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Does Class Count? Class Structure and Worsening Inequality in China and India¹

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Abstract

In this paper, we investigate the question of whether class structure matters in understanding the increasing inequality in China and India. We argue that almost the entire increase in the overall Indian inequality between 1993-94 and 2004-05 is explained by the rising inequality *between* classes rather than within them, whereas in the case of China, the entire increase in inequality between 1995 and 2002 appears to be explained by the rising inequality *within* classes. The increased distance between urban and rural elites that are more stratified at the top (such as formal sector owners, managers and professionals in urban areas and rentier classes like moneylenders and absentee landlords in rural areas), and those classes that are stratified at the bottom such as unskilled urban workers, agricultural workers and marginal farmers, helps us understand the distributional dynamics of the Indian growth story. In the Chinese case too, while the between-class inequality explains an even higher part (than in the Indian case) of the overall inequality, we argue that the rise in overall inequality that is seemingly explained by the rise in intra-class inequality is actually explained by the phenomenon of “administrative urbanization.” We analyze the class structures in India and China and decompose (using the methodology of Yitzhaki 1994) the overall inequality into inter-class and intra-class terms while investigating the trends towards stratification. Finally we offer our policy suggestions.

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I. Why Focus on Class Structure?

It is now well known that Indian and Chinese economies have been experiencing high growth rates since 1980 (e.g. Dutt and Rao 2000; Economic Surveys (2000-2009), Ministry of Finance, Government of India; Wu 2004) even as the Chinese growth path has been much steeper than the Indian one. While the Chinese path has been one in which reforms have progressively deepened towards market orientation since 1978, in the Indian case, there was a major regime shift in 1991 when India introduced market-oriented economic reforms in most of its sectors and increased its openness to the global economy. It is also widely acknowledged now that the income distribution has taken a turn for the worse in both countries especially since 1990s (e.g. Khan and Riskin 2005; Riskin, Zhao and Li 2001; UNDP 2006, Deaton and Dreze 2002; Sen and Himanshu 2004; Himanshu 2007). In India, inequality stagnated or mildly declined during the 1980s before beginning to rise in the 1990s, while in China there has been an unmistakable increase in the inequality at least from the late 1980s. While Chinese inequality has been studied quite carefully along multiple dimensions in the literature enumerated above, trends in overall Indian inequality have been understudied except at a fairly general level such as the inter-household, inter-sectoral (rural vs. urban) or inter-state level. There are very few studies that have carefully investigated changes in inequality along the comparative dimension between China and India (for eg. see Chaudhuri and Ravallion 2006; Barooah, Gustaffson and Li 2005). Our paper is the first of its kind that compares the consumption distribution in India with the consumption distribution in China at two different (comparable) points in time. Moreover, while the already published work helps us understand inequality at a broad level, it does not illuminate the dynamics of how different groups/classes in these two countries have begun to witness increases in relative prosperity or relative pauperization. Understanding these dynamics is crucial both to examine whether class structures matter in explaining distributional changes as well as to show whether particular classes or occupations have been included/excluded in the growth process in India and China. This paper sheds light precisely on these questions by analyzing in class terms, the Indian household consumer expenditure surveys conducted by the Indian National Sample Survey Organisation (NSSO) and the household surveys from China Household Income Project (CHIP) of the Chinese Academy of Social Sciences.

There have virtually been no empirical large-scale economic studies on China and India that have worked with the construct of *Class* to examine its impact on economic and social *change* (For an exception in the case of wealth distribution in India, see Jayadev, Motiram and Vakulabharanam 2007). Especially since the 1990s, this absence becomes extremely glaring as sociologists, political scientists and other social observers have argued that the class structure in India has not only undergone a ‘great transformation’⁵ but also that it has been central to understanding Indian economic policy initiatives during the last two decades (Chatterjee 2008). In China, there are some studies on class structure and so on, mainly done by sociologists (Lu 2002 and Lu 2004, Li, Zhang, Zhao and Liang 2005) but there have been very few studies that have used an empirical approach to the construction of class structure (for an exception, see Xue and Zhang 2007). Since policy initiatives are not undertaken in vacuum, we know that different class interests pressure the state to pursue different sets of policies, whether they are rich minorities or poor majorities. State policies that support the former interests may help promote

⁵ Also see a forthcoming volume– “Great Transformation: Understanding India’s Political Economy” edited by John Harriss, Stuart Corbridge, Sanjay Reddy and Sanjay Ruparelia in which ‘class’ among other important axes, received serious attention.

inter-class inequality, and those that are guided primarily by the latter interests tend to be regarded by many as populist but usually tend to put a lid on growing income gaps. So far, while careful social observers (e.g. Patnaik 2009) have pointed out that the Chinese and Indian economic policies during and after 1990s have tended to exacerbate inequalities between classes, there have been no large empirical studies that establish this story convincingly. In this paper, we use the Indian Consumer Expenditure Household Surveys from 1993-94 and 2004-05 and the Chinese Household Surveys from 1995 and 2002 to examine whether the rising inequality has been due to increased inter-class inequalities or intra-class inequalities. Using Yitzhaki methodology (1994) to decompose the Gini Coefficient, we are also able to show tendencies towards stratification that shed light on the nature of the rising inequality in China and India⁶.

The rest of the paper is organized as follows. Section II presents the theoretical framework employed in order to define classes and a class structure. Section III discusses the data used to describe classes and make comparisons. It also discusses the limitations of the data sources employed. Section IV presents the main results using the Chinese and Indian Class Structures. Section V describes the Yitzhaki method briefly and discusses the results of the Yitzhaki decomposition of the Gini Coefficients for China and India. Section VI compares the Indian and Chinese results. Section VII explains the results of sections IV, V and VI and concludes.

II. Defining Class Structures for China and India

There have been many frameworks to define classes in modern societies. While in popular parlance, class is defined in income terms (Rich, Middle and Poor or with many gradations in between such as upper middle class, lower middle class etc.), for many social scientists, this is not a satisfactory device since it uses the outcome i.e., income, of various social dynamics to define class. Other frameworks have tended to focus on economic, political and consciousness based notions to define class (e.g. Thompson, E.P. 1963). Usually sociologists have tended to focus on notions of authority/power and status to define and embellish class even when they are using explicitly economic class categories (see Wright E.O. 1997 for a contrast of the Marxian and Weberian Class schemas). In some recently popular frameworks in Indian nationalist historiography such as Subaltern Studies, terms such as elite/subaltern have been deployed which are primarily power-based or consciousness-based categories.

In the economics literature that excludes the income-based definitions, the towering intellect around which class frameworks have been defined is that of Marx. However, Marxists have tended to disagree quite a bit on how classes ought to be defined and how they can be deployed to understand the evolution of modern societies. In this context, the predominant use of class among Marxist scholars has been around the idea of ownership. This is usually based on how Marx theorizes the transition to capitalism in England, where he makes a stark distinction between those that come to own property through force and plunder, and the masses that are expropriated from their property and are forced to sell mainly their ability to perform labour (labour power). Marx builds on this description of class in the pages of Capital Volume I (1867:1976), Volume II (1894:1978) and Volume III (1894:1981) where he argues that class is defined at the site of production i.e. a class of people/workers that perform labour and earn

⁶ This decomposition methodology has been applied in two previous studies – Wolff and Zacharias (2009) in the US context and Zacharias and Vakulabharanam (2009) in the context of Caste groups and Indian Wealth inequality.

wages while they also produce economic surplus/profits for the entire capitalist society, while the other classes appropriate and live off this surplus. Marx expands on these latter classes in *Capital*, Volume III and shows how it is not merely the industrial or agricultural capitalists that live off this surplus but also other classes such as moneylenders (receive interest), merchants (receive trading margins), landlords (receive rent), shareholders (receive dividends), managers (receive salaries) and the state (receives taxes) amongst others. While Marx appreciates the heterogeneity of the working class in his writings, he does not overly dwell on the differences within the working class as he was more focused on teasing out the distinctions between the working class and all the other classes that live off the surplus that is produced by the working class.

For this paper, we resort to the use of two Class schemas. The first schema uses broad consciousness categories (applicable to China and India) to arrive at simplified class categories. This schema identifies only two classes in the urban areas viz., elite (which includes owners, managers and professionals) and the workers (other than professionals). In rural areas, China and India have different class structures owing to the extensive land reform implemented in China and its absence in India. For India, four classes are identified keeping in mind the differences between agricultural and non-agricultural workers. These four classes are – rural elite (both the big farmers and the non-agricultural elites that include owners, moneylenders, government officials, professionals, and absentee landlords), rural non-agricultural workers, small farmers and agricultural workers. The whole schema consists of six classes and relies primarily on how society broadly views classes in terms of self-identification of status and power. In the Chinese case, there is a total of six classes with the urban schema being identical to the Indian one. However, in the rural areas, since the Chinese state implemented extensive land reforms, we do not differentiate among farmers. We treat the entire farming community as one class. Among the rural non-agricultural workers, we make a distinction between formal and informal workers and split them into two classes. Finally, the owners and managers of rural enterprises along with civil servants are identified as rural elite.

The second schema uses Marx's latter definition to define a broad distinction between the working class and the other classes in the urban sector. The working class, which is defined by its role in production, is quite heterogeneous in most modern societies and it is no different in China and India. There is a widely accepted distinction between skilled and unskilled work. The skilled are to be further sub-divided into professionals and skilled workers⁷. This makes for a three-tier structure within the working class – professional, skilled and unskilled. Generally, it is also acknowledged that there are fundamental distinctions between working people in manufacturing and services⁸. Once we build this distinction into the class schema, we arrive at six sub-classes within the working class. Of the non-workers, given the limitations of data and

⁷ This framework for urban areas is somewhat similar to the one employed by Wright (1997) although a further sectoral sub-division into services and manufacturing is not done in Erik Wright's work. Professionals are different from skilled workers in the sense that professionals usually do white-collar kind of work and possess greater autonomy/control than the skilled blue-collar workers. An example would be an engineer and a lathe worker in a factory.

⁸ This is not merely in the nature of labour (material vs. immaterial as Hardt and Negri (2000) point out) but also in terms of the inequalities among different workers. It seems to be the general case that service sector has a much greater inequality among its workers compared to manufacturing.

the occupational categories available in the datasets (discussed in the next section), we arrive at two composite classes viz., owners and managers in the formal sector, and owners and managers in the informal sector. Managers are included alongside owners since their role in the labour process is primarily supervisory and they live off the surplus value that productive workers produce.

In the rural sector, the Indian class structure is primarily defined by the failure of a crucial state policy that distinguishes India from the successful Asian economies to its east. This is the near complete failure of land reforms as a state policy. Given this failure, the class structure in agriculture is fundamentally split between the landed and the landless at the broadest level. But among the landed, there are many differences but the most crucial distinction of these is the quantum of land ownership. We divide the landed groups into four classes – Rich, Middle, Small and Marginal/Tenant (empirical details provided in the next section). Roughly, the first two groups hire net-labour power, the third group is balanced in its labour-power selling and buying, and the last group is net-labour power selling⁹. The non-agricultural population can be divided into five classes. First, the rentier class can be further divided into the moneylender and absentee landlord classes. Second, the non-agricultural self-employed group (usually quite heterogeneous) that cannot be further sub-divided due to data difficulties described below. Third, the working class can be divided into two classes: the rural non-agricultural professionals (for instance, the government officials and those who possess formal employment) and the other workers. In both urban and rural sectors, there is also an unclassified section that defies further sub-division given the data limitations.

The detailed rural Chinese class structure has to be different as mentioned above because of the land reforms that the Chinese state implemented. The rural elite is the owner and managerial class in rural areas usually of the non-agricultural formal enterprises. Owners in the informal sector are identified as a separate class. Among the workers, a total of three classes are identified: the rural non-agricultural skilled workers in the formal sector, the rural non-agricultural unskilled workers in the formal sector, and the non-agricultural workers in the informal sector. Farmers are identified as a unified class. Finally, the surveys possess a category of workers called as the rural unclassified. This last one is a separate category.

III. Data, Definitions and Limitations

III.1 Indian data

The data source used for this analysis is the Indian National Sample Survey, Household Consumer Expenditure Data, rounds 50(1993-94) and 61(2004-05). In the 50th round, 115,354 households were selected in the sample, out of which 69,206 are from rural area, and 46,148 are from the urban area. In the 61st round, 124,643 households were selected out of which 79,297 are in the rural area, while 45,346 are from the urban area. The basic unit of analysis is the household for which monthly consumer expenditure data are available. However, we use the household size to obtain the monthly per capita expenditure levels. All the results presented below are expressed as per capita consumption expenditure data adjusted to annual figures and further adjusted to 2005 PPP US\$.

⁹ Please see Utsa Patnaik's agrarian class schema (1987), for a similar framework. Utsa Patnaik uses her framework in fieldwork based methodology to generate these categories, not large surveys as presented in the current work.

Classes are defined using occupational data obtained from the National Classification of Occupations (NCO 3-digit, 1968 scheme) codes of various occupations listed in the Indian sample. Therefore, this generates a maximum of 1000 occupations, although less than 400 occupations are listed in the actual scheme. NSSO assigns an occupation to a household based on the principal occupation of the members of the household.

For the urban data, the proprietary and managerial classes have been broadly split into formal and informal categories based on the occupational descriptions (NCO) and nature of the industry (National Industrial Classification Codes - NIC). These classes include the proprietary or managerial classes directly available from the NCO descriptions as well as from the category of self-employed (based on a survey question). Based on the NIC codes that are available in the surveys, we assigned the workers either to manufacturing or services sectors. Further in each of these sectors, sub-division was made among professionals, skilled workers and unskilled workers based on the description of the occupations (NCO).

For the rural sample, using occupational data for the non-agricultural population, rural professionals and rural moneylenders are identified. Of the remaining, the self-employed among the non-agricultural community are defined based on one of the NSS survey based questions and this cannot be further sub-divided. Of these and others that own more than half-acre of land, while pursuing occupations other than agriculture, absentee landlord category is defined. Using the NSS survey based question that identifies agriculture as the primary occupation of the household, based on land data, the agricultural community is divided into five classes. Those that own more than 10 acres¹⁰ are defined as rich farmers. Those that own between 5 and 10 acres are defined as middle farmers. Those that own between 2 and 5 acres are designated as small farmers. Those that own less than 2 acres are called marginal farmers. Those that own no land but depend on agriculture as their primary source of livelihood, and define themselves as workers are defined as the agricultural workers.

III.2 Chinese Data

The China Household Income Project survey was conducted by Institute of Economics, Chinese Academy of Social Sciences. It is actually a sub-sample from the National Bureau of Statistics. In each year, not all the provinces are included in the survey. In 1995, 11 provinces with 6931 households in urban areas, 19 provinces with 7988 households in rural areas were selected; in 2002, 12 provinces with 6835 households in urban areas, 22 provinces with 9194 households in rural areas were selected. All the results presented below are expressed as per capita consumption expenditure data adjusted to annual figures and further adjusted to 2005 PPP US\$.

Classes were defined using the CHIP survey based questions on the occupations of the members of the household. We used the occupation of the head of the household to make the occupational classes. For the urban classes, the same procedures used in the Indian case were adopted to make a three-tier structure of the working class and then to separate the owners and managers of the formal and informal sectors. For rural areas, the survey based questions were used to identify different classes of workers, farmers and owners.

¹⁰ Irrigated land is considered to be equivalent to twice the non-irrigated land. This is based on yield per acre calculations during field research in Telangana villages.

III.3 Biases and Limitations

The biases in both Indian and Chinese surveys are that the upper end consumption groups are not adequately sampled, while the owner and managerial class is under-represented. This would most certainly understate the inequality levels in the Indian and Chinese economies. Moreover, consumption distribution is usually more equal than income distribution.

In the Chinese case, the migrants from rural areas to urban areas are not listed as urban residents. This is because the migrants still hold on to their rural hukou¹¹ while living in the urban areas. As a result of this, the Chinese urbanization process, which is discussed below is even more intense than the household surveys that we use are able to capture. This, however, is a limitation with all the large sample Chinese surveys. As the process of granting urban hukous to migrants gathers pace, this limitation may be sorted out at some point in the future.

IV Results I: Class Structure

IV.1 Indian Class Structure

IV.1.1 Simplified Class Structure

From table 1, which presents the simplified class structure, we can make the following observations. First, in terms of levels of consumption, at both points in time (1993-94 and 2004-05), the urban classes are better off than their rural counterparts. As expected, the urban elite (Owners, Managers and Professionals) is the best placed among the six classes presented, and the agricultural workers are at the bottom. The ranks of different classes are as expected.

[Insert Table 1 Around Here]

In terms of change (defined as the rate of change in the ratio of class mean to the population mean over the period), however, it can be seen from table 1 that the biggest gainers are the urban elite. Moderate gainers are the rural elite and rural non-agricultural working class. The biggest losers are the urban working class, small peasants and agricultural workers.

IV.1.2 Detailed Class Structure

From table 2, it can be seen that in terms of the levels of consumption, the ranks are more or less along expected lines. The only interesting thing to note is that the consumption levels of service sector professionals exceed the consumption levels of even the formal owners and managers. While this may be partly due to the sampling limitations, it shows how the relative position of the service sector and the service professionals in particular has begun to witness improvement at the higher end of the income ladder¹².

[Insert Table 2 Around Here]

In terms of change, the biggest gainers are the urban professionals (service and manufacturing), urban informal managers and owners, urban unclassified, rural moneylenders,

¹¹ According to the Chinese household registration system (hukou), an individual can be registered at one place. Once registered, the individual is expected to live there. Rural-urban migrants usually have rural hukou, so they are listed as part of the rural sample.

¹² The fact that the formal sector owners and managers do not witness a gain in their relative position although all other perceptions are to the contrary indicates how under-sampled this category is in the overall sample.

rural professionals, absentee landlords, and rural unclassified. Broadly, it is the service sector that has made rapid strides in terms of improvements in the urban areas, and the rural rentier classes that have improved in rural areas. The biggest losers are the urban unskilled workers (both manufacturing and service), skilled manufacturing workers, rural marginal farmers and tenants, and agricultural workers.

Tables 1 and 2 give a broad picture wherein the elites in urban as well as rural areas have begun to march ahead of the rest of the classes in their own sectors. The glaring gaps are between the relative enrichment of the professionals and the relative decline of the agricultural workers and small peasants. These results give a preview of how the detailed inequality decomposition results would turn out.

IV.2 Chinese Class Structure

IV.1.1 Simplified Class Structure

From table 3, which presents the simplified class structure for the Chinese case, we can make the following observations. First, in terms of levels of consumption, at both points in time (1995 and 2002), like in the Indian case, the urban classes are better off than their rural counterparts. As expected, the urban elite is the best placed among the six classes presented, and the farmers are at the bottom. The ranks of different classes are as expected.

[Insert Table 3 Around Here]

In terms of change, however, it can be seen from table 3 that for all the classes the ratio of the mean consumption of the class to the overall mean has actually declined. This is primarily because of the rapid urbanization phenomenon in China. We can observe from the table that the population shares of the urban classes as a whole have increased quite a bit while the farmer class has declined in its share quite significantly. While the farming population has migrated mainly to urban areas, and to the non-agricultural informal sector, in the survey data, only a part of this urbanization process, what we term as “administrative urbanization” has been captured¹³. This is the process by which villages in the suburban areas of cities and towns, which do not necessarily change their economic character, are added on to urban locales and thereby cease to be rural. Large masses of rural population become members of urban classes/populations by virtue of the change in their designation as part of the unfolding urban process. This is one of the big stories in China. The reclassifications of rural places as urban have the effect of turning the richest former rural dwellers in each class into relatively poor urban members of each urban class. This redistribution of the population's residential status thus lowers the mean per capita consumption of both rural and urban populations, causing both means to rise more slowly over time than national per capita consumption. Therefore, it appears as though every class has witnessed a decline in the ratio of its own group mean to the population mean.

IV.1.2 Detailed Class Structure

In analyzing the detailed class structure, in table 3, we present the group ratios to the mean in the following way. The rural class means are compared to the rural mean and the urban class means are compared to the urban mean. Not doing this would make the results appear in a distorted fashion. This is mainly because of the above-mentioned two phenomena - the rapid

¹³ Since most of the rural-urban migrants do not possess urban hukou, they are not listed as urban residents in the CHIP surveys.

urbanization (mentioned above) and the fact that the national growth rate of consumption is higher than both the rural and urban growth rates.

Once we make the above modification, the results appear as follows. In level terms, urban professionals (both services and manufacturing), and owners and managers benefit more than the urban average. Similarly, skilled workers in the services sector benefit quite significantly. The unskilled workers in the services sector have both lost out relatively as well as increased their population share significantly compared to their own earlier level. Unemployed workers are distributed either in the informal sector or in the urban unclassified category, and it is evident that the above two categories benefit less compared to those in the formal sector. The most glaring result, however, is that manufacturing workers, no matter skilled or unskilled, benefit less than the average, even though there is a large and growing manufacturing sector¹⁴ in China. It is also quite clear that there is a big increase in the service sector population share for urban residents, which is an interesting result in itself, as most commentators on China believe that it is the manufacturing sector that really captures the essence of the Chinese economy. If it is indeed the case, the results show that working class in this sector has not really made relative gains, while the growing service sector workers in the population have done relatively better than those in the manufacturing sector.

In the rural areas, a big change in the class structure is that the proportion of farmer class has shrunk very rapidly: from more than half of the total population to less than one-third of the total population. Relevant to this, the proportion of worker class in the rural informal sector has increased rapidly. In rural areas, those who worked in the formal sector and owners in the informal sector benefit more than the rest, while unskilled workers in the formal sector and the workers in the informal sector have lost out in 2002 relative to 1995. Urban-rural gap is extremely large. Urban-Rural divide is more than three to one. This gives a preview of the flavor of the decomposition results regarding China.

[Insert Table 4 Around Here]

V. Results II: Analyzing Inequality, Does Class Count?

In terms of the overall story of changing inequality in India, the main observation is that there is an almost 4 points (more than 10%, which is very likely an underestimate as discussed above) increase in the Gini Coefficient between 1993-94 and 2004-05. This is a big change after the experience of equalizing growth in the 1980s. After economic reforms have been introduced, the story of Indian growth has been dis-equalizing. In the Chinese case too, the overall consumption inequality has risen by more than 4 points (more than 10%) between 1995 and 2002. This shows a continuing deterioration in inequality, a trend that was clearly identified for the 1988 to 1995 period. In the Chinese case too it has been a story of dis-equalizing growth with both the rural as well as urban inequality taking a turn for the worse.

By decomposing this inequality along multiple axes such as rural-urban, inter-state, simplified class structure, complex class structure and so forth, we present competing ways of breaking down the increase in inequality into comprehensible structures. Before that, a brief note is presented on the methodology of decomposition.

¹⁴ It is also important to note that it is a bit difficult to catch the rising share of the manufacturing sector in the urban population, because the manufacturing sector workers are mainly composed of migrant workers.

V.1 Yitzhaki Methodology of decomposing the Gini Coefficient

The method of Gini decomposition developed originally by Shlomo Yitzhaki¹⁵ offers a unified framework for addressing certain important issues such as how much of the inequality can be explained by the inter-group and intra-group components. Moreover, this method helps us examine whether particular classes are stratified at a point in time and if they are getting increasingly more stratified over time. A brief description is sketched out below.

Let G be the Gini coefficient of consumption. Using the Yitzhaki decomposition methodology, we separate G into inter-group inequality (I_b) and a remainder (I_r) that can be interpreted as intra-group inequality (Yitzhaki, 1994):

$$G = I_b + I_r \quad (1)$$

The amount of inter-group inequality is:

$$I_b = \frac{2 \operatorname{cov}(\mu_i, \overline{F_{oi}(y)})}{\mu}, \quad (2)$$

where y is consumption, μ is mean consumption for all persons, μ_i is mean consumption for group i , and $\overline{F_{oi}(y)}$ is the mean rank of group i , i.e., the average position of the members of a group in the overall distribution. Thus, the amount of inter-group inequality is twice the covariance between the mean amounts of consumption and mean ranks of groups divided by the mean consumption for all individuals.¹⁶

The remainder term is calculated as:

$$I_r = \sum_i s_i G_i O_i, \quad (3)$$

where s_i is the share of group i in aggregate consumption, G_i is the Gini coefficient of the consumption distribution within group i , and O_i is the overlapping index for group i . The Yitzhaki decomposition provides group-specific measures of overlapping unlike the standard decomposition of the Gini. The index of overlapping proposed by Yitzhaki is a measure of the degree to which the range of consumption in each group overlaps with the range of consumption for all population. Overlapping can thus be seen as the opposite of stratification: the higher the amount of overlap between a group and the population, the less stratified they are as a group in terms of consumption (Yitzhaki, 1994, pp.148–149). The amount to which group i overlaps with the overall distribution is defined as:

¹⁵ As mentioned above, this framework and its description are also available in (Wolff and Zacharias 2009) and (Zacharias and Vakulabharanam 2009) apart from the original description in Yitzhaki (1994).

¹⁶ In contrast, in the standard decomposition, the between-group component would be equal to twice the covariance between the consumption of each group and the rank of each group's mean consumption divided by overall mean consumption. The Yitzhaki decomposition takes into account the ranking of each individual within each group in the overall distribution.

$$O_i = \frac{\text{cov}_i(y, F_{oi}(y))}{\text{cov}_i(y, F_i(y))}, \quad (4)$$

where $F_{oi}(y)$ is the function that assigns to the members of group i their ranks in the overall distribution, F_i is the function that assigns to the members of group i their ranks in the consumption distribution within that group, and cov_i indicates that the covariance is according to the distribution within group i . The minimum value of O_i is given by the share of group i in the population and its maximum value is equal to 2. When the index equals the minimum possible value, it suggests that the group in question is a perfect stratum, i.e., it occupies an exclusive segment of the overall distribution. If a particular group has a range of consumption that coincides with the range of consumption of all persons then the index will be equal to 1. Finally, if the index is greater than 1, the distribution of consumption within the group is much more polarized than in the overall distribution. This can happen if the members of the group constitute two strata, one that has higher and the other that has lower than the average consumption of the whole population (Milanovic and Yitzhaki, 2002, pp.162–163).

The index of overlapping defined in equation (4) is constructed from indexes that indicate the amount by which a group overlaps with each of the other groups:

$$O_i = p_i + \sum_{j \neq i} p_j O_{ji} \quad (5)$$

where p_i is the share of group i in the total population and O_{ji} is the index of overlapping of group j by group i . Since the overlapping of a group by itself is equal to 1 by definition, its contribution to O_i is equal to its relative size. The index of overlapping of the overall distribution by a group is the weighted sum of overlapping of each of the other groups by that group, with the relative size of each group serving as the weights.

In turn, the group-by-group overlapping indexes are calculated as:

$$O_{ji} = \frac{\text{cov}_i(y, F_{ji}(y))}{\text{cov}_i(y, F_i(y))}, \quad (6)$$

where F_{ji} is the function that assigns members of group i their ranks in the distribution of group j . The index O_{ji} indicates the extent to which the consumption of individuals in group j falls in the range of consumption of individuals in group i . (Yitzhaki, 1994, pp.150–152).

Using the Yitzhaki method, various decomposition results are presented below.

V.2 Decomposing Indian Inequality

V.2.1 Rural-Urban Decomposition

Table 5 presents the results of the rural urban decomposition using the Yitzhaki method. First, it can be observed that a big share of the overall inequality (more than 80%) can be explained by the intra-group component in both years, although there is a moderate increase in the inter-group inequality, i.e. between the rural and urban areas, during the period of study. Second, it is also evident that there is an increase in the intra-group inequality i.e. within-rural or within-urban inequality or both. When we investigate this further, we find out that all the

increase in the intra-group inequality comes from the increase in the intra-urban inequality. Third, in terms of the overlapping indexes, urban overlapping index has declined suggesting a greater stratification of the urban vis-à-vis the rural. These results are in consonance with a lot of studies as well as the changing overall sources of the GDP, while the employment structure does not change readily.

[Insert Table 5 Around Here]

V.2.2 Inter-State Decomposition

Table 6 presents the summary results of the inter-state decomposition in India. According to these results too, a bigger share of the overall inequality is explained by the intra-state inequality (more than 85% in both years). In terms of changes across the two points in time, it is evident that both inter-group as well as intra-group inequality rose in absolute terms, although the proportion of the overall inequality explained by the inter-state component has risen (from 10% to about 15%). States like Gujarat, Tamil Nadu, Maharashtra, Kerala and Andhra Pradesh have begun to grow more rapidly than other states while they have also witnessed fairly steep increases in their inside-inequality (Based on own calculations from the NSS surveys; and for growth rates of State Domestic Product, see Jayadev et. al. 2007; Also see Bannerjee et. al. 2009).

[Insert Table 6 Around Here]

V.2.3 Simplified Class Decomposition

Table 7 presents the results of the simplified class decomposition. Inter-Class inequality rose quite significantly. This is self-evident from the discussion regarding the gainers in the simplified class structure story above, with the urban elites making significant relative gains while the urban working people and the rural working people have lagged behind. Intra-Class component also rose somewhat but it is marginal. The main contribution to the increase in the intra-class component comes from the urban classes and the non-agricultural working class. Also, Gini indexes of these two classes have begun to witness steady increase. In terms of overlapping, both urban elite and urban workers have witnessed significant declines in their indexes, suggesting that these classes have begun to get more stratified vis-à-vis the rural classes. The increase in the intra-group component of the rural non-agricultural working class needs more careful examination and further investigation. However, an initial hypothesis is that there is an increased migration from among the agricultural poor to the non-agricultural population.

[Insert Table 7 Around Here]

V.2.4 Detailed Class Decomposition

Table 8 presents the results of the detailed class decomposition. First, there is a substantial increase in the between-class inequality. The entire increase in the overall Gini is accounted for by the increase in the between-class inequality. This is by far the most significant decomposition result. The details of the nature of this increase in the between class inequality have been discussed in section IV. To summarize briefly, the urban professionals on the one side, and the marginal farmers and agricultural workers on the other side have shown tendencies towards stratification at the top and bottom respectively. This can also be obtained from a discussion of the overlapping index in table 7. Substantial reductions have been noted for urban professionals, urban informal manager/owner, manufacturing professional, skilled workers in manufacturing, rural professionals, and rural moneylenders. All these groups have become more

stratified at the top and are performing better than other members of society. For some classes such as formal managers and non-agricultural workers, the Gini coefficients show substantial increase.

[Insert Table 8 Around Here]

A few points need to be noted regarding the within urban and within rural class inequality (the details are not all presented in the table but can be found in Vakulabharanam (2009)). First, the urban inequality as a whole is higher than the overall Indian inequality at both points in time. Second, urban inequality registered an increase of almost 10% in terms of the Gini Coefficient during the period of study. The main contributor to this seems to have been the rise in the inter-class component. Overall inequality within the rural sector has risen moderately (about 5%). From the results it is clear that this increase has come about mainly because of the increase in the inequality among the non-agricultural groups and the increase in the inequality between the agrarian and non-agrarian classes. In terms of the intra-class component, the largest increase has come about among the non-agricultural workers, whose overlapping index has almost equaled one, implying a process of polarization within this group. Given also the fact that this group has witnessed a swelling in its ranks, probably an increasing number of agricultural workers and distressed marginal farmers/tenants are joining the non-agricultural workforce.

V.3 Decomposing Chinese Inequality

V.3.1 Rural-Urban and Inter-regional Decompositions

In the Chinese case, a major part of the overall inequality is explained by the rural urban gap i.e. the inter-group inequality (about 50% of the total inequality). Between the two years, the absolute contribution of between group did not change much, but in relative terms there is a decline in percentage terms of the between group effect, from 55% to 49%. This is clearly due to the administrative urbanization impact as explained above. All the changes of overall Gini can be explained by the rising intra-group effect in urban areas. Each component of the intra-group effect, i.e., the consumption share, the within Gini as well as the overlapping index have shown increase. While in rural areas, due to the shrinking of the population share as well as other factors, the share of the consumption has declined. But the Gini coefficient has increased, and the overlapping index increased, so that the final result is that the absolute contribution of the rural remains unchanged.

The inter-regional decomposition shows that much of the overall inequality arises from within regions and not between them. This fact does not change much over time as we can observe from table 9.

[Insert Table 9 Around Here]

V.3.2 Simplified Class Decomposition

From table 10, it can be observed that the main story in China is the significant increase in the intra-class component of the overall inequality. The inter-class component appears to be more or less the same. The massive contribution to the increase in the intra-class component occurs through the increase in the intra-component of the urban working class as well as the informal non-agricultural sector in rural areas. This is clearly the result of the migration patterns in China wherein the farmers are moving into non-agricultural pursuits willy-nilly (either voluntary migration or administrative urbanization). Due to the migration patterns, therefore the class structure at this point in time is in a state of flux. Due to this, while the increase in

inequality might have originally occurred due to the very different economic processes in the urban and rural areas, due to administrative urbanization, it all appears as a within-urban phenomenon as well as intra-class phenomenon. In other words, the increase in the intra-class inequality is actually an increase in the inter-class inequality but appears differently due to the massive urbanization phenomenon.

[Insert Table 10 Around Here]

V.3.3 Detailed Class Decomposition

From table 11, the following observations can be made. The inter-class effect appears to be unchanged in absolute terms but declines in terms of the explaining the overall inequality. However, the inter-class effect explains more than 50% of the overall inequality in both years (much higher than the Indian case). The contribution of the intra-urban inequality to the overall inequality increased in 2002 compare with 1995. In urban areas, the Gini coefficient in each class goes up during this period, while overlapping index increases in most of the cases besides one group (unskilled manufacturing workers), and as mentioned above, this can be explained by the phenomenon of rapid urbanization. The rapid migration from the rural to the urban areas results in the slowdown of the wages of all the unskilled workers in the urban sector. In rural areas, the total population share of rural residents decreased a lot, but mainly the share of consumption of farmer class goes down. Thus the contribution of the intra-farmer class to the overall inequality decreased rapidly during this period. Gini coefficient in each class in rural areas goes up, while the trends of overlapping indices vary across classes. The important point to note is that the overlapping index of the informal workers in the rural areas has gone down suggesting that they are getting more stratified at the bottom. This suggests distress migration from the farming community like in the Indian case.

[Insert Table 11 Around Here]

VI Comparison of Indian and Chinese Class Structures and Inequality

From the above analysis it can be observed that inequality in China and India increased at the national level during the period of study by about 10%. In 1995, the mean consumption in China is about 35% higher than that of India, while in 2002, it is 87% higher. But it is also true that overall Gini in China is much higher than that in India, in 1995 and 2002, it is 10 percentage points higher than in India.

Inter-Class effects explain a significant part of the overall inequality in both countries. Rural-urban divide is also extremely significant (especially in China) in explaining inequality. In terms of the levels of consumption, elites in China and India are doing much better than the other classes. In both countries, the service professionals (somewhat surprising for the case of China) and skilled workers are gaining significantly relative to other classes. In India, in rural areas, the rentier classes (moneylenders and landlords) have made huge gains. In rural China, it is mainly those who worked in formal sectors that gained. In India, the biggest losers are the urban unskilled workers, manufacturing skilled workers, small and marginal farmers and agricultural workers. In China, the biggest losers are the farmers, those who worked in informal sectors in rural areas together with manufacturing workers and the unemployed in urban areas.

While in India the rural-urban gap increased (inter-group), China witnessed the opposite trend of decreasing inter-group inequality. The intra-group inequality in urban areas in China as well as India has tended to increase. Urban in India became more stratified (from overlapping

index) while in China it became less stratified during the period of study. In 1995, overlapping indices in every urban class in China are lower than their Indian counterpart, but in 2002, the overlapping indices of classes that gained in urban India become lower than those of China. This suggests tendencies towards greater stratification of urban India vis-a-vis rural India compared to the same in China.

While in India, the inter-class inequality explains the entire increase in overall inequality, the intra-class effect inside urban China almost completely explains the increase in the overall Chinese Gini. We believe that the latter is an appearance that comes about mainly due to the process of administrative urbanization as explained above. In India, classes such as service professionals, manufacturing professionals, informal owner/manager class and rural rentier classes (such as moneylenders and landlords) are getting more stratified at the upper end while agricultural workers are getting more stratified at the bottom. In China, generally urban classes are more stratified compared to rural classes although this stratification declined mildly according to our findings during the period of this study.

VII. Explanations and Discussion

VII.1 Indian Story

The Indian growth strategy of the 1990s and this decade has led to increased economic inequality among its population. The emerging patterns of this inequality have been discussed above. How do we understand and explain these patterns of inequality?

Several studies have pointed to increased distress in the agrarian sector in India. More than 100,000 farmer suicides have occurred between 1998 and now. Agricultural growth has lagged far behind the growth in other sectors such as services and manufacturing. This has been attributed to policies of economic liberalisation¹⁷ as well as a slowdown caused by a decline in the returns from Green Revolution technologies (Vakulabharanam and Motiram 2007). Policies of economic liberalisation have tended to cause a reduction in public investment in agriculture, as well as partial withdrawal of state support to various small farming groups. Especially before 2004-05 (this study focuses on that period), the cutback in subsidies and the slow growth of subsidized agricultural credit on the one hand, and the introduction of trade liberalisation on the other, which caused agricultural output prices to fall for some key agricultural commodities, caused a “double squeeze” of the farming community. Now it is well documented that this has led to an increased dependence of the small farmers on informal moneylenders, who also frequently combine other roles (such as that of merchant) with moneylending causing an increase in their market power vis-à-vis small peasants (Reddy and Mishra 2009). This has led to a further deterioration of the farmers’ living standards as they now have to pay much higher interest rates (compared to the institutional rates), and also sometimes lose control over the cropping pattern decision and so forth (See Vakulabharanam 2004). All in all, the agricultural sector has suffered the worst and this reflects in the reduced consumption shares of all the populous groups in agriculture but especially of the marginal farmers, tenants and agricultural workers. Indian growth strategy has tended to leave agriculture and a majority of its population behind as the above analysis based on consumption data suggests. At the same time, it is evident that the

¹⁷ Since 2004, certain reversals in policy have come about such as the introduction of the National Rural Employment Guarantee Scheme. The results of this act and other reversals would have to be evaluated when the next consumption survey is released.

rentier classes (such as moneylenders and absentee landlords) have cashed in on the state withdrawal to make steady gains. When the agrarian sector is in distress, does the rest of the economy provide opportunities for migration for these peasants?

The rural non-agricultural sector has seen impressive gains at a first glance. However, when we do a careful class analysis it is mostly the non-working groups (mentioned above) that have witnessed improvements. The rural non-agricultural working population has seen improvement but its ranks have almost doubled while the inequality within this group has undergone a big increase. The latter probably results primarily from the distress that the agricultural sector has undergone causing an outward migration. In the wake of insufficient employment opportunities in the urban areas, this migration shows up as intra-rural. Clearly, while there are improvements in this sector, they do not compare with the massive development that the Chinese non-agricultural sector witnessed, especially in the 1980s and 1990s. One of the main objectives¹⁸ of the relatively new special economic zone (SEZ) strategy implemented mostly in rural areas for rapid industrialization is the increase in the level of non-agricultural employment, although results are far from evident. Apart from the enormous dispossession of peasantry that this strategy has tended to generate in states such as Maharashtra, Andhra Pradesh and West Bengal, the positive net employment effects have not appeared on the horizon.

The urban sector has grown more rapidly than the rural sector during this period with the growth path skewed in favour of the organized services sector. It is now well known that the Indian government (as the rest of the world) has been seeing the Indian economy as primarily driven by service sectors such as Information Technology, Biotechnology, Finance, Insurance, Real Estate, Transport, Hotels and so forth. These and other similar sectors have, therefore, received a lot of infrastructural support, as well as have benefited from easier legislation. The main beneficiaries of this set of policies (they can also be termed policies towards globalization) have been the upper end of formal workers (professionals) employed in these industries as well as the capitalist and managerial cadres. These sectors have typically been export-led, skill-intensive and dependent on overseas demand for their sustenance. In contrast, the manufacturing sector¹⁹ in India has been witnessing impressive growth only in the recent years, although the professionals in this sector have witnessed impressive gains through the period as the survey results indicate.

The informal sector owners and managers within urban areas have seen impressive growth in their consumption even as the inequality within this group has increased sharply. This group is operating within the high-income generating arenas such as retail and wholesale, as well as low-income generating arenas such as self-employed petty vendors. The consumption shares of the unskilled workers have declined sharply suggesting that Indian growth trajectory has not been a rising tide for most groups in the society. In sum, the distress in the agrarian sector has not been countered by a rapid growth of decent employment opportunities in other sectors. The fact that the share of informal workers (informal workers in the informal as well as the formal sectors) in the total employment rose slightly during the first decade of reforms to more than

¹⁸ Of course, the other and more important premise for the policymakers is that it will generate high growth along the Chinese lines.

¹⁹ It remains to be seen if this will result in employment generation like in the case of China.

92% of the total employment is indicative of the fact that decent employment opportunities on a large-scale have simply not been forthcoming from the formal high-growth sectors (From NSS report on the informal sector in India in 2004-05, Report 519).

When we analyze the macro-economic growth statistics for the Indian economy during the period of analysis (1994-2005), Indian growth has been led largely by investment, exports (not net exports) and private consumption initially until 2002, and after 2002, consistently by investment and exports²⁰. However, consumption shares of almost all the poor groups have witnessed declines implying that it has been luxury consumption that has driven the private consumption growth patterns. Similarly, it is now widely documented that investment in agriculture has not kept pace (see Reddy and Misra 2008), suggesting once again that it has been investment in non-agricultural sectors that has seen impressive growth. With this clarity, we can see how luxury consumption, non-agricultural investment and export-led growth sectors have tended to become enclave-like, while the rest of the economy that contains the predominant majority in India has not significantly benefited from the growth process. While some economists argue about the 'trickle-down' effects of this sort of a growth process, it has not been visible in the Indian economy so far on any large scale. It is this skewed growth process that explains the increase in the overall inequality after 1991 reversing the impressive record with inequality in the 1980s decade.

The above evidence buttresses the understanding that there is a consolidation of a new class structure in India as has been noted in other analyses (Chatterjee 2008). Until the 1980s, literature about the pan-Indian class structure points to two ideas: an intermediate class regime (originally proposed by Kalecki 1972 and imported to India by Raj K.N. 1973); or a loose coalition of dominant classes (Bardhan 1984). In the intermediate regime story, the urban intermediate class (self-employed groups, small and medium enterprise owners, and traders), and the rural intermediate class (rich and middle peasants) played a big role in determining state policies at the expense of the big bourgeoisie. In the dominant class story, rich peasants, public sector bureaucracy and big bourgeoisie jostled for supremacy with none achieving it fully and the state more or less acting in a domain of relative autonomy (See McCartney and Harriss-White 2000 for a discussion of the variants of the intermediate class regime idea applied to India). The state operated with an ambivalence wherein it took part in accumulation activities, worked for the conflicting interests of the dominant classes, while also appearing to take on a broadly developmentalist and progressive pro-poor role for itself. This class structure along with the role of the state is supposed to explain both the tendencies towards stagnation in the economy as well as why certain classes tended to benefit disproportionately during the phase of relative stagnation until 1980. After 1991, as the survey results indicate, the dominant classes are the urban elites. Urban elites have incorporated the professionals (some may use the term - upper income middle classes) from among the working people, as well as the state in pushing through the agenda of economic liberalisation. The state has consequently reduced its own accumulation

²⁰ For the whole period 1994-2005, if we take the National Accounts figures, about 60% of the cumulative growth can be attributed to private consumption, over 30% can be attributed to investment and about 30% to exports (not net exports) making these three components the main pillars of Indian growth (Source: Calculations from CSO Data on macroeconomic aggregates, Ministry of Statistics, India).

role quite significantly. The rural intermediate classes are not quite as important in this new scheme, although their interests are usually protected, directly or indirectly²¹. Members of this class have also unevenly moved on to urban occupations to become constituents of urban capitalist classes (Damodaran, 2008). The working groups (the rural poor - small and marginal farmers, agricultural workers; as well as the urban poor - unskilled urban workers) are no longer among the main foci of the state but their interests have continued to be addressed mainly through a populist mode in order to enlist their support during elections²². The owners and managers in the informal sector in urban areas are quite heterogeneous and certain groups (e.g. wholesale and retail)²³ have probably benefited (even this may not last long once liberalisation takes deep roots in these occupations) while a large section (petty vendors) has probably not. However, the employment numbers suggest that the informal sector as stated above plays the key role of absorbing employment in the face of insufficient employment opportunities in the formal sector, although this does not apparently improve the consumption levels of the informal workers (in the unskilled category in our datasets) as the above analysis shows. This consolidation of a new class structure comes through largely in the analysis of the levels and changes in the consumption patterns as revealed by the NSS consumption surveys.

VII.2 Chinese Story

In the case of China, the overarching story after 1978 (when reforms were introduced) is one of fast-paced economic growth and rapid reduction in poverty, while inequality has risen tremendously. But if we analyze this period in different phases, it seems as though a great amount of poverty reduction happened in the early 1980s when the agricultural sector grew rapidly. At least after the mid-1980s, inequality levels have risen steadily.

The main cause behind Chinese inequality is that the rural classes (in particular, the farming community) have been left behind vis-à-vis the urban classes. During the period of our study the farmers are not only at the bottom of the consumption ladder both in 1995 and 2002, but they also registered relatively low rates of consumption growth. The failure of implementing a proper agricultural policy in China surely explains a big part of this. Given the slow paced increase in agricultural incomes, we need to raise a similar question as the one raised for India. Does the Chinese economy provide the disadvantaged farmer community other avenues to find employment?

The main difference between the Indian and Chinese stories is precisely that the Chinese economy has been able to provide employment opportunities in both the non-agricultural sector as well as the urban sector. In the 1980s, with the Township and Village Enterprises (TVE) strategy, it was able to absorb a lot of migrating farm workers from villages into the non-agricultural sector. With its Special Economic Zone strategy, it was able to absorb a lot of

²¹ Usually in the formulation of minimum support price policies or in the prevention of large-scale land reform process, the interests of rural elites continue to be protected. Also, the rural intermediate classes have considerably diversified themselves into urban activities so that they have one foot in the rural and another foot in the urban areas. See Vakulabharanam and Motiram (2008) for a further discussion of these issues.

²² Chatterjee (2008) calls this phenomenon as the reversal of the primitive accumulation wherein the state counteracts the dispossession of the poor by throwing certain benefits in their direction.

²³ With the onset of corporate retail services in the more recent years, it may be hard for the informal retailers to compete and continue to make gains.

migrants into the manufacturing sector. This also shows up in the rapid urbanization that is visible in the current survey. The income differentials between the farming level and the urban employment level are significant and therefore have provided the impetus to migrate for the farming population. While the income differentials between the rural non-farm sector and the farm sector are not as significant, they are still significant enough for farmers to leave agriculture and move to non-farming work.

However, one of the main reasons behind the rising inequality in the Chinese economy is that the migrant workers have been absorbed in relatively low-paid unskilled work, whether in the non-agricultural manufacturing sector or the urban manufacturing sector, or in the urban services sector. This has been coupled with substantial improvements for the professionals (even more so in the services sector), thereby creating a multiple-tier labour market structure. This has led to an increase in the within-urban inequality. At the same time, since the migrants are usually absorbed in the low-wage non-agricultural sectors, even if they have rural hukou, the rural-urban gap has remained high. These, along with the consumption of the farmer class that has lagged behind, explain much of the Chinese inequality.

What is the new Chinese Class structure? Before 1978, it is widely felt that there were three large groups/classes in Chinese society in economic terms. Firstly, the farming community that was not completely homogeneous. In the sense that there was a substantial intra-peasant inequality due to the differences of productivity levels across communes, while the communes themselves were fairly equal. Secondly, the urban working class that was fairly homogeneous. Thirdly, the government officials, who worked at various levels of the government. With the onset of economic reforms after 1978, the major transformation in this class structure is that a capitalist class (owner and manager category in our results) emerged first in urban areas and then in the rural areas. This class has taken on a dominant role in the Chinese society today. This class gets its support from the professional class in the urban and rural areas. The rest of the society consists of urban workers (skilled and unskilled, in manufacturing and in services) as well as the farmers. State policies have contributed to tremendous growth in China while creating and deepening the new class structure. Added to this, the failures in the agricultural policy have meant that the gaps between the entire urban community and the farming community have increased tremendously. From our analysis of the CHIP survey data, these trends are unmistakably evident in the Chinese society.

VII.3 Policy Suggestions

For India and China, several policy conclusions follow if this skewed pattern of growth and rising inequality need to be counteracted. Firstly, it is obvious that the agricultural sector in both countries needs higher public investment and better support in terms of promoting institutional lending and so forth. However, in the Indian case, it is the poor peasants and agricultural workers who really need to be supported. In this context, an effective way to counter landlessness (in which group, poverty is quite concentrated) is to implement land reforms. Better market-mediation structures need to be developed, for instance, creation of input-procurement and output-marketing cooperatives among farmers (Motiram and Vakulabharanam 2007). This could potentially make the rural sector much more egalitarian and may even contribute to higher growth due to improved consumption within the rural areas due to this. Secondly, the labour absorption strategies for the agricultural surplus labour need to be strengthened. Instead of hankering exclusively after higher labour productivity, the strategies in the two countries need to center around job creation. These efforts need to be proactive and direct, wherever possible.

Thirdly, the non-agricultural sector needs to be developed along cooperative lines in both countries, perhaps taking a cue from the Chinese growth strategy especially in the 1980s and 1990s when township and village enterprises provided a much needed impetus towards finding employment for the displaced farmers. India should think about this strategy afresh. Fourthly, careful social safety nets need to be provided for those classes of people (the urban and the rural poor) who are contributing to growth but who are benefiting little from it. Implementing these measures will certainly improve domestic consumption in both economies as well as put both these economies on a sounder, more sustainable and a more equal growth path.

References

- Bannerjee L., Deshpande A., Ming Y., Ruparelia S., Vakulabharanam V. and Zhong W., (2009) "Comparing Indian and Chinese Inequality After Economic Reforms," *India China Institute Working Paper*, New School, New York.
- Bardhan, Pranab (1984) *The Political Economy of Underdevelopment in India*, New Delhi: Oxford University Press.
- Barooah V. Gustafson B. and Li S. (2005) "China and India: Income Inequality and Poverty North and South of the Himalayas," presented at an International conference on "Liberalization Experiences in Asia: a Comparative Appraisal", jointly organized by Centre de Sciences Humaines (CSH,) in Delhi, the Indian Statistical Institute, Kolkata and the Indian Council of Social Science Research ICSSR, Delhi.
- Chatterjee, Partha (2008) "Democracy and Economic Transformation in India," *Economic and Political Weekly*, April 19th.
- Chaudhuri S and M Ravallion (2006) "Partially Awakened Giants: Uneven Growth in India and China" in L A Winters and S Yusuf (eds) *Dancing with Giants: China, India and the Global Economy*, World Bank Washington DC.
- Damodaran, Harish (2008) "India's New Capitalists," Delhi: Permanent Black.
- Dutt A.K. and Rao, J. Mohan (2000) "Globalization and Its Social Discontents: The Case of India" *Working paper No 2000-06, SCEPA Working Papers from Schwartz Center for Economic Policy Analysis (SCEPA)*, The New School of Social Research, New York.
- Hardt Michael, Negri Antonio (2000) *Empire*, Harvard University Press.
- Himanshu, (2007) "Recent Trends in Poverty and Inequality: Some Preliminary Results", *Economic and Political Weekly* February 10, 2007.
- Jayadev A. Motiram S. and Vakulabharanam V. (2007) "Patterns of Wealth Disparities in India During the Era of Liberalization," *Economic and Political Weekly*, 42 (39), pp. 3853-63
- Kalecki, M. (1972) *Essays on the Economic Growth of the Socialist and the Mixed Economy*, London: Unwin.
- Khan, Azizur R., and Carl Riskin (2005) "China's household income and its distribution, 1995 and 2002." *The China Quarterly*, Vol. 182, June, pp. 356-384.
- Li Peilin, Zhang Yi, Zhao Yandong and Liang Dong (2004) *Social Conflicts and Consciousness in China Today (shehui chongtu yu jieji yishi)*, Social Sciences Academic Press.

Lu, Xueyi. (eds.) (2004), *Social Mobility in Contemporary China (dangdai zhongguo shehui liudong)*. Social Sciences Academic Press.

Lu, Xueyi. (eds.) (2002), *Contemporary China's Social Strata Report(dangdai zhongguo shehui jieceng yanjiu baogao)*. Social Sciences Academic Press.

Marx, Karl. (1976) *Capital Volume 1*, London: Penguin.

Marx, Karl (1978) *Capital Volume 2*, London: Penguin.

Marx, Karl (1981) *Capital Volume 3*, London: Penguin.

McCartney M. and Harriss-White Barbara (2000), "The Intermediate Regime and Intermediate Classes Revisited: A Critical Political Economy of Indian Economic Development From 1980 to Hindutva," *Working Paper Series of Queen Elizabeth House, Oxford, QEHWPS34*.

Milanovic, Branko and Shlomo Yitzhaki. (2002) "Decomposing World Income Distribution: Does the World Have a Middle Class?" *Review of Income and Wealth*, Series 48, No.2, pp.155-178.

Motiram S. and Vakulabharanam V. (2007) "Corporate and Cooperative Solutions for the Agrarian Crisis in Developing Countries," *Review of Radical Political Economics*, Vol. 39, No. 3, pp. 360-367.

Patnaik, Prabhat (2009) "A Perspective on the Growth Process in India and China," *The IDEAS Working Paper Series, Paper No. 05/2009*.

Patnaik, Utsa (1987) *Peasant Class Differentiation: A Study in Method With Reference to Haryana*, New Delhi: Oxford University Press.

Raj, K.N. (1973) "The Politics and Economics of Intermediate Regimes," *Economic and Political Weekly*, July 7th.

Reddy D. N. and Mishra Srijit (2009) *Agrarian Crisis in India*, Delhi: Oxford University Press.

Riskin, Carl, Renwei Zhao, and Shi Li (eds.), (2001) *China's Retreat from Equality: Income Distribution and Economic Transition*, Armonk, New York: M.E. Sharpe.

Thompson E.P. (1963) *Making of the English Working Class*, London: Victor Gollancz.

UNDP, China Human Development Report 2005, UNDP.

Vakulabharanam V. (2004) *Immiserizing growth: Globalization and agrarian change in Telangana, South India between 1985 and 2000*, PhD. Dissertation, University of Massachusetts, Amherst.

Vakulabharanam V. and Motiram S. (2007) "Political Economy of Agrarian Distress in India Since the 1990s," in *Great Transformation? Understanding India's New Political Economy* (eds.) John Harriss, Stuart Corbridge, Sanjay Reddy and Sanjay Ruparelia, *Forthcoming*.

Vakulabharanam V. (2009) "Does Class matter? Class Structure and Worsening Inequality in India During the Era of Economic Reforms," *Discussion Paper*, Economic Research Center, Nagoya University, Japan.

Wright E.O. (1997) *Class Counts: Comparative Studies in Class Analysis*, Cambridge University Press.

Wolff E.N. and Zacharias A. (2009) "Class Structure and Economic Inequality," *Cambridge Journal of Economics*, Forthcoming Issue.

Wu, Jinglian. (2004) *Economic Reform in Contemporary China (dangdai zhongguo jingji gaige)*, Shanghai Fareast Press.

Xue J. and Zhang Y. (2007) "Social Class Structure and Income Inequality in China: A Study Base on the China Social Dynamic Survey 2006," *Economic Science*, Vol. 55 Issue 3.

Yitzhaki, Shlomo. (1994) "Economic Distance and Overlapping Distributions," *Journal of Econometrics*, 61, pp. 147-159.

Zacharias A. and V. Vakulabharanam. (2009) "Caste and Wealth Inequality in India" Working Paper No. 566, Annandale-on-Hudson, NY: The Levy Economics Institute of Bard College, May.

Tables

Please note: 1. All Indian tables constructed from National Sample Survey Rounds 50 (1993-94) and 61 (2004-05)

2. All Chinese tables constructed from China Household Income Project, 1995 and 2002.

Table 1: Simplified Class Structure (India)

	1993-94			2004-05			
	Mean	Pop (%)	Ratio to Mean	Mean	Pop (%)	Ratio to Mean	Ratio Growth
Urban Elite	984	7.44	1.94	1189	8.19	2.04	0.06
Urban Workers	703	17.35	1.38	758	17.13	1.30	-0.06
Rural Elite	480	32.18	0.94	559	29.44	0.96	0.02
Non-Ag Workers	417	6.67	0.82	488	11.01	0.84	0.02
Rural Small Peasants	412	15.62	0.81	456	15.67	0.78	-0.03
Agricultural Workers	322	20.74	0.63	354	18.56	0.61	-0.04
ALL	509	100.00	1.00	582	100.00	1.00	0.00

Table 2: Detailed Class Structure in India

	1993-94			2004-05			
Class	Mean	Pop (%)	Ratio	Mean	Pop (%)	Ratio	Ratio - growth
Owner/Manager(formal)	1345	0.95	2.64	1490	1.16	2.55	-0.03
Owner/Manager(informal)	816	3.58	1.60	982	4.32	1.68	0.05
Manufacturing-Professional	1006	1.60	1.98	1247	0.45	2.14	0.08
Manufacturing-Skilled	682	6.17	1.34	721	6.72	1.24	-0.08
Manufacturing-Unskilled	527	2.14	1.04	537	1.47	0.92	-0.11
Service-Professional	1170	1.25	2.30	1534	1.01	2.63	0.14
Service-Skilled	884	4.59	1.74	1055	3.85	1.81	0.04
Service-Unskilled	629	4.46	1.24	648	5.08	1.11	-0.10
Urban-Unclassified	872	0.05	1.72	1331	1.25	2.28	0.33
Urban Sub-Total	787	24.74	1.54	897	25.20	1.54	0.00
Rich Farmer	524	7.36	1.03	601	6.23	1.03	0.00
Middle Farmer	445	8.02	0.87	497	7.54	0.85	-0.03
Small Farmer	406	10.52	0.80	459	10.07	0.79	-0.01
Marginal Farmer/Tenant	426	5.09	0.84	451	5.59	0.77	-0.08
Ag Workers	322	20.74	0.63	354	18.56	0.61	-0.04
Rural Professional	600	2.62	1.18	928	1.50	1.59	0.35
Rural Moneylender	669	0.01	1.31	999	0.01	1.71	0.30
AbsenteeLL+ Nonagselfemp	465	3.31	0.91	563	4.94	0.97	0.06
Nonag Selfemployed	422	6.15	0.83	482	7.40	0.83	0.00
AbsenteeLL+Others	514	1.08	1.01	690	0.98	1.18	0.17
NonAgWorkers	417	6.67	0.82	488	11.01	0.84	0.02
RuralUnclassified	483	3.64	0.95	650	0.87	1.11	0.17
Rural Sub-Total	417	75.26	0.82	476	74.80	0.82	0.00
ALL INDIA	509	100.00	1.00	583	100.00	1.00	0.00

Table 3: Simplified Class Structure in China

Class	1995			2002		
	Mean	Ratio	Pop (%)	Mean	Ratio	Pop (%)
Urban Elite	1421	2.13	11.13	2160	1.97	13.26
Urban Working Class	1194	1.79	18.01	1687	1.54	25.89
Rural Elite	529	0.79	5.59	836	0.76	6.32
Rural Non-Agricultural Worker in Formal Sector	543	0.81	4.06	753	0.69	4.91
Rural Non-Agricultural Informal Sector	483	0.72	4.80	596	0.54	14.99
Farmer	390	0.58	56.41	553	0.51	34.64

Table 4: Detailed Class Structure in China

Class	1995			2002		
	Mean	Ratio	Pop (%)	Mean	Ratio	Pop (%)
Owner and Manager(Formal)	1427	1.11	4.98	2110	1.14	5.87
Owner and Manager(informal)	882	0.69	0.18	1464	0.79	1.27
Manufacturing-Professional	1288	1.01	0.50	2003	1.08	2.45
Manufacturing-Skilled Worker	1220	0.95	7.32	1641	0.89	7.63
Manufacturing-Unskilled Worker	1115	0.87	2.73	1425	0.77	2.65
Service-Professional	1428	1.11	5.65	2296	1.24	4.94
Service-Skilled Worker	1240	0.97	4.12	1987	1.08	7.03
Service-Unskilled Worker	1123	0.88	1.99	1700	0.92	3.61
Urban Unclassified	1215	0.95	1.67	1464	0.79	3.70
Subtotal	1281	1.92	29.14	1847	1.69	39.14

Detailed Class Structure in China (Continued)

Class	1995			2002		
	Mean	Ratio	Pop (%)	Mean	Ratio	Pop (%)
Farmer	389	0.94	54.04	550	0.90	31.43
Manager & Professional(Formal)	529	1.27	5.59	836	1.37	6.32
Skilled Worker(Formal)	475	1.14	0.94	821	1.35	1.36
Unskilled Worker(Formal)	564	1.36	3.11	728	1.19	3.55
Owner or Manager(Informal)	544	1.31	2.46	743	1.22	3.80
Worker(Informal)	420	1.01	2.35	545	0.90	11.19
Rural Unclassified	407	0.98	2.37	576	0.95	3.20
Subtotal	416	0.62	70.86	609	0.56	60.85
Total	668			1094		100.00

Table 5: Decomposition I: Rural-Urban in India

	1993-94					2004-05				
	Cons. Share	Gini	Overlap	Contrib.	%	Cons. Share	Gini	Overlap	Contrib.	%
Overall		0.326 (0.0020)		0.326	100.00		0.363 (0.0022)		0.363	100.00
Intra-group effect				0.281	86.25				0.291	80.15
Rural	0.65	0.286	0.993	0.185	56.75	0.61	0.305	0.993	0.185	50.96
Urban	0.35	0.344	0.799	0.096	29.45	0.39	0.376	0.727	0.107	29.48
Inter-group effect				0.045	13.75				0.072	19.85

- Note: 1. The numbers in parentheses are the standard errors.
 2. Cons. Share is the consumption share of this group in the total consumption.
 3. Contrib. is the absolute contribution of each term to the total Gini.
 4. % is the proportion of the contribution of each term to the total Gini.

Table 6: Decomposition II: Inter-State in India

Overall Decomposition	Gini (1993-94)	%	Gini (2004-05)	%
Total	0.326	100	0.363	100
Intra-Group	0.292	89.56	0.312	85.96
Inter-Group	0.034	10.44	0.051	14.04

Table 7: Decomposition III: Simplified Class (India)

	1993-94					2004-05				
	Cons. Share	Gini	Overlap	Contrib	%	Cons. Share	Gini	Overlap	Contrib	%
Overall Gini		0.326		0.326	100.00		0.363		0.363	100.00
Intra-group				0.257	79.04				0.263	72.24
Urban Elite	0.131	0.357	0.664	0.031	9.51	0.167	0.389	0.553	0.036	9.92
Urban Workers	0.218	0.32	0.838	0.059	18.10	0.223	0.34	0.786	0.059	16.25
Rural Elite	0.321	0.292	0.937	0.088	26.99	0.283	0.318	0.929	0.084	23.14
Non-Ag Workers	0.058	0.274	0.968	0.015	4.60	0.092	0.313	0.997	0.029	7.99
Small Peasants	0.134	0.265	0.946	0.034	10.43	0.123	0.273	0.946	0.032	8.82
Ag Workers	0.139	0.24	0.931	0.031	9.51	0.113	0.233	0.895	0.024	6.61
Inter-group				0.068	20.76				0.100	27.66

Table 8: Decomposition IV: Detailed Class (India)

	1993-94					2004-05				
	Cons. Share	Gini	Overlap	Contribution	Prop.	Cons. Share	Gini	Overlap	Contribution	Prop.
Overall Gini		0.326		0.326	100.00		0.363		0.363	100.00
Intra-Class				0.245	75.22				0.245	67.49
Owner/Manager(formal)	0.023	0.352	0.418	0.003	1.04	0.030	0.425	0.460	0.006	1.65
Owner/Manager(informal)	0.052	0.335	0.755	0.013	4.03	0.073	0.358	0.635	0.017	4.68
Manufacturing-Professional	0.029	0.363	0.682	0.007	2.20	0.009	0.343	0.420	0.001	0.55
Manufacturing-Skilled	0.075	0.304	0.827	0.019	5.78	0.083	0.330	0.784	0.021	6.06
Manufacturing-Unskilled	0.020	0.291	0.978	0.006	1.75	0.014	0.300	0.942	0.004	2.48
Service-Professional	0.026	0.322	0.449	0.004	1.15	0.027	0.341	0.295	0.003	0.55
Service-Skilled	0.073	0.317	0.661	0.015	4.69	0.070	0.340	0.556	0.013	2.75
Service-Unskilled	0.050	0.302	0.859	0.012	3.98	0.056	0.292	0.785	0.013	2.20
Urban-Unclassified	0.001	0.312	0.699	0.000	0.07	0.028	0.416	0.543	0.006	1.65
Rich Farmer	0.080	0.277	0.855	0.019	5.81	0.064	0.301	0.852	0.016	4.41
Middle Farmer	0.074	0.275	0.933	0.019	5.82	0.064	0.268	0.904	0.016	4.41
Small Farmer	0.089	0.249	0.928	0.020	6.31	0.079	0.266	0.929	0.020	5.51
Marginal Farmer/Tenant	0.045	0.297	0.979	0.013	4.01	0.043	0.283	0.976	0.012	3.31
Ag Workers	0.139	0.240	0.931	0.031	9.53	0.113	0.233	0.895	0.024	6.61
Rural Professional	0.033	0.329	0.898	0.010	2.99	0.024	0.392	0.669	0.006	1.65
Rural Moneylender	0.001	0.281	0.781	0.001	0.07	0.001	0.192	0.283	0.001	0.001
AbsenteeLL+Nonagselfemp	0.032	0.287	0.938	0.009	2.64	0.048	0.328	0.936	0.015	4.13
Nonagselfemp	0.054	0.273	0.964	0.014	4.36	0.061	0.3	0.979	0.018	4.96
AbsenteeLL+Others	0.012	0.266	0.850	0.003	0.83	0.012	0.298	0.770	0.003	0.83
Non-Ag Workers	0.058	0.274	0.968	0.015	4.72	0.092	0.313	0.997	0.029	7.99
Rural Unclassified	0.036	0.315	0.980	0.011	3.41	0.01	0.358	0.904	0.003	0.01
Inter-Class				0.081	24.78				0.118	32.51

Table 9: Decomposition V: Urban-Rural Divide and Regional Differences in China

	1995					2002				
	Cons. Share	Gini	Overlap	Contribution	%	Cons. Share	Gini	Overlap	Contribution	%
Overall Gini				0.424	100.0				0.465	100.0
Urban-Rural										
Intra-group Effect				0.190	44.8				0.237	50.9
Urban	0.560	0.303	0.444	0.075	17.8	0.667	0.331	0.553	0.122	26.3
Rural	0.440	0.299	0.873	0.115	27.1	0.333	0.376	0.913	0.114	24.6
Inter-group Effect				0.234	55.2				0.228	49.1
Regional										
Intra-group Effect				0.401	94.5				0.428	92.2
East	0.457	0.431	0.919	0.181	42.6	0.451	0.452	0.893	0.182	39.2
Middle	0.321	0.364	0.933	0.109	25.7	0.298	0.420	0.951	0.119	25.6
West	0.222	0.446	1.116	0.111	26.1	0.251	0.474	1.070	0.127	27.4
Inter-group Effect				0.024	5.6				0.036	7.8

Table 10: Decomposition VI: Simplified Class (China)

	1995					2002				
	Cons. Share	Gini	Overlap	Contribution	%	Cons. Share	Gini	Overlap	Contribution	%
Overall Gini				0.424	100.0				0.465	100.0
Intra-group Effect				0.183	43.2				0.227	48.8
Urban Elite	0.237	0.302	0.386	0.028	6.5	0.264	0.321	0.473	0.040	8.6
Urban Working Class	0.323	0.298	0.473	0.046	10.7	0.403	0.328	0.581	0.077	16.5
Rural Elite	0.044	0.314	0.852	0.012	2.8	0.047	0.391	0.891	0.017	3.6
Rural Non-Ag Worker in Formal Sector	0.033	0.321	0.863	0.009	2.1	0.033	0.420	0.962	0.013	2.9
Rural Non-Ag Informal Sector	0.035	0.329	0.911	0.010	2.5	0.080	0.352	0.863	0.024	5.2
Farmer	0.328	0.284	0.843	0.079	18.5	0.172	0.362	0.893	0.056	12.0
Inter-group Effect				0.241	56.8				0.238	51.2

Table 11: Decomposition VII: Detailed Class (China)

	1995					2002				
	Cons. Share	Gini	Overlap	Contribution	%	Cons. Share	Gini	Overlap	Contribution	%
Overall Gini				0.424	100.0				0.465	100.0
Intra-group Effect				0.182	42.9				0.222	47.7
Owner and Manager(Formal)	0.107	0.320	0.407	0.014	3.3	0.114	0.327	0.496	0.019	4.0
Owner and Manager(informal)	0.002	0.364	0.728	0.001	0.1	0.017	0.384	0.667	0.004	0.9
Manufacturing-Professional	0.010	0.264	0.413	0.001	0.2	0.045	0.300	0.468	0.006	1.4
Manufacturing-Skilled Worker	0.134	0.285	0.436	0.017	3.9	0.116	0.313	0.576	0.021	4.5
Manufacturing-Unskilled	0.046	0.298	0.507	0.007	1.6	0.035	0.300	0.605	0.006	1.4
Service-Professional	0.121	0.287	0.363	0.013	3.0	0.105	0.320	0.443	0.015	3.2
Service-Skilled Worker	0.077	0.309	0.461	0.011	2.6	0.129	0.315	0.496	0.020	4.3
Service-Unskilled Worker	0.034	0.307	0.536	0.006	1.3	0.057	0.324	0.570	0.010	2.3
Urban Unclassified	0.030	0.297	0.479	0.004	1.0	0.050	0.338	0.637	0.011	2.3
	S_i	G_i	O_i	Coef.	%	S_i	G_i	O_i	Coef.	%
Farmer	0.314	0.282	0.841	0.075	17.6	0.155	0.363	0.895	0.051	10.9
Manager &	0.044	0.314	0.852	0.012	2.8	0.047	0.391	0.891	0.017	3.6
Skilled Worker(Formal)	0.007	0.273	0.803	0.001	0.3	0.010	0.398	0.909	0.004	0.8
Unskilled Worker(Formal)	0.026	0.331	0.872	0.008	1.8	0.023	0.426	0.979	0.010	2.1
Owner or Manager(Informal)	0.020	0.346	0.910	0.006	1.5	0.025	0.390	0.912	0.009	1.9
Worker(Informal)	0.015	0.293	0.864	0.004	0.9	0.055	0.328	0.808	0.015	3.1
Rural Unclassified	0.014	0.313	0.900	0.004	1.0	0.017	0.349	0.871	0.005	1.1
Inter-group Effect				0.242	57.1				0.243	52.3