



Brazil's Innovative Anti-Poverty & Inequality Model

Abdul Ghafoor Awan

Dean, Faculty of Management and Social Sciences, Institute of Southern Punjab, Multan, **Pakistan**

E-mail for correspondence: ghafoor70@yahoo.com

Received: Aug 5, 2014;

Accepted: Aug 22, 2014;

Published: Aug 29, 2014

Source of Support: Nil

No Conflict of Interest: Declared

ABSTRACT

Introduction: Poverty and income inequality were two main problems of Brazil. In order to solve these problems Brazil has taken different policy initiatives. The economists call it an innovative anti-poverty and inequality model.

Objectives: The objectives of this paper are to study different aspects of Brazilian innovative anti-poverty and inequality model and its impact on Brazilian society. Another objective to study is whether this model is specification in its applicability or it may be applied on other medium-income economies because income inequality and poverty are the common problems of almost all developing countries.

Methodology of study: This is a qualitative research study in which we have studied different characteristics in general terms and policies introduced by Brazilian government during 2000-2010 periods. We have used secondary data extracted from the database of IMF, World Bank, US Federal Reserves, US Bureau of Economic Analysis and relevant journals.

Results & conclusions: Our study finds that poverty in Brazil has reduced from 17 percent in 2000 to 8 percent in 2010. The evidence also shows that the wealth of the richest 20 percent of upper class was decreased during 2000-2010 due to high tax rates payment and the income of lowest 20 percent quintile was increased from 2.6 percent to 3.5 percent in the same period. It shows that the income of lower class was increased while the wealth and income of upper class was decreased during 2000-2010. The study also reveals that about half of poor segment of Brazilian population has come out of poverty trap in a short span of just 10 years.

Keywords: Emerging Economies, income inequality, poverty alleviation

INTRODUCTION

Brazil is the big economy of Latin America having an area of 3.29 million square miles and 8.51 million square kilometers and ranking as sixth by nominal and seventh by purchasing power parity as the largest economy of the world. Its territory is equal to the size of the whole Europe and 2.5 times big of India. It is over 35 times of Britain. It is modest free economy having GDP size in 2009 was \$3.143 trillion and its nominal per capita income in 2011 was \$12,916 while its per capita GDP in term of Power purchasing parity (PPP) was \$11,845. Its GDP is composed of three main sectors such as services 67.0 percent, industry 27.5 percent and agriculture 5.5 percent in 2011. The ratio of population below poverty line in 2011 was 8.5 percent. Ginico efficient was 49.3 percent, which shows high income inequality. Total labor forces in 2010 were 103.6 million out of which 66 percent were engaged in services sector, 20 percent in agriculture and 14 percent in industry. The unemployment rate in February 2012 was 5.7 percent. Main industries include

petroleum, steel, coal, machine building, textile, armament, aero planes, cement and apparel, soybean, food processing products, chemicals, consumer products, locomotives, automotive, satellites and tourism. It is highly regulated economy in which government has strong control and its ranking in the World Bank's ease of doing business is 126th.

Total exports of Brazil in 2011 were \$256.0 billion and the export goods include: transport equipment, machinery, steel, aero plane, paper, electric machinery, iron ore, soybeans, footwear, coffee, autos, automotive parts and machinery. Major export partners are China 17.3 percent, United States 10.1 percent, Argentina 8.9 percent, Netherlands 5.3 percent and Japan 3.7 percent. Total imports of Brazil in 2011 were around \$226.2 billion and import items include machinery, electrical and transport equipment, chemical products, oil, automotive parts and electronics. Main import partners are USA 15 percent, China 14.5 percent, Argentina 7.5 percent, Germany 6.7 percent, and South Korea 4.5 percent. Gross external debt was \$310.8 billion. Public debt is around 41.4 percent of

GDP in 2010. Total revenue collection in 2011 was \$1,005 billion while total expenditures were \$926.8 billion. Revenue is more than expenditures and it means that budget is surplus. Brazil international trade was also surplus to the tune of \$30 billion in 2011. Foreign exchange reserves in March 2012 were \$365 billion.

ECONOMIC STRUCTURE

AGRICULTURE SECTOR

Brazil population was 51 million in 1950 and it rapidly grew to 200 million in 2002014, an average more than two percent increase per annum. In order to feed this growing population special concentration was paid to develop the production of agriculture sector. The agriculture land was divided into zones and allotted to farmers on the size of their family. Necessary finance and equipment were provided to encourage the farmers to produce more. Cattle rearing and crop raising activities were encouraged. The use of new technology in agriculture field was encouraged. About 800,000 agricultural families were assisted under special credit facility, research and extension programs. The credit facilities were particularly women and young farmers to develop entrepreneurial skill among them. Under land reforms, one million families were allotted agricultural land and through this program about two million jobs were created. Total 600,000 km² of land was divided among the farmer's families. Brazil is the top producer of Soybean oil with production of more than 50 million tons. It is the fifth largest producer of packaging and its share in the global export of raw cane and refined sugar is 25 percent. The agricultural reforms has transformed Brazil as most productive country of the world. About 40 percent of Brazil population lived in the urban areas and this ratio was increased to 56 percent in 1970 and 78 percent in 1999. Brazil is the most urbanized country of the world. It was occurred due to rapid migration of population from rural to urban areas. The share of agriculture in GDP was 28 percent in 1947, which was substantially reduced to about 10 percent in 1990s.

INDUSTRIAL SECTOR

The Economist (2006) states that Brazil made economic miracle during 1968-1973 by recording average annual GDP growth rate of 11 percent. How that growth momentum could not be maintained due oil crisis and GDP growth rate was recorded 6 percent during 1974-1980. However, industrial output continued to grow vis-à-vis other sector of the economy. The share of industry in GDP was 20 percent which was increased to 36 percent in the end of 1990s. The heavy industrialization was resulted in the production of 2 million cars and buses, 26 million tons of steel in 1997, 39 million of cement in 1998, about 7.7 million televisions and 3.8 million refrigerators in 1999. Its sixty percent exports comprises of manufacturing goods. It generated 58,000 megawatts of electricity in

1998. During 1990s ten percent population has come out of poverty trap, which was a good achievement.

SERVICE SECTOR

Brazil has a vibrant service sector particularly banking sector. Banking sector share in total GDP is around 16 percent. It shows the size of this sector. Various reforms were introduced in this sector in 1990s and new technology was introduced. It resulted the expansion of financial services in the economy and widen out reach of these services. U.S. financial companies also entered Brazil to exploit its potential and to generate profit. This sector was opened to foreign investor and on May 2008 the merger of the São Paulo Stock Exchange (Bovespa) and the São Paulo-based Brazilian Mercantile and Futures Exchange (BM&F) were taken place. It created BM&FBOVESPA, one of the largest stock exchanges in the world. Insurance sector was opened to third party companies to lessen the monopolistic situation in reinsurance business. Transport and telecommunication sector is also rapidly expanding in Brazil.

AN ECONOMY OF HIGH INFLATION

Robert et al (1999) states that in 1980s hyper inflation gripped the economy and it was mounted as high as 500 percent in February 1986. To control rising inflation government introduced economic reforms under "Cruzado Plan", introducing a new currency (Cruzado), stopping change in discount rate and freezing wages and prices. Initially it plunged to near zero as a result of strict economic measures but it again surged to 100 percent by enthusiastic consumer spending in 1998. Brazil government initiated austerity plan and negotiated the debt rescheduling with International Monetary Fund. High inflation and deep recession hard hit Brazilian economy. In 1990 then Brazil President, Collor, froze bank deposits to stop capital flight, import tariffs were significantly reduced, cut fiscal deficits which was the main problem of Brazil. He took administrative measure to control prices and wages and closed overnight market. Under IMF conditional ties tight monetary policy was followed in 1992. The GDP was reduced to just 1.5 percent in 1992. Hyper-inflation continued to grip Brazilian economy and it peaked to 2700 percent in 1994. The government introduced a new currency, privatized state-owned industries, cut tariffs, end wage-inflation indexing and cut budget and trade deficits. It brought down inflation to only 6.9 percent in 1997 and was remained under control since then. During this crisis and the currency crisis of East Asian economies and collapsed of Soviet Union created a severe uncertainty Brazil lost about \$50 billion reserves due to consecutive capital flight in 1998. IMF provided a loan worth \$18.2 billion with a \$12.6 billion supplementary Reserve facility. It was the part of financial package of \$41.5 billion announced by G-7 countries. But this financial support could not stop currency crisis in Brazil, which devalued it 8 percent on

January 15, 1999 and the Brazilian currency was made free float, ending its pegging with US dollar. The currency lost about 45 percent of its value after de-pegging it from dollar. However, the GDP recorded positive growth 0.2 percent in 1998 and 0.8 percent in 1999 and inflation remained under control ranging between 3.2 to 4.9 percent. However, Brazil foreign debt was multiplied and debt services rose to 113.1 percent of export earnings in 1999 against 76.2 percent in 1998. But the consecutive value made Brazilian products competitive in international markets and exports were increased rapidly. The rising export earnings brought down the percentage of debt services 90.8 percent in 2000 and 78.5 percent of export earnings in 2001. GDP grew 4.5 percent in 2000 due to high volume of exports. IMF approved another loan of \$30 billion in September 2001 to enable Brazil to manage its public finance and currency fluctuations and to avert loan defaults. The Brazil's economy started improving in 2003 and government announced to achieve 4.25 percent primary fiscal surplus.

INSTABLE GDP OVER THE YEARS

Brazil GDP growth was phenomenal during last six decades except 1990s. During 1950-1959 average GDP growth was 7.1 percent and during next decade-1960-69 GDP growth was 6.1 percent. During 1970-79 GDP growth rate was 8.9 percent, which was highest in the history of Brazil because in the following two decades GDP growth was dismal. For example, average GDP growth during 1980-89 was 3.0 percent while during 1990-1999 it was only 1.7 percent. This period was very difficult for Brazil's economy recorded hyper inflation, foreign debt was increased to unaffordable level and Brazil had to approach IMF for bail out. However, economy came out of financial mismanagement during 2000 and 2009 and average GDP growth was returned to 1980s level and it was 3.7 percent (Lael et al, 2009).

ECONOMIC REFORMS

In 1990s Brazil introduced different reforms in taxation, social security, public finance, trade, banking, industry and other sectors to make the economy dynamic and pull it from long stagnancy. Structural reforms were enforced to make the administrative machinery of country efficient and policies were rationalized to promote investment, trade and industry. In order to check inefficiency and wastage of resources a specific law of fiscal responsibility was implemented at different governmental levels. It reduced its high level of debt to half through exchange rate-linked certificates.

It opened its economy for foreign direct investment in manufacturing sector which resulted in growth of exports by 20 percent per annum. Brazil kept the exchange rate stable by accumulating foreign currencies and increasing its foreign exchange reserves to comfortable. It ruled out the possibility of liquidity crunch faced by the country in

1980s. The inflation was low to 4 percent due to stable exchange rate and domestic prices. As a result of a long consistent policy initiative Brazil achieved trade surplus after 12 years. Brazil cut 30 percent tax on manufacturing sector to boost its output and widen its role in international trade. Similarly, Brazil invested \$8 billion in infrastructure projects to fasten the mobility of people and goods. The policy thrust was to promote industry, foreign trade and technology. Special focus was given to develop pharmaceutical, software, semiconductor and capital goods. For this purpose, a large number of mergers and acquisitions were made. During 1993 and 2010 total 7012 mergers and acquisitions valuing \$707 billion were made by Brazilian firms. Such transactions of worth \$115 billion were executed only in 2010.

IMPROVING COMPETITIVENESS

Goldman Sachs (2005) in its report states that Brazil is among those countries which rapidly increased their world competitiveness in 1990s by making its economy efficient, by using resources properly and implementing reforms in all relevant sectors that boosted economic growth. Brazil secured 8th position in competitiveness and left behind Russia and closing gap with India and China, which are regarded as three top BRIC countries. The economic reforms provide a better environment to private sector to grow. In sophisticated sectors Brazil also made a good mark in the production of submarines, aircraft and space satellites. It is the only country in South America which has a satellite launching center. It has also constructed the international Space Station, besides being a pioneer in ethanol technology and its largest producer.

World Bank in its report 2011 disclosed that Brazil in collaboration with Mexico developed many multinational companies to play an active role in international business. After accumulating sufficient resources now these multinationals are investing in different countries around the globe and making handsome profits. Brazil has specialization in the fields of deep water oil exploration and it has been extracting about 73 percent of its oil demand through this source. Brazil has a large consumer market and modest per capita income attracted about ten international automobile companies to set up their plants there. Brazil is the tenth largest market of the world with a population of 190 million and ample natural resources. In the ranking of the number of billionaires in the world, Brazil ranks 8th and it is ahead of Japan in this respect as per the Forbes, 2011 Report. The size of economy can be judged from the fact that Brazil produces million tons of steel, 26 million tons of cement, 70 million cubic meters of petroleum, 3.5 million television sets, 3 million refrigerators annually.

ACHIEVING SELF-SUFFICIENCY IN ENERGY

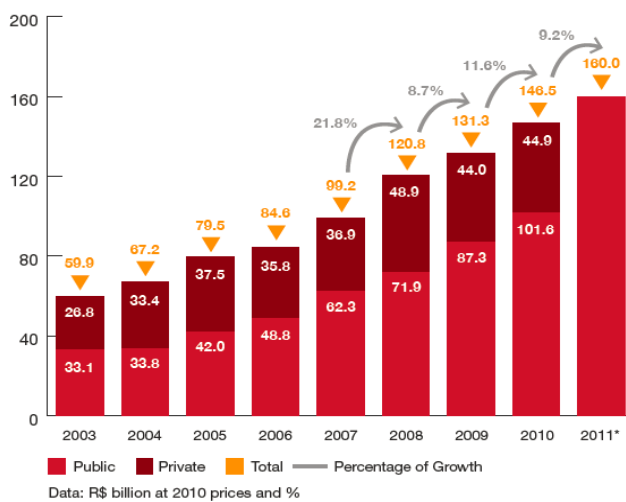
In the past Brazil was an oil-deficit country and it had to import around 72 percent of oil to meet domestic needs of different

sector. But in 2008 Brazil became self-sufficient in oil production due to discovery of oil reserves. Another important achievement of Brazil is huge power generation by utilizing its hydel resources, which meets 90 percent requirement of energy demand. The electricity generation from hydel source is 260,000 megawatts. It shows the highest producing capacity of hydroelectric power. Brazil is regarded as the world leading producer of hydro power. It constructed two world largest dams, one at River Parana and other at River Tucuruin, jointly produced 19,990 Megawatts. Three nuclear power plants, Angra-I, II and III have been built with generation capacity of 9000 megawatts. Brazil is working on the construction of another 19 nuclear power plants by 2021 to utilize this cheap source of energy generation on maximum scale. Brazil has been expanding its power generation capacity to meet the demand of growing industrial sector.

INFRASTRUCTURE DEVELOPMENT

Brazil started an ambitious program of infrastructure development since 2007 in phase wise under the title of “Growth Acceleration Program”. Under these programs 12,000 public and private infrastructure projects were initiated in the fields of transport, highways, bridge, dams and the projects relating to the World Cup and Olympics. The booming commodities prices in the world market and rising exports have enable Brazil to make ample funds for these projects. The Figure 6.1 shows the rising investment in infrastructure by private and public sector. In 2003 the total investment was more than R\$59 billion which was jumped to R\$ 160 billion in 2011 (Clendenning, 2008).

Figure 1: Brazil’s investment in Infrastructure during 2003-2011 (R\$ bns and %)



POVERTY ALLEVIATION

OECD Economic Surveys: Brazil (2006) states that Brazil policy makers devise economic taxation policies in such a way that they reduce poverty level and improve the living

standard of lower segment of the society. While framing growth policies they kept in mind the results of policies followed during 1960s and 1970s when economic miracle was occurred and high economic growth was recorded but its benefits were not distributed in equitable way due to concentration of wealth in the hand of upper class. Brazilian leadership launched a comprehensive multi-billion dollars poverty alleviation plan in 2011 to eradicate absolute poverty from the country by 2014. The poor segment of the society was targeted through cash transfers, education, health and infrastructural projects. Initially half a million people were included into this program. The program name was SemMi-Seria (Brazil without misery). Government legislated an Act to empower the administration to search for the poor families who are not availing the benefit of the program due to lack of information or living in remote areas. The Ministry of Social Affairs was made responsible to implement the program efficiently. The UNDP in its report 2011 has recognized the efforts of Brazil for reducing social inequality and increasing the income of poor class significantly during 2000s as compared to the decade of 1990s. The innovative anti-poverty model of Brazil is being followed by other developing countries as well. In the budget announced in 2013, government has increased minimum wages from R\$622 (US\$305) in 2012 to R\$674.96 (US\$331), besides increasing allocating 10 percent of GDP to education during next 10 years. Brazilian government also enhanced budgetary allocation for health and social welfare and infrastructural projects. World Bank Report (2010) pointed out that poverty in Brazil has reduced remarkably from 21 percent in 2003 to 11 percent in 2010. The Brazilian Institute of statistics in its report, 2012 also mentioned that the wealth of the richest 20 percent of upper class has been decreased during last decade due to high tax rates payment and the income of lowest 20 percent quintile has been increased from 2.6 percent to 3.5 percent in the same period. It shows that the income of lower class is increasing while the wealth and income of upper class is decreasing and this is the main reason the 10 percent population have come out of poverty trap in a short span of just seven years.

INCOME INEQUALITY REDUCING POLICIES

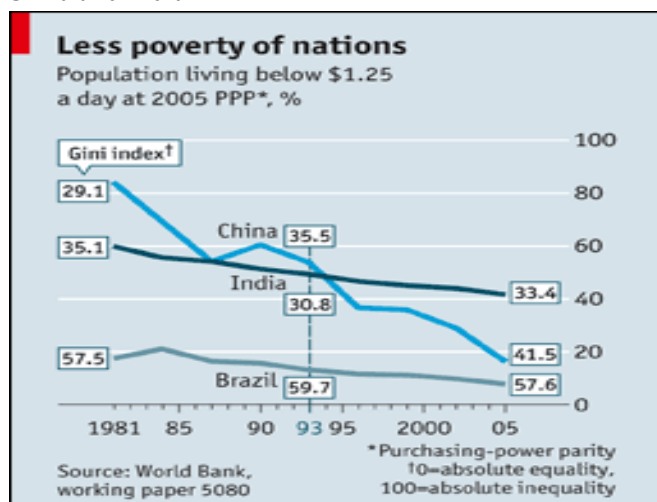
International Monetary Fund in its Report “Job and Growth: Analytical and operational considerations for the Fund” dated March14, 2013 stated that “Inthepast, Brazil has suffered long periods of low growth and very high inequality. But starting in the early 1990s, and particularly during the past decade, improved macroeconomic stability, the commodity boom, and targeted social policies have contributed to high growth accompanied by substantial reduction in poverty and income inequality with in a relatively short time frame. From 1990-2009, GDP growth per capita followed a strong upward trend, while inequality as measured by the Ginico efficient

declined substantially. Reducing income inequality has been an important goal of the Brazilian government. For this, the government used well-targeted and innovative social policies, among other policies. One popular scheme, called Bolsa Familia, has gained worldwide recognition as a tool for reducing (primarily rural) poverty at relatively low fiscal costs. This scheme features a direct cash transfer to poor families conditional on children's school attendance and the irreceiving basic health care. A study finds that one fifth of the decline in inequality during 1994-2005 can be credited to this program (Medeiros et al., 2006). Moreover, regulatory changes in favor of micro businesses have also contributed to promoting formalization in the labor market and reducing inequality. Formal job snow account for more than half of all employment, an increase of 10 percentage points since 1990.

COMPARISON WITH CHINA AND INDIA

Martin Ravallion, Director of the World Bank's Development Research Group conducted a comparative study of poverty reduction in Brazil, China and India in 2004. In his report he says that these three countries recorded economic growth, aiming at reducing poverty and inequality. The growth which does not care of hunger is worthless. About half of world's poorest population lives in these three countries. In 1980, about 83 percent of Chinese population of was living below poverty line of \$1.25 per day which was scaled down to only 16 percent in 2006. This was about 6.6 percent annual reduction in poverty, which was not less than a miracle (See Figure 2).

Figure 2: Comparison of poverty and inequality in Brazil, China and India



However, Brazil's performance is also exceptional because it cut poverty rate by 50 percent from 17 percent to just 8

percent, an annual reduction of 3.2 percent during 1981-2005. It means that anti-poverty policies followed by Brazil were proved very successful. When we compare Indian performance with Brazil and China it appears as India could not make a remarkable achievement in this field. India was able to cut poverty rate only 20 percent from 60 percent to 42 percent during 1981 and 2005, which is an annual reduction of 1.5 percent per year. India Underperformed despite the fact its economic growth rate was higher than Brazil during the study period.

According to Ravallion (2004), it was due to innovative official policies followed by Brazilian government. It pulled out about 11 million families or 60 percent of all those in the poorest tenth through cash transfer program. This program was executed across the country without any political consideration. In contrast, in China social security was provided by the state enterprises only to those workers who are in the job while those who are out of work, could not avail it. Similarly, the Indian poverty-reducing policies were discriminatory because ration cards were given to party workers to purchase consumer items at subsidized prices while political opponents were neglected intentionally. Such discriminatory policy was the result of Indian Congress defeat in 2014 general election.

When we compare the issue of inequality in Brazil, China and India, we come to know that income inequality has been reduced in Brazil as compared to China and India where it has been widen (see Figure 2). It means economic growth has widen income inequality in Indian and Chinese societies because the governments of these countries did not follow the policies for equitable distribution of the benefits of economic growth. The Figure 2 shows that inequality has fallen steeply in Brazil due to taxation policies that affect high income segment of the society while provide relief to lower income people. It has reduced inequality gap, which is the major achievement of Brazil.

CONCLUSIONS

We can draw the following conclusions from the above discussion which is the lessons for other developing countries.

- Zhang, et al (2003) argues that China was able to cut poverty by developing agriculture sector where most of the population was in poverty trap. But surplus labor was migrated to urban areas to seek employment in growing industrial sector. It increases income inequality. At this stage Chinese government did nothing to reduce inequality. If it were followed Brazilian-style progressive policies it would have performed even better. It allowed the shifting of

growth from agriculture sector to manufacturing sector but did nothing for equitable distribution of growth, which is ultimate goal of economic development. China used growth policies to reduce poverty, which, perhaps, was its main problem and for time being it allows inequality to rise.

- India introduced the policies having linked both to economic growth and uplift of social sector. But these policies did not target to the poor segment of society. According to our study, Cast system and state school system in India are two main hurdles in the eradication of poverty and reduction of income equality. Inequality is one of the main problems of Indian society.
- Brazil followed distribution policies to lessen inequality because more than 80 percent of its population is living in urban areas. Its major problem was inequality which has been dampened its growth. Thus, the policy focus of Brazil during 1991-2010 was distribution of the benefits of growth among the low income families and reducing the level of poverty.

REFERENCES

- Awan, A. (2014). China's Economic Growth - 21st Century Puzzle. *Global Disclosure Of Economics And Business*, 2(2), 9-26. Retrieved from <http://i-scholar.in/index.php/GDEABC/article/view/54533>
- Awan, A. (2014). Human Capital: Driving force of Economic Growth in Selected Emergine Economies?. *Global Disclosure Of Economics And Business*, 1(1), 9-30. Retrieved from <http://i-scholar.in/index.php/GDEABC/article/view/54501>
- Awan, A. (2014). Shifting Global Economic Paradigm. *Asian Business Review*, 4(3), 35-40. Retrieved from <http://i-scholar.in/index.php/ABRABC/article/view/58256>
- Awan, A., & Khan, R. (2014). The Enigma of US Productivity Slowdown: A Theoretical Analysis. *American Journal Of Trade And Policy*, 1(1), 7-15. Retrieved from <http://journals.abc.us.org/index.php/ajtp/article/view/1.1>
- Clendenning, Alan (17 April 2008). "Booming Brazil could be world power soon". USA Today - The Associated Press. p. 2.
- Goldman Sachs (2005) "How solid are the BRIC?" (December, 2005).
- IMF (2013) Report "Job and Growth: Analytical and operational considerations for the Funds". March 14, 2013, Washington D.C.
- John J. Crocitti; Monique (2010) "Brazil: The Encyclopedia in the Republic". The University of Chicago. p. 628
- Jump up^ (2006) "OECD Economic Surveys: Brazil 2006." OECD Publishing, p. 94.
- Jump up^ (2005). "OECD Economic Surveys: Brazil 2005." OECD Publishing, p. 105.
- LaelBrainard; Leonardo Martinez-Diaz (2009). "Brazil As an Economic Superpower?: Understanding Brazil's Changing Role in the Global Economy." Brookings Institution Press. p. 45.
- Ravallion, Martin and Shaohua Chen (2004) "China's uneven progress against poverty." World Bank Policy Research Working Paper WPS-3408, World Bank, Washington, D.C.
- Robert M. Levine; John J. Crocitti (1999). "The Brazil Reader: History, Culture, Politics." Duke University Press. pp. 11-.
- The Economist (2006) "The New Titans: A Survey of the world Economy", September 14, 2006.
- World Bank (20011). Rural Poverty Alleviation in Brazil: Towards an Integrated Strategy." World Bank Publications. p. 40. ISBN 978-0-8213-5206-9.
- Zhang, Linxiu, Jikun Huang and Scott Rozelle (2003) "China's war on poverty: Assessing targeting and the growth impact of poverty program" *Journal of Chinese Economic and Business Studies*, Vol.1 No.3, 2003: 299-315.