

Afdeling Algemene Economie
Faculteit Economie en Bedrijfskunde
Universiteit van Amsterdam

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Economic reforms and the effects on inequality and poverty in India

Begeleid door:
drs. Oscar O. Catalán Aravena

Geschreven door:
Urgyen Ponse
0439320

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1 Introduction

Present-day India is well known for its strong emerging economy and its large and increasing population. The country is currently counting over a 1.1 billion people. Although the economy showed a remarkable high growth for the last decade, there is still a significant proportion of the population living in poverty.

India experienced a respectable economic growth after its independence in 1947. In the period from 1950 till 1980 economic growth averaged 3.5 percent (Das, 2006). The stable growth in this period is also referred to as the 'Hindu rate of growth'. Prime Minister Jawaharlal Nehru and his daughter, Prime Minister Indira Gandhi, led the country under an inward-looking regime. The economy in this period was characterized by a model of import-substitution.

In the 1980s the government policies towards the economy changed. Under the leadership of Prime Minister Rajiv Gandhi the economy transformed gradually to a more open model. Small reforms were undertaken, such as lowering the marginal tax rates and tariffs, which would lead the country to a new path of growth. However these policies were undertaken dissolutely and turned out negative for the country.

In 1991 the country was hit by a macroeconomic crisis, which triggered more economic reforms towards liberalization. The country was lending money from the IMF, which was conditional to liberalizing policies. Tariffs were reduced drastically and most of import licenses were eliminated. The man who led the country into an upcoming liberalizing era was the then minister of finance, Manmohan Singh¹. Structural reforms were undertaken such as a lowering of tariffs and other trade barriers, taxes were reduced, the Indian currency the rupee was devalued and the country was opened to foreign investment. These reforms took place on a gradual basis and turned in favor of the country as GDP-growth rose, inflation dropped sharply and exports were increasing (Das, 2006).

The aim of strong economic growth in India is to spur development and thereby improve the wellbeing of the total population. The economic reforms India undertook since the beginning of the 1990s have led to a sharp rise in the trend rate of economic growth. In contrary to the Washington Consensus, the liberalization process in India took place under gradual and controlled basis and was called the Delhi Consensus. Under the Delhi Consensus privatization was also slowed down and capital account liberalization was avoided.

¹ Manmohan Singh is India's current Prime Minister since 2004.

With these reforms in place and the global integration of India with the world market was a fact. Economic theory states that international trade can improve welfare of a country. In the case of India it can be analyzed what the effects of the reforms are for the development of the country, in particular the well-being of the people. This paper analyses the consequences of the economic reforms in the beginning of the nineties in India on inequality and poverty.

The structure of this paper is as follows: The second section of this paper will give an overview of the economy of India in the pre-reform period. The third section describes which reforms were undertaken by the Indian government and how they were implemented. The fourth section discusses the effects of economic growth on inequality and poverty using theory and outlines the trend in both of these indicators in the case of India. Finally the fifth section concludes.

2 The Indian economy pre-reform period

In the 20th century before independence the Indian economy was stagnant, in the years from 1900 till 1950 the economy showed an average growth rate of 0.5 percent (Das, 2006). Since population growth equaled GDP growth, GDP per capita didn't improve over these years. These figures showed the ending of an almost two hundred years era of colonization.

After the country became independent in august 1947, the country came under control of Fabian Socialist² governments. Under the direction of Prime Minister Jawaharlal Nehru and subsequently his daughter, Prime Minister Indira Gandhi, the economy of India turned into an inward-looking model. In this model the new credo was 'import substitution'. Government policy was directed towards industrialization³, state intervention in the labor and financial market, an increasing public sector and a central planning mechanism (Das, 2006). Furthermore Nehru introduced price and production controls, an inefficient monopolistic public sector was set up and foreign investments were discouraged. This would insulate the Indian economy from the global economy and made the country unable to exploit the benefits of foreign technology and foreign competition. In the period from 1950 till 1980 the economy performed quite stable and GDP growth showed an average of 3.5 percent a year (Das, 2006).

² Fabian Socialism is a British form of socialism in which the purpose to advance the socialist cause is obtained by gradualism and reformism, in stead of revolutionary means. Current Fabian Socialism can be found in the British Labor Party, where it has laid its foundations.

³ Protection of the domestic industry is central under a model of import substitution.

Economic policy changed when Rajiv Gandhi became Prime Minister in 1984. Under his command several measures of liberalization were undertaken. These include the loosening of import and industrial licenses and the replacement of quota restrictions by tariffs (Biswas and Sindzingre, 2006). Although these measures were quite modest, they were seen as the first step towards liberalization.

Comparing economic growth in the period from 1980-1990 with the period from 1950-1980, the Indian economy showed a better performance in the former period. Average growth equaled 5.6% in the period from 1980 till 1990 (www.imf.org, 2007) .⁴ However there were signs that this growth was accompanied by an increased vulnerability, since public expenditures were financed by foreign debt through the international financial system. As a result India's external debt to GDP ratio doubled in these years (Chandrasekhar and Ghosh, 2006). When investors started to lose their confidence this triggered a freeze in capital inflows, which eventually has led to a crisis in 1991.

The crisis in 1991 was the beginning of a period of economic reforms in India. The country was forced to lend money from the IMF, which was conditional to liberalizing policies. The government policy towards liberalization also changed and a number of critical reforms were undertaken. The chief architect of these reforms was the then minister of finance, Manmohan Sing. Under his charge the country became more integrated into the world economy. What reforms exactly were undertaken will be discussed in the following section.

3 The economic reforms in the beginning of the 1990s

India suffered from a severe crisis in 1991 which has forced the country to search for assistance at the IMF. Borrowing from the IMF goes hand in hand with complying to IMF policies, its so-called lending conditionality. However this crisis has also triggered a change in government policy with respect to liberalization. The Indian government undertook a large number of economic reforms which has led the country to a more open economy. The bulk of these reforms took place on a gradual base, but showed a break from its original economic-political trend.

⁴ These figures were calculated from the IMF World Economic Outlook 2007 (www.imf.org).

The aims of the economic reform process that began in 1991 were: (1) to reduce controls on capacity creation, production and prices, and let the market mechanism influence the behavior of economic agents; (2) to allow for international competition and prices; (3) to reduce the presence of state agencies in production and trade; and (4) to reduce controls in the banking sector and thereby liberalizing the financial sector (Chandrasekhar and Ghosh, 2006). The emphasis of these reforms was put on liberalizing policies, which would improve the country's competitive position in the global economy and restructure production towards areas of international comparative advantage.

3.1 The Delhi Consensus

The Delhi Consensus⁵, under which these reforms are also referred to, emphasized the slow liberalization of trade, a gradual privatization of state-agencies and avoided capital account liberalization (Jha, 2000). The first priority was set on fiscal consolidation and stabilization, which were seen as preconditions for successful reforms. The government deficit had to be reduced and stabilized in order to make these reforms work effectively. Fiscal consolidation was achieved by the abolishment of some of the export subsidies, a reduction of capital expenditures and a reduction in transfers to state governments (Jha, 2000). After this base was set up the government put in place some structural economic reforms.

First of all industrial policy was subject to a major revision and there were some slight changes concerning the capital account. Several industrial licenses were abolished and entry barriers were removed. In addition the policy towards foreign investment changed. Where foreign investment used to be very selective, it was now permitted in a much larger number of sectors (Jha, 2000). By the beginning of the 21st century India achieved a significant degree of capital account liberalization. Rules for foreign direct investments were eased, permissions for non-residents to hold domestic financial assets existed and access to foreign commercial borrowing by domestic firms was eased (Chandrasekhar and Ghosh, 2006).

Second, trade and exchange rate policies have undergone considerable changes. Trade was liberalized substantially compared to the previous period of import substitution. A drastic reduction of tariffs followed and all 26 import licensing lists were eliminated (Biswas and Sindzingre, 2006). Furthermore, import quotas and customs duties were lowered. In the case

⁵ The Delhi Consensus was named after the famous Washington Consensus, but differed from it because the neo-liberal reforms that took place in India were much more gradual and controlled. In addition capital account liberalisation was avoided, which was essential in the Washington Consensus.

of exchange rate policy, a complete transformation occurred. The exchange rate, in the 1980s pegged to a basket of currencies, was now determined by the market and current account transactions were liberalized (Chandrasekhar and Ghosh, 2006). In addition subsequent exchange rate devaluations followed, because the Indian rupee was overvalued.

Third, reforms were undertaken in the public, financial and agricultural sector. A restructuring of the public sector took place, because of the existence of inefficient public enterprises. The government engaged in selective disinvestment rather than privatization, in order to retain control over management. In the financial sector the emphasis was put on liberalization. Reductions in directed credit followed and interest rate ceilings were removed (Chandrasekhar and Ghosh, 2006). The banking sector was furthermore regulated and supervised by the government and efforts were undertaken to improve transparency and reduce transaction costs (Jha, 2000). At last, investments in the agricultural sector have been reduced and restrictions on interstate trade in food grains have been removed. The end of the import substitution era and the devaluation of the exchange rate have reduced the anti-agriculture bias in India's development strategy (Jha, 2000).

Fourth, a tax reform was scheduled in order to improve the distribution of income. Income taxes were reduced significantly, from a top marginal rate of 56% in 1991 to an effective top marginal rate of 33.3% in 1999-2000 (Jha, 2000). Corporate taxes were also lowered and the number of excise rates on manufactured goods has more than halved (Jha, 2000). Overall India experienced a reduction in direct and indirect taxes, which has led to declining tax-to-GDP ratios (Chandrasekhar and Ghosh, 2006).

Fifth and finally, reforms were undertaken in the labor market. The Indian labor market used to be very rigid, because of the existence of strict labor laws that provide considerable protection from retrenchment to labor in the formalized sector. Reforms were aimed at increasing the flexibility in the labor market. This increased flexibility would make old firms with excess labor more viable and attract new capital (Jha, 2000).

3.2 Social Programs

Given India's immense and long-lasting problems concerning inequality and poverty, policy planner recognized that the economic reforms would not mean an end to these problems. A vast number of people were living on the edge of subsistence and credible programs had to be implemented to target the needs of these people. These needs include the very basics such as safe drinking water, health, education and infrastructure.

Although the reforms meant that the government would cut in its expenditures temporarily, the Indian government initiated a number of programs that would target the poor directly. The Food for Work Program, instituted in 1977, was set up to subsidize food supplies through the public distribution system and concessional loans schemes for small farmers (Jha, 2000). Other social programs include self employment programs, the Integrated Rural Development Program, the Employment Assurance Scheme and the Accelerated Rural Water Supply Program.

The Indian government took in account the situation of the poor while undertaking the structural economic reforms. And even though budgetary pressures existed, the government continued and enhanced it's financing for these social programs (Jha, 2000). Thereby the government could fight against the problems of poverty and inequality. In the next section there will be discussed what the effects of the reforms are for economic growth, inequality and poverty and the trends of these indicators in the case of India will be outlined.

4 Growth, inequality and poverty

4.1 India's growth pattern

India experienced a significant change in economic growth since the 1980s. Where the country was stuck to its 'Hindu rate of growth' in the period from 1950 till 1980, which was also characterized by respectable numbers, the country was running far below potential. The end of the period of import substitution opened a whole new doorway for the country and made possible new opportunities with respect to trade and openness.

Since the 1980s economic growth accelerated, from 1980 till 2002 average growth equaled 6 percent a year and in the period from 2002 till 2006 average growth increased to 7.5 percent a year (Das, 2006). While population growth has decreased from a historical 2.2 percent a year to a 1.7 percent in 2006 (Das, 2006), income per capita based on purchasing-power parity has increased significantly from \$648 in 1980 to \$3,736 in 2006 (www.imf.org, 2007)⁶. Table 1 summarizes the rate of growth in GDP and Net National Product (NNP) per capita in ten year periods starting from 1950. From table 1 it can be seen that both GDP and NNP per capita have been rising since the eighties.

⁶ These figures were calculated from the IMF World Economic Outlook 2007. The GDP per capita (PPP) figure for 2006 is based on IMF staff estimates.

Table 1

India: Annual Growth Rates of National Income (in percentages)					
Period	1950-52 to 1960-1962	1960-62 to 1970-1972	1970-72 to 1980-1982	1980-82 to 1990-1992	1990-92 to 2000-2002
GDP	3.9	3.5	3.5	5.6	5.6
NNP per capita	1.8	1.2	1.0	2.9	3.5

Notes: 1. Both GDP and NNP per capita are measured in constant 1993-94 prices. 2. Rates of growth are compound annual rates for the three-year averages.

Source: National Account Statistics (Chandrasekhar and Ghosh, 2006).

Besides the highly accelerated growth India experienced since the eighties, the structure of output has undergone considerable changes as well. Table 2 shows the structure of India's output for years ranging from 1988 to 2005 subdivided in three sectors, namely agriculture, industry and services. A shift can be seen away from the agricultural sector towards services. The share of agriculture of GDP at current factor cost has decreased from 32.7 percent in 1988 to 19 percent in 2005, for the same period the share of services has increased from 40.7 percent to 53.6 percent. For industry, its share of GDP stays roughly the same during these years.

From the figures in table 2 it can be seen that India is undergoing a transformation from an agriculture economy straight to a service economy, thereby skipping an industrial revolution.⁷ Das (2006) explains the absence of a broad industrial revolution as a part of bad policies which were implemented after independence. According to him Prime Minister Nehru attempted a state-directed industrial revolution by replacing entrepreneurs with the government and introduced stringent controls in the private sector. Moreover a huge selection of small scale industries (SSI) were preserved, that weren't able to compete against foreign enterprises. The SSI have been untouched until the reform program took place in the 1990s.

Table 2

India: Structure of Output (in percentage of GDP at current factor cost)								
Year	1988	1990	1995	2001	2002	2003	2004	2005
Agriculture	32.7	31.3	28.2	23.2	20.8	21.0	19.6	19.0
Industry	26.6	27.6	28.1	25.5	26.7	26.4	27.3	27.4
Services	40.7	41.1	43.6	51.2	52.6	52.5	53.2	53.6

Source: Asian Development Bank, India: Key Indicators (Updated: 27 March 2007) (www.adb.org).

⁷ Most economies in the rest of the world evolve from agriculture to industry to services (Das, 2006).

India's current strategy of growth is driven by services and consumption, consumption accounted for 64 percent of GDP in 2006 (Das, 2006). The country is currently famous for its large-scale outsourcing activities of white-collar services. Software and business-process export have grown from almost zero to 20 billion in 2005 (Das, 2006). Despite these new developments India still has a competitive advantage in agriculture, with plenty of land, water and sun. In the short-run the country might opt for a second Green Revolution⁸ to retain growth. There should be a shift from peasant farming to agribusiness and private capital flows should be encouraged from urban to rural areas (Das, 2006).

4.2 The effects of growth on inequality and poverty

Inequality and poverty are both measures that give an overview of the living standards and the well-being of the people in the country. Economic growth seems to be a necessary condition to reduce both inequality and poverty and can thereby increase human welfare. Perkins et al. (2001) however state that economic growth is not a sufficient condition for improving mass living standards. They argue that the created distribution of income is also an important aspect and that a higher per capita GNP does not necessary mean a higher income for all. The distribution of income can be altered by several channels, such as government expenditures, investment activities and consumption patterns. In this section the income distribution model of William Arthur Lewis will be elucidated to examine the relation between growth, inequality and poverty. But first a brief explanation of the concepts of inequality and poverty will be given.

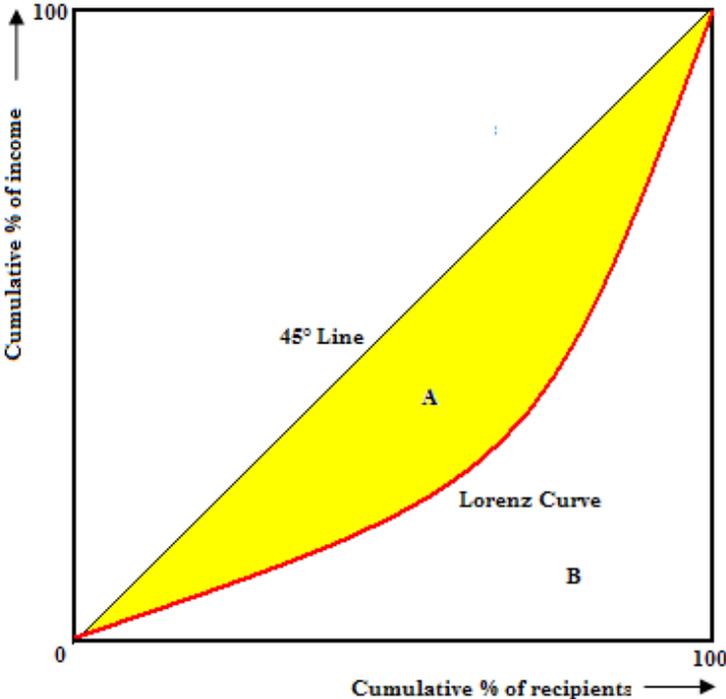
Inequality

Inequality is a concept which is directly related to income distribution. The size of income that the poor, middle-class and rich receive determines the size of inequality. Inequality can be measured by the well-known GINI coefficient. The GINI coefficient can be calculated by constructing the Lorenz Curve. This curve represents the share of total income received by any cumulative percentage of recipients. Figure 1 shows the Lorenz curve together with a 45° line. On the horizontal axis income recipients are arrayed from lowest to highest, the vertical

⁸ During the Green Revolution in 1940-1960 several programs of agricultural research and development were implemented to increase agricultural production. In India these programs took the form of plant breeding, irrigation development and the financing of agrochemicals. The Green Revolution helped the production of food to keep in pace with the world-wide accelerating growth of population.

axis depicts the cumulative share of income. The 45° line drawn in figure 1 resembles perfect equality i.e. everyone has got the same income. Inequality increases the farther away the Lorenz Curve bends away from the 45° line. From figure 1 the GINI coefficient is calculated by dividing the surface of A (the yellow area) by the surface of A+B (the area under the 45° line). The higher the GINI coefficient, the higher the level of inequality.

Figure 1 Lorenz Curve



The GINI coefficient is calculated by dividing the yellow area A by the total area under 45° line, A+B.

Poverty

To give an overview of the poverty rate in a country, one can simply count the number of the ‘poor’. However, the question that immediately rises is: How do we define ‘poor’? Poverty is a very complex concept and is not a matter of absolute income but implies something about relative income (Perkins et al., 2001). One might receive a higher income in country A than another in country B, but still be declared for ‘poor’ relatively (given that the person of country B is non-‘poor’). Different standards of poverty may arise in different areas, which make a common definition of poverty difficult.

A method often used to measure poverty is done by drawing a poverty line. This line is usually defined in terms of household income per capita. The households that fall below this line are labeled as poor. For the purpose of global aggregation and comparison, the World Bank defines two common poverty lines. These standards can be used to measure poverty world-wide. ‘Extreme poverty’ is defined as one at \$1.08 a day and ‘moderate poverty’ as \$2.15 a day (www.worldbank.org/poverty, 2007)⁹. However these standards can only measure ‘absolute poverty’ and are subject to time and place.

More recently the focus has been set on social indicators. To give a more accurate overview of poverty, an assessment can be made whether the basic human needs of the people are satisfied. Under these basic human needs we understand a minimum level of nutrition, health, clothing, shelter, and the opportunities for individual freedom and advancement (Perkins et al., 2001). The World Bank periodically releases data on social indicators as well. These data include infant death, life expectancy, child malnutrition, adult literacy, access to safe water, energy consumption and the prevalence of personal computers, televisions and radios. Perkins et al. (2001) conclude that an improvement in social indicators generally goes hand in hand with a rise in per capita GDP. But that within each income class there exist high variations among countries. Furthermore they come to the point that most social indicators in most countries have improved over time.¹⁰

Lewis’ labor-surplus model

The neoclassical theory provides an explanation for income distribution in developed countries. Under the neoclassical theory all factors of production are in scarce supply and their rates of returns are set equal to their marginal products in competitive factor markets (Perkins et al., 2001). Although this theory might be relevant for developing countries, it might be less applicable because of the existence of imperfect factor markets in developing countries. William Arthur Lewis provided an alternative model, named the labor-surplus model, which analyzed the income distribution in developing countries.

In the model of Lewis the same assumption is used as in the Ricardo’s two-sector model, which is labor is available in unlimited quantity at a fixed real wage. This is contrary to the neoclassical theory which assumes labor as a scarce factor that must be bid away from

⁹ Both figures are defined in 1993 Purchasing Power Parity terms.

¹⁰ Perkins et al. (2001) derive these conclusions from World Bank data on social indicators. They used data from the World Development indicators 1999.

other uses. The labor-surplus model furthermore suggests that inequality first will increase and later on diminish as development progresses. This is consistent with Kuznets's theory on inequality.¹¹ In the labor-surplus model of Lewis, inequality may initially rise because of two reasons. First, the income share of capitalists rises as the size of the capital sector, also referred as modern sector, increases. Second, inequality in the distribution of income rises during the early period, because of an increasing but relatively small number of laborers begin to move from a subsistence wage level to a capitalist-sector wage level (Perkins et al., 2001)¹².

The rise in inequality in the early stages of development as Lewis suggested, is strongly reversed when all the labor-surplus is absorbed in the employment of the capitalist sector. This is the point at which inequality reaches its maximum, which is also predicted in Kuznets's theory. At this point labor becomes a scarce factor of production, a further increase in demand now requires an increase in real wages to bid labor away from marginal uses, which is consistent with the neoclassical theory. Furthermore the model suggests that the increase in real wages do not only bring down inequality but also drives down poverty, at least by formal standards (Perkins et al., 2001).

The labor-surplus model of Lewis predicts that inequality is not just a necessary effect of growth, but also sees it as a cause of growth. An income distribution which favors the high-income groups can contribute to growth when the profits earned are saved to obtain funds for future expanding activities. Also the more income the high-income groups receive, the more they will invest. A resulting increase in total savings and investment will increase the productive capacity and this in turn will lead to output growth (Perkins et al., 2001). Hence, Lewis model predicts that growth occurs when the high-income population save and invest more, which happens when the profit share of the income increases with the growth of the capitalist sector while the wage share remains constant (Perkins et al., 2001).

'Redistribution with Growth' model

Perkins et al. (2001) bring an alternative of Lewis' labor-surplus model in which the gains of economic growth can be redistributed, so that the income distribution gradually improves as

¹¹ Simon Kuznets suggested that the relationship between per capita GNP and inequality in the distribution of income takes the form of an inverted 'U'. This implies as income per capita rises, inequality initially rises, reaches a maximum at intermediate level, and then declines when the levels of an industrial country are reached (Perkins et al., 2001).

¹² Lewis suggested that the capitalist-sector wage level tends to run 30 percent higher in real terms than the subsistence wage level (Perkins et al., 2001).

growth proceeds. In their ‘redistribution with growth’¹³ model government policy is aimed at steering development, such that low-income producers see improved earning opportunities and simultaneously receive the resources necessary to take advantage of them. Within this framework several policy measures can be undertaken, such as an encouragement of unskilled labor, a dynamic distribution of assets, greater education to improve literacy and skills, more progressive taxation, public provision of consumption goods, intervention in commodity markets to aid poor producers and consumers, and the development of new technologies to increase the productivity of low-income workers (Perkins et al., 2001).

For a large and predominantly rural country, such as India, Perkins et al. (2001) argue that the time required to absorb all the surplus labor of the traditional sector in the capitalistic sector would be far too long to achieve a reasonable standard of equity and maintain political stability. Furthermore they propose a rural-based development strategy that is hoped to bring a stronger equitable pattern of development than ever could be attained by an urban or industrial growth strategy. In practice, the redistribution with growth strategy is mostly used by developing countries that aim at policies regarding poverty reduction.

4.3 Trends in inequality and poverty in India

India experienced a large increase in economic growth since the economic reforms in 1991 and onwards. Economic growth is essential for poverty reduction and also has its consequences on the distribution of income within the country. India is a large developing country that struggled with a huge poverty count from the beginning of its independence. In this section the trends of inequality and poverty in India will be highlighted before and after the reforms.

Pre-reform period

The measurement of poverty and inequality in India has for years been subject to several rounds of the National Sample Survey.¹⁴ These rounds include large consumer expenditure

¹³ ‘Redistribution with Growth’ is a study sponsored by the World Bank.

¹⁴ The Indian government publishes official figures on poverty estimates which are based on regular consumer expenditure surveys by the National Sample Survey Organisation (NSSO). The Planning Commission, which calculates the official poverty statistics, focuses only on data on consumer expenditures from the larger surveys. Poverty estimates published by the Planning Commission are based on a headcount of people whose monthly per capita total expenditure is less than the poverty line for the sector and state they live in. In addition these poverty

surveys conducted at state-level and present numbers for poverty and inequality in rural and urban sectors.

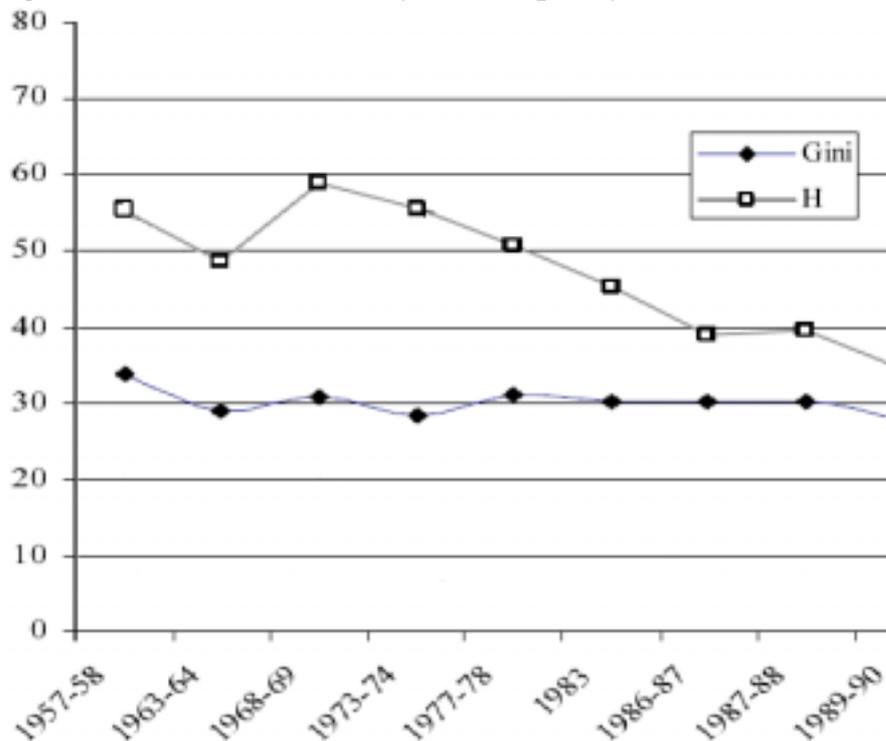
In the pre-reform period poverty has undergone a large decrease in both the rural and urban sector. Jha (2000) calculates measures on poverty based on headcount from several NSS rounds, starting with the 13th round (1957-58). He shows that poverty in the rural sector has declined from an immense percentage of 55.16 percent in 1957-58 to 34.30 percent in 1989-90. The urban sector also faced a large decrease in poverty in the same period from 47.75 percent to 33.40 percent. Figure 2 and figure 3 show the trend in poverty and inequality in India for the rural and urban sector, respectively, in the period from 1957 to 1990. The large overall reduction in poverty can be explained by the adoption of Green-Revolution-type technologies and an improved industrial base which have led to a higher GDP growth during these years (Jha, 2000).

From figure 2 and figure 3 it can be seen that inequality in both the rural and urban sectors did not fluctuate very much in the pre-reform period. Rural inequality measured by the GINI coefficient was 33.74 percent in 1957-58, fluctuated around the 30% in the years thereafter and reached a value of 28.23 percent in 1989-90 (Jha, 2000). For the urban sector the GINI coefficient fluctuated around the 34.5 percent for the same period, with a minimum of 31.50 percent in 1973-74 (Jha, 2000).

All together we can see that India faced a large reduction in poverty from the 13th NSS round (1957-58) until the 45th NSS round (1989-90). The period of import substitution combined with the Green Revolution seemed to be fruitful concerning the huge poverty issue the country faced. Although the amount of poverty improved, inequality seemed to be fairly constant over these years. In the period from 1963-64 to 1990 the rural GINI coefficient fell only by 0.78 percentage points and the urban GINI coefficient fell only by 0.92 percentage points in the same period (Jha, 2000). Overall, inequality in the urban sector has always been higher than inequality in the rural sector.

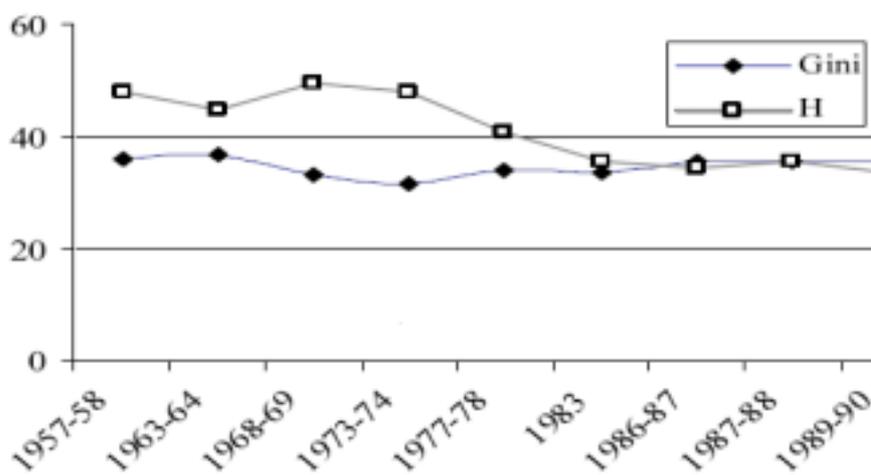
lines are updated over time, separately for rural and urban households, using the Indian system of state by state price indexes (Deaton and Kozel, 2004).

Figure 2 Rural Sector, Poverty and Inequality, 1957-1990



'Gini' represents the GINI ratio as a measure of inequality and 'H' stands for the headcount ratio of poverty (Jha, 2000).

Figure 3 Urban Sector, Poverty and Inequality, 1957-1990



'Gini' represents the GINI ratio as a measure of inequality and 'H' stands for the headcount ratio of poverty (Jha, 2000).

Post-reform period

The post-reform period has been characterized by an increase in economic growth, which started to accelerate even faster in the more recent years. When examining poverty and

inequality in the post-reform period, available data from the 50th (1993-94), 55th (1999-00) and 61st (2004-05) NSS rounds can be examined.

Data from the 50th and 61st NSS rounds suggests that poverty has been reduced further in the post-reform period. When comparing headcount ratios for major Indian states, poverty in the rural sector was estimated to be 37.26 percent in 1993-94 and 29.18 percent in 2004-05. Headcount ratios for the urban sector were estimated to be 32.56 percent and 26.02 percent, respectively for the same years (Dev and Ravi, 2007). Table 3 gives an overview of the poverty headcount ratios for the pre- and post-reform period. Overall, poverty showed a decrease of 8.91 percentage points in the pre-reform period (from 1983 till 1993-94) compared to a decrease of 7.75 percentage points in the post-reform period (from 1993-94 till 2004-05). This implies that poverty in India has been reduced further after the reforms, on a lower pace, compared to the years before. In addition poverty reduction in the rural sector has been slightly larger than in the urban sector.

Compared to the pre-reform period, inequality followed a whole different pattern in the post-1991 period. Rural inequality underwent a major break when economic growth started to grow in the years after the crisis. Jha (2000) reports that both rural and urban inequality have been risen in the post-reform period. He found a rural GINI coefficient of 27.71 percent for 1990-91 compared to 30.11 percent for 1997. The urban GINI coefficient rose from 33.95 percent to 36.12 percent in respectively the same years.

Deaton and Dreze (2002) have also come to the conclusion that inequality in the 1990s was rising. Using data from the 50th and 55th NSS rounds they found that regional disparities increased in the 1990s because of three reasons. First, they found strong evidence on divergence in per capita consumption across states. Second, their estimates of the growth rates of per capita expenditure between 1993-94 and 1999-00 point to a significant increase of inequality in both the rural and urban sector. Third, they show that rising inequality within states, particularly the urban sector, has moderated the effects of growth on poverty reduction.

Table 3

India: Poverty Headcount Ratios by Major States (in percentage of population)				
Year	1983	1993-94	2004-05	
Rural	45.76	37.26	29.18	
Urban	42.27	32.56	26.02	
All	44.93	36.02	28.27	

Source: Estimated from published data of NSS 43rd (1983), 50th (1993-94) and 61st (2004-05) rounds of Consumer Expenditure Surveys (Dev and Ravi, 2007).

More recent data from the 61st NSS round suggests that inequality has been subject to a further rise in the new millennium. Inequality deteriorated in the urban sector, the urban GINI coefficient has risen from 34.31 percent in 1993-94 to 37.51 percent in 2004-05. In the same period the rural GINI coefficient rose slightly from 28.55 percent to 30.45 percent (Dev and Ravi, 2007). Data for pre- and post-reform period inequality are presented in table 4. The data from table 4 suggests that inequality in the urban sector has been risen significantly in the post-reform period compared to the pre-reform period. In the rural sector inequality was declining in the pre-reform period, but has increased back to pre-reforms levels after the reforms. In addition Dev and Ravi (2007) have come to the conclusion that the increase in inequality has reduced the rate of decline in poverty in the post-reform period. Furthermore, they show that widening disparities between the rural and urban areas is one of the concerns in the post-reform period.

From these data a conclusion can be drawn that inequality worsened in the post-reform period. Although the rise in inequality caused a decline in the rate of poverty reduction, poverty seemed to improve in the post-reform period, nevertheless at a slower pace. But even with this reduction the rising disparities between the rural and urban areas should be of a concern for a higher rate of poverty reduction in the future. Therefore India should opt for policies that would increase growth and equity simultaneously to improve the rate of poverty reduction, as highlighted in the ‘Redistribution with Growth’-model.

Table 4

India: GINI Ratio of Consumption Expenditure (in percentages)			
Year	1983	1993-94	2004-05
Rural	30.79	28.55	30.45
Urban	34.06	34.31	37.51

Source: Estimated from published data of NSS 43rd (1983), 50th (1993-94) and 61st (2004-05) rounds of Consumer Expenditure Surveys (Dev and Ravi, 2007).

5 Conclusion

India faced a whole different pattern of growth since the country implemented its economic reforms in the beginning of the 1990s. Economic growth rose heavily and started to accelerate even more in recent years. From macroeconomic data examined in this paper the economic reforms the country undertook seemed to be fruitful in terms of economic growth. India, one of the largest developing countries, suffered from a high rate of poverty since its

independence in 1947. This essay analyzed the consequences of the economic reforms on inequality and poverty.

Under the name of the Delhi Consensus the country opened a whole new doorway with respect to economic policies. The Delhi Consensus comprised a process of slow liberalization of trade, gradual privatization and avoided capital account liberalization. Furthermore reforms were undertaken in the private, industrial, agricultural and financial sector, all in the view of liberalization. Besides these reforms the government also introduced several social programs to take in account the situation of the poor. This in the aim of controlling the poverty and inequality issues the country faced.

As economic growth seemed to improve after the reforms, the country also faced a structural change in output. The structure of output shifted away from agriculture towards services, thereby skipping a large industrial revolution as normally predicted in developing countries. This shift however was accompanied by a strong economic growth and a rise in income per capita. The country thus made a transformation from the lower-skilled agricultural sector towards the higher-skilled services sector, which also implied an increase in per capita income.

To examine the effects of the economic reforms on inequality and poverty data from several NSS rounds have been studied. These data suggest that poverty continued to decline in the post-reform period, although at a slower rate than in the pre-reform period. For inequality the outcome turned out to be less favorable. Data and several studies suggest that inequality worsened in the post-reform period compared to the pre-reform period. Inequality showed a steady pattern in the pre-reform period but showed a significant rise in the post-reform period, especially in the urban sector. Furthermore, there exists a concern of widening disparities between the rural and urban sector, which could hamper future poverty reduction.

The rise in inequality can be explained in the light of the economic model invented by Lewis, also known as the labor-surplus model. Lewis' model states that inequality in developing countries rises in the early stages of development. This rise of inequality is explained by the movement of laborers from a subsistence wage level to a capitalistic wage level and an increasing share of income in the capitalistic sector. In the case of India this movement can be seen in the change of output structure, away from agriculture towards services. Lewis' model furthermore predicts that inequality will start to decrease when all the labor-surplus in the rural sector is absorbed in the capitalistic sector. This, for India, implies a shift of all the labor-surplus in the rural sector to the industrial and services sector.

The case of India fits better within the strategy described in the 'redistribution with growth'-model by Perkins et al. (2001). For a country like India, which is a largely rural-based, it may take too long to absorb all the labor-surplus in the traditional sector into the modern sector. This is a reason for the country to opt for a strategy in which the gains of economic growth are redistributed, so that the distribution of income improves as growth proceeds. India showed an increase in growth after the reforms, this however was accompanied by an increase in inequality. The country should opt for a rural-based development strategy, because it still has a competitive advantage in agriculture. In addition India should continue and improve its social programs to fight against its long-lasting problem of poverty.

From here on a conclusion can be drawn on the consequences of the economic reforms on inequality and poverty. The economic reforms in the beginning of the 1990s turned out negatively for inequality in the short-run. However, economic theory states that this negative effect will turn on positively as the country develops in the future. Since the reforms induced an increase in economic growth and income per capita, these imply signs of development. In regard of poverty reduction the country is still on the right track. India, a country which always has in mind the fait of the poor, should continue its social programs to support the poor. With an ongoing, strong economic growth the country should be able to get its inequality back on track in the future and this will further improve the reduction of poverty. At last, the country should exploit its comparative advantages in the rural sector by transforming it into a modern sector, thereby creating more opportunities for future growth.

References

- Biswas, R. and A. Sindzingre (2006). Trade openness, poverty and inequality in India: Literature and empirics at the sub-national level. *National Center for Scientific Research/CNRS, EconomiX-University Paris 10-Nanterre*, 28 and 29 September.
- Chandrasekhar, C.P. and J. Ghosh (2006). Macroeconomic policy, inequality and poverty reduction in India and China. *The IDEAs Working Paper Series*, Paper no. 05/2006.
- Deaton, A. and J. Dreze (2002). Poverty and inequality in India: A re-examination. *Economic and Political Weekly*, September 7.
- Deaton, A. and V. Kozel (2004). Data and dogma: the great Indian poverty debate. *World Bank*, September.
- Das, G. (2006). The India model. *Foreign Affairs*, 85, (4).
- Dev, S. M. and C. Ravi (2007). Poverty and inequality: All-India and states, 1983-2005. *Economic and Political Weekly*, February 10.
- Jha, R. (2000). Reducing poverty and inequality in India: Has liberalization helped? *United Nations University: World Institute for Development Economics Research*, Working Papers No. 204, November.
- Perkins, Radelet, Snodgrass, Gillis and Roemer (2001). *Economics of development*. London: W.W. Norton & Company Ltd. (Fifth Edition).

Websites:

- Asian Development Bank (2007). India, Key Indicators (http://www.adb.org/Documents/Books/Key_Indicators/2006/pdf/IND.pdf), July 6th.
- International Monetary Fund (2007). World Economic Outlook Database for April 2007 (<http://www.imf.org/external/pubs/ft/weo/2007/01/data/index.aspx>), July 6th.
- World Bank (2007). Poverty, Overview (<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/0,,contentMDK:20153855~menuPK:373757~pagePK:148956~piPK:216618~theSitePK:336992,00.html>), July 10th.