groups and its consequences for inequality of income. This is a complex issue. There are different forms and durations of unemployment¸ and the role of unemployment is quite different in the Brazilian and Indian labour markets. One issue that is readily explored is whether the notion of unemployment as a luxury is valid – it is often argued that in situations of very low income, the only people who can afford to be unemployed are those with alternative income sources, for instance youths from relatively well-off families. In this case, high levels of unemployment would be associated with high levels of family income rather than the reverse (Ghose, 2003, 2004). Insofar is this is the case, it seems more likely to apply to India than to Brazil, where there is also a considerable degree of cyclical unemployment. But in India there is also a great deal of casual daily unemployment at the bottom end of the income distribution. The comparison between India and Brazil is further muddied by the existence of unemployment insurance in Brazil, and its absence in India.

Social exclusion has other dimensions with a bearing on the labour market. Some adverse labour market situations, whether in terms of protection, regulation or organization, can be conceived as exclusion from rights at work. And exclusions from work also often imply exclusion from not only income, but also social recognition, social security and other aspects of life.

The relative importance of labour markets in the overall distribution of income and welfare
A fundamental issue for the research project is whether overall income inequality is mainly determined by what happens in the labour market, or whether the most important factors determining inequality lie elsewhere, in the distribution of power or wealth. If it is the latter, then what we observe in the labour market is merely the reflection of wider societal forces, which function through labour market institutions in which that inequality is embedded. Education provides a simple example. If inequality is essentially endogenous to the labour market, then education reflects investment in human capital, and the wage differentials associated with different levels of education reflect productivity differences and market equilibrium. If on the other hand, the educational system is itself a reflection of social inequality, then this is just a means by which that inequality is transmitted to, and perpetuated through the labour market.

An alternative way of looking at this question is to consider to what extent labour market mechanisms are responsible for overall patterns of inequality. Is inequality basically a question of access to jobs and incomes through the labour market, and the differentials in earnings that are obtained by different workers or groups of workers? Or is labour market inequality just one of a number of factors, which also include the distribution of capital, land, knowledge and political power? Is poverty just a labour market failure, a result of labour market inequality, wages that are too low or employment opportunities that are too rare, or is it the result of some deeper forces that lead to exclusion? And what is the role of political institutions and popular participation – what role does the mobilization of workers, to defend their labour market interests, play in the broader quest for a fair and equal society?

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II. Theoretical introduction and analytical framework for research on "The transformation of economic and social structures in Brazil and India in the second half of the 20th century: Old and new patterns of inequality"

The purpose of this section is to shed light on the analytical framework that will be used in the "country historical papers" to be produced for Brazil and India under the CEBRAP-IHD project. This will also facilitate the task of elaborating a comparative historical paper, another outcome of the project. The theoretical discussion that it may contain is not an end in itself, but a means for sharpening categories that we find operational for setting up a broad view on:

1. The characteristics of the development process in countries that industrialized in the 20th century under very peculiar social and economic conditions;
2. The changing configuration of the capitalist world-economy and how it affected these development processes in two periods: 1940 to 1980; and 1980 to 2010.

The section is broken down in 4 parts. In the first, we argue the need for an historical approach, which should be seen not as merely illustrative. As we see this, the historical approach is intertwined with economics and the social sciences in general. In other words, we do not assume the existence of an inherent law in the development process outside history.

In the second part, we discuss the three main approaches that evolved in the 1950s and 1960s under the label of "development economics". They may be named, respectively, the "stagist", "balanced growth" and "historical-structuralist" approaches. Even though the third one seems to fit better the analytical framework espoused in the project, we find the debate itself illuminating, one that may help to grasp the unfolding of the historical process with many concepts and insights.

The third part starts with a criticism of some authors of the neo-institutionalist economics school, as, in our view, it isolates institutions from the history itself, assuming a Western-bias, as if efficient institutions can only appear and evolve in some particular settings. We do not downgrade the role of institutions; on the contrary, as they are embedded in different ways in society, interacting with economic and social structures, the State and decision-making processes, as well as integrated in the ever-changing capitalist world-economy. Instead, we delve into the contributions of Fernand Braudel, Immanuel Wallerstein, Robert Brenner, Giovanni Arrighi and Robert Boyer in order to look at how patterns of capitalist development manifest themselves in different ways across time and space. In so doing, they affect the labour market structures and institutions and the way old and new forms of inequality evolve.

Finally, we put forward an outline of the planned country historical papers, to be followed, not strictly, but depending on the data and literature available for each country.

1. The importance of an historical approach

Why do we need to go back to history in order to address the current trends of inequality in Brazil and India? The answer to this question is not obvious. As Eric Hobsbawm (1998, p. 126) points out, the place reserved for the teaching of history, even economic history, in most of the economic departments worldwide, has been mostly "like that of the human appendix".

As a consequence, historical knowledge remains confined in the past, isolated from the present, which is mainly captured through series of data, not having much to do with "the operations of real economies". Most economists have turned themselves into "sub-species of philosophers or mathematicians, unless they choose to occupy the space left vacant in our secular society by the decline of theology".

Notwithstanding this somewhat harsh criticism, the author's main purpose is to reintegrate history in the realm of economics. To take it out of its outside position, "namely all that distinguishes the unchangeable past from the theoretically changeable future". This theoretical effort, however, could not be undertaken by simply "transforming history into retrospective econometrics" (Hobsbawm, 1998, pp. 127-128).

The only way out of this dilemma, in his assumption, lies in "the recognition of historically rooted visions of economic development" (pp. 139-142). He quotes Marx and Schumpeter, but many others could be mentioned. What these authors have in common is the attempt to "see future developments in other than linear terms", avoiding the current affairs of making predictions. That is, trying to come to grips with the realities, produced through history, as well as their potential unfolding in the future - what actually was not pursued by many Marxists during the post-war period, as even Hobsbawm (p. 138) acknowledges.

Fernand Braudel [1969] (1992, pp. 115-124) also sees some room for a dialogue between economists and historians, in case both believe that it could be meaningful. On the one hand, he asks the economists to work on "tendential rules", helpful in order to process the complexity of facts and data, pointing towards some possible direction to societies; on the other hand, he stresses the importance of taking into account "plurality of historical time". It is made out of a dialectic between the structures (*la longue dureé*), the tendential rules and the current facts and realities of everyday life. Thus, History is not *there* in the past, but within the present, allowing for political choices that may enable different futures to come about.

We do not envisage, in this project, to apply Braudel's method of a "total history", incorporating through the plurality of historical time the importance of the social, economic and political dimensions in the different geographical contexts. These embedded spaces are not isolated, but intertwined, as they connect differently to a common "perspective of the world". However, Braudel's contribution may work out as a caution to the indiscriminate use of theoretical models that assume the linearity of history (pp. 64, 71-76). In this sense, the limits of economics are the same as those faced by social sciences in general.

The Brazilian economist Celso Furtado (1972, pp. 23-26) also took part in this debate. According to him, the relationship between economic analysis and the historical approach is far from unilateral. "How should one proceed once facing a complex social system", he argues? The problem lies in the fact that "macroeconomic models are not embedded in general theory of economic processes". The best they can do is to create abstract models based in quantitative variables, which are doomed to change very often. Thus, the vision of the process cannot be taken but from history. However, this is not enough, as History in itself cannot offer, in his regard, the analytical framework that allows for capturing the dynamics behind the historically defined structural trends. Here economics and social science, asking questions posed by history, enter the scene.

But whose history, and managed by which economics and social science as supposedly universal theoretical bodies? This question, posed by Indian historian Dipesh Chakrabarty, raises important methodological issues that should be taken into account in our research project. Actually, the so-called post-colonial approach developed by the Indian historians and social scientists, after the 1980s, under the label of "subaltern studies", shares some common theoretical assumptions with the ECLAC school and the dependency theories which spread throughout Latin America from the 1950s up to the late 1970s.

Chakrabarty's (2000, pp. 4-6) argument is structured as follows: the knowledge embodied in social sciences arises out of concepts that were created and mobilized in Europe and the Western world in very specific historical circumstances. His intellectual project of "provincializing and decentering Europe" reveals the false universality of concepts like "capitalism" and "modernity". However, he does not despise the tradition of Western thought, considered both "indispensable" and "inadequate".

The main idea to be contested, following his argument, may be summarized by the sentence "first in Europe, then elsewhere". According to the mainstream view, capitalism, for instance, became global over time, originating in one place (Europe), and spreading outside it (pp. 7-8). Yet, if it has not happened that way, the reason should be found in institutions, usually coined as "traditional", hampering its dynamics, in opposition to the "modern" ones abstracted from Europe's quite complex history. The outside-Europe history becomes "a not yet" tale.

His claim is not for a sort of historical relativism or methodological nationalism, but to adapt critically these only potentially universal concepts to the actual history of the metaphorically named "developing countries". This methodological approach could help to unveil practices, institutions and patterns of development that do not easily fit in the strait-jacket established by the "habits of thought" derived from social sciences.

To sum up, the inadequacy of concepts should not lead to a theoretical paralysis. On the contrary, the clue lies in finding strategies for "thinking about historical difference without abandoning one's commitment to theory" (pp. 43-46).

2. The "Development Economics" approach: History in the backstage?

The so-called "development economics" approach reached its golden era during the 1950's. Even though a new set of concepts had been launched – searching to give solutions to practical problems, by looking at the peculiarities of the so-called underdeveloped countries –, the "not yet" tale was underneath some of the assumptions espoused by many (but not all) authors.

Actually, one of its striking characteristics was the diversity and eclecticism of the views that gathered under the same conceptual umbrella. In hindsight, development economics can be portrayed as a hybrid theoretical body, "part structuralist, part neoclassical, part Keynesian, part pragmatic" (Peet & Hartwick, 1999, p. 44).

Taking this fact into account, we should ask right from the beginning the following question: was there any common denominator among its several branches of thought? A positive answer would point to the adoption of 'economic development' as a policy objective in and for the 'underdeveloped' countries of the world, as mainstream economics, and even Marxism, had up until then been concerned only with capitalist development of the Western world (Arndt, 1987, pp. 2, 29-30).

A change of place brought about a change of framework, which evolved in different directions. The focus on economic growth was not enough. Economic development should not be left alone to market forces, but planned from the outset, but going beyond

Keynesianism, due to the skepticism about the efficacy of price mechanisms (Arndt, 1987, pp. 57, 124), as most authors seemed to agree. The role of the State was strategic in many different ways. However, in the 1960s, apart from being a mere economic force, promoting the "big push", it came to be regard as the space in which political and social forces confronted each other in order to defend their own interests, sometimes hampering "development". Others focused more on the role of institutions and the need to promote investments on education and entrepreneurship and enhance the role of international cooperation, moving away from the more structuralist perspectives. In short, as Arndt (1987, p. 165) argues, "the interpretations of 'development' have become so diverse that one sometimes wonders whether it now stands for anything more substantial than everyone's own utopia".

This assessment, however, should not lead to a rejection of everything that was produced under the label development economics – on the contrary, as it does not exist as a single theory. Actually the "theory" and the acknowledgement of the obstacles faced in the process of development itself went hand in hand. That is why the different theoretical constructs – which evolved under the same label of development economics - need to be brought to life, in order to check whether they may still be useful as analytical tools.

For the purpose of this section, we will concentrate on three different branches of development economics: Rostow's idea of stages of economic growth; the "balanced development" idea launched by Rosenstein-Rodan and Nurske, to which the contributions of Arthur Lewis, Alexander Gerschenkron and Simon Kuznets were relevant. And a third approach which groups Albert Hirschmann, Gunnar Myrdal, Hans Singer and the ECLAC school form Latin America.

In the introduction of his important book, Rostow [1960] (1990, p. 1) makes explicit his objective: "to break down the history of each national economy according to a definite set of stages", in order not only to launch a "theory about economic growth", but also, "if still highly partial", a "theory about modern history as a whole". Even though he seeks to combine "the uniformities in the sequence of modernization" with "the uniqueness of each nation's experience", the author's effort is twisted in favor of the former. He even admits a "considerable violence done to economic history" by retracing each country's trajectory in order to fit into the five stages.

According to his model, the five stages would comprise the following: the traditional society; the preconditions for take-off; the take-off; the drive to maturity; and the age of mass consumption. Each country, once it had left behind the traditional society – depicted very vaguely as based on pre-Newtonian science and technology, covering the dynasties of China as well as medieval Europe – would at some point of time meet the preconditions for the take-off, usually dependant on external intrusion by advanced societies, managed through some sort of reactive nationalism. Once the take-off starts, the economy overcomes the resistances to change and reaches steady growth. Some rates of investment are required (5% to 10% of the GDP), which are related to other factors like the existence of entrepreneurship, agricultural transformation and social overhead capital. The drive to maturity means a "long interval of sustained if fluctuating progress", due to the flowing of modern technology to the whole front of economic activity". These two stages are usually are separated by a time interval of 40 years. The final state, "a phase from which the Americas are beginning to emerge", can be defined by the shift of leading sectors towards durable consumer goods and services, which means that “Western societies have chosen to allocate increased resources to social welfare and security”.

This impressionistic account of the development process is “not merely descriptive”. According to Rostow (1990, pp. 4-16), its analytical skeleton lies in a so-called “dynamic theory of production” – and its inter-sectoral relations – linked to the elasticities of demand. Behind this interaction among economic variables, there are the choices made by society in its process of economic development.

From this very simplistic model, the author jumps to a sort of race among countries in different lanes, pinpointing from their history specific dates that would mark the beginning of take-off, with total disregard to anything closely related to a an “international economy”. This linear and stagist mindset was quite influential in its time and served – paradoxically – as the counterpart to the orthodox Marxian version of a necessary feudalism/capitalism/communism sequence. Here, history is not only in the backstage, but obliterated by a model that despises historical diversity.

The second approach takes a very different perspective. It goes back to the history of some countries in order to trace their peculiarities and poses practical questions, which had not been addressed by mainstream economics. New concepts are brought to life, paving the way for the introduction of new development policies in the backward and/or underdeveloped countries. In sum, historical diversity should be considered if there is a willingness to overcome poverty, disguised unemployment, low productivity levels in agriculture and so forth.

This new current of thought was inaugurated by Rosenstein-Rodan with an important article written in 1943. From the outset, he states that the “industrialization” of “international depressed areas” – the case in mind is the Eastern and South-Eastern European countries – “is in the general interest not only of those countries but of the world as whole”. The “agrarian excess population”, also labeled as “disguised unemployment”, amounts to 25% of their labour force, leading to a waste of this factor of production. As emigration is not feasible, the only way out is industrialization, that is, bringing capital to labour (Rosenstein-Rodan, 1943, p. 202).

The “Russian model” is discarded because of its autarkic character, inefficiency and social costs. The solution presented tries to combine the advantages of the “international division of labour” with industrialization itself. Although international capital and lending are a part of the equation, it would not come at the beginning because of the high risk and low profit expectations related to the limits of the market. So what needs to be done is a change of the whole economic structure. “This is a tremendous task, almost historical precedent”. In this regard, “active participation of the State in the economic life is a new factor which must be taken into account as a new datum” (pp. 203-204, 206).

Then, the author presents the new institutional framework that needs to be put in place. Investments in training and skilling of the labour force – because peasants cannot be turned into full-time or party-time industrial workers in “the automatism of laissez-faire” - and the launch of complementary industries, each generating demand for the others, through a process of large-scale planned industrialization, are required. Also, capital should become available for basic industries, which apart from creating new external economies, would have a multiplier effect (pp. 204-209).

This combined effort – carried out by the State and supplemented by international capital - should be enough to create a state of equilibrium, "from which onwards normal private incentives may operate successfully". Yet, this transformation in the international depressed areas would bring about a "reorganization of the world trade" (pp. 208-209).

What can we take out of this quick description of Rosenstein-Rodan's model on how to move away from "underdevelopment" – the concept was not yet used - in the so-called "international depressed areas"? First, there is major imbalance in the operation of the world economy, which affects especially the depressed areas. This can be solved through a whole reorganization of these economies (that is, industrialization), without disorganizing the world trade, on the contrary. Once the ambitious project of development becomes reality these countries would be better off, reaching a state of equilibrium, leaving behind the waste of production factors, mainly labour, by the very creation of domestic capital, which would attract new sources of international capital. So, at the end, the international division of labour would be somewhat improved, no longer working as a constraining force on development.

Ragnar Nurske and Arthur Lewis would develop further most of the arguments presented above in the early fifties, having a huge impact both in India (Krishnamurty & Kale, 2009, p. 31) and Brazil. In the latter, Nurske gave six conferences in 1951 under the title "Problems of Capital Formation in Underdeveloped Countries" – the same as his book to come out two years later - to be published in the Brazilian Review of Economics with a reply by the Brazilian economist Celso Furtado (Memórias do Desenvolvimento, 2007).

Stressing that "the main determinant of the size of the market is productivity", he seeks to show how the small incentive to invest – due to the small size of the market – can be overcome, doing away with the "vicious circle of stagnation", responsible for maintaining these countries in a "state of underdevelopment equilibrium" (Nurske, [1951], 2007, pp. 41-42).

The small size of the market explains the unproductive use of savings and this may also be the reason for foreign capital to concentrate mostly in export industries, avoiding industries producing for the domestic market. In the same line as Rosenstein- Rodan, the disguised unemployment in agriculture allows for an increase in capital formation without having to cut down consumption. Public finance should contribute to capital formation, so that investment projects could be carried out by private enterprises (pp. 43, 111). The authors hold the same caution on the availability of foreign capital. International loans, however, can be used to expand industries producing for the home market and to create public overhead capital, if they do not substitute for domestic sources of capital formation. The improvement in the terms of trade is an important way to yield additional savings in order to allow for imports of capital goods (p. 139). More important than infant industry protection – which he defends, not in nationalistic terms, but "from a cosmopolitan point of view"- is the infant industry creation, which depends not only on tariffs, but on the sources available for capital accumulation (p. 162).

If Nurske's main objective lies in putting forward a comprehensive set of economic policies that would allow for development to flow and spread throughout the limited market of underdeveloped countries, through proper policies aimed at higher savings and investments; Lewis's focus is directed to elaborating a theoretical model to explain the development process in countries with a labour surplus – as this assumption is outside the body of both neoclassical and Keynesian economics.

In order to do so, he comes up with a two sector model. The transfer of workers (mainly farmers, casual workers, petty traders, retainers, domestic workers) from the "subsistence" to the "capitalist sector" will lead to a rise of output per head in the latter, as its wage is defined in the former. Having set the stage, Lewis [1954] (1958) depicts the process of economic expansion: if the capitalist surplus is invested in creating new capital, a virtuous circle starts, leading to an increasing share of profits in the national income (pp. 412-418). If this leads to inequality of income between capitalists and the rest, this inequality has a different pattern, as it reflects profits that favour capital formation, not an inequality based on rents (pp. 419-420).

The key issue then is the development and expansion of the capitalist class. It derives its sources of capital not only through profit, but also by virtue of credit expansion. If there are no obstacles hampering capital accumulation (growth of subsistence goods, or their price does not fall in line with productivity gains, or workers raise their wages), "the capitalist sector will continue to expand until there is no surplus labour left" (p. 434).

Although this second approach was quite successful in looking at concrete situations of underdeveloped countries, and setting forth some important policy recommendations in a comprehensive way, going much beyond the mainstream view, "the big push" or "balanced development theory" fell short in trying to unveil the complex interplay between economic and non-economic factors. In sum, the somewhat hasty assumptions made one believe that from a initial point of "underdevelopment equilibrium", these countries would jump up to another point at which "development would practically have been accomplished", as pointed out by Hirschman [1958] (1962, p. 65). But these authors' contributions should not be neglected, as their starting point was the understanding of the economic and social specificities of underdeveloped countries, exactly the opposite of what was pursued in Rostow's model. On the other hand, methodologically their effort was constrained by a sort of "retrospective comparative statics" (Hirschman, 1962, p. 62).

Before we move forward, a brief comment should be made on the work of three authors – Alexander Gerschenkron, Arthur Lewis (slightly different from the model presented above) and Simon Kuznets, contemporary to the authors discussed above, who started, already in the early fifties, to cast some doubts on the somewhat simplistic models launched by their predecessors.

Gerschenkron [1952] (1962, pp. 3-4), for instance, stresses, from an economic historian's perspective, that "the search is no longer for a determination of the course of human events as ubiquitous and invariant as that of the course of planets". He suggests as an alternative "the extraction from the vast storehouse of the past sets of intelligent questions that may be addressed to current materials". The historian should leave the backstage and participate in the discussion of industrialization and development patterns, by pointing to "potentially relevant factors and potentially significant combinations among them". In short, he should take a broader perspective, not one limited in terms of time and space.

His focus is on the considerable differences shown in the industrialization processes. Differently from the "more advanced countries", the "backward" ones present specificities in terms of speed of development, productive and organizational structures, institutional instruments mobilized and the "ideology" that was behind it. These factors interacted also in as specific way depending on the "conditions and degrees of backwardness" (pp. 5-22).

Notwithstanding the fact that his analysis focuses on "backward Europe" – Germany, France and Japan - it marks a clear departure from Rostow's model and opens a critical debate with some important assumptions taken for granted in the balanced development theory. Moreover, at the end of article, he makes important statements concerning the new "backward" countries of his time. Doing away with the idea that modern sites and plants mushrooming in these regions were symptoms of "economic megalomania", he argues that the clue to the question is how to develop new adequate institutional arrangements, as apart from the imitation side of the coin, every instance of industrialization "appears in combination with different, indigenously determined elements" (pp. 25-26). The recognition of this diversity is an important step, but does not lead to new concepts and analytical frameworks, nor proposals for social, political and economic changes. The notion of "gradations of backwardness" does not suffice for building up a new comprehensive approach.

Lewis (1955, pp. 5, 15) also opens new avenues on the field of development economics, by dismissing the possibility of a "single theory of economic growth". Getting a little distance from his model of "unlimited supplies of labour", in this piece he argues for a "map of theories" with diverse validity in different times and spaces. Dissatisfied with the "deductive basis of economic theory", he is not comfortable to coming to grips with the facts of history. To know what happened is not enough to get into the "why" question. The interplay between economic opportunities and institutions appears quite complex, leading more often than not to a cumulative process (pp. 142-148, 155).

He unfolds this train of thought by posing the following questions: "is there a path which institutional change inevitably follows?" Is there a succession of stages? Is there inevitable progress? Or is the movement of history along some cyclical curve?" The "no" answer to these questions does not forbid him to say that "institutions may change in ways favourable or unfavourable to growth", pointing, however, to the existence of "cumulative processes" (pp. 143, 156-157, 162). The time has not yet come for the idea of patterns of development and underdevelopment, even though we are almost there.

In the introduction of a book, aimed at a comparative analysis of the economic growth of Brazil, India and Japan, Kuznets (1955, pp. 5-8) raises some relevant ideas, not only for a comparative analysis, but on the issue of development itself. For example, by analyzing a country, or comparing some of them, for a long period, what is the meaning of measuring economic variables, as everything else changes through time? The only solution is to grasp the process of change underneath the rates of economic growth, in order to capture its dynamics. To accomplish this task, one should not rely on national figures only, but get deeper into how the different economic structures, regions, social groups and decision-making institutions relate to one another, carrying out the process of change. Furthermore, these countries' transformations should be understood as a part of broader "concert of nations", or as we could add, of a highly complex and also changing international economy.

His project is ambitious as a "tentative exploration" on the different historical accounts of economic development in distinct places and times, but the use of "underdeveloped" concept is somewhat biased: it suits not only the ones underdeveloped "today", but also the supposedly "underdeveloped phase, fifty or a hundred years ago, of a currently highly developed country" (p. 4).

The third approach, apart from the differences between its authors, has in common the following theoretical standpoint: the underdeveloped countries – even if they pursue strategies for economic development - will never become “developed” in the sense that they will not reproduce the structures and institutions of the early-comers. It also has to do with the fact that the existing international division of labour is considered as an “obstacle”, which needs to be changed in order to not distort the industrialization process already under way in many countries.

Hirschman’s and Myrdal’s books of the late 1950s reflect this new intellectual climate, which was ignited by the works of Singer and Prebisch, a decade before, when they pointed out that the terms of trade were harming the development of the peripheral countries to the benefit of the core ones.

Prebisch’s [1949] (1998, pp. 65-66, 74-77, 112-113) main purpose was not to create a “Latin American economics”, but to show the “false universality of economics as science”, as it did not take into account the operation of the international trade system, and how it affected differently the countries from the North and the South. The pursuit of industrialization should not be regarded as ideological. On the contrary, its *rationale* should be sought in the very nature of the facts. That is, prices of goods traded between both regions did not move accordingly to their productivity levels, leading to a concentration of technical progress in the core countries. Also, industrialization was not doomed to be inefficient, as it would draw on labour surplus, underemployed in activities with very low productivity, and could bring about income generation, with industrial output rising much faster than the amount of industrial goods to be purchased with the falling prices of Latin American commodities. His very pragmatic tone would come out of the end of his famous article, when he acknowledged the intent of getting deeper into the still “precarious knowledge of the economic structure of our countries”.

Hirschman [1958] (1962, pp. 1-11, 25, 65) is a clear departure from the other approaches seen before. He questions the very idea that once a “missing component” – whether capital, entrepreneurship, technical knowledge or a given value system – was overcome, the underdeveloped countries would “finish the job”. Thus, he despised the “prerequisites” for economic development, as much as a supposed “fixed number of backwardness features”, pointing to the specificity of the “late-comers”. He does not dismiss these factors, but highlights their redefinition once economic development gets started. Then, we should look at the “deficiency in the combining process”. The main obstacle can be located in the “mind”, or in the absence of a “growth perspective” that understands the economic system as shaped by the rising of different tensions, disproportions and disequilibria over time.

In sum, “the fundamental problem of development consists in generating and energizing human action in a certain direction”. Beyond a mere adjustment process, the interplay between market and nonmarket forces reveals itself quite complex, as none of them are portrayed as automatic. The core of the issue is the decision-making process, as this scarce resource conditions all the other scarcities. The incentive mechanisms should be constantly revised, which means that the “economics of growth” does not suit the needs of an “economics of development” (pp. 24-29, 63).

Then, he moves to a very interesting dilemma, which he mistakenly names “the dualistic development”. We say “mistakenly”, because he does not address the intrinsic heterogeneity of underdeveloped countries in a dualistic way. Let us see how he unfolds the argument. After mentioning the common view that “underdeveloped but developing countries are apt to pass from the mule to the airplane in one generation”, he corrects it. What happens is that “both airplane and mule fulfill essential economic functions". This has to do with the fact that "forces of industrialization tend to leave the preindustrial sectors alone for a prolonged period rather than attacking them frontally", due to the existence of "two distinct wage levels" (pp. 125-126), or as we should say, distinct demand profiles. Moreover, industrial progress can concentrate on a wide range of products that are entirely new to the economy. Even though this cannot be generalized to all sectors, as Hirschman points out, the power his argument lies in the specificity of the patterns of development compared to the "nations that industrialized in an earlier period" (pp. 129-132).

Myrdal [1957] (1963, p. 6) also moves away from the notion of stages of growth and equilibrium states. He starts, actually, stressing that "the trend towards international economic inequality stands out in contrast to what is happening within the rich countries individually". Prebisch's lesson has become widespread.

The main contribution of his piece, though, is methodological. He questions the very idea of "stable equilibrium", as "there is no such tendency towards self-stabilization in a social system". If instability is the rule, how can we approach it conceptually? Even a static accommodation between factors is provisional and quite different from equilibrium. A change of one of them leads to a "cumulative process of mutual interaction", through which the whole system would be transformed, much beyond the direction of the primary change. This notion of "circular causation" can be very useful for the "understanding of development and underdevelopment in a country, or within it". Yet, it means going beyond the boundaries of mainstream economics, as the non-economic factors become autonomous, but not isolated from the economic ones (pp. 11-20). The changing-one-factor panaceas are dead.

Myrdal's main point is to adapt this framework for the series of changes and obstacles that may appear once a set of policy devices are mobilized for unleashing a cumulative process of economic development, one that "provide more not less space for what of private enterprise such a country possesses or is able to foster". To amplify the spread effects of the development policies between occupations, sectors and regions sounds like a huge challenge, especially if we consider the outworn institutions – inequality-driven – that constrain the change due to the political influence of powerful social groups or to the operation of the international forces, mainly through trade and investment, that reinforce the so-called "backwash effects" (pp. 50-53, 79-81, 92-93).

Heterogeneity, inequality, cumulative process and mutual interaction between market and non-market forces allows for a different perspective in looking at the unfolding of the economic and social dynamics that do not follow any static prerequisites, as these "underdeveloped" countries follow different patterns. This does not mean a new science devoted to them, but a challenge to an economics based on premises which do not fit these specific cases, not only in the beginning but also throughout the development process.

Furtado, the Brazilian economist, would go a step further: underdevelopment is neither a syndrome nor a malady that should be cured. It does not mean the lack of something others had managed to acquire, but a field of inquiry in its own right, allowing for the understanding of the socio-economic realities of the countries located at the periphery of capitalism.

In Furtado's [1961] (1965, pp. 157-159) view, the traditional economic models missed a historical dimension. The Industrial Revolution should be seen as qualitative turning point in the development process. In European countries, economic growth had become endogenous by virtue of the technological progress that opened the room for an increasingly diversified demand structure. At the other end of the international division of labour – where we find countries under the plantation system (Brazil) or the ones that were forced to open their trade routes (India) – the penetration of capitalism was not complete.

Even though Furtado (1965, p. 173) mentions "hybrid structures" and "dualistic economies" – as it was the common mindset at that time - the important issue was touched upon: "underdevelopment was an autonomous historical process, not a phase that all countries should overcome before reaching the highest levels of development". That happens because the capitalist activities while advancing through these areas generated a mass of profits that did not necessarily lead to a complete transformation of the local economies.

As he would sum up latter, development and underdevelopment are different historical configurations, both derived from the same initial force, which tend to reinforce each other, even though not following a predicted course, as economics and politics are intertwined. So underdevelopment should be seen as a part of an integral movement, an expression of the dynamic economic system brought about by industrial capitalism. In the first group of countries, we had a transformation of the social structures by virtue of development, whereas in the other group "modernization" of life styles prevailed. Consequently, mass consumption, lessening inequality and hypothetical full employment was possible in the developed societies; whereas in the underdeveloped ones, hidden unemployment and urban marginality – the informal sector was implicit in the argument - became more the rule than the exception (Furtado, 2000, pp. 27-28). This analytical framework is everything but static; on the contrary, he tries to grasp the possibilities and obstacles posed by the very dynamics of these different societies, which are not set apart one from the other.

In his book written in the early sixties, Furtado sees the underdeveloped social and economic structures as made out of three sectors: the subsistence sector; the export-oriented; and internal market-oriented one. In the "more complex underdeveloped structures", the industrial core, aimed at the internal market, can be indeed very dynamic, bringing about considerable changes. However, it expands mostly in the sophisticated sectors dominated by the developed economies, being consequently unable to incorporate completely the great reservoir of the workers expelled from the non-capitalist activities. In one word, the industrial output increases rapidly without changing correspondingly the occupational structure. As a consequence, any reasoning by analogy with the experiences of industrial advanced societies is prone to misconceptions and should not be looked at as a meaningful framework for the underdeveloped countries (Furtado, 1965, pp. 184-185).

The argentine economist Raúl Prebisch (1981, pp. 39-42) would put forward in the seventies another concept: "peripheral capitalism". It had a constrained dynamic, even though underdeveloped countries could face moments of very rapid industrial and economic growth. In his view, capitalist segments coexist with non-capitalist ones, generating different "styles of development". The main changes in the technical structure of the economy, carried on by the capitalist sectors, lead to a movement of labour force from the subsistence sectors to the modern ones, preventing wages from following productivity levels. The surplus does not return to the economy in order to feed the accumulation of capital. It tends to be filtered through conspicuous consumption or to be applied in a non-reproductive way.

Thus, economic efficiency and social inefficiency go hand in hand. Despite the increasing diversification of these economies - that could have led to an increasing purchasing power of the low-income groups - an extremely segmented demand structure emerges. At the top, we find a “privileged society”; at the bottom, its mirror image, an “infra-consumption society”. As if the boundaries between social classes and strata were deep and sharp and social mobility just a way to fill the empty places opened by the modernization process. This structural heterogeneity brought about the internalization of the same pattern of unequal distribution of technical progress gains, once located in the international trade arena (Prebisch, 1981, pp. 59-60). It was the time when the ECLAC school moved into the discussion of styles of development (Bielschowsky, 1998, p. 36).

In the Indian case, the close interaction of most of its economists and social scientists with Western authors – from different currents of thought – brought a very specific outcome: although the structuralist school was not influential here, Indian authors managed to selectively use modern economic theory that seemed relevant to their case, and some of them were “entirely indigenous products” (Krishnamurty & Kale, 2009, pp. 2, 35-37). Indian specific institutions and paths of development were scrutinized by an empirical analysis of the changes that took place, in an effort to reassess policy strategies and overcome the asynchronous growth between and within economic sectors and their impacts in terms of employment and labour incomes.

3. Strategic categories for capturing specific patterns of capitalist development

After this brief summary of its several approaches and analytical frameworks – sometimes one opposite to another – we may raise the following question: what is left of development economics today? Very little, it could be said, if we take into account the neoclassical counterrevolution (Payne & Philips, 2012, pp. 111-123), which started in the 1970s, and spread throughout the economics departments in universities all over the world, at least until the recent financial crisis. The provocative statement made by Dudley Seers in 1963 (p. 27) - that the mainstream economics was, at best, suitable for the Western industrial capitalism, becoming then, not the rule, but the exception – should be neglected, seen as a sort of heresy.

In this section, we try to show, at first, how history was relegated to the backstage once again, focusing on the contributions of Douglass North and, more recently, of Daron Acemoglu and James Robinson. In spite of an in-depth analysis of this author’s works, we concentrate on their main assumptions.

North, in his book first published in 1990 (2005, p. vii, 3), attempts to “integrate institutions into economic theory and economic history”. He states that “not all human cooperation is socially productive”. In order to understand why, he launches some concepts that should bring about a “theory of institutional change”. The concept of path dependence works as cornerstone for neo-institutional economics. The main idea is to “explain how the past influences the present and the future”, by looking at how “incremental change affects the choice set at a moment of time”. This framework connects very well with the “choice theoretical approach of neoclassical economic theory”.

North attempts to pick up the train where Rostow left it. Why, contradicting what the latter had espoused, do we have “widely divergent paths of historical change”? Or, in other words, “why do competitive pressures not eliminate inefficient institutions”? The answer is straightforward: in many Third World countries, a reverse set of incentives gets underway, “favouring activities that promote redistributive rather than productive activity”, “creating monopolies rather than competitive conditions”, “restricting opportunities rather than expanding them" (p. 9). Then, the question - "if institutions determine the performance of economies, what creates efficient institutions"? – seems to lie at the core of his analytical framework.

However, even North (2005, pp. 115, 137) acknowledges that the task is not that easy, as in order to make the case for path dependence it would be "necessary to demonstrate the network externalities that limit the actors' choices and prevents them from radically altering the institutional framework". That is, history would need to show up, leaving the backstage, and not dressed up with Western-like habits. On the contrary, the empirical evidence he deals with is one that contrasts different end-points, discarding the complexity of the historical process as whole and avoiding to check how social and economic structures, institutions, decision-making and an international system combine in a specific way, bringing about different development paths.

The more recent work of Acemoglu & Robinson goes along the same line of argument. The path dependence appears once we have the interplay of small institutional differences with critical junctures. The possibility of institutional improvement may be wasted if "extractive political and economic institutions" have the last voice (2012, pp. 44, 106-107).

Even though the "weight of history" is considered strategic, the final outcome – "not historically predetermined, but contingent" - depends on which of the "opposing forces" will succeed (p. 110). A war against the modern and the traditional is established, quite similar to the one found in the modernization theory of the 1950s. Ideas such as a "cumulative process of circular causation", of "unbalanced development", or of "underdevelopment as an autonomous process" characterized by "structural heterogeneity", leading to "different development patterns and styles" are totally out of this mindset shaped by binary oppositions. In the latter, the "not yet tale" comes back to the scene, now enveloped with an institutional discourse.

There is also an acceptance of European colonization as "setting the stage for institutional divergence in the Americas", but this could be changed in case these countries decided to choose the more efficient and inclusive institutions. The Industrial Revolution is a body of technologies and institutions that did not travel around because of the resistance of rent-seeking elites (pp. 113-116). The authors bring back the dichotomy of vicious and virtuous circles once again, which depend almost completely on the set of institutions chosen. In this regard, a virtuous circle can be reversed in case extractive institutions predominate during critical junctures, and "whether this happens is, again contingent". They go as far as depicting the Mexican case as one in which they find a "persistence into the twentieth century of a specific institutional path inimical to growth" (pp. 36-38). That is, in a country that was able to stir industrialization and change completely the economic and social structures. If inequality increased during the process, that cannot be explained by institutions themselves, as one should take into account a whole set of factors and their complex interaction.

The brief description of the above-mentioned analytical frameworks leads us to a conclusion that contradicts their assumptions. Actually, in this framework history *does not* matter. Or, it does matter only if we approach it selectively, finding why "underdeveloped" countries did not "develop" like the "developed" ones, a sort of tautological way of thinking. This is the reason we try to go back to the development economics, at least to the so-called historical-structuralist approach.

It works, in this project, as an analytical framework, not a theory in itself, which allows us to get deeper into the development trajectories of India and Brazil. We try, however, to rejuvenate it with the contributions of the so-called “variety of capitalisms” approach, which were launched after the 1980s. To make them more operational, for the sake of our project, we will also make use of the concepts elaborated by Fernand Braudel, Immanuel Wallerstein and the Regulation school.

Actually, Boyer and Hollingsworth (1997, pp. 1-3), point to an interesting paradox between the trajectory of economic policy and theory in the last 30 years. While the former tended to deify the efficiency of the markets, the latter – or at least an increasingly important stream – drew on the complexity of the really existing markets. Then, emphasis was placed on connections established between the markets and a complex of institutions, responsible for “the discovery” of various modalities of capitalism. Instead of a single institutional architecture, posited as the most efficient, theorization built on the diversity inherent to capitalist societies (Amable, 2005, pp. 7-18).

Therefore, the hypothesis that the global market would lead to a convergence of models of capitalism can be, at present, empirically and theoretically discarded. Boyer and Hollingsworth (1997, pp. 4-5, 461-462) acknowledge a coexistence of different social systems of production under specific forms of economic coordination. This has to do with the fact that there is neither complete globalization of production factors, nor perfect competition in the products markets, coupled with a resistance to transferring modern-day technologies. Thereby, each capitalist national economy exhibits a complex organization that varies according to the distribution and interaction of productive sectors, regional characteristics, power differences between capital and labour and market organization mechanisms.

Several studies have been conducted with the purpose of assessing the distinct varieties of capitalism. In addition to assessing a complex of institutions – which goes a way beyond the neo-institutional economics binary opposition between inclusive and extractive ones -, they aim at showing how these institutions complement and interact with each other. Amable (2005, pp. 23-35), for instance, proposes a model to map the relationship between five institutional sectors – competition in the product market, wage relations, financial intermediation, social protection and education – in 21 economies of developed countries.

This approach has been, mostly, restricted to the developed countries. The exclusion of the once so-called “underdeveloped countries” from these analyses may be accounted for either by a lack of knowledge about the reality of the countries at the periphery of capitalism, or by a conception – misguided, in our understanding - that these countries have not succeeded in “endogenizing” the dynamics of capitalism.

It is our view, indeed, that the acronym BRICS can be reassessed if we try to fill it up with more theoretical work than just assuming these countries vaguely as “growth economies”. They can be depicted as varieties of capitalism, not isolated, but differentially integrated in the capitalist world-economy, going through significant spatial changes brought about a new division of labour (Barbosa & Cacciamali, 2013, pp. 13-19). This approach appears to be useful for this project, in case we can operationalize this concept in order to capture the industrialization processes both in Brazil and India and the changes faced after the 1980s. However, in order to do so, we need to go back to its origins, as the “varieties of capitalism” do not exist separated, presupposing the existence of a capitalist world-economy.

Braudel developed the concept “world-economy” in his three-volume masterpiece, *Civilization and Capitalism, 15th-18th Century*, the last volume dating back to the late 1970s. Assuming the impossibility of a complete history of the world, he states, nevertheless, that a “perspective of the world” – a sort of “superstructure of the global history” - would be the only way to capture the flowing of national, regional and local societies, even if they seem to be isolated. In this regard, the idea of a “world-economy” comprises a “fragment of the universe”, a “superior layer”, which allows for a minimum coherence in the trade networks. Even though it does not encompass the whole world, it shapes the outcomes everywhere, but in an interactive way. That is, the assumption that the economy is the material engine of the world is not held under a supposedly passive role of other spheres of collective life. His analytical framework can be summarized as in the following sentence: “the economy in time and space, on the side, below and above its co-participants: politics, culture and society.

In his book, the notion of a world-economy is not restricted to Europe, as we had alternative “world-economies” managed by India, China and even Russia in the timeframe covered by the book. What they have in common is the fact that they operate in enlarged spaces, in which hierarchies are created in the core areas, seen as the privileged place of capitalism. In sum, we have dominant cities, secondary zones and large peripheral areas. Polarization is always present, but presenting different forms (Braudel [1986] 1996, pp. 8-9, 12-16).

According to his view, capitalism equals monopoly and unequal trade, locating itself above the market economy (the space of competition), below which there is the material life, infra-market or self-consumption zone. In sum, an economy does not exist in itself, if not through the interplay of these main “sectors” (Braudel, 1985, pp. 10, 56-63, 66-67). This three-layer structure of economic life is a toolkit, enabling the social scientist to get into the complexities of existing economies (modern and traditional), surrounded and permeated by world-economies. The three-layer structure can also be useful also in both ends of a world-economy. Yet, these “sectors” combine in a different way, having different sizes and dynamics. In the core, the capitalist sector and the market economy complement and oppose each another, while at the periphery an enclave sector gets subordinated to the “outside” world-economy, leaving aside an enormous subsistence economy (Braudel, 1996, 29-31,52-53), as “development economists” would say.

Furthermore, what may be possible in the core is not so in the peripheral areas, as the social relations established within the enlarged space of a given world-economy manifest themselves under quite different forms. Here, Braudel raises the argument already elaborated by Wallerstein, that a “capitalist world-economy” may be comprised of wage-earners, slavery and serfdom as forms of social relations that play different roles within it.

The “wheels of commerce” would be developed further in Europe, leading to the Industrial Revolution, which would bring about, by virtue of its advanced capitalist sector, a partial assimilation – an even disintegration - of the other self-sustained world-economies before and during the 19th century. So the existence of a truly world market depended on the development of a national market in Britain, through a complementary interaction between capitalist and market economy (Braudel, 1985, pp. 33, 88-89, 97-99, 103-104), one that would transform the “perspective of the world”.

The basic point made by Wallerstein [1979] (1983, pp. 4-5,10-28) was to say that to understand the “capitalist world-economy”, nurtured in Europe from the 16th onwards, and about to encompass the whole world by its expanding trade networks in the 19th century, we need a systemic approach, not one based upon stages do be followed by every single country. According to his analytical framework, the unity of analysis is not a "national economy or society" in itself, but the sequence of changes faced by the whole – the modern world-system or the capitalist world-economy. This new totality is made out of different structural positions – core, semi-periphery and periphery – which also condition class structures in the different points of it. Yet, this totality is now static, but dynamically transformed, by the interplay of forces of his "model".

His main point was to criticize the idea of "stages" in economic development. In his words, "if a stage can be skipped, it isn't a stage" (p. 4). According to him, it is more feasible to think that a new operation of the capitalist world-economy may take place by the reshuffling of structural positions and the unleashing of new sources of capital accumulation. That is, a country does not move to a next stage, but the whole totality is changed, by the pressure of forces coming from different points or through the redefinition of its position in an already different capitalist world-economy

The flaw in Wallerstein's theoretical approach, in Brenner's view, lies in his simplistic definition of capitalism, as "a mode or production for a profit in the market". In this sense, Wallerstein, even though capturing the transformation of an European world-economy into a "capitalist world-economy", which he derived from Braudel's work, lost sight of the complex three-layer structure of economic life put forward by the French historian. If, then, capitalism is a production for a distant market, its nature is merely quantitative. Moreover, the profits arise mainly through the unequal exchange.

That is, according to Brenner (1977, pp. 27, 31-33), Wallerstein "moves too quickly from the proposition that capitalism is bound up with, and supportive of, continuing underdevelopment in large parts of the world, to the conclusion that the 'development of underdevelopment' – a concept he takes from Andre Gunder Frank - is an indispensable condition for capitalist development itself".

On the contrary, following Brenner's argument, capitalism by its own dynamics is constantly developing and revolutionizing the forces of production through a process of accumulation by means of innovation, which has to do with the very class structure of the economy (capital and labour power have become commodities). The extension of capitalist development from the core throughout the world by increasing trade networks and capital flows does not mean – actually it could hamper it - the emergence of class structures and of relation of production typical of capitalism in the periphery. That is, underdevelopment may feed capitalism in the core but it is not a condition for the accumulation process.

Arrighi [1994] (1996, pp. 6-15) gets into the debate by pointing out that capitalism as historical system shows some recurrent patterns, as well as shifts, according to the joint operation of market expansion and inter-State competition. Using the concept of "systemic cycles of accumulation", made out by a sequencing of material and financial expansions, he seeks to demonstrate how blocs of government and private actors redefine constantly the spatial configuration of economic and political power. His empirical basis is the characterization of these systemic cycles historically, under the hegemony of Italian city-states, the Netherlands, Great Britain and the United States, lasting for around one hundred years each.

How to reconcile this theoretical debate with the one put forward by the historical-structuralist school on the patterns of development of the industrializing semi-periphery of the capitalist world-economy in the second half of the 20th century? We may now get to the argument that these development trajectories, especially the Brazilian and Indian ones, led to specific – albeit different - patterns of capital accumulation, as these countries were able to endogenize accumulation mechanisms, without doing away with some of their "underdevelopment" and "structural heterogeneity" characteristics.

If this assumption is valid, the analytical framework of the Regulation school may prove appropriate for this research project. According to Boyer [2004] (2009, pp. 58-60, 70, 140-142), we should leave behind "the idea of transhistorical laws and trends shaping the evolution of capitalism". This social-economic system should be addressed by the empirical and historical analysis of its several accumulation regimes as they appear in different times and spaces.

Summarizing the mains concepts of this framework - which we find operational when applied to the Brazilian and Indian cases during their industrialization period (generally speaking from 1940 to 1980) and also thereafter -, we present, at first, the five institutional forms that – depending on their specific interactions – bring about an accumulation regime. They are listed below (Boyer, 2009, pp. 62-63):

- Monetary regime;
- Competition regime;
- Wage relations;
- Forms of international integration;
- Modes and spheres of State intervention;

We do not aim, here, at specifying every institutional form. What is important, at the moment, is to highlight that they may lead to some regularities bringing about a coherent path of capital accumulation, due to a combination of several factors: the way production is organized, as well as its respective market structures, the time-horizon of capital accumulation, the role of the State, the pattern of integration in the capitalist world-economy, the shape and extension of wage relationships, the composition of social demand (somewhat determined by the income distribution, personal and functional), as well the as role assumed by the non-capitalist forms (Boyer, 2009, pp. 80-81), which is an important "variable" in our case, due to the size of the informal or non-capitalist sector in Brazil and India.

These accumulation regimes are only brought into life by virtue of a specific "mode of regulation" which enables the emergence of institutionalized compromises, assuring its coherence and "piloting" the accumulation regime. This has to do with the role of the State and the decentralized relationships maintained by social and economic actors. The crisis of a mode of development – which is the result of the interaction between "accumulation regime" and "mode of regulation" – may be endogenous or exogenous, and has to do, depending on the "variety of capitalism" considered, with its position within the wider capitalist world-economy.

This analytical framework of the Regulation school works here, but not as a strait-jacket to be applied in the particular cases of Brazil and India. Its categories are easily derived from the social, economic and historic data that will be collected for the historical papers. Yet, the "model" is far from deterministic. Actually, most of the criticisms aimed at this school arise from its indeterminacy (Boyer, 2009, p. 64). In our view, what looks like a problem may be the advantage of using these set of "variables" within the Brazilian and Indian contexts.

It should also be stressed that this approach, by looking at mechanisms of capital accumulation and their relationship with the social structures and institutions, will enable the research teams in Brazil and India to look at the role of the labour market in shaping new patterns of inequality; but also at the place occupied by a large workforce which is not integrated into it, at least directly, as these workers reproduce themselves as small producers of goods and services in the urban and rural informal sectors, that is, not through a wage relation under typical capitalist forms.

4. Outline for the historical papers on Brazil and India

Below we put forward a preliminary proposal for the outline of the historical papers. Items A and B should be seen as introductory. Items C and D are the core of the analysis to be pursued taken into account the available data and literature for each country, considering the period 1940-1980. The latter sets the stage for what will come next, the changing economic and social structures due to different forms of engagement with the capitalist world-economy (items E and F). Item E focuses on patterns of integration in the changing capitalist world-economy, whereas item F delves into the main political, economic and social changes that followed, preparing the ground and/or constraining the new international trends in a cumulative and interactive way. Together they set up the conditions for analyzing the determinants and trends in labour market inequality for the recent period, which will be tackled through a more in-depth quantitative approach, another outcome of the project.

A. Broad Political Context in the Period 1940-1980
B. The Role of State, Economic Policies and the Pattern of Industrialization
C. The Workforce as Social Structure: The Role of the Labour Market and Labour Institutions
D. Old and New Patterns of Inequality
E. The Reconfiguration of the Capitalist World-Economy and How Brazil/India Managed to Adapt/Integrate (1980-2010)
F. Political, Economic and Social Changes (1980-2010)

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III. Causes and interpretations of social inequalities

India and Brazil share the same sources of inequality, among which we highlight their high levels of informality; high land concentration; gaping regional differences; sweeping unequal distribution of opportunity in access to the school system, to health, and to other public services; and discrimination in the labour market against women and certain social groups, among others, black and colored people in Brazil and castes, tribal and religious communities, and homosexuals in India.

In contrast, the economic policy tools that could be deployed to bridge the income gap are constrained. Three examples illustrate this point. The Public Social Security System is constrained due to high informality, especially in India; the tax system is overly regressive, among other reasons because income tax collection is inefficient as informality is widespread, thus prompting the government to opt for indirect taxes; and highly asymmetric markets, particularly the credit market, which restrain investments in physical capital and in education for the poorest.

A study by the OECD (2011) reports that in Brazil, since the 1990s, but especially in the 2000s, the bottom and middle quintiles of real household income outgrew the top quintile. This is a positive outcome because it signals that income and equalization are growing side by side, especially in the rural areas. This is not the case for India, where, according to the same study, income growth is distributed the other way round, that is, the real household income ratio grew more at the top of the distribution than at the bottom and median levels, especially in the urban areas (OECD, 2011).

These distinctions are made more salient in relation to the poor population. By the late 2000s, 10.6% of the Brazilian population was below a \$2 per day poverty line,[1] while in India the proportion was 72.2% (OECD, 2010). In both countries this indicator decreased when compared with the early 1990s – 26.7% in Brazil and 79.1% in India (OECD, 2010). One of the reasons for the more dramatic drop in poverty in Brazil than in India was public spending in social programmes, which in the former country accounted for 16.3% of GDP in the mid-2000s, while in the latter this amounted to 4.6% of GDP. However, it is worth noting that in both countries these expenditures are still lower than those of OECD countries – 20.6% of GDP, on average (OECD, 2011). The downward and upward trend of inequality rates in, respectively, Brazil and India took place against different backdrops as regards economic performance. In Brazil economic growth rates were modest in the period – 1.7% per year in the 1990s and 3.3% per year in the 2000s – yet they were accompanied by high employment growth rates, mostly formal in the 2000s – 5.3% per year for formal employment versus 2.9% per year for total employment. In India, instead, economic growth rates were high in the 1990s and 2000s – 5.7 and 6.9% annually, respectively – while total employment grew at a yearly rate of 2.1%, that is, low employment elasticity and high growth of productivity. Furthermore, while in Brazil informality in the labour market was 39.2% – down from 44.1% –, in India the level of informality remained constant over the same period – 86.3%.[2]

It is worth noting that in Brazil, despite a reduction in income inequality over the last ten years, household income concentration is still very high. By the late 2000s, the top quintile accounted for 60% of total income, while the Gini coefficient was 0.548, among the highest in

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[1] We consider the OECD pattern that defines the poverty line those households with a daily income (Brazil) or consumption (India) of US\$ 2 per capita. OECD (2010).

[2] Based on OECD (2010) and data from: http://www.oecd.org/els/46955111.xls.

the world. In India, income concentration is smaller: The top household income quintile accounted for 46% of total income, and the Gini was 0.376. However, a direct comparison between the two countries' income profile is not possible, since the data are quite distinct. The Indian Statistical System, unlike the Brazilian, uses consumption as a proxy for income. The literature shows that estimates of the level of income inequality relying on household consumption data are lower than those based on income data (World Bank, 2006). Thus, a comparison between the magnitude of Brazil's and India's inequality measures is not possible because of the diverse nature of the data collected, though no restriction is placed on comparing trends in inequality.[3]

1. Why income concentration affects economic growth

Over and beyond reasons guided by social justice, what are the socioeconomic reasons for opposing high levels of inequality?

The specialized literature presents at least five arguments. The first is that high income concentration has repercussions on the poverty rate. High inequality in income, when associated with low income per capita, has a direct effect on poverty rates. Econometric estimates show that the elasticity of poverty reduction to growth is lower in countries with higher income concentration (Goñi, López and Servén, 2008; Ravallion, 2007). In this case the implication is that, in countries with a higher income concentration, achieving a lower poverty rate requires a higher economic growth rate (World Bank, 2006).

The second argument is that inequality rates and homicide/theft rates are positively correlated, even when other crime rate determinants are controlled for. Fajnzylber, Lederman and Loayza (2002) estimated that, on average, an increase of one percentage point in the Gini coefficient adds 1% – 4% to the delinquency rate. High crime levels keep investments away and foster a hostile business environment, besides spurring bribery and broadening economic informality.

The third argument is that greater equity is beneficial for long-term development. High levels of social, economic, and political inequality tend to reproduce themselves and to generate inefficiencies – tend to create, in the words of the World Bank, "inequality traps" (World Bank, 2006). This is so because the most influential groups of more unequal societies hold greater political power and tend to establish institutions and make public expenditures that will preserve their interests, for example in educational, health, and housing social services, and in science and technology. Hence, the capabilities of the people that make up the lower social strata are wasted and society loses the chance of achieving greater efficiency, of further investing and innovating. It is worth stressing, however, that the findings of these econometric studies are still inconclusive as regards the occurrence of a negative correlation between inequality and growth (Fajnzylber, Lederman and Loayza, 2002).

The fourth argument concerns the fact that a high inequality ratio not only expresses inequality of opportunities, but also unequal reward to risk and effort at work.[4] Thus, for the purpose of the relation between economic growth and income inequality, one should add the relation between income inequality and social mobility. High inequality combined with high

[3] The Gini coefficient of consumption could be estimated for Brazil through the Consumer Expenditure Survey (POF). However, while the survey has nationwide coverage in 2002/2003 and 2008/2009, in 1995/1996 it covers only six metropolitan regions.
[4] Evidence supports a negative correlation between inequality and social mobility as, for example, in Bozeat, Irving, Ramos, Vincze, Juravle, and Jesuit (2010); Aaberge and Mogstad (2011).

mobility might indicate reward to entrepreneurial risk and effort at work, behaviours that accelerate economic growth. In contrast, a social setting of high inequality coupled with low mobility reduces economic growth, as it increases risk aversion, leading to lower investment and reducing incentives for greater effort at work. Brazil and India have low social mobility compared with the USA for example, which is another argument in favour of governmental interventions to reduce income concentration.[5]

The fifth argument is related to demographics and its evolution. Studies show that, should inequality rise with the cohort's age, societies whose population is older will tend to exhibit higher inequality than those with a younger population (Higgins, Williamson, 1999). This is likely to be the case for Brazil, where there is an accelerated trend toward population ageing. Both in Brazil and in India the population in the early 1990s was basically composed of youths aged 24 or less, respectively, 54.6 and 57.0%, while the elderly (65 years-plus) accounted for only 4.4% and 3.8% of the population. In Brazil, this picture is now changing, with a predominance of the adult population in the late 2000s, 49.2%, against 44.3% for youths; and a growth in the proportion of elderly people, 6.6%. This is less true in India, where the young population is still predominant, 51.1%, while the elderly account for 4.8% of the total.

Lastly, it is worth noting that greater income dispersion is generally accompanied by rising inequality in terms of distribution of and access to health services, education, and basic infrastructure. Still, poverty-targeting policies can offset this behaviour, as they may reduce concentration in the provision of such public services and widen access to the poorest, regardless of a high income-inequality social environment.[6]

2. Labour market segmentation

The labour market's occupational structure depends largely on the economic growth pattern, which in turn is conditioned by social institutions. The labour market's dynamics and structure will have a decisive influence on the outcomes, the rate and speed of occupational and social mobility. In this context, labour market segmentation theory seeks to create a description and an analytical framework to explain relations between labour market and occupational and social mobility.

The original literature on labour market segmentation divided this market in two sectors: primary and secondary. The primary labour market comprises jobs offered by large companies exhibiting high capital-labour ratio and productivity, acting in oligopolistic markets, often in conglomerates and on a global scale. These companies have clearly defined rules on people management and follow practices designed to retain their workforce because a considerable part of the cost of labour can be considered fixed cost given the quantity of human capital they transfer to the workers.

Provision of such jobs is accompanied by a career plan, stability, on-the-job general and specific training, likelihood of personal development and, especially with regard to the market, high wages plus an array of benefits and high retirement schemes. These constitute the best jobs on the labour market. The recruiting and selection methods applied by these companies, in addition to job quality and high total remuneration, tend to attract a workforce

[5] See, among others, Munshi and Rosenzweig, (2009); and Behman; Gaviria and Szekely (2001).

[6] This proposal is advocated by the World Bank in its 2006 report. An analysis of the importance of applying this proposal to Asian countries can be found in Son (2012).

exhibiting high schooling, adequate profile for each position, and highly motivated toward self-development.

This sector can also be divided into two subsectors: independent or creative (upper) and dependent or routine (lower). The first one is formed by planning, command, and supervision jobs, thus corresponding to the higher hierarchical layer of the companies' professional careers. The second one comprises clerical, operational, and administrative jobs subject to administrative supervision and control.

Secondary labour market jobs are offered largely by smaller firms or family enterprises in competitive local or regional markets. Investments in technology are restrained due to low profitability and limited credit access, suffer with demand fluctuations, and go virtually unplanned. Thus, secondary labour market jobs are offered by companies or activities where working conditions are often below recommended standards, many of them franchises or subcontractors, with low wages and few indirect benefits. These jobs have low entry barriers, require less qualification, training is characterized by learning by doing or training in the job, and vertical rise is limited. Trade unions, where they exist, are hardly active, while labour contracts are often not in compliance with the labour code in force. All these characteristics lead to high turnover and low incorporation of human capital at the workplace, which tends to restrict a worker's entry into the primary labour market sector.

In order to address all forms of workforce entry and sources of income, two further segments must be added to the primary and secondary labour market: Self-employed work, autonomous and independent, and domestic service (Cacciamali, 1983).

Self-employed workers are those producers who sell their goods and services directly to the market, using working tools that they control and specific knowledge. These activities and jobs have not been entirely taylorized,[7] even though they may be constantly threatened by the strengthening of capitalist companies that might push them out, temporarily or permanently, from the market. This is a labour market segment in which each activity and/or job involves a high level of heterogeneity in working conditions and pay, depending on these workers' markets. This is the case for crafts and arts, technical services, maintenance and repair services and personal services, among the most important. Some of the activities that can be performed by the self-employed are formally or informally regulated by trade unions or associations that create entry barriers. In addition, part of this segment is made up of workers who are either seeking to learn in one of these fields, or workers who, for lack of adequate schooling or a given skill, deliver low pay services or take on casual jobs.

The domestic workers segment is composed of service providers in a number of occupations whose income, as in the previous case, depends on the market layer to which the services are being delivered. In Brazil, this activity is regulated by Federal Law under the supervision of associations or trade unions, following ILO Convention 189.

We should emphasize that the literature on the labour market of developing countries often uses the term "informal sector" despite a lack of consensus either in the literature or the theoretical framework and its definition. We can point out at least three ways of describing this sector. The first one corresponds to domestic services, self-employed workers in low pay activities and workers hired without respecting the labour and social security legislation. The

[7] Meaning work that is divided into elementary tasks to increase operational efficiency.

second one corresponds to the entire workforce without registration in labour and social security bodies. And the third definition is focused on the analysis of each group per se: self-employed workers/micro family firms; domestic services; and wage workers with no contract.[8]

Labour market segmentation theory disputes the hypothesis that labour market differences arise solely from the workers' characteristics, productive attributes, or income-leisure preferences. Followers of this theory oppose, therefore, the conception of a homogeneous labour market where competition between buyers and sellers of work prevails and where wage differences are either due to differences in human capital between workers or by their preferences or by compensation for the risk exposure that certain jobs entail.

The tenets of labour market segmentation theory lie on three axes: division of labour driven by the corporate dynamic, which creates groups of workers who do not compete against each other in the labour market; factors influencing job supply and reactions to the job supply; and the impact of the labour market's social institutions.

First of all, this differentiation arises from geospatial factors, the type of industry, and the type of occupation. These three dimensions in themselves imply a need for large investments in human capital to permit job change.[9] If we add to these factors the effects of the formal and informal practices often adopted by companies and workers in the labour market, workers' mobility can be severely restricted.

Companies, especially for those positions requiring heavy investment in training, detail and deepen their job descriptions by specifying tasks, knowledge, and skills, and/or pay higher wages with the aim of reducing their more skilled workers' turnover. Workers of a given industry and/or occupation, in turn, often control their respective job market by creating barriers to entry, and establishing minimum qualifications and experience requirements, in an effort to drive pay increases.

Capital-intensive technological changes (Vietorisz and Harrison, 1973; Szirmai, 2005) further segment the goods market and the labour market, thus creating technological divergence rather than convergence and widening productivity gaps between the lesser and more dynamic sectors. The primary market's high wages lead to the adoption and innovation of capital-intensive techniques but, instead of reducing wages via reduced demand for labour (neoclassical model), investments in human capital run parallel to investments in physical capital. These reactions prompt increases in productivity due to a combination of machines, methods, and labour force skills and, ultimately, pay rises. In contrast, in the secondary labour market the ongoing use of labour-intensive techniques and the low level of investment in human capital inhibit productivity growth, while wages lag behind.

Lack of access of the less favoured to the primary sector labour market, interpreting Vietorisz and Harrison (1973), arises from a range of factors – lower educational level and quality; shorter vocational training; and patterns of work behaviour acquired in the secondary segment. For the employer, hiring workers from the poorest social strata entails higher

[8] In the last definition the segment of wage workers without formal contract can be denominated "informal labour market", because the self-employed are considered part of the goods market (Cacciamali, 2011).
[9] Spatial shifts require investments in migration, while shifts between industry sector require investments in education, training, and specific skills.

training costs (learning by doing or training in the job), higher costs arising from workforce turnover, and greater risks due to instability-driven labour and employment habits.

The State becomes an intervening factor in the labour market though its regulation of the employment relationships, which may be extensive or confined only to some of its basic characteristics. The most common public interventions include regulating the use of the labour force, type of contracts, and access to public social security; the setting of general conditions whereby work can be performed; issues related to health and safety at work; and the establishment of a minimum wage. In Brazil, in addition to these interventions, the State regulates and funds the trade union structure. In India, the main trade unions are linked to political parties, thus prompting multiple organizations to defend the rights of the same group of workers. Furthermore, the primary source of funds is derived from yearly fees paid for by the unionized workers, such that most Indian trade unions face a funding problem due to their low membership.[10]

Trade unions and workers' associations, in turn, are the leading actors of the labour market. By reacting to or acting proactively in face of corporate strategies, they can establish formal institutions for all workers or introduce practices limited in scope to their particular constituency. In the latter case they prompt different results for unionized or nonunionized workers, even among those who exhibit similar personal characteristics and productive capabilities.

In short, employment level, wages, working conditions, and occupational mobility in the labour market are driven by operating circumstances and variables that go beyond individual characteristics and productive attributes.

It is worth noting that dual theories in social sciences have guided analysis of the economies of the underdeveloped countries since the 1950s, and are still revisited today.[11] ECLAC in the 1950s, for instance, laid down the centre/periphery paradigm in order to understand economic relations between Latin America and the industrialized countries, and set forth the concept of structural heterogeneity to account for the gaping differences in productivity levels across the region's economic sectors and territories. The globalization process after the 1980s further strengthened the use of dualistic analysis to explain contradictions across countries, regions, and territories stemming from a greater integration of given economies to the world economy and to technological processes. Moreover, dualism is also oft-used approach to analyzing gaps across territories and social groups, or derived from technological processes.[12]

In this study we consider that the dualistic approach, although it is a powerful instrument for describing a phenomenon, has at least two limitations: it obscures the causes of the inequalities between core and peripheral economies; and it ignores the relationships that can integrate or can segment these economies either among themselves or between themselves and the world economy. As we saw in section 2, the structure of production of different

[10] More details at http://www.whatishumanresource.com/problems-and-measures-to-strengthen-trade-union.

[11] See also the more detailed discussion in section 2.The literature ascribes to Julius Herman Boeke (1953) the creation of the term *dual economy* to characterize the economy of underdeveloped countries. The concept separates economies in two or more segments depending on their development, technology, and demand patterns. The social implications thereof are the creation of social groups distinguishable by their living standards. This approach was widely used, for example, to challenge the functionalist theory in sociology and the neoclassical theory in economics. See, among others, Sundaram (2005).

[12] This has been applied to a range of different structural differences, including rural/urban, manufacturing/agricultural, modern/traditional, protected/unprotected, formal/informal.

countries and their labour relations are generated by the dynamic of the dominant productive activities that create, transform and recreate the relations of production into the world economy. This method of approaching the relations of production, in their totality and in their dissimilar expressions as well, can be applied within a territory at any level of analysis, such as, national, regional, or local. The dynamic of the dominant productive activity determines the structure of production and shapes all sets of relations of production. No “traditional", "archaic" or "whatever" sector can be created by isolated forces; a single productive dynamic structures the whole productive system and the economic role of each part of it.

In this context we will analyze the shape, behaviour and the relationships between rural and urban labour markets, or among different economic activities or segments of the productive structure and the labour market. We will consider that the primary and secondary labour markets are interconnected, although the passage of a worker from the second sector to the first depends on whether labour market conditions are favorable for the supplier of labour, that is, whether there is a continuous and dynamic economic process that may create high demand for labour in an environment of moderate demographic growth. Still, the likelihood for any worker of moving from the secondary to the primary sector will also depend on the provision of training and capacity building and on the adaptive capacity of workers and employers to the new setting.

3. The value of democratizing education

An unequal distribution of assets is the primary factor of the persistence of social unfairness. In this field, the specialized literature has considered land and education as the most important determinants of income inequality, yet we cannot neglect the importance of financial assets and urban property as well. Since colonization, Brazil and India have exhibited a worse-off distribution of all these assets when compared to many other countries (Acemoglu, Johnson and Robson, 2001).

The educational system became the paramount social institution of the 20th century due to the social mobility attained in countries where secondary schooling was made universal and due to its contribution to economic growth. The seminal study by Schultz (1961) on the rapid reconstruction of the countries defeated during World War II established definitively the positive relationship between the accumulation of years of schooling and economic growth. Human capital theory has been widely used to explain country-level poverty, or wealth, and unequal distribution of income, the latter reflecting unequal distribution of education.
In short, the argument on the relationship between income concentration and the unequal distribution of education is based on the fact that low wages are the counterpart to the low marginal productivity of workers who have had little or no schooling. On the other hand, workers who earn high wages/salaries, often above their marginal productivity, are earning a bonus arising from the shortage of a more educated/skilled workforce.

There is a positive correlation between Gini coefficients of education and income. In Brazil and India the effects of deficits in or unequal distribution of education are compounded by low intergenerational mobility. The increase of income subsequent to the completion of secondary school is extremely high; and it is known that people in the bottom quintile of the income distribution hardly attain this level. These facts contribute to understanding not only the long-term constancy of income inequality, but the low mobility of education itself as well.

The opportunity cost of school attendance for children from poor families is high. It corresponds to the income they can earn at work, which can be an important part, and sometimes an essential one, of the family income, especially in hard times. So it is not difficult to understand why school dropout rates are high among children and teenagers of lower social strata. This is the main reason for the Conditional Cash Transfer Programmes (CCTs), dependent on school attendance, that have been implemented in Brazil since the late 1990's.[13]

CCT programmes, coupled with other public programmes designed to reduce asymmetries in the credit market, can decrease the school dropout rate of the poorest, as well as increase their access to higher levels of education, including to technical and university courses (Soares, 2012). We must consider, however, that even when this occurs, there are other factors that can limit the social and intergenerational mobility of the poorest.

4. Is social class a trap? The intergenerational reproduction of inequality and poverty

Social class is one of the main sources of inequality. A family's wealth, including the human, social and cultural capital of its members, tends to reproduce intergenerational poverty. The level and, above all, the quality of education are influenced by social class, which directly affects job opportunities, earnings, and upward social mobility (Arrow, Bowles and Durlauf, 1999).

Families with more human capital tend to participate in the labour market in the higher occupational layers of the so-called primary labour market, earn higher wages/salaries and, consequently, invest in their children's education. Conversely, many poor families participate in an unstable way and in lower quality jobs in the secondary labour market and often depend on their children's work to complement the household's income. In extreme cases a child may quit studying in order to work, thus compromising her chances of getting better jobs as an adult, and so reproducing the poverty cycle (Basu, 1999).

The economic and social heritage of the family influences the choice of professional careers. Bourdieu (1999) argues that representations of the social division of labour are internalized during childhood within the family, social networks and social institutions, and especially in the school system. The social and cultural capital of the poorest is different from what is expected of those who occupy the best jobs in the labour market, so they will usually choose professions, careers and jobs they believe are more suitable for them. This self-discriminating behaviour, together with other socially-driven discrimination mechanisms, restricts social mobility in general, particularly intergenerational mobility (Bordieu and Passeron).

The literature shows that the offspring of poor families tend to apply for easier-to-enter courses/careers, usually in lower ranking colleges. These youths lack the skills and knowledge required to apply for and be admitted into more demanding courses requiring, inter alia, speaking and written proficiency, knowledge of a foreign language, reading and research habits, more study-intensive procedures (seminars, reports, summaries), autonomy in searching for knowledge, information technology skills, access to a library, use of cultural equipment and, often, background knowledge.

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[13] The Bolsa Escola was created in 1995 at the municipal level in Campinas and Brasilia, reaching 60 municipalities in 1999. By 2001 the programme had been implemented at the federal level. It functioned until its incorporation into the Bolsa Família Programme in 2003.

Most college students from lower-income families have attended public schools that, generally, are lacking in these aspects and have not developed skills and knowledge at home. Therefore, the poorest college entrants face the difficult task of adapting to their classes, keeping track of subjects, and finishing their courses, while often working at the same time.

Yet, the offspring of the middle and higher socio-economic layers have other opportunities, as their families have invested in their education. Additionally, better-off college students live in a social environment with cultural and socializing spaces that contribute to enhance their knowledge. Their parents share influential sociability networks that benefit their offspring when it comes to entering the best universities, the most prestigious courses, and the best careers.[14] Moreover the middle and higher layers of the social hierarchy value education, keep track of their offspring's school work, and choose tutors to orient their children's careers. Children and youths from the more popular layers neither enjoy the same conditions nor the same social capital. [15]

Thus, though democratizing the educational system is a necessary step, it is by no means sufficient. Entrance into the school system must be provided by the public school system from pre-school for the purpose of overcoming nutritional, socialization, and cognitive shortcomings. The provision of education must be standardized to enable satisfactory quality for all.[16] In the case of the poorer students, the literature also suggests the need for measures designed to overcome the tensions brought about by the deficiencies accrued and to facilitate their re-signification in the university environment. In general, these analyses suggest that higher education institutions need to build preventive actions to support these students throughout their college years if they are not to drop out.[17]

Social class is not the only source of inequality; other elements must be added to complete the picture. Gender, race, and religion are among the most important societal aspects when it comes to social discrimination, occupational segregation and restrictions on social mobility. It must be underscored that each of these aspects is not dealt with in isolation, as they are mutually reinforcing.

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[14] The term socializing is being used to refer to the "process of mutual influence between the person and the social milieu... there from stems an acceptance of models of social behaviour... the personality is formed... under the influence of, among others, educational, family, religious institutions." (Birou, 1982, p.380). The concept of sociability follows the definition by Simmel, that is, values and behaviours acquired by way of more flexible relations than those set by institutions, such as friends, social groups and networks; in short, socialization's play-form, the outcome of which depends on the personalities interacting in a given environment, with no goal or result set a priori (Boudon, Besnard, Cherkaoui, Lécuyer, 1990; p. 226). For the theme addressed here, group conversation may seem like peer exchange of experience, yet it may be discriminating depending on the subject chosen by the group for the conversation.

[15] The concept of *social* c*apital* follows Bourdieu, i.e. the resources mobilized on a daily basis by the individual within a social space. "The volume of the social capital possessed by a given agent thus depends on the size of the network of connections he can effectively mobilize and on the volume of the capital (economic, cultural or symbolic) possessed in his own right by each of those to whom he is connected." (Bourdieu, Pierre, 1985; p, 241-58). It is worth stressing that living within the same sociability, social capital, network does not necessarily lead to the same result.

[16] The measures usually recommended refer to increased number of adequately qualified teachers in an upward mobility career earning competitive pay; pay and social prestige incentives to attract qualified teachers to depressed and/or inhospitable regions, zones and areas.

[17] In Brazil there are two federal programmes aimed at including the poorest, blacks, colored, and indigenous people into higher education: Grants (full or partial tuition plus maintenance costs) to private universities; and quotas to federal universities. The federal universities adopt programmes to support quota programme new entrant students to overcome poor knowledge of foreign languages, improve speaking and writing, acquire core curriculum knowledge and develop greater autonomy to study and research.

5. Discrimination and segregation

Differences between women and men are important drivers of social inequality. Wage gaps have narrowed in most western countries' labour markets since 1980, but not all countries have managed to reduce the level of discrimination, especially concerning better jobs, i.e., CEO, CFO, and even mid-management and supervisory levels.

Wage differentials between whites and non-whites have also declined in western countries, at a higher rate than the decrease of wage gaps between women and men. Considering sex and skin color, the literature provides evidence on the adverse conditions of non-white women in many labour markets. They carry both forms of prejudice: being non-white and women.

Becker (1957) contends that discrimination in the labour market is derived from non-economic subjective preferences, among others social prejudice and cultural and religious values, and surfaces in the labour market when an employer considers characteristics not associated with the worker's productivity to pay a lower salary or even not to proceed with the recruitment. Furthermore, Arrow (1972) and Phelps (1972) broaden this approach by considering labour market information asymmetry, which leads employers to discriminate by sex or colour in the absence of direct information on worker ability.

Since human capital is hard to measure, employers resort to indirect measures. Thus, if in a society conventional wisdom states that people from a given group are recognizably less schooled than others, the employer might use this information to screen the workforce. This reasoning is common when accounting for the situation of women, since they dedicate part of their grown-up life to looking after the family and children and, therefore, invest less in human capital. In parallel, the assumption that men and women possess different skills is also at the heart of occupational segregation. Davies (1982) and Hakim (1994) show for instance how the sexual division of labour took place naturally throughout history, since certain jobs call for particular skills for which either men or women are regarded as better adapted. To these authors, this is mirrored in the gender-based job structure, as many occupations are currently, both socially and culturally, considered male or female.

In Brazil there are several studies on this matter. Leme and Wajnman (2000) observed the gender-based wage gap reduction in the 1990s, when men earned 25% more than women as compared with the 1970s, when men earned 70% more. The downward trend in discrimination and wage gap, especially in the 1990s and the 2000s, was also studied by Bohnenberger (2005), Matos and Machado (2006), Oliveira and Rios-Neto (2006), Barros, Franco and Mendonça (2007), among others. Additionally, studies by Soares (2000) and by Cacciamali, Tatei and Rosalino (2009) point out that in Brazil sex discrimination is more pervasive than discrimination by color of skin. Estimations indicate that white women are discriminated against in the labour market, while black men are discriminated against before the labour market due to poorer schooling. In contrast, black women are discriminated against on the basis of both factors.

Labour market segregation mainly affects women, who are faced with constraints and prejudice to perform activities and occupy jobs that are considered male by society. In general, "female" jobs tend to pay lower salaries and offer poorer promotion prospects, further worsening labour market inequality (Fresneda, 2006). Still, labour market segregation is simultaneous with discrimination, in that the two phenomena interact. Yet, as discrimination often appears separately, less effort is made by the literature to focus on occupational segregation. Some studies in Brazil, however, analyze this issue. Oliveira (2003) estimated that 40% of the workforce would need to be relocated for a sex-equitable distribution to be attained in the metropolitan regions; while King (2009) observed that segregation by sex is greater than segregation by the color of the skin, especially among those with more schooling.

In general, evidence of discrimination and segregation can be found in both countries, yet in Brazil the problem is more concealed, while in India this gap is more apparent, especially among women from the scheduled and backward castes.

Kundu (2003) found that many employers, mostly men, believe Indian women are less qualified, competent, and productive than their male peers. Even women recognize their more limited chance of promotion and wage increases. This discriminatory perception against women persists despite all the evidence of the negative impact of sex discrimination on the economic development of the country. Esteve-Volart (2004) observes that the fact that women do not hold managerial jobs leads to distortions in the allocation of the most talented and reduces the propensity of women to achieve higher schooling levels. As half the population is 'discouraged' from investing in education, this reduces GDP per capita growth in the long run.

Social and cultural aspects are also critical in this matter. Das and Desai (2003) observe that women are encouraged to drop out of school and to quit work to dedicate themselves to the family, especially among those of a higher socioeconomic status. Moreover, Banerjee and Knight (1983) have found evidence of discrimination against scheduled castes, especially by segregating them in more poorly paid and less qualified jobs. The situation gets worse for low caste women, since they are the constant targets of violence, in addition to facing unequal access to public and legal services, among other social constraints (Barbour, Palikovic, Shah, and Narula, 2007). Among others, Das (2005) shows that only 20% of Muslim women participate in the labour market, whereas the majority is relegated to domestic work.

6. Final remarks

In the past decade, Brazil's economy grew at 3.3% per year, with an employment elasticity of 0.8 and reduction in household income inequality. India's economic growth was almost double that of Brazil, 7% per year, but with an employment elasticity much lower that that in Brazil, 0.3, and an increase in household income inequality (OECD, 2011).

The tendency for inequality to decline in Brazil has been attributed to a synergy produced by a number of factors that aim to create opportunities for the poor. We must mention the importance of the pattern of economic growth, focused on economic openness and on the consumption of the poorest; the increase of skilled labour supply ; the reduced pressure of younger age cohorts on labour supply and the greater access of youth to the school system; distributive social programmes, such as the active policy of minimum wage, credit expansion, more access to public health services , housing and education; programmes against race and gender discrimination; and programmes to combat poverty, such as the programmes of Conditional Cash Transfers, of non-contributory social security transferences to the old poor population and the expansion of rural pensions, especially focused on regional inequalities.

Indian socio-economic policy in the same period has been less articulated at the National level than in Brazil and has focused more on programmes to combat poverty and the inequities of the caste system than in programmes that aim to redistribute income. The accelerated economic growth tends to produce dramatic structural changes in production and in the labour market. One consequence has been a deep segmentation between the most dynamic economic activities and the most dynamic regions and the others. The main cause of this phenomenon is the differences of productivities, wages and labour relations that are created between activities and regions and that are intrinsic to the economic growth process. Following the historical experience, as well as theoretical propositions, an effective way to decrease the level of inequality is to ensure that macroeconomic and fiscal policies improve income distribution, and to continue programmes that increase opportunities for the poorest, especially the access to the school system and to labour markets.

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IV. Labour market institutions and policies: A comparative study framework

This section deals with labour market institutions and policies with implications for labour market outcomes in general and inequality in particular, and examines them in a historical and analytical framework. The focus of this section is institutions like trade unions, employers' associations or associations of business and commerce, labour laws and other labour market regulatory regimes like minimum wages. There are social and other non-economic institutions, like caste and class in India, class and race in Brazil, gender in both Brazil and India, party politics, pressure groups, constitutional set up, and so on, which also play an important role in determining labour market outcomes. There is also a wide range of policies with implications for labour market outcomes. For example, most of the macro-economic policies have some implications for labour market outcomes. However, there are specific policies like industrial policies, technological policy, education policy, investment policy, credit policy, which directly affect labour market outcomes in general and inequality in particular. This study will focus on those policies with direct impacts on labour market inequality.

The problem of labour market inequality has increased in recent years, and is often attributed to structural economic changes; the transition from the primary sector-dominated economy to the secondary and tertiary sector-dominated. The nature of the labour market changes with the change in the structure of the economy. So do the labour market outcomes. The problem of labour market inequality is more of a concern in an economy dominated by the secondary and tertiary sectors than on dominated by the primary sector. The issue of income and wage differentials is more noticeable in the secondary and tertiary sectors. Labour market segmentation is primarily a phenomenon of the secondary and tertiary sectors, and less than that of the primary sector, except in the plantation sector and in mining. The formal-informal division is also applicable more in the case of the secondary and tertiary sectors than in the case of the primary sector.

The nature of the economy of both Brazil and India has changed dramatically since the 1990s. With the changes in the structure of the economy, the issue of labour market inequality has become more noticeable, and raised academic and policy interests in the institutions and policies with implications for inequality. This study, therefore, looks into the changes in institutions and policies affecting labour market inequality within a larger historical canvas.

Both Brazil and India were once colonial countries, but with different independence paths. The first became independent in the early 19th century following the collapse of the so called Iberian colonial pact, while India conquered its independence only during the post-Second World war period. In India, the origin of many of its labour market institutions and policies is found in the colonial period. An elementary form of modern labour market came into existence with industrialization and other policies adopted by the colonial government. So was the case of labour market policies and in particular the regulatory regime. On the other hand, Brazil has consolidated its labour institutions since the 1940s, after a long period of social conflicts starting at the beginning of 20th century, mostly in urban areas, and inspired by European experiences and pressed and induced by international laws.

The 1950s was important for both countries for other reasons as well. Apart from the political development at the national level in India, there were various other developments in the field of industrialization, growth of the service sectors, and rapid expansion in the volume and value of global trade. These structural changes had profound impacts on labour market conditions in both the countries.

In Brazil this period was characterized by the enlargement of the urban labour market and by a limited and partial enforcement of labour standards, but in a labour market that was segmented sectorially and spatially. In India, a new institutional and policy regime came into existence after Independence, but the historical origins of labour market institutions and policies could be found in the colonial period. In view of this, the point of departure for our study is the period after the Second World War, although the main thrust of the analysis is focused on the period since the 1980s.

While examining the labour market institutions and policies, the main question that is asked here is: how have those conditions of the labour market been formed in Brazil and India? What are the main institutional and policy determinants? And how have these institutional and policy regimes influenced labour market outcomes, in particular inequality in both the countries?

1. Defining labour market institutions and policies

"Labour market institution" is a broad concept. Solow (1990) defines the labour market as a social institution and argues that non-economic/non-market institutions play an important role in labour market outcomes. Against the broader perspective of Solow, a Marshallian view of the labour market would be confined to the economic determinants and outcomes and would treat the wage rate as the main variable of interest.

We will use the term labour market institutions to refer to the set of rules and regulations, norms, organizations and patterns of behaviour which determine broad labour market conditions. We will concentrate on those institutions of the labour market which have a direct relationship with economic and labour market inequality.

The scope of labour market policies is wider in the contemporary context. Again contrasting a narrow and a wider perspective, one can identify a variety of policies with implications for labour market outcomes. A wide definition would include all the policies of the state and government that have direct impacts and influences on labour market conditions. These policies could be related to agriculture, industry and service sectors, demography, education, employment, technology and trade, investment and credit. This study, however, will focus on those policies which have a more direct relation with labour market inequality. These may include industrial policies, technological policy, education policy, investment policy, credit policy, policy related to wages and employment promotion policies.

2. Some important l abour market institutions

The role of labour market institutions varies with labour market context and conditions. For example, the role of trade unions in setting the wage floor in an economy is greater in the country where the formal sector dominates the economy. Similarly, the role of the business and commerce associations in determining the labour market conditions is greater in a country where the economy is dominated by the secondary and tertiary sectors. India's urban economy is dominated by the secondary and tertiary sectors, but the labour market conditions are still greatly influenced by the primary sector. This is much less the case in Brazil.

Trade Unions
Trade Unions (TU) have been historically one of the most important institutions of the labour market that promote and protect the interest of workers in an organized manner. The role of trade unions has been significant in raising the wage rate and improving working conditions in the developed industrial countries of the world. But this has not happened in the same way in the developing countries. For example, in India, the role of TU has been limited, as it is mostly found in the organized sector, and the organized sector employs only about 8 percent of all workers (NCEUS). Moreover, the role of trade unions has been significant in the manufacturing and service sectors, but not in the agricultural sector, even though there are strong organizations of farmers like Bhartiya Kisan Sabha, Shetkari Sanghathan, etc. Understanding the role of the farmers' union would be important in India, as agriculture continues to employ the majority of workers in spite of its decreasing share in GDP (only 14.1% in 2011-12; Economic Survey 2013).

On the other hand, in Brazil, trade unions have played a greater role in influencing market wages, as a result of both the nature of trade unions and the pattern of non-farm employment; in Brazil, the unorganized sector does not dominate employment as it does in India. The functioning of trade unions in Brazil is also quite different. Trade unions are present in every formal business and enterprise, and since there is a mandatory annual reporting of the status of employees, it is easy to monitor the status of trade unions in Brazil. However, the corporatist nature of the economy constrained collective bargaining for many years. Independent national trade unions only appeared in the early 1980s in the course of the process of redemocratization.

The origin of trade unions in India goes back to the colonial period. The first national organization, the All India Trade Union Congress (AITUC), was created in 1920; it acted as a national federation of small unions across the country. However, it was only in 1926 with the passing of the Indian Trade Unions Act, 1926, which allowed any seven workers to combine in a trade union; that trade unions acquired a legal existence. Soon after, the AITUC split, most of the leading political parties formed a trade union of their own and the Indian National Trade Union Congress (INTUC) affiliated to the Congress Party came into existence. At that time most of the unions were organized at a plant level and had affiliations to larger bodies. During the colonial period the trade union movement became an important platform for the larger independence movement in India. At present the major trade union federations are the Indian National Trade Union Congress (INTUC), All India Trade Union Congress (AITUC), Centre of Indian Trade Unions (CITU), Hind Mazdoor Sabha (HMS), Bharatiya Mazdoor Sangh (BMS), Hind Mazdoor Kamgar Party (HMKP), United Trade Union Congress (UTUC) and the United Trade Union Congress Lenin Sarani (UTUCLS). These federations, which all have political affiliations which affect their activities, exist alongside a number of small, unaffiliated unions.

With increasing contractualisation of work, there is a tendency for employers to replace permanent jobs with low-paying contract workers, which also results in a fall in union membership. In contrast to Brazil, there has been a decline in not only the strength of trade unions in India, but also in overall membership even within the formal sector where trade unions are most present. Only 2.77 percent of workers in India are members of any trade union (NCEUS). There are approximately 84,000 registered trade unions in India, of which 9000 are regularly filing returns.

Apart from trade unions of wage workers, there exist membership-based associations of self-employed workers such as the Self Employed Women's Association (SEWA), which works primarily with women workers involved in street vending, home-based work and domestic work, and the National Alliance For Street Vendors In India (NASVI), which works exclusively with street vendors and hawkers' organizations. They are also important players in the labour market. SEWA is now recognized as one of the major unions in the country and has also started several financial and other welfare schemes for their members as most of these workers are deprived of any social protection scheme. There are also some advocacy groups and non-governmental organizations that in a sense play role similar to those of trade unions.

Literature on the impact of trade unions on income inequality takes divergent positions. There are some who argue that trade unions promote equality of wages and income through ensuring (a) uniform wages within firms, (b) uniform wages across firms; and (c) reduction in the wage differentials between skilled and non skilled workers. As against this Pettengill (1980) and others argue that trade unions promote wage inequality because they raise the differential with the non-unionized sector. In case of a country like India where the trade unions reach only a very small proportion of workers and mostly in the organized sectors, they are able to push their wages, but this does not ensures automatic increase in the wages of workers of the non-unionized sector.[18]

Organized trade and business associations

Organized trade and business associations are phenomena of modern industrial societies, and are important institutions of the labour market. De Silva (ILO, 1996) categorizes associations of employers into three types. The first includes trade and business associations which primarily protect the interests of business, trade and commerce through lobbying and mobilizing collective strength to influence the social, economic and political settings under which policies related to trade, investment, tariffs, etc are framed. These organizations are a kind of trade unions of employers and work for the promotion of the collective interests of owners (capital). The role of these organizations is significant in the sense that they are able to influence the government's policies related to taxation, industrialization, access to finance (banking and insurance), etc. All these have direct impacts on labour market conditions including on labour market outcomes such as the level and inequality of the wage rate. In India, the Confederation of Indian Industry (CII) and Federation of Indian Chambers of Commerce and Industry (FICCI) are two national level organizations that fall in this category.

The second type of organization aims to protect the interests of employers' vis-à-vis workers in the area of social policy. These organizations are also called employers' associations and their main goal is to ensure that their interests are adequately protected under the labour market related social policy regime. For, most of the social policies are in favour of workers, but the cost is generally borne by the employers or the state. The employer's associations try to ensure that this burden to the greatest degree possible falls on the state or directly on workers.

De Silva identifies a third type of employers' association which combines type one and two.

In India, there is a strong presence of the first type of organization. The CII and FICCI have been in existence for long and have played an important role in influencing economic policies

[18] See Parsley 1980 for a view of literature on trade union's effects on wages.

of the government. Stanley Kochanek (1966) has done a classic study of interaction between business and democratic politics in India. More recently, there are a number of other studies (Kochanek, 1996; Rob Jenkins, 2000; Atul Kohli, 2010) that suggest that these organizations have also important role in influencing the course of economic reforms in India in the liberalization phase.

In Brazil the third type of organization is found, such as the National Confederation of Industry (CNI), a nationwide industry association, and the Federation of Industries of the State of São Paulo (FIESP), representative of the most industrialized state in the country. The CNI was particularly important as political leadership for the industrial organization and has actively participated in the formulation of public policies that directly affect the industrial sector.

Wage-fixing institutions

In India, up to the 1990s, most regular jobs were created in the public sector, especially in the different departments, organizations and undertakings of the central and state governments. Although public sector employment has declined in recent years, it continues to dominate the formal and regular employment in India. The wage structure of the workers of the government sector is determined by a body called the Pay Commission, that fixes the wages of government employees every ten years. So far, six pay commissions have been formed, and have submitted their recommendations which have been accepted by the central government and followed by the state governments. The recommendations of the pay commission thus play a crucial role in determining not only the wage structure of the formal and regular workers, but also influence the wage floor in the labour market and income and wage disparities in the labour market. The last two pay commissions have been very generous in their recommendations and as a result the income and wage disparities between the regular government and casual and private workers have increased significantly.

While there are pay commissions for the regular workers of the government sector, there are also occupational wage boards, such as the journalists' wage board that determine the wage structure for journalists and other workers employed in the media. But such occupational wage boards are limited in number and do not cover a large number of other such workers employed in the private sector.

A major instrument of regulating and fixing the wages of casual workers either in the private or government sectors is the Minimum Wages Act 1946. However, there are serious implementation related problems, in part because of the poor organization of casual and informal sector workers. There is a fairly substantial literature on the impact of minimum wages, but while some addresses the impact on poverty there is relatively little evidence on the effect on inequality overall. Brown et al (1982) reviewed the literature dealing with the impacts of minimum wages on labour market. They also emphasize the impacts of minimum wages on employment and unemployment, which could be a source of income inequality. Ralph Smith and Bruce Vavrichek (1987) analyse the specific impacts of minimum wages on income and poverty.

Labour laws

We include under labour laws those laws that govern and regulate capital-labour relations. These are important labour market institutions and can be classified into two broad categories:

(a) Regulatory labour laws
(b) Protective labour laws

Under regulatory labour laws, we include those laws that regulate the conditions of employment and provide the regulatory regime for labour-capital relations. In India the Minimum Wages Act, 1948, Factories Act, 1948, Trade Union Act, 1926, Industrial Dispute Act, 1947, Child Labour (Prohibition and Regulation) Act, 1986 etc are examples of regulatory labour laws.

Under protective laws, we include those labour laws that govern working conditions, and provide social security and other protection to labourers. Under protective laws, we include laws like Provident Fund Act, 1952, Employees State Insurance Act, 1948 Workmen Compensation Act, 1923, etc.

In Brazil labour relations have been regulated by the Consolidation of Labour Laws (CLT) since 1943 with little change. This legislation is quite complete and it involves norms on individual contracts, work conditions, occupational health, union structures for employers and employees, collective bargaining and labour courts, among the most important aspects. However, it left out of its scope important sectors of workers, mainly in the rural areas and in the informal sector in the urban areas. We must also mention the Constitution of the Federative Republic of Brazil, 1988, which guarantees the basic social rights of workers, extending its scope.

An additional function, in some cases a by-product of labour laws is the collection of data which provide feedback to policy makers on the working of the law. They also provide useful data for labour market analysis.

There are debates in India about the role of labour laws in influencing the labour market outcomes. The debate extends to the larger macro-economic implications of labour laws and has become a bit polarized. This debate has become sharper in the era of economic liberalization and high growth rate. The protagonists (Bhagawati and Panagariya, 2013) of liberalization have taken a position that India needs to push forward the second generation of reforms that include labour laws for sustaining high growth rate in the longer period. They also argue that the answer to the problem of jobless growth lies in the nature of labour laws. To them reforms in labour laws, in particular the Industrial Dispute Act, 1947, would go a long way to supporting the expansion of the manufacturing sector. They emphasize the 1982 Amendment to the Industrial Dispute Act that has made it very difficult for companies employing more than 100 workers to dismiss workers, because of the need for prior government authorization.

As against this, there are a number of studies that suggest that labour laws have not restricted the expansion of industry or job creation. R C Datta (2003) finds that there are forces like technology that have played a greater role in displacement of manpower by the machine. He illustrates this with the case of textile industries where jet looms have become a basic necessity for the textile manufacturer, because they give better quality products. So the choice to introduce jet loom which displaces manpower is not driven by a policy to escape labour laws. Rather it is driven by the market. He also demonstrates that employers have the ways and means to negotiate various labour laws and they have been doing it. D’Souza (2008) similarly demonstrates that the labour laws in India have not restricted the scope of job creation. Papola has also written extensively on this topic.

Social and informal institutions
Many labour market outcomes are influenced by social institutions, norms and practices. Informal labour markets, in particular, are embedded in dense mechanisms of reciprocity that arise from personal networks and tacit rules of loyalty. These institutions consist of a set of socio-economic practices, norms, values and traditions and customs and they influence the working of the formal institutions and in particular labour market processes like negotiations for employment and wages. The main aspects of coordination between supply and demand of work in the informal labour markets and activities are the social relations, reducing the costs of access to information and distrust. For people who search for jobs in unstable and precarious labour markets, personal relationships are a common and widespread resource, and often an efficient mechanism to obtain the ways to guarantee their well-being. (Machado da Silva, 1971; Guimarães, 2006). Such mechanisms also influence job access in the formal sector, where networks of contacts play an important role.

Caste, gender, racial and other forms of discrimination, which we discussed in section III, directly and indirectly impact the functioning of the labour market even though they are not part of the formal institutions of the labour market. For instance there are multiple instances of inequality in wages, nature of work, access to work and the rights and other benefits between men and women workers, which reflect underlying social institutions. Moreover, the ties of kinship, brotherhood, informal associations etc. also influence the access to and the nature and terms of employment. There are a number of studies in India that show how the social position of a person determines his prospects in the job market. Thorat and Newman, Jodhaka and Newman have studied the recruitment practices in multinational companies in India and found that the recruitment process was biased against those with low social status. Their studies suggest that the chance of a low caste person to getting a skilled job in the labour market in India is less than for his equally qualified counterpart from a high caste. The entry into the labour market is also determined by such practices. For, there are studies that demonstrate that low caste born people are discriminated in education. Recognizing the practice of social discrimination, the Constitution of India has made many provisions for the welfare of the SCs and STs and protected those provisions from executive and judicial scrutiny. Similarly the Government has adopted a policy of positive discrimination favouring SCs, STs, OBCs and women in education and employment policies. In Brazil too discrimination against colour and gender still affects the society and labour markets, although the Federal Government has established severe laws and punishments against any discriminatory behaviour since the 1990s.

International labour and other regimes
Apart from the national laws, there are international conventions and laws that also influence national labour market conditions, especially the conventions of the International Labour Organization (ILO), which, once been ratified by member countries, are incorporated into national law. The international trade regime under the WTO also has significant implications for domestic labour market conditions.

These labour market institutions will be analyzed with respect to both India and Brazil and in a comparative framework. The main questions of enquiry will be: to what extent have the above labour market institutions determined and influenced labour market inequalities in the two countries? How important are these institutions compared with other factors, and notably market relationships?

3. Policies impacting the labour market

Many policies have a direct or indirect effect on the labour market, with greater or lesser implications for inequality. In this section we list some of the policies which need to be considered.

Population

Population policies do not have direct or immediate impacts on economic and labour market inequality, but they do ultimately affect the labour market through their impacts on the supply of labour, both in the long term because of population growth, and in the shorter term because of the competing demands of child care. If we consider migration under this heading the impact is even more apparent.

It is difficult to test to what extent has labour market inequality in India and Brazil been influenced by the demographic forces. What is the extent of its impact on wages? It is held that more than the supply of labour force, the education and skill related quality of labour force and differentiations within the labour force are major influences on labour market related inequality. But these issues merit more investigation.

Macroeconomic and sectoral policies

The scope of macro-economic policies is wide. However, the focus would be on those policies which directly influence the labour market outcomes in general and inequality in particular. Special attention would be given to the policies of job creation, investment, credit, industrialization, etc. Among the monetary and fiscal polices, the most relevant policies are those related to taxation and tariffs, credit and investment. These policies would be analyzed with a focus on those components that specifically determine employment, wages and other labour market outcomes.

a. <u>Agricultural policy</u>: Agricultural policy has been an important influence on the labour market, as a significant section of the workforce is employed directly or indirectly in the form of owner or tenant farmers, agricultural labourers and workers in allied activities. However, the slow growth of agriculture has resulted in a relatively slow increase in income and wages in the agriculture sector. The income and wage disparities between agricultural and non-agricultural workers have been increasing. There are also implications for terms of trade between the agriculture and non-agriculture sectors.
b. <u>Industrial policy</u>: Industrial policies may be important in the labour market. For example, a policy favouring capital- and technology-intensive industries over labour-intensive industries can have significant impacts on employment, wages and thereby on income and wage inequality. Capital- and technology-intensive industrialization policy may create employment opportunities, but this are mainly availed by technically qualified and high skilled workers. Such workers are also paid higher wages and income, but a vast number of unskilled and semi-skilled workers are left out of the benefits of new employment opportunities. The result is likely to be growing inequality.

   An important aspect of industrial policy with implications for labour market inequality concerns firm size. It is widely recognized that small firms create more jobs, but the incentive structures in India lead to a variety of distortions. One finding of recent research is that there is a "missing middle" of intermediate sized firms, which would be an important source of employment creation (Mazumdar and Sarkar, 2008). The implications for labour market inequality need to be explored.

c. Service sector: In the post-liberalization phase, the growth of the service sector has been remarkable, and it has been the main driving force of the high growth rate in India and Brazil. But while the service sector has grown relatively fast, in India the growth rate of employment in the service sector has not been in the proportion to the growth rate of the output. In contrast, the service sector is Brazil's has been the largest employer and the main generator of employment with a high employment elasticity. The growth of industrial and service sectors has been a major push to urbanization. But urbanization is also promoted through a number of other indirect policies, like greater educational and health facilities, and better amenities. Policies related to urbanization are thus another important component of policies with impact on labour market conditions.
d. Trade policy: Trade policy plays an important role in influencing labour market outcomes. In the case of India, the recent experience in export-based high growth rate of the service sector has resulted in skewed (employment and) income distribution, with a concentration of demand for highly skilled labour. This is an issue which reappears in many export-oriented sectors, for India does not seem to have been able to take advantage of its abundant supply of low cost labour in labour-intensive exports. In Brazil the issue is again one of the concentration of benefits among a relatively small proportion of workers. Trade policy may therefore have important implications for labour market inequality.
e. Monetary and Fiscal Policy: Under monetary policy, the impact of interest rate on the labour market may be analysed. However, it would be difficult to establish a direct link between monetary policy and wage and income inequality. At the most, the impact of monetary policy can be seen through its general impacts on industrialization and on technological choices which are influenced by interest rate and credit policies. The role of fiscal policy is more direct and obvious. Under fiscal policy, taxation is a direct instrument of redistribution. The focus of the study would be to what extent, the taxation policy in the two countries has been a factor either in increasing or decreasing income and other inequalities. Taxes and subsidies can influence the location, composition, and factor proportions in economic activities.

Employment policy

In India, there is no well defined employment policy as such except for a document called National Employment Policy prepared by the Ministry of Labour. Brazil has the Public System of Labour, Employment and Income, which includes various policies such as the National Employment System (SINE) for labour market intermediation, the Unemployment Insurance, that benefits workers who had been dismissed from jobs without due cause; general qualification/training programmes; youth employment and vocational training programmes; and the Employment and Income Generation Programme (PROGER), a subsidized line of credit to micro and small enterprises. Notwithstanding that, these policies are poorly integrated, as they lack coordination at the national level, and are implemented at the state and municipal levels.

However, in India, there have been various kinds of employment relief programmes both in the rural and urban areas. In fact, there have been employment-creating public works programme in India for many years, even though the nature of these programmes is more like a social protection measure than a long term employment policy. Bhaduri (2005) has added a new perspective and argued that India can achieve full employment scenario through public works based guaranteed employment programme (MGNREGS).

The view is widespread in India, including in the Planning Commission, that the macro economic policies are policies of employment as well. Hence there is a no need of separate employment policies. Nevertheless, most of the Five Year Plan documents address the issue of employment creation, but mainly as a micro-economic issue and not as a separate policy.

Educational policy
Educational policy is an important determinant of labour market conditions. Education policy influences both the demand and supply side of labour market, and education is of course strongly correlated with income at the individual level.

The most important part of education policy is related to access to education. Differential access to education results in differential access to employment.

One of the major criticisms of India's education policy is lack of adequate attention to the creation of employable value among the educated persons. The general education dominates over specialised and skill based education. The bias towards general education has been institutionalized through the lower allocation to technology and skill oriented education. In contrast to the education institutions of general education, the specialized institutions and institutions providing knowledge and skill in science, engineering and technology are few in numbers.

In fact, India suffers from a major training deficit, with investment in skills concentrated on a small fraction of the workforce, which as a result reaps the benefits of substantial wage differentials. Brazil has a much broader based training policy.

Brazil's current educational policy is synthesized in the Plan for the Development of Education (PDE), which covers policies such as the Fund for the Maintenance and Development of Basic Education and Educational Professionals (FUNDEB), which unifies the funds for all basic education, besides allocating resources for young and adult education; the Basic Education Development Index (IDEB), a combined indicator of student and school performance; the University for All Programme (PROUNI), which offers scholarships at private institutions of higher learning; the Federal University Support Programme for Restructuring and Expansion (REUNI), that aims to expand enrolment and reduce the dropout rate in undergraduate courses; and the restructuring of Federal Education, Science and Technology Institutes (IFET). These policies contributed to the universalisation of access to elementary primary education in Brazil (95% in 2010), starting in the 1990s, and the strong expansion of enrolment in high school, technical and higher education, especially after the 2000s, even though these improvements seem to be more quantitative than qualitative.

Technology policy
While education policy influences both the demand and supply side of the labour market, the influence of technology policy on the labour market is more on the demand side. But if there is a specific policy to promote technology, it creates supply side effects as well. The technological choices of industry, and the set of government policies and incentives that affect them, constitute an important field for research into inequality because of their unbalanced nature. For instance, they tend to favour large, formal firms with relatively high capital labour ratios. This is an important area for investigation,

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V. Quantitative Methods for Inequality Analysis

This section discusses the standard inequality measures, special methods and indices for measuring inequality of opportunities, and key inequality decomposition techniques. It also reviews regression-based methods for aggregate and detailed decomposition of distributional statistics and discusses alternate methods to analyze factors influencing inequality.

The goal of the project is comparative analysis. This requires the systematic use of observations or data relating to Brazil and India at different times in their history since the 1940s until 2010. The format and structure of the two countries' data bases should permit the analysis of the economic and social dynamics, political pressures and formal and informal social institutions, and their effects on the behavior of the labour market and income distribution. The purpose is to verify, under certain circumstances, similarities or differences on these processes between the two countries and to investigate their causes.

The choice of the characteristics for accomplishing this comparative analysis was based on criteria highlighted by Sartori (1970, 1994). According to this author features/variables for this purpose should have the capability to cross borders, "the capability to travel", i.e. they must be suitable (applicable) to one or more cultures, countries or historic times. The comparative method requires that the object of study should be carefully defined, and especially the sources of variation of the phenomenon should be controlled. Statistical and econometric models constitute a proper choice for this purpose. In this case one should classify the variables/factors into independent and dependent, and should apply models to prove the assumptions established in the research.

Besides these, logic models should also be used. In this field we can highlight two models: agreement and difference.

- The first indicates that if the occurrence of one or more events of a given phenomenon coincides only in a given circumstance, then this circumstance should be considered its cause or its effect. This is a necessary reason.
- The second one asserts that if a phenomenon occurs in a given circumstance and does not occur in other circumstance, and all other circumstances are common to both cases but only one of them differs, then the latter it is cause or effect, or it is an indispensable part of phenomenon. This is the sufficient reason.

Then here are two arguments. The argument of the sufficient reason says that if a condition is sufficient all the times it occurs, the phenomenon or its effect will be present; and the argument of necessary reason says that if a condition is necessary, its absence shall be joined by the absence of the phenomenon

The data collected to carry on specific research, transformed into information, organized and analyzed using the two procedures, will extract more appropriate results, making room for in-depth qualitative studies.

1. Standard inequality measures

Distribution of income and resources is an important concern in economic theory and economic policy. If most resources in an economy are concentrated among a few people, it indicates a highly unequal society. There are both graphical and quantitative ways of analyzing inequality and this section. Graphical representations of inequality include the histogram and the Lorenz curve. In a histogram data are represented in adjacent rectangles wherein the heights of the bars are proportional to the class frequencies, and width is based on user specified bins. It visually indicates how concentrated or disbursed the distribution of a variable is. The Lorenz curve is a graph that plots the cumulative share of total value of a variable (say income or wages) on the Y-axis against the cumulative proportion of units (say individuals or households) on the X-axis. The 45 degree straight line running across diagonally is called the line of equality and it represents the case when resources are distributed equally. That is, if each individual had the same wage, or if there is total equality, the Lorenz curve would be the straight line in the graph – the line of total equality. If not, it is curved convex and is below the line of inequality. Figure 1 and 2 plots the histogram and Lorenz curve of wages of female casual workers in 2009-10 in India.

Other commonly used simple inequality measures are the range (difference between maximum and minimum value of the variable), coefficient of variation (ratio of standard deviation to the mean), and simple differences across different points in the distribution (such as the inter-quartile range). With the right kind of data, functional distribution of income also serves as an indicator of inequality. For example, a time series of share of labor income in total income in the economy can indicate how returns to labor have changed over time.

Figure 1: Histogram of wages of female casual workers in 2009-10

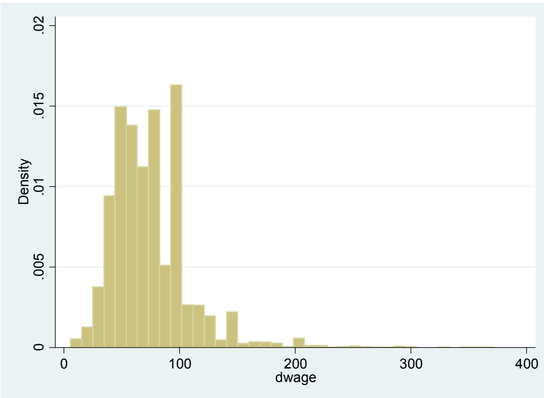
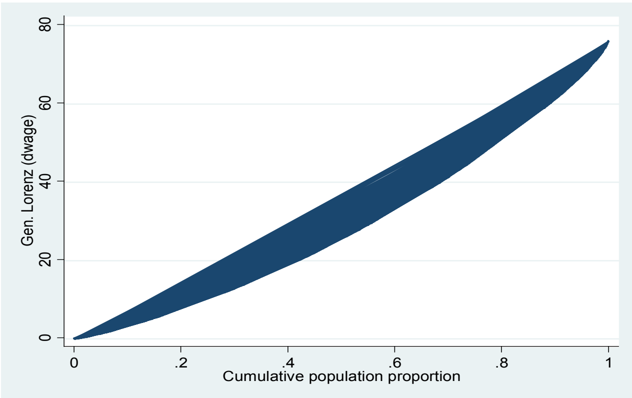


Figure 2: Lorenz curve of wages of female casual workers in 2009-10



Source: India, National Sample Survey, 2009-10

A wide class of standard inequality measures are available that can quantify how equally or unequally a variable is distributed. Standard measures of inequality are the Gini index, and the three generalized entropy measures, namely, the mean log deviation, Theil index, and half of squared coefficient of variation. The inequality indices have different mathematical properties that can be used in their ranking, relevance, decomposition and performance evaluation.

The Gini-coefficient is the most commonly used measure of inequality. The coefficient varies between 0, which reflects complete equality and 1, which indicates complete inequality (the case when one person in the economy has all the income or consumption, all others have none). Graphically, the Gini coefficient is represented by the area between the Lorenz curve and the line of equality, the 45 degree line in Figure 2. Mathematically, Gini coefficient is defined as

$$G = \frac{\sum_{i=1}^{n} \sum_{j=1}^{n} \left| x_i - x_j \right|}{2 n^2 \mu},$$

the mean of the difference between every possible pair of individuals, divided by the mean sizeμ, where n is the total number of individuals.

The generalized entropy index measures redundancy in data. The formula is given by the following:

$$GE(\alpha) = \frac{1}{N\alpha(\alpha-1)} \sum_{i=1}^{N} \left[\left(\frac{y_i}{\bar{y}} \right)^{\alpha} - 1 \right], \qquad \text{for real values } \alpha \neq 0,1$$

$$GE(\alpha) = \frac{1}{N} \sum_{i=1}^{N} \ln \left(\frac{\bar{y}}{y_i} \right), \qquad \text{for } \alpha = 0,$$

$$GE(\alpha) = \frac{1}{N} \sum_{i=1}^{N} \left[\frac{y_i}{\bar{y}} \ln \left(\frac{y_i}{\bar{y}} \right) \right], \qquad \text{for } \alpha = 1$$

The index is called with special names for different values α. It is called the mean log deviation when α=0, two Theil index when α=1, and half of squared coefficient of variation when α=2.
There are basic properties that these indices should typically satisfy: (1) Scale independence or that the inequality metric should not dependent on the total level of income and population independence or that the inequality metric should not depend on the population in the economy (2) Anonymity or that the metric should not depend on the "labeling" of individuals in an economy (3) Pigou-Dalton condition which means that if income is transferred from a rich person to a poor person the resulting distribution is more equal.

The Gini coefficient, the squared coefficient of variation and the two Theil's measures satisfy all three properties, while the range satisfies only the first two conditions. The variance measure violates the mean independence property. While the Gini coefficient is not additive across groups, i.e. the total Gini of a society is not equal to the sum of the Ginis for its sub-groups, Theil index is (World Bank, 2013). For more details on the properties of the different indices of inequality see Anand (1997).

To calculate these inequality measures, it would be useful to have a cross-section data or repeated cross-section of outcome variables such as income and wage across different subgroups like gender, sex, sectors, industries, and states. Numerous studies have calculated Gini coefficient and the generalized entrophy measures for India mainly for wages and consumption expenditure. For wage inequality, see Dutta (2005), Sarkar and Mehta (2010), Das (2012), and Galbraith et al. (2004).

According to Das, the overall inequality based on the Gini index in India in 2004-05 (using the 61st round National Sample Survey data) was 0.55; .56 for rural areas 0.49 for urban areas. Dutta (2005) in her analysis of wage inequality in India, again using the NSS, found that the Gini coefficient of wages for regular workers rose from .39 to .42 between 1983 and 1999 and it fell from .29 to .26 in the same time period for casual workers. Note here that the inequality among casual workers is smaller than among regular workers. Galbraith et al (2004) calculate the Theil index of inequality in pay in the Indian manufacturing sector using the Annual Survey of Industries data for all years between the years 1979 and 1998. They observe that the overall index shows an upward swing in 1974-75, remains steady till 1981-82, drops sharply in 1982-83, again remained steady till 1993-94 and creeps upward after that. The point estimates of the index itself is not reported in their paper, but just a graph showing this trend - although the index approximately rose between 0.1 in 1974-75 and 0.13 in 1998[19].

A comparison of the inequality index over time indicates if inequality has fallen or risen over time, as seen above. In doing so, different inequality measures may yield different trends and therefore caution is needed in interpretation. Dutta (2005) illustrates this carefully in her study in analyzing inequality trends between 1983, 1993, and 1999 using the National Sample Survey. She notes that while inequality among regular workers unambiguously rose according the mean log deviation it fell according to other GE measures in the first time period of her study followed by a rise in the second. For casual workers, the inter-quantile range rose in both sub-periods but the Gini coefficient and Theil index fell between 1983 and 1993 before stabilizing during the 1990s. The coefficient of variation rose between 1993 and 1999 after a sharp fall in the first sub-period.

2. Inequality decomposition - Between and within

Based on the mathematical properties of inequality indices, different methods have been developed to decompose inequality (Shorrocks 1980, 1982 and 1984; Cowell, 1995). Decomposition can be performed by sub-groups, income sources, and by other socio-demographic characteristics. Any of the generalized entropy class of measures can be decomposed by population subgroup so that the overall inequality (I) can be additively separated into within-group (I_w) and between group (I_b) inequality as follows (Cowell and Jenkins, 1995). Gini coefficient can only be decomposed under the special circumstance when the groups are non-overlapping (i.e., each individual's income in one group is greater/lower than each individual in the other groups), but there are ways to address this as seen below.

The within-group inequality is defined as a weighted sum of inequality within each of the subgroups where the weights are population shares of each subgroup, relative wages or some combination of these two depending on the inequality measure used. Between-group inequality is computed by assuming each group member receives the mean group wage (W_j). This is an important distinction for policy purposes. The relative proportion of within group and between group inequality measures in the overall inequality tells the policy maker, if the

[19] Different index measures should not be cross-compared since the magnitude of inequality index calculated using one index is by definition different from another for the same outcome. For instance, Dutta (2005) found that the Theil index among regular workers rose from .27 to .31 between 1983 and 1999; for casual workers, the Theil index fell from .15 to .11 in the same period. These numbers are by definition different from the Gini estimates and should not be compared for that reason.

inequality in the society arises relatively more from class, caste and other institutions (or other ways in which the society is subdivided) or if there is more inequality even within these subgroups.

Das (2012) considers two sets of groups based on gender and sector. He decomposed Gini-indices of wages into between and within groups in India in 2004-05. Further, following Dagum (1997), Das notes that if the groups are overlapping, there is an additional component of inequality measuring the contribution of intensity of transvariation, or the overlap component. He computes this simply by subtracting from the overall Gini index, the between and within group components. He finds that for gender based grouping, the within group Gini index was higher than between group Gini index, which was in turn higher than the overlap component. For groups based on sector, the within group inequality was higher than between group inequality, which was in turn higher than the overlap component, for both casual and regular workers. Dutta (2005) decomposed the Generalized entropy measures into between group and within group components by education levels. She found that in 1999, using the mean log deviation measure, the within group component was 75% while the between group component was just 25%. Similar trends were observed in both Theil index and half of squared coefficient of variation. Galbraith (2004) decomposed the Theil index into within and between components across states and sectors. They find that the between state component is smaller than the between sector component by which they conclude that sectoral rather than regional differences contribute more to inequality of earnings in the Indian manufacturing sector.

There should be some caution in interpretation in interpreting within and between components. Kanbur (2003) warns that when decomposed, usually, the between group estimates are smaller than within estimates. For example, evidence shows that wage inequality within education levels and industry groups is higher than between education groups and between industries. Kanbur further states that this does not imply that from a policy perspective, between-group disparities are low and that group equalizing policies are not needed. Since after all, the decomposition between groups is simply made by comparing means in each group and this may not show the complete picture.

There are several other regression based decomposition techniques which are different in spirit compared to the between-within decomposition. An overview of these is provided in section 4 below.

3. Inequality of opportunities

Another approach in understanding the source of inequality is the inequality of opportunities approach. Roemer (1998) states that unequal opportunities are created by circumstances at birth, such as ethnicity, gender, place of origin, and family background which are beyond the control of the individual and restrict the outcomes that individuals are able to achieve in life. He terms the outcome of interest as an “advantage” and divides the determinants of advantage into two groups: “efforts,” which are based on individual choices, and “circumstances,” which are outside the individual’s control. It has been in vogue in the recent literature to distinguish inequality of outcomes such as income and wages from the inequality of circumstances or opportunities (World Bank, 2006). As laid out in section I on conceptualizing inequality, this approach assumes that, provided opportunities are distributed equally we should not be concerned about the consequent inequality of outcomes, which is of course a highly debatable proposition[20].

Although recognized as conceptually important, empirical work in this arena is not without difficulties. It is hard to identify the relevant circumstances and distinguish them from outcomes and not surprisingly, the empirical study of inequality of opportunities remains a nascent field (Ferreira and Gignoux, 2008; Roemer et al., 2003; Bourguignon et al, 2003; Lefranc et al, 2006). Sometimes the relevant circumstances however identified, may not even be observable from the available data.

In conceptualizing the measurement of inequality of opportunity, an opportunity set is usually defined. An opportunity set s for an individual is defined by a special combination of values taken by a vector of circumstances available to him or her. Suppose gender (male and female) and father's education (school and college) are the two relevant characteristics, there are four opportunity sets: (1) male with father educated till school; (2) male with father educated till college; (3) female with father educated till school; (4) female with father educated till college.

There are two distinct types of approach in the analysis of inequality of opportunities. The first approach is based on the theory by Roemer (1998) who defines inequality of opportunity based on the fact that the distribution of advantage or outcome should be independent of the circumstances, in the case of perfect equality of opportunity. In other words, circumstance should not affect the outcomes (Yalonetzky, 2009). For a discrete outcome case, this can be reinterpreted as just testing the equality of probabilities of achieving an outcome level α regardless of the 'circumstances'. If the probabilities are equal across all circumstances, then there is an equality of opportunities. For a continuous case, this translates to testing if there is first order stochastic dominance (FSD). Presence of FSD indicates unequal opportunities. A class of measures proposed by Ferreira and Gignoux (2008) (between group inequality), Barros et al (2008) (the human opportunity index), Asadullah and Yalonetzky (Pearson and Cramer index based on Pearson goodness-of-fit statistic), Weitzman (1970) (the overlap index), are based on the concept proposed by Roemer. The second approach was proposed by Lefranc et al (2008), who declare equality of opportunity if there is no second order stochastic dominance of outcome distributions according to each circumstance. Note that for declaring equality of opportunities, the absence of First order Stochastic Dominance (or the equality of conditional probability) of conditional distributions is a stronger requirement than the absence of Second Order Stochastic dominance.

The different inequality of opportunity indices in the literature are explained in detail below.

(i) Between group inequalities : In this spirit of this definition, to measure inequality of opportunities, Ferreira and Gignoux (2008) advocated using the ratio of between group inequalities to the measure of overall inequality, based on any decomposable inequality measure[21]. They estimated a lower bound for opportunity share of inequality in earnings, household income per capita, and household consumption per capita in six Latin American countries. They find that Brazil and Central America are more opportunity-unequal compared to Colombia, Ecuador, or Peru.

[20] The criticisms of this approach are laid out in section I.

[21] Specifically, Ferreira and Gignoux (2008) recommend using the entropy measure of degree 0, the mean log deviation because it satisfies the path dependence assumption.

(ii) The Pearson Cramer index of inequality of opportunity: This is also based on Roemer's concept that the distributions of outcomes conditional on circumstances are independent of the circumstance. The index takes its minimum value 0, representing complete equality of opportunities, if the conditional distributions are identical across the elements in the opportunities set. It takes the maximum value of 1 if and only if there is complete, or absolute, association between social group partitions and values of the outcome. It is defined by H, as below[22].

$$H = \frac{X^2}{X^2_{\max}} = \sum_{t=1}^{T} \sum_{\alpha=1}^{A} w^t \frac{\left(p^t_\alpha - p^*_\alpha\right)^2}{\min\{T-1, A-1\}\, p^*_\alpha}$$

Where w^t is the relative weight of the population belonging to type t,

$$w^t = \frac{N^t}{\sum_{k=1}^{T} N^k}$$

$P^*\alpha$ is the proportion of the population attaining outcome state α.

$$p^*_\alpha = \sum_{t=1}^{T} p^t_\alpha \frac{N^t}{\sum_{t=1}^{T} N^t} = \frac{\sum_{t=1}^{T} N^t_\alpha}{\sum_{t=1}^{T} N^t}$$

(iii) The overlap index, defined by Weitzman (1970) is defined by

$$OV_M = 1 - \sum_{\alpha=1}^{A} \min\left\{p^1_\alpha; p^2_\alpha; \ldots; p^T_\alpha\right\},$$

This takes the value of 0 if and only if the distributions of all T types are identical, in a Roemer sense. It takes the value 1 when there is absolute association between types and outcomes.

(iv) Human opportunity index: This index was proposed by Barros et al. (2008) is similar to how Sen's welfare measure[23] takes in account, both absolute level of basic opportunities in a society and how equitable these opportunities are distributed. That is, it incorporates into a single indicator, overall access rates of opportunities and D-index measure of opportunity distribution. The index is defined by O = p (1-D), where p is the p is the overall access rate to an opportunity for the entire population, say clean water. D is the D-index, is a version of dissimilarity index widely used in the sociology literature. It is a weighted average of absolute difference in group specific access rates (p_i) and overall access rates (p). Barros et al (2008) applied this method to compute the human opportunity index for children with unequal access to a set of basic services, using nationally representative household surveys for 19 Latin American countries. They consider five types of opportunities namely, completing sixth grade

[22] It uses the Pearson goodness of fit statistics used to test the homogeneity of multinomial distributions (see Asadullah and Yalonetzky, 2010 and Hogg and Tanis, 1997). If all individual probabilities are closer to each other, then all of them are also closer to the weighted average probability, implying that the statistic H is closer to 0.

[23] Sen's welfare measure combines income per capita along with income distribution indicators.

on time, school enrollment in ages 10-14, access to water, sanitation, and electricity. Results show that Argentina, Chile, Costa Rica, Uruguay, and Republic of Venezuela are closest to inequality, whereas Honduras, Nicaragua, and Honduras are more unequal with respect to opportunities.

(v) Gini index of inequality opportunity: This index is based on the second approach and was defined by Lefranc et al. (2008). This is based on the fact that equality of opportunities exists as long as individuals cannot rank any circumstance set according to second order stochastic dominance. Circumstance s SSD-dominates circumstance s' (s ≥ s') for outcome y if and only if,

$$\int_0^x F(y \mid s)dy \leq \int_0^x F(y \mid s')dy \;\forall x \in \mathbb{R}_+.$$

Lefranc et al. (2008) proposed a Gini inequality of opportunity (GIO) index that is related to Sen's welfare metric, W (x) = μ(x) (1-G(x)), where the mean of the variable x is multiplied by one minus the Gini coefficient of x[24]. The GIO is defined as:

$$GIO = \frac{1}{2\mu}\sum_{i=1}^{T}\sum_{j=1}^{T} w_i w_j \left|\mu_i\left(1-G_i\right)-\mu_j\left(1-G_j\right)\right|$$

He applied these to analyzing the degree of inequality of opportunity among a set of OECD countries. He found that Sweden was the only for which equality of opportunity creation was satisfied for all social backgrounds. Norway was the second most equal country. He further ranked all countries by the index of inequality of opportunities as well as the inequality of outcomes and studied the discrepancies and the deviation of one ranking from another.

To sum up, there are two broad approaches to measuring inequality of opportunities – the first one was proposed by Roemer (1998) which is based on the equality/non-equality of the conditional distributions of outcomes. For a continuous outcome, this is equivalent to testing First order stochastic dominance. The second one proposed by Lefranc et al. (2008) is based on whether the conditional distributions stochastically dominate each other in the second order. Both approaches are useful but the results may always not indicate the same story. Yalonetzky (2009) notes that when the society is opportunity equal in the Roemer sense (absence of first order stochastic dominance), the conditional distributions do not dominate each other in the second order as well. But the reverse is not true. There could be no second order dominance even when the conditional distributions are not the same. Using one approach over the other depends on what level of strictness we set for the analysis. It may be illustrative to conduct analysis based on both approaches and compare the results.

4. What factors affect inequality? A regression-based approach

Regression based method for inequality decomposition

One of the short comings of the between-within inequality decomposition technique is that it can be performed easily only for the Generalized Entrophy measures. Fields (2002) proposed

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[24] Shorrocks (1983) showed that Second order stochastic dominance is equivalent to Generalized Lorenz dominance based on Lorenz curves. That is,

$\forall x \in \mathbb{R}_+ \quad s \succeq_{SSD} s' \quad \Leftrightarrow \quad \forall p \in [0,1] \quad GL_{F(.|s)}(p) \geq GL_{F(.|s')}(p)$, where $GL_{F(.|s)}(p)$ is the value of the Generalized Lorenz curve at p for the distribution F(.|s).

an alternate regression based framework[25] to generalize inequality decomposition techniques that can be applied for all kinds of inequality measures He used the following regression equation,

$$\ln(w_i) = \sum_{j=1}^{J} \beta_j' Z_{ij} + \varepsilon_i$$

where ln(.) is the natural log operator, w_i are wages, β_j are coefficients, *Zij* are the explanatory variables (*j* = 1,..,J) for individual *i* (at time *t*) while ε_i is the random error term. In this set up, Fields (2002) applied Shorrocks' theorem to compute the percentage of inequality (using any measure) that is accounted for by the *j*th factor.

Dutta (2005) employed the NSS data for years 1983, 1993 and 1999 and decomposed the Theil, Gini indices and the Inter Quartile range into different components using the Fields decomposition method. She ran a regression of wage on factors like age, marital status, education level, social and ethnic group, season and settlement type, state of residence, industry affiliation for regular and casual workers separately and calculated relative factor inequality shares for each. She found that among all factors, educational level contributed most to the inequality among both types of workers. Sarkar and Mehta (2010) used the NSS data for years 1983, 1993-94, and 2004-05 and conducted a field decomposition of factors that contribute to earnings disparity of all wage earners. Here again, the level of education emerged as the dominant factor contributing to the level of inequality in earnings of wage workers.

Oaxaca-Blinder decomposition of mean differences between groups
The regression framework can also be applied to study explained and unexplained differences in observed mean wages or income between two groups. Mean decomposition is most common and straightforward and was demonstrated by Oaxaca (1973) and Blinder (1973). Consider the following regression:

$$Y_{gi} = \beta_{g0} + \sum_{k=1}^{K} X_{ik}\beta_{gk} + \upsilon_{gi}, \quad g = A, B, \qquad \text{----- (1)}$$

Y can be any outcome of interest like income or wages. X is a matrix of covariates or characteristics of household or individuals like age, industry of occupation, state of residence etc. Groups A and B can represent any mutually exclusive and exhaustive subgroups like gender, caste etc. A separate sample of observations (y_i, x_i, i = 1; 2; … n) for two groups should be used to estimate two models one for each subgroup.

$$\widehat{\Delta}_O^{\mu} = \underbrace{(\widehat{\beta}_{B0} - \widehat{\beta}_{A0}) + \sum_{k=1}^{K} \overline{X}_{Bk}\left(\widehat{\beta}_{Bk} - \widehat{\beta}_{Ak}\right)}_{\widehat{\Delta}_S^{\mu}\ \text{(Unexplained)}} + \underbrace{\sum_{k=1}^{K}\left(\overline{X}_{Bk} - \overline{X}_{Ak}\right)\widehat{\beta}_{Ak}}_{\widehat{\Delta}_X^{\mu}\ \text{(Explained)}} \qquad \text{----- (2)}$$

[25] This is however different is spirit from the between and within decompositions, as noted by Fortin, Lemieux and Firpo (2010).

In this framework, the difference in the mean of the outcome Y between two groups A and B can be decomposed into two aggregate components – (i) the unexplained differences or the wage structure effect (difference in βs between the groups) and (ii) explained differences (differences in mean characteristics – X) between two groups. For a general review of these methods for statistics beyond the mean, see Fortin, Lemeiux, and Firpo (2010). A detailed decomposition, in other words, the influence of each contributing factor (the additive term for each X variable in equation 2) to the unexplained and the explained parts (separately) of the difference in mean can also be easily performed using the Oaxaca-Blinder decomposition method.

The proportion and size of the wage structure effect indicates the inequality or the difference in mean Y arising from differences in returns to factors between A and B. This component is also referred to as the discrimination effect. The second component, explained difference is the contribution of inequality arising from difference in characteristics between A and B. The second one indirectly acknowledges and measures the structural and embedded differences in the characteristics between different sub groups of people. This component is also related to the issue of selection bias in empirical estimation as noted by Fortin, Lemeiux, and Firpo (2010). Section 5 illustrates the issue of selection bias and how it is conceptually linked to structural differences and inequality.

Oaxaca-Blinder decomposition has been widely used in the literature In the Indian literature on inequality, caste based decompositions have been done widely use the OB method. For example, Barooah (2005) used the National Council for Applied Economic Research (NCAER) survey to illustrate that about one third of the income differentials between caste groups in India could be attributed to discrimination in the market place. Using the NSS consumption surveys, Kojima (2006) showed that disparities between the non-SC/ST households and Sc/ST households were both due to lower endowments of physical and human capital and different structures of income generation. He decomposed the differences in the consumption expenditure by social or ethnic group and showed that these both the wage structure effect and difference in characteristics equally contributed to the aggregate disparities of the living standards. A comparison of the decomposition results for the years 1983, 1987, 1993, and 1999 reveals that there has been little change in the contribution of the structural difference between the SC/ST and the non-SC/ST.

If the regression equation is non-linear in nature[26], an alternate reweighted regression decomposition method has been proposed by Barsky et al. (2002). Often times, researchers are not only interested in the decomposition of mean differences between two groups of workers but the decomposition of variance, median, and sometimes the whole distribution. Variance can be readily decomposed to within and between group components and this is similar in spirit to between and within inequality decompositions of inequality indices explained in section ii (Fortin, Lemieux and Firpo, 2010). However, there are many disadvantages (and advantages) in the between-within decomposition[27]. To overcome these drawbacks, several methods have been proposed to decompose different distributional

[26] A regression of consumption on income could be specified as a non-linear model.

[27] Fortin, Lemieux and Firpo, 2010 note that the between and within decompositions are very different in spirit to the Oaxaca-Blinder decomposition and there are advantages and disadvantages to each. On the positive side, the within-between decomposition can help understand economic mechanisms or sources of inequality growth. On the negative side, between within decomposition cannot be performed for measures like interquartile range or the entire Probability density function. This is an important shortcoming because what happens where in the equation is important to identify factors.

statistics and even the whole distribution. See Juhn, Murphy and Pierce (1993), Donald, Green, and Paarsch (2000), and Machado and Mata (2005) for some techniques that are extensions of the variance decomposition approach. In these methods, the whole conditional distribution of outcomes (not just conditional variance) is estimated and decomposed.

A number of studies in the Indian case are based on these above methods. For instance, Azam and Prakash (2010) use a quantile regression based decomposition strategy developed by Machado and Mata (2005) to decompose wage differentials in different parts of the wage distribution between the public and private sector workers in India. They find that the differences in observed characteristics of workers (covariate effect) account for only a small part of the wage differential at lower quantiles, but for a larger part at higher quantiles. At the top of the distribution, covariate effect contributes to majority of the observed wage differential. Inequality measures and distributional statistics can also be decomposed over time. Azam (2005) used the same quantile regression based approach to evaluate the role of changing workforce composition (worker characteristics) and wages, in changing wage distribution in urban India for 3 years namely 1983, 1993, and 2004. He found that increase in returns in the labor market (or wage structure effect) was the main driving force in increase in wages in the labor markets in urban India.

Other approaches to analyze inequality with some illustrations
A regression based approach could be used to analyze the factors that contribute to any inequality measure of interest. In this set up, an outcome variable y is any measure of inequality such as the inequality indices, simpler measures like standard deviation, or other non-standard measures of inequality. Inequality outcomes can be measures at the level of a state, industry, firm or other units of analysis. Appropriate explanatory variables that explain the inequality of outcome should be included in the model based on relevant social and economic theories. Presented below are two illustrations as to how regression methods can be applied to analyze the factors and policies contribute to inequality and how. These models can be estimated with panel data or repeated cross section data. This frame work can be applied to evaluate policies and programs in general, in understanding how they affect inequality. This would be useful given the interest in policy evaluation not just on average outcomes but on their distributions, both in Brazil and in India. In India, the most important policies that merit interest are the minimum wage law and Mahatma Gandhi rural employment guarantee scheme. In Brazil, the minimum wage policy and the conditional cash transfer programs are of interest.

<u>Illustration 1: Skill premium and technology adoption</u>
One of the key factor contributing to rising inequality in many countries is the increase in skill premium (skill-unskilled wage differential) driven by an increase in the demand for skilled workers (Autor, Katz, Kearney, 2003). This phenomenon is called the Skill-Biased Technical Change (SBTC), which is by definition a shift in the production technology that favors skilled over unskilled labor by increasing its relative productivity and, therefore, its relative demand. A large literature based on the United States (Autor et al. 1998; Autor et al. 2003) tries to understand the extent of skill gap, and influence of factors like technology cost and adoption on this gap. The presence of skill biased technological change is tested by regression methods typically using firm or industry level data. The outcome variable is a measure of wage premium for skilled workers, is defined as the share of skilled wage bills in the total wage bills in a firm (or industry). Note that this is a non-standard measure of inequality of wages. The independent variables include a host of firm (or industry) characteristics like log capital to value added ratio, log value added, log imports to value added ratio, and log outputs-value

added ratio. If skill enhancing capital-output ratio contributes positively to the rise in skill-wage shares at the firm or industry level, this is seen as evidence for skill biased technological change.

The presence of skill premium in India has been noted by Berman, Somanathan and Tan (2005) and Ramaswamy (2005). But there is no consensus on the presence of STBC in India. While Berman, Somanathan and Tan (2005) note that half of the acceleration in wage-bill share in the 1990s was explained by output growth, rather than increase in skill biased technology change, Ramaswamy (2005) finds a comparatively stronger role of capital-skill complementarity on skill-wage shares. Neither of these studies completely attempt to eliminate endogeneity bias arising out of unobserved heterogeneous industry level characteristics[28]. In a firm level model for testing SBTC, there may be unobservable factors like productivity differences that creates an omitted variable bias, and this has not been addressed in any of the studies.

<u>Illustration 2: Effects of industrial delicensing on within-industry inequality</u>
Aghion et al. (2005) developed a Schumpeterian model to illustrate that if firms in an industry are exposed to the risk of liberalization, they respond heterogeneously thus increasing inequality of output and productivity within the industry that underwent liberalization. They illustrate this empirically for India, which went through a series of instance of delicensing measures in the 1980s and 1990s. Constructing an industry-time panel on three-digit manufacturing industries during 1980-1997 from the Annual Survey of Industries data, they use a "differences in differences" specification to estimate their model. The outcomes variables considered are inequality measures like standard deviation of log output, standard deviation of log output per worker, and standard of two measures of total factor productivity. The key independent variable is a dummy that takes a value 1 if the industry was delicensed in that year, and 0 if not. In this specification the effect of delicensing is identified from the differential change over time in the economic outcome in industries that delicensed relative to industries where compulsory licenses were retained. Their results indicated that industrial de-licensing in India increased the inequality at the industry level.

Note the careful attention paid in some studies in addressing endogeneity and selection issues, which are commonplace in empirical estimations of this kind. The presence of endogeneity or selection problems in models, biases the estimates of coefficients in regressions. In other words, biased coefficients do not indicate the "true" value of the effects of an explanatory variable on an outcome variable. The annexure to this section presents an elaborate treatment of the endogeneity problem, its possible types, the nature of the bias it causes, and the lists the methods available in the literature to address this.

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[28] See the appendix for an illustration of endogeneity bias.

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Appendix to section V: Endogeneity and bias

There are differences in achievable outcomes and opportunities available for individuals and households based on a number of characteristics. Subgroups of individuals and households in societies consistently earn lower wages, obtain less education, have lower access to public services, and are also socially discriminated against. These differences could be mild or structurally deeply embedded in societies and economies. In counties like India and Brazil, structural differences can manifest in differential treatment of people and households belonging to a particular caste/race or residing in remote localities. Labor markets can also be segmented along the lines of formal and informal sector.

In a regression framework (in and similar to ones considered in section iv), it is important to acknowledge the presence of these structural differences (of any degree). Characteristics that vary across individuals and households or any other units of analysis either structurally or non-structurally, can be controlled for if they are measurable, by simply including them in the regression equation. This is called condition-on-observables (Angrist and Pischke, 2008). Consider the following multiple linear regression model.

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \varepsilon_i \text{ -------------------------------- } (1)$$

In the above regression, Yi is the outcome variable for individual i; X_{1i} and X_{2i} are explanatory variables that explain the outcome, and ε_i is the error term. β_0 is the coefficient of X_{1i} and it measures the change in Yi when X_{1i} changes by one unit, everything else remaining the same. β_1 is the coefficient of X_{2i} and it measures the change in Yi when X_{2i} changes by one unit, everything else remaining the same. It is important to estimate β_0 and β_1 without any "bias". Statistically, an estimator $\hat{\mu}$ a statistics of interest is an unbiased estimator, if its average or expected value is equal to its true value[29]. Bias in the estimated coefficients arises if the associated variables are endogenous. A variable is endogenous if it is not exogenously determined outside of the model. This violates a fundamental assumption in the classical linear regression model that assumes that all explanatory variables are exogenously determined outside the system. Technically, a variable X_{1i} is endogenous if E $(X_{1i}\varepsilon_i \neq 0)$, where E is the statistical expectation operator. This implies that there is non-negative correlation between the error term and the explanatory variable. Endogeneity can occur due to reasons such as simultaneity (or the simultaneous determination of outcome variables and the explanatory variable as in the determination of price and quantity in a demand-supply framework), omission of important variables which are correlated with other explanatory variables among more (this case is explained below). See Meyer (1995) and Angrist and Pischke (2008) for a both technical and intuitive illustration of endogeneity issues.

One common reason for endogeneity bias is the omission of important variables in the model. Suppose the true model is the one presented in equation (1), but the researcher omits Z in the model. The omission could occur due to the non-observability of Z in survey data. Omission of Zi causes Xi and the error term to be correlated with the error term ε_i. That is E $(Xi\varepsilon_i) \neq 0$. That is, Xi is now an endogenous variable which is no longer independent and exogenous to the model. The practical implication of this is that, to the extent that X and Z are correlated,

[29] That is, $\hat{\mu}$ is an unbiased estimator E $(\hat{\mu}) = \mu$

the omission of Z in the model biases the estimate of β_0[30]. To the extent that we care about the true value of β_0, we want to avoid omitting relevant variables.

Consider the example below which models wage outcomes (measured in Rupees/day) for individual i as a function of his/her educational attainment (measured as years of school).

$$\mathbf{W_i = \beta_0 + \beta_1 * education_i + \varepsilon_i} \text{ -------------------- } \mathbf{(2)}$$

Suppose, we are interested in measuring the effect of educational attainment on wages, that is β_1. The estimated value of β_1 is unbiased only if there is no endogeneity in the model for reasons mentioned above. But suppose that the "true" model contains other variables (say gender) that matter in the determination of wages and these are clearly omitted in (2). Even worse, there could be discrimination based on gender and caste in educational attainment and in payment of wages. In this situation it is clear that the estimate of β_1 is biased. This bias can also be explained intuitively. It could be the case that male (female) workers may have higher (lower) education to begin and in such a case, the estimated value of β_1 is not its true value of the effect of an increase in education on wages, but also contains the bias of the non-random assignment of education based on gender. Particularly, in this case, β_1 underestimates the effect of education on wages. This situation can be taken care of by simply including the gender (1=male; 0=female) variable in the regression equation (3) below. There could also be interactive effects between gender and education which can also be explicitly added as a separate variable.

$$W_i = \beta_0 + \beta_1 * education_i + \beta_2 * gender_i + + \varepsilon_i \text{ ------ } (3)$$

In model (3), the coefficient on the gender variable, β_2, is simply the gender discrimination effect; that is, the additional wages obtained if a worker is a male vis-a-vis a female, everything else being equal.

While easily observable variables like gender, caste, race, location, health can be controlled for by simply adding them in a wage regression model, there are other variables which are typically not available from household surveys. These could include motivation levels or ability of an individual, which are important determinants of wages, and are correlated with other variables like education - Individuals with lower motivation levels could possibly have lower motivation to earn money. As mentioned earlier, higher the correlation between ability and education level, larger the bias in estimating the coefficient of education, when the ability variable is omitted. Any regression-based approach to measure and decompose inequality, such as the Oaxaca-Blinder decomposition, Fields decomposition or other techniques to study the factors that affect inequality considered in section iv should strive to eliminate endogeneity bias. If the regression coefficients are biased, the decompositions that use these coefficients are flawed.

There are many ways proposed in the literature to address the endogeneity problem and they are dependent of the type of endogeneity and the kind of data available. Again in the omitted variables case considered above, a researcher could strive to exhaustively add all the variables into the regression model. For the wage model above, this would entail measuring ability for using an ability index using all the observables in the dataset, although this method could be expensive. In individual-level models, it is common that there are unobserved heterogonous

[30] For a technical note on the omitted variable bias and it's formula, see Greene (2011).

factors which cannot be measured easily that may be unique to an individual, which can cause an omitted variable bias. In this case, using an individual-fixed effects model in a panel data on individuals can control for all the unobserved heterogeneous individual characteristics, eliminating bias. Other commonly used approaches are and difference-in-difference estimation, instrumental variables models and first difference estimation. An elaborate and practical discussion on each of these techniques, is available in Angrist and Pischke (2008).

VI. Social Dialogue

Social dialogue is a methodology that is specially used for building consensus through the involvement and discussion of relevant stakeholders, such as representatives of government, workers, employers, civil society and academia, so that each of them may express its opinion about a specific topic. And it is particularly important when it involves segments of society with divergent interests on the design of public policies. In this project, the activity of Social Dialogue constitutes one of the branches of the methodology that is being developed.
With the purpose of discussing this project and getting suggestions, CEBRAP and the ILO Office in Brazil organized a session of social dialogue on 12 August 2013, in Brasília, with seventeen representatives of government, public organizations, unions, employers' associations and universities to present the project being developed and collect opinions and suggestions to improve the project's methodology.

The session was opened by Lais Abramo, ILO Office Director, who stressed the importance of the social dialogue and the development of studies on inequality in the labour market. In sequence the project was briefly presented as concerns its objectives, methodology, guiding assumptions and some expected results.

Then each participant discussed the validity of the research and made his or her suggestions. We emphasize the importance of this step, because it was the moment to collect different views on the main hypotheses we are working with as well as inputs on new methodologies that could be applied throughout the project.

We present below a summary of the suggestions/arguments that were raised during the social dialogue:

a) give attention to the issue of job security;
b) economic development cannot occur without decent work;
c) overcome the difficulty to qualify functionally illiterate workers;
d) informality must be well defined in both countries;
e) consider the articulation of cash transfers programmes and labour market policies;
f) take into account the employment in the public service;
g) population aging will significantly change the economically active population and affect economic growth;
h) need to improve labour productivity in Brazil and link it to better jobs and wages;
i) there is no synergy between public policies (especially social policies) and macroeconomic policies in Brazil;
j) get deeper into the issue of the differences between income and consumption data for studies on inequality.

As mentioned above, this is a summary of some points in which there was some convergence in the debate. We will also look at the different viewpoints among the participants, especially concerning the relationship between inequality, labour market performance, social policies and the process of economic development.

The project was considered appropriate and relevant as a South-South cooperation experience. All the participants agreed on the importance of the main issues of the research and expressed the urgency of doing more comparative studies, despite the many challenges they bring about.

At the end, the participants approved the way the Social Dialogue was conducted and showed their willingness to cooperate and follow the research, as well as to contribute in the upcoming Sessions. A network will be established in order to get inputs (reports, analyses and data produced by them), and to circulate the many outcomes to be produced by the research team.

In India, a process of dialogue with social actors has also been initiated to understand and analyze their perspectives with respect to labour market issues and policies. This dialogue is being established through a semi-structured interview and discussion with selected social actors and representatives of relevant organizations. A start has been made with trade union representatives, and it is planned to continue the process with representatives of business and government. While the literature gives various perspectives and tools of analysis, dialogue with the social actors is helpful in not only understanding the problem from the point of view of insiders, but also in suggesting policy priorities from the perspectives of the labour market actors concerned.

A semi-structured questionnaire has been prepared. Interviews start with a presentation of the project, followed by collection of information about the biographical and leadership profile of the respondent and the geographical and sectoral spread of the organization concerned.

The questionnaire then asks the view of the respondent on various forms of inequality prevalent in the labour market, including inequality among different groups of workers. It addresses in particular issues of wage and income inequality and its social and gender dimensions.

On the issues of wage inequality, the questionnaire seeks to probe how and why wage levels differ among different groups of workers, between different industries, within an industry and among different social groups. Is there any discrimination on the basis of caste and gender? How far do wage differences reflect the returns to skill, education and other endowments? The questionnaire also asks for views on the role of trade unions, and the implementation of labour laws and regulations, especially those pertaining to the enforcement of wages.

As in the case of Brazil, the results of this dialogue will be used to inform the methods and priorities of the research.