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Brazil: The Impact of Business Conditions and Hyper-Urbanization on Development in the Country of the Future

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Abstract

In recent history, Brazil's economy has featured the typical boom and bust cycle. In the "boom" phases of this cycle the nation has been deemed "The Country of the Future." Unfortunately, Brazil has never been called "The Country of Now" because its booms are inhibited by culprits such as the bust in the cycle, a global downturn, or a lack of sufficient systems and infrastructure to continually support growth.

Brazil is situated in the northern part of South America, and covers 47.3 percent of the continent (United Nations, 2013). It ranks fifth in the world both in terms of area and population with 196,655,014 people (World Bank, 2011). Careful examination of Brazil's economic data indicates that it is moving towards a service-based economy, an indication that the economy is becoming similar to those of high-income nations. However, high inequality remains a problem as evidenced by its high GINI coefficient.

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Nicholas Desideri, Drake Hill, Elizabeth Liubicich, & Claudia Petcu

I. INTRODUCTION

In recent history, Brazil's economy has featured the typical boom and bust cycle. In the "boom" phases of this cycle the nation has been deemed "The Country of the Future." Unfortunately, Brazil has never been called "The Country of Now" because its booms are inhibited by culprits such as the bust in the cycle, a global downturn, or a lack of sufficient systems and infrastructure to continually support growth.

Brazil is situated in the northern part of South America, and covers 47.3 percent of the continent (United Nations, 2013). It ranks fifth in the world both in terms of area and population with 196,655,014 people (World Bank, 2011). Careful examination of Brazil's economic data indicates that it is moving towards a service-based economy, an indication that the economy is becoming similar to those of high-income nations. However, high inequality remains a problem as evidenced by its high GINI coefficient.

Throughout the years, Brazil has suffered from political turmoil and changes of regime. Since stabilizing, the main problem plaguing Brazil's political realm is corruption. In order for Brazil to change and become the country of today, two main economic issues must be addressed immediately. The first is that business conditions that are more conducive to completing transactions must be created. To accomplish this, Brazil must aim to improve its Ease of Doing Business rating by loosening its protectionist trade policies and reforming its archaic labor code. Furthermore, Brazil should address the problem of its ever-increasing urban population by providing more opportunities in the agricultural sector. If such ends could be achieved, Brazil may finally be able to change its status from "The Country of the Future" to "The Country of Now".

II. ECONOMIC BACKGROUND

Despite suffering from the economic recession during the global financial crisis in 2008, Brazil is now South America's regional economic power. Though the country faced economic collapse due to diminished demand for exported goods, Brazil's natural resources, the sizeable labor force and international interest allowed it to recover. Classified by the World Bank as a middle-income country, Brazil's 2011 GNI per capita was 10,720 United States dollars. In 2011, Brazil's Gross Domestic Product (GDP) was 2.477 trillion (measured in current United States dollars). Brazil's average annual per capita GDP growth rate from 1990 to 2000 was 0.369 percent. During the 2000 to 2011 timeframe, the growth rate was 2.47 percent, indicating that Brazil is beginning to grow faster despite the economic downturn of 2008.

A breakdown of Brazil's GDP by sector reveals that the country is becoming more akin to high-income countries. 2011 data from the World Bank shows slight shrinkages in agriculture, which now accounts for 5.5 percent down from 5.6 percent in 2000, and in industry, which is now responsible for 27.5 percent down from 27.7 percent. The service sector, on the other hand has increased its contribution from 66.7 percent to 67.01 percent. Though these changes are slight, they are indicative of the overall trend of Brazil's economy becoming focused on service. Brazil's manufacturing exports as a percentage of its total exports have declined from 52 percent in 1990 to 34 percent in 2011 (World Bank). This contraction can be attributed to two things: the global recession and the growth of Brazil's service sector.

The GINI Index, a measure of the degree of income inequality with 0 being absolute equality and 100 being absolute inequality, was 53.9 in 2009 for Brazil (World Bank). While the nation has shown improvement from previous indices of 59.0, 60.6, and 59.2 for years 1985, 1990, and 1995 respectively, it is still among the most unequal countries in terms of income inequality. The headcount index, based on the 1.25 dollar per day poverty line, is 6 percent of the population (.06).

Despite Brazil's rapidly fluctuating economic fortunes, Brazil's unemployment rate has remained relatively stable, below 10 percent during the same time period. The government tried to stimulate hiring with the Employment and Income Generation Program of 2003, offering credit to "small businesses and microenterprises" to motivate entrepreneurs (Gonzalez, 2010). Brazil's average annual inflation rate in terms of Consumer Price Index has changed drastically over the past two decades. The average annual inflation rate first spiked in the late 1980s and continued to vacillate until the mid 1990s when it finally remained consistently under 15 percent. In the early 1990's it drastically fell from 2947.73 percent in 1990 to 432.78 percent in 1991. Following the plummet, the average annual inflation rate began to climb steadily until its peak in 1994 at 2075.88 percent. It dropped to a comparatively low 66.01 percent in 1995 and continued to fall to a low of 3.19 percent in 1998. The average of the individual annual inflation rates for the 1990s is 767.26 percent. Since then, the rate has remained low; it has fluctuated minimally between the 1995 low of 3.19 percent and a high of 14.72 percent in 2003 (World Bank). The average of the individual annual average inflation rates for the 2000's was 6.72 percent. Despite its numerous economic challenges, Brazil does seem to be improving economically over all. With a few key economic changes, the country could be well on its way to being the "Country of Now".

III. POLITICAL BACKGROUND

Since the country's independence, Brazil has lived under seven different constitutions. This exemplifies the political instability of the country, as each document signifies a regime change. Brazil has suffered a history of strongmen and authoritarianism. Other than the military junta that ruled from the 1964 to 1985, the most famous of these men is Getulio Vargas. Ruling Brazil from 1930 to 1954, Vargas implemented an import substitution plan for Brazil that many consider to be populist (Rabello de Castro and Ronci, 1991). Though he committed suicide in 1954, Vargas remains one of Brazil's most loved and in some circles, revealed of Brazil's politicians.

Brazil suffers from a low level of party fidelity, meaning its legislators switch political parties at a very high rate. This need to form broad coalitions among squabbling legislators enables Brazil's greatest institutional problem: corruption. Transparency International ranks Brazil as the 73rd most corrupt nation out of 173, and the Christian Science Monitor calls corruption "endemic… and rarely prosecuted" (Corruption Index, 2011; Downie, 2012). While the stability of Brazil's democracy is not in question, current president Dilma Rousseff's coalition could collapse if she is unable to play her cards right.

Political instability was a major issue for Brazil until Fernando Collor de Mello won the first direct presidential election since 1960. The victory was short-lived, as a corruption scandal led to his impeachment in 1992. The resulting political instability and resulting absence of economic policy likely contributed to the wavering of the average annual inflation rate. Since the mid 1990s Brazil has been politically stable and consistently growing. The government has been diligent about implementing policies, like tightening government spending, to keep inflation down, as they did in 2010 (CIA World Factbook, Brazil Government, 2012).

IV. EASE OF DOING BUSINESS

A. International Trade

The Ease of Doing Business ranking, compiled by the World Bank, ranks countries from 1 to 185 based on how conducive conditions in the country are to do business operations. Lower numbers indicate the most business-friendly conditions. Countries such as Singapore, Hong Kong, New Zealand, and the United States have climates that are favorable for business transactions. At the other end of the spectrum of rankings, the Central African Republic, Chad, and the Democratic Republic of Congo have some of the worst business conditions in the world. The Ease of Doing Business index is calculated by averaging the country's ranking in the following ten categories: starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency. Brazil's rank for fiscal year 2013 is 128, and though Brazil experiences significant problems in each of the measured categories, trading across borders is currently one of their weakest areas.

Despite having significant exports such as soybeans, orange juice, ethanol, commercial aircraft, automobiles, and coffee, Brazil lacks efficient trading policies and procedures (Brazil Exports 2012, 2012; Brazil Economy). Brazil ranked 123 for trading across borders in fiscal year 2013. The ranking for this category is determined based on the number of documents necessary to import and export, the costs associated with trade, and the time it takes for completion of the process. Brazil was ranked 123 in fiscal year 2012, as well, indicating that they have not experienced any significant improvement or decline (DoingBusiness.org Brazil). In addition to its poor rating by the World Bank, the International Chamber of Commerce's Open Markets Index ranked Brazil 68 out of 75 countries with a score of 2.3, indicating below average openness (Open Markets Index, 2011). Brazil's protectionist trade policies and lack of infrastructure and technology are the key factors preventing the country from becoming a more open economy.

Recently, Brazil has enacted new taxes and policies that are notably protectionist in nature. Protectionism is essentially the establishment of barriers to trade to protect domestic goods, and it was one of the primary causes of the world economic disaster of the 1930s (Protectionism Alert, 2012). It is one of the major reasons for difficulty of importing in Brazil. In January 2012, a tax increase of thirty percentage points was levied on imported cars, which already face a high import tariff, in response to stagnant economic growth (The Economist, September 24, 2011). The government has responded to strong economic relations with China, with whom friction is also quickly increasing, with "short-term protectionist measures combined with modest steps towards more constructive longer-term policy changes" (The Economist, September 24, 2011). The goal of this policy is to protect domestic industry in Brazil, and it is working. However, Brazil must be careful about protecting trade with China at the expense of its trading relationships with other Latin American countries, which are also suffering as a result of these protectionist policies.

The customs process that all imported good must go through is extremely convoluted and time consuming, and it is one of the mechanisms that accomplishes the protectionist agenda. It takes seventeen days to import a product in Brazil, eight of which are spent on document preparation and four of which are spent on customs clearance. The process of exporting goods is simpler, cheaper, and less time consuming than importing, but not by a significant amount. There are eight documents necessary for importation, and the cost of document preparation alone is 275 United States dollars (DoingBusiness.org Trading Across Borders). During 2009, when the World Trade Organization (WTO) was reviewing Brazil's trade procedures and policies, Brazil implemented a modified import declaration process, which has improved the number of rejected import declarations, but has not significantly reduced the number of documents or amount of preparation time necessary for the process (Trade Policy Review, 2009).

A lack of technological progress is another major contributor to the length of time necessary for goods to clear customs. As of the WTO Trade Policy Review in 2009, scanners, which allow non-invasive inspection of imported cargo, have been installed at only nine of the border entry and inspection points in Brazil. While these nine locations are responsible for 90 percent of the cargo imported to Brazil, the recent technological updates have had little impact in speeding up the customs process (Trade Policy Review, 2009). Though the implementation of this technology was expected to cut down customs clearance time significantly, it still takes an average of four days for imports to clear customs in addition to the three days that are spent on port and terminal handling (DoingBusiness.org Trading Across Borders). As the report notes, Brazil has been taking "gradual steps to simplify and modernize its customs procedures." However, these improvements have not had a significant enough impact on Brazil's trading efficiency, as their ranking has not changed in recent years.

In addition to a lack of sufficient technology, Brazil also lacks the infrastructure necessary to facilitate faster trade. In 2012 the World Economic Forum ranked Brazil's quality of infrastructure 104 out of 142 surveyed countries. It is also estimated that only 14 percent of the roads in Brazil are paved, contributing to the problem of inefficient inland transportation (The Economist, August 11, 2012). Unpaved roads are not the only infrastructure problem that plagues Brazil. The airports in the nation are ill equipped to handle the ever-increasing passenger and cargo traffic that they face, and are in need of updates and expansion (Centre for Aviation). Although promises to invest in and improve infrastructure have been made repeatedly by the government, Brazil lacks the necessary follow-through to fix this broken system.

B. Solutions to International Trade Issues

Brazil's trade problems are deeply entrenched, and will require much more than a simple fix. The WTO Trade Policy Review notes the importance of repairing trade in Brazil: "Brazil needs to press on with its efforts to give additional impetus to trade and investment, […] by […] reducing the use of import prohibitions and providing greater predictability to the foreign investment and trade regime" (Trade Policy Review, 2009). The protectionist mind set in the country will be hard to overcome, as it stems from a desire to protect the domestic industries in the country, namely the manufacturing industry. Fortunately, Brazil is already taking steps to improve its industries, such as cutting payroll taxes for local businesses, while these protectionist policies are in place (The Economist, September 24, 2012). Brazil has also been attempting to implement policy changes that will facilitate faster trade, such as the aforementioned streamlining of the customs and documentation processes. Unfortunately, they have not successfully changed their trade situation enough to improve the difficult business conditions in Brazil, making the current changes arbitrary. One of the simplest and most concrete ways that Brazil can effectively shorten the time it takes to move goods across the border is to invest in new technologies and improved infrastructure, specifically the high-tech scanners that have been implemented in a few of the busiest border entry points.

Brazil's infrastructure is among the worst in the world. With the 2014 World Cup and the 2016 Olympics on the horizon, the government knows that it must move quickly and invest heavily to improve the roads and airports. Unfortunately, what they have promised to do will not be nearly enough to catch up with countries of similar standing. Between 2011 and 2014, the government intends to invest 163 billion reals, or about 80 billion United States dollars on infrastructure (The Economist, August 11, 2012). The intended amount is equivalent to 1 percent of Brazil's GDP, but it is not enough. According to a 2010 report by Morgan Stanley, "Brazil would need to spend 6 to 8 percent of GDP annually to catch up with South Korea in 20 years and 4 percent per year to catch up with Chile" (The Economist August 11, 2012). Chile has the best infrastructure in Latin America with a Logistics Performance Index (LPI) sub score of 3.18 while South Korea scores a 3.74 (World Bank). The LPI is a tool created to help countries identify strengths and weaknesses in categories such as customs, infrastructure, international shipments, logistics competence, timeliness, and tracking and tracing. Germany has the highest infrastructure rating of all countries measured with a score of 4.26 (World Bank). The Latin American and Caribbean Transport Association recently highlighted Brazil's inadequate airport infrastructure, suggesting that they need to invest 4.9 billion United States dollars before 2014 in the already existing airports and must construct nine additional airports that are at least the size of Guarulhos, one of the nations largest and busiest international airports (Centre for Aviation). Investing more heavily in infrastructure will help Brazil catch up to similar nations more quickly in terms of their infrastructure ratings. Improvements in infrastructure will aid their poor trade situation by shortening the time it takes to transport products within the country.

Improving technology is another critical improvement that Brazil must make if it hopes to improve its trading across borders and ease of doing business ratings. According to the Trade Policy Review in 2009, nine border entry points have been equipped with scanners that are supposed to shorten the time it takes to clear customs. Unfortunately, Brazil has not implemented enough of this technology. Countries with more advanced trading procedures and better technology, such as the United States, clear imports in one day, and in Brazil it takes an average of four days (DoingBusiness.org Trading Across Borders). Brazil can remedy this problem by improving the technology in other border entry points and redirecting the location of import receipts so that each location is responsible for a smaller percentage of the country's imported good. This, in combination with increased spending on infrastructure will allow Brazil to hasten the process of bringing goods into and out of the country.

C. The Labor Code

Another factor contributing to the difficulty of doing business in Brazil is the labor code, which is archaic, inefficient, and has little relevance in today's workplace. The labor code dates back to the time of Getúlio Vargas, a noted populist dictator, and was inspired by Mussolini's labor laws (Rohter, 2001). The labor code fosters high labor costs and low worker productivity, making Brazil an unfavorable place for entrepreneurs to invest.

The labor code unfairly protects the employees at the expense of employers. This is seen in the justice system when employers are taken to court because of unfair laws and the courts rarely rule in their favor (The Economist, March 10, 2011). Employers are taken to court on charges such as insufficient overtime pay and payroll records despite the fact that the employees are responsible for these tasks. In most, court cases employers are responsible for paying exorbitant settlements to their employees. In the labor code foreign investors often state salaries in a foreign currency forgetting that exchange rates are flexible. If the actual rate is less than the wage stated in the labor code charges can be filed against the employer (The Economist, March 10, 2011). The laws are set up in a way that makes it necessary for most claims to be taken to court, when in fact the employees may get a favorable long-term deal through negotiations. By taking their employers to court the employees may get a high settlement sum, however it will not improve future workplace conditions.

The employer is also responsible for additional costs such as the high cost associated with firing workers without just cause and paid leave, both of which are guaranteed by the labor code (Gonzaga, 2003). At first glance this policy may seem as though it offers much needed protection to workers; however, low productivity and workplace truancy are not considered just causes for terminating a worker. Fundo de Garantia por Tempo de Servico (FGTS) is a program in which employers are required to put 8 percent of the employee's earnings monthly earnings in a bank account and when they terminate that worker, he gains access to the account. The employer must also pay a fine for firing the worker to both the worker and the government (Gonzaga, 2003). According to the code workers are entitled to three months maternity leaves and one month paid vacation (Gonzaga, 2003). These laws obligate the employers to pay their workers even when they are not productive at all. Unfortunately, the political party in power does not see how these laws are unfavorable to the economic health and the Minister of Labor is pushing for termination of workers to become more expensive for employers than it already is (The Economist, March 10, 2011).

Brazil ranks 15th out of 17 Latin American countries in terms of worker productivity, which was measured through a survey where the Conference Board was responsible for collecting data. Bolivia and Ecuador are the only two nations ranked lower than Brazil (Brazilian Bubble, 2012). Unfortunately, workers actually have incentives to be less productive such as the FGTS program (Gonzaga, 2003). Employees earn interest on the money saved for them under the FGTS program and only gain access to it if they are fired for an unjust cause. The interest rate that they receive while employed is lower than the rate of return they would earn in the money market. So, workers have an incentive to lose their jobs due to low productivity in order to gain access to these accounts and to deposit the funds in a private bank where they will earn higher yields (Gonzaga, 2003). Another piece of legislation requires the employer to provide one month's advance notice before a worker is fired (Gonzaga, 2003). If a worker knows that they will be jobless in a month, their productivity drops causing losses for the firm. The essential flaw of this system is that workers are better being fired without justification than if they performed their job functions at their maximum productivity level. Low worker productivity is undesirable for an employer because non-productive workers would make the company as a whole less productive. There is also evidence that Brazil has high turnover rates meaning employees change jobs frequently. For firms this means that they lack human capital and that they frequently have to train new workers. Low human capital prevents businesses from expanding.

D. Reforming the Labor Code

A more lenient labor code will ultimately improve the business conditions in Brazil and will help improve their Ease of Doing Business Index. Reforming the labor code and eliminating some of its rigid laws is one possible proposal to improve labor productivity and reduce costs. First and foremost, the code itself should be reformed, as it would not be possible to implement unions without doing so. Removing the laws that prevent just firing of employees as well as those that mandate high firing costs would give power back to the employers. Some of the clauses in the code, such as the fact that a lazy employee does not constitute a reasonable cause for firing, should be eliminated.

In order to address the problem of employees taking their employers to court often, unions could be instituted so that employees could have a channel other than the court system to reach mutual agreements with their employers. Unions should be implemented in Brazil so that employees can remain protected, while giving employers more room to negotiate and to foster higher productivity levels among workers. This would better facilitate negotiations between employers and employees, and would make industries more productive (Rohter, 2001). To prevent arbitrary employer power, unions would be helpful in negotiating laws between employees and employers specific to their industries. It would be less costly for the employers to settle deals with the employees through unions rather than in court. However, solving Brazil's productivity problems by implementing unions may also have costs for businesses, as unions are often associated with hindered economic growth. Nevertheless, they would be a better alternative to the current restrictive labor code.

Since Brazil is faced with high job turnover and no accumulation of human capital, a reform of the FGTS system would also be appropriate (Gonzaga, 2003). The incentives associated with FGTS must be eliminated in order for worker productivity to rise. The rate of return on each worker's account should be based on how long they have worked in their current position, rather than on one interest rate across the board. Reforming the interest rate alone would prevent the high turnover rate, which creates an additional burden on the employers, as they have to continually hire and train new workers, an added supplementary cost. Long-term financial incentives to stay on the job would ultimately decrease the turnover rate and improve human capital of a firm because they would have more experienced and productive workers making the firm more successful overall. It is possible that a reform of this nature would not improve worker productivity because there is a chance that the relationship between the program and high turnover merely correlate. Also, if the workers are more productive but the money stays in the hands of the employers income inequality in the country would increase, as the bulk of the money would stay concentrated in the hands of only a few people. Although aware of its shortcomings, a reform of the FGTS system would be necessary to encourage human capital accumulation in order to promote business expansion.

IV. THE URBANIZATION EPIDEMIC

A. The Current Situation and Its Implications

One of Brazil's major problems is its urbanization rate. With 85 percent of its population living in urban areas in 2011, Brazil surpasses other industrializing nations like India at 31 percent, South Africa at 62 percent, China at 62 percent, and Russia 74 percent. A main Latin American competitor, 78 percent of Mexico's population resides in urban centers. Surprisingly, Brazil's urbanization rate has been decreasing, reaching 3 percent in 1990 but dropping to 1 percent by 2011. In the same time period, the percentage of Brazil's population in urban areas has jumped by 11 percent, from 74 percent to 85 percent (World Bank). Meanwhile, Brazil's rural population has been shrinking, dropping from 26 percent of the country's total population to 15 percent between 1990 and 2011 (World Bank). This suggests that Brazil's rural population expects higher returns from life in the cities than they do from working in the agricultural sector. They migrate to the cities based on these perceived assumptions, which can be modeled using the Harris-Todaro Model. The migration phenomenon is understandable as the Inter-American Development Bank (IADB) notes that rural-dwellers "account for 46 percent of total extreme poverty nationwide," whereas only 5 percent of the urban population is considered "extremely poor" (IADB, 2012). Of the extremely poor rural dwellers, "46 percent are landless, unemployed laborers," according to the International Fund for Agricultural Development (IFAD, 2011).

Unfortunately, Brazil's cities are simply unable to accommodate the influx of migrants from the countryside. Usually these individuals settle in Brazil's famous favelas, or shanty-towns. These favelas, usually built on un-owned land, often lack formal infrastructure. While access to sanitation in urban areas has increased from 80 percent in 1990 to 85 percent in 2010, 15 percent are still without access to proper sanitation (World Bank). Even worse, 57 percent of the sewage in urban areas is disposed of improperly (Seligmann, 2012). Crime is also a problem; despite falling by nearly 75 percent over the past decade in Sao Paulo, one of Brazil's biggest cities, violent crime is now projected to reach "epidemic levels" by 2013 (Mean Streets, Revisted, 2012). The preparation for the 2016 Olympics in Rio de Janiero has highlighted the crime problems Brazil's favelas face. On December 4th, Brazilian law enforcement arrested 63 police offices for alleged collusion with drug traffickers in Rio's low-income favelas (Associated Press, 2012).

Though overall urban unemployment continued to fall to 6.4 percent from 6.7 percent in 2011, the percentage of urban youth unemployment has been fluctuating over the past decade, peaking at 26 percent in 2000, dropping to a low of 17 percent in 2007, and rising to 18 percent in 2009 (World Bank). Add to this Brazil's increasing problem with creating jobs in the formal sector since the 2007 economic downturn, and Brazil's falling urban unemployment rate seems far less peachy (International Labor Office, 2010). As of 2007, Brazil's informal sector employment at 50.6 percent was expected to grow, especially considering Brazil's falling formal job creation rate (Maurizio, 2012).

Overall, excessive urbanization creates many problems for Brazil. Even though urban growth rates are falling, decreasing rural population rates suggest continued migration to cities. Brazil's already bustling metropoli are having problems incorporating migrants, despite falling urban unemployment. Favela growth exacerbates sanitation issues and crime problems. Crime, ahead of the 2016 Olympic Games, is especially touchy for Brazil; a rise in crime before such an event could discourage international investment. Also, the youth unemployment rate's past fluctuations and more recent rise suggest that young individuals are having problems finding jobs in the cities, whether due to lack of education or lack of opportunities. Increasing urbanization can aggravate both, whether by increasing the amount of surplus labor or by putting more stress on schools, lowering their effectiveness.

B. Causes of the Epidemic

Multiple factors contribute to the migration of rural dwellers to Brazil's urban areas. While the deforestation of the Amazon Rainforest earns the most headlines, its effect on rural-urban migration needs to be explored in order to better understand its true impact. In 2010, the Brazilian government sold off multiple logging permits to companies, designating certain areas of the rainforest as "off limits" to industry (Pyne, 2010). The deforestation rate dropped 27 percent in the first half of 2012 (BBC, 2012 Nov 22).

This willingness to grant concessions to logging industries in order to stimulate local rural in Brazil economies ignores the increasing mechanization of Brazil's logging industry. Though specific figures are unavailable, the country's logging industry experienced a seismic shift in 1993, when Brazil's government lifted tariffs on heavy machinery (Murakami 2002). Though the cost of labor decreased overall between 1990 and 1995 from 21 United States dollars to19 United States dollars, firms had to respond to "increasing market pressures…" with "increases in the volume of production" with "…significantly intensified" mechanization (Murakami, 2002; Stone, 1996). As a result, many laborers found themselves out of a job and moved to the cities. In short, Brazil's logging industry, as a result of mechanization, contributes to rural-urban migration.

Another contributor to rural-urban migration is a convergence of various problems, mostly concerning the farming industry in Brazil. Most of these issues crystallize in the Sertao, a semi-arid region in Northeastern Brazil that covers 1 million square kilometers. As such, the analysis will focus there. 67 percent of the Sertao's rural population is poor. Years of cattle ranching and has led to desertification of the region 20 percent of the total. Furthermore, land tenure is incredibly unequal; though "smallholder farmers make up more than 84 percent" of the region's agricultural sector. Most of these individuals are able to export around 50 percent of their output, but are forced to subsist on the remaining half (IFAD). Much of these problems are due to poor irrigation in the region. Unlike other portions of Brazil, irrigation infrastructure would require pipelines to run uphill, making it far more expensive to implement (Cline, 1973). The Brazilian government has attempted to address these problems through expanding irrigation canals/pipelines, but Damiani (1999) notes that the agencies in charge of such projects "…have been paternalistic, not even enforcing the payment of subsidized land and water fees." Also, the lack of effective irrigation means that most farmers in the area grow subsistence crops like corn instead of more "high value crops like fruits or vegetables" that would earn them more profit due to the produce's higher price (Damiani, 1999).

Besides irrigation, the region also lacks basic opportunities for economic advancement. The region suffers from an overall lack of investment; after all, who would want to invest in Brazil's poor rural areas as opposed to its increasingly cosmopolitan cities? And as investment floods urban areas, the rural poor will become increasingly attracted to them.

C. Curing Over-Urbanization

The solutions to Brazil's high urbanization rate is to increase opportunities for economic growth in the rural areas and agricultural sector. The first is to recognize that developing industry in the logging industry, especially through deforestation concessions, probably will not result in significantly increased opportunities for rural Brazilians. Cameroon, which also sold off permits to logging companies in the 1990s, provides an example. International investors poured money into the central African country and were required to invest in local infrastructure; however, the infrastructure was often shoddy, and the companies provided far fewer jobs than expected (Pyne, 2010; Karsenty, 2007). Instead, Brazil must look to other engines for rural growth.

Brazil can foster rural economic growth, and thus decrease incentives for urban migration, by improving infrastructure in rural areas, especially the semi-arid North East. Irrigation is the most needed amenity. While Brazil's infamous corruption has inhibited the effectiveness of government-funded irrigation infrastructure, Damiani (1999) proposes a solution. Since large private firms often short-change the Northeastern rural poor with poor irrigation infrastructure, and public work encourages graft, the Brazilian government should fund middle-size firms to undertake the projects. These firms would be far easier to work with in the sense that the government could withdraw subsidies or level other punishments if the firm did not meet production targets than larger conglomerates (2012). Later, Damiani (2003) cites the state of Petrolina-Juazeiro as Northeast Brazil's success story. Plagued by abject poverty in the 1960s, the Brazilian government's appropriation-cum-development of the region's irrigation infrastructure turned the state into an exporting powerhouse by 1990. Grape exports jumped from 0 hectares in1970 to 6,000 in 1990; the percentage of wage workers jumped from 5.9 percent to 37.8 percent, and "by 1996, irrigated agriculture in Petrolina-Juazeiro employed nearly 40,000 wager workers 30 percent of the rural labor force in the region" (Damiani, 2003). A smart mix of private and public investment enabled the state to export more valuable crops at a higher yield, raising wages by 21.7 percent higher than Brazil's minimum wage and creating jobs. However, it is worth noting that as the number of individuals growing valuable export crops increases, the supply would increase, thus lowering the world price. Brazil would have to be careful to avoid oversaturating the market with valuable crops.

An expansion of effective infrastructure would also aid rural areas in the development of other industries. Since 1980, IFAD has loaned Brazil 211.6 million United States dollars in loans for programs to "improve rural people's access to off-farm employment and other income-generating business activities" (IFAD, 2010). However, as detailed previously, Brazil's poor roads and river transit systems inhibit efficient trade. Businesses cannot get their goods in or out of rural areas cheap enough to warrant the investment. By investing in better infrastructure, more investment could be encouraged. However, there is a drawback; improved infrastructure would most likely result in increased deforestation rates as logging companies take advantage of lower transportation costs (Lind, 2010). But in terms of reducing rural-urban migration, better infrastructure would result in better rural opportunities, decreasing the desire to migrate to urban areas.

The Brazilian government also needs to expand the Bolsa Familia conditional cash transfer program, which currently covers one-third of Brazil's children (Soares, et. al., 2012). Bolsa Familia pays eligible families under the poverty line roughly 68 United States dollars per month if their children miss less than 15 percent of their classes; "12.4 mil households are now enrolled" (The Economist, 2010 July 29). At a mere cost of 0.5 percent of GDP, some experts expect the program to "increase enrolment rates by about 18 percent" (Glewwe, 2010). Bolsa Familia has reduced Brazil's poverty gap by 12 percent, and was 21 percent responsible for a GINI index drop by 4.7 percent between 1995 to 2004 (Soares, et. al, 2010). The Economist (2010) notes that Bolsa Familia has been specifically more successful at addressing rural poverty, with 41 percent of rural households covered. Not only does this provide rural families supplementary income that might help discourage migration, but it also increases the human capital potential of rural areas. The Northeast state of Pernambuco understands this need well. Increased cash flow from the Bolsa Familia program brought a host of new opportunities, such as car dealerships and restaurants (The Economist, 2012 Oct. 27). But as these industries grow, the state finds its populace ill-suited for non-agricultural work. This has created an "acute skills shortage" as illiteracy and other deficiencies constrain productivity (The Economist, 2012 Oct. 27). Though Brazil's 10 percent illiteracy rate, last measured in 2008, is not particularly high, encouraging poorer students to go to school through Bolsa Familia also encourages the accumulation of human capital in areas that are beginning to require it.

V. CONCLUSION

Brazil's economic concerns go beyond their ease of doing business rating and hyper-urbanization. However, both of these issues have far-reaching consequences, and it is evident that Brazil should address these problems in order to stabilize its economy and country status in the world.

Brazil has a long way to go, in terms of its Ease of Doing Business ranking, until it can compete with high-income countries such as the United States. Brazil must reduce its reliance on protectionist trade policies by cutting out the red tape in the process across all industries if it is to gain favor on the international market. Technological progress and updated infrastructure are also musts, especially in light of the imminent World Cup and Olympics that will be hosted in Brazil. If Brazil is to improve its business conditions, the nation must also seek to foster worker productivity and longevity by reforming its labor code. Overcrowding in Brazil's urban centers must also be addressed. Though it is a social problem in nature, lack of adequate infrastructure and job opportunities in the cities have a negative economic impact on Brazil. Increasing funding to programs that increase wealth and opportunities in rural areas can help alleviate the strain on cities.

Brazil has proven to be resilient through decades of political and economic turmoil; it has bounced back from the most recent recession with impressive speed and strength. With a mixture of radical and relatively simple reforms to its policies, it is likely that Brazil will become a top international contender in the not-too-distant-future as the "Country of Today".

VI. REFERENCES

Associated Press. (2012 Dec. 4th). Brazilian police arrest dozens of officers for alleged collaboration with drug dealers. The Washington Post . Retrieved 4 December 2012, from http://www.washingtonpost.com/world/the_americas/brazilian-police-arrest-dozens-of-officers-for-alleged-collaboration-with-drug-dealers/2012/12/04/8c0826fa-3e4b-11e2-8a5c-473797be602c_story.html

BBC. (2012 Nov. 27th). Amazon deforestation 'at record low'. British Broadcasting Corporation. Retrieved 28 November 2012, from http://www.bbc.co.uk/news/world-latin-america-20512722

Brazilian Bubble. (2012, March 26th.) Rank Chart: Productivity by country…Brail ranks 15th out of 17 Latin American countries, Brazilian Bubble. Retrieved 28 November 2012, from http://brazilianbubble.com/rank-chart-productivity-by-country-brazil-ranks-15th-our-of-17-latam-countries.

Centre for Aviation (2010). Brazil infrastructure lags behind boom; airports to reach capacity before World Cup. Centre for Aviation. Retrieved 29 Nov. 2012, from http://centreforaviation.com/analysis/brazilian-infrastructure-lags-behind-the-boom-brazilian-airports-to-reach-capacity-before-world-cup-40920

Cline, W. (1973). Cost-Benefit Analysis of Irrigation Projects in Northeastern Brazil. American Journal of Agricultural Economics, 55, 4, 622-626.

Damiani O. (2012). Beyond Market Failures: Irrigation, the State, and Non-traditional Agriculture in Northeast Brazil. Massachusetts Institute of Technology. 1-235.

Damiani, O. (2003). Effects on Employment, Wages, and Labor Standards of Non-Traditional Export Crops in Northeast Brazil. Latin American Research Review, 38, 1, 83-112.

The Economist. (2010 July 29th). How to get children out of jobs and into school. The Economist. Retrieved 2 December 2012, from http://www.economist.com/node/16690887

The Economist. (2011, March 10th). An Archaic Labour Code Penalizes Businesses and Workers Alike, The Economist. Retrieved 30 November 2012, from http://www.economist.com/node/18332906.

The Economist. (2011, September 24th.) Seeking . The Economist. Retrieved 1 December 2012, from http://www.economist.com/node/21530144

The Economist. (2012, June 30th.) Protectionism Alert. The Economist. Retrieved 1 December 2012, fromhttp://www.economist.com/node/21557766?zid=295&ah=0bca374e65f2354d553956ea65f756e0

The Economist. (2012, August 11th.) The Road Forsaken. The Economist. Retrieved 30 November 2012, from http://www.economist.com/node/21560309

The Economist. (2011, September 24th.) A Self Made Siege. The Economist. Retrieved 30 November 2012, from http://www.economist.com/node/21530144

The Economist (2012 Oct. 27th) The Pernambuco model. The Economist. Retrieved on 1 December 2012, from http://www.economist.com/news/americas/21565227-eduardo-campos-both-modern-manager-and-old-fashioned-political-boss-his-success

The Economist. (2012 Nov. 17th). Mean Streets Revisited. The Economist. Retrieved 28 Nov. 2012, from http://www.economist.com/news/americas/21566653-brazils-biggest-city-becoming-more-dangerous-mean-streets-revisited

Glewwe P. (2010). What is the Impact of the Bolsa Familia Programme on Education? The International Policy Center for Inclusive Growth. 107, 1.

Gonzaga, G. (2003). Labor Turnover and Labor Legislation in Brazil. Economia, 4, 165-222.

International Fund for Agriculture Development (2012). Rural Poverty in Brazil. International Fund for Agriculture Development. Retrieved 30 Nov. 2012, from http://www.ruralpoverty.org/country.home/tags/brazil

International Fund for Agriculture Development (2011). Enabling poor rural people to overcome poverty in Brazil. International Fund for Agriculture Development, 1-7.

International Chamber of Commerce. (2011). Open Markets Index. International Chamber of Commerce. Retrieved 29 Nov. 2012, from http://www.iccwbo.org/Products-and-Services/Trade-facilitation/Open-Market-Index/

International Labour Office. (2010). Brazil: Despite Slowdown in Economic Growth, Labour Market Proves to Be Resilient. International Labour Office G20 Statistical Update, 1-4.

Karsenty A, Jegou C. and Singer B. (2008). Social

Policies of Forest Concessionaires in West and Central Africa. CIRAD. 2-27.

Latinamerica Press. (2012 Nov. 22nd). Unemployment on the Decline. Latin American Press. Retrieved 29 Nov. 2012, from http://www.lapress.org/articles.asp?art=6742\

Leahy, J and Pearson, S. (2011, Dec. 28th). 'Bope' takes fight to favela gangs. The Financial Times. Retrieved 25 Nov. 2012, from http://www.ft.com/cms/s/0/180a8f06-2bc1-11e1-98bc-00144feabdc0.html

Lind, D. (2010). Impacts and Causes of Deforestation in the Amazon Basin. Retrieved 30 November 2012, from http://kanat.jsc.vsc.edu/student/lind/main.htm

Maurizio, R. (2012). Labour Informality in Latin America: the case of Argentina, Chile, Brazil, and Peru. Brooks World Poverty Institute, 165, 20-30.

Murakami, E. (2002). The Evolution of the Forest Logging Mechanization in Brazil: The Logging Mechanization Processes and Phases at Rigesa. Council on Forest Engineering, 1-3.

Pyne, S. (2010, Oct. 10th). Brazil offers up land for logging. Global Post. Retrieved 29 November 2012, from http://www.globalpost.com/dispatch/brazil/101019/logging-amazon-rainforest

Rabello de Castro, P and Ronci M. (1991). Sixty Years of Populism in Brazil. The Macroeconomics of Populism in Latin America, 1, 151-173.

Rohter, L. (2001). Brazil Efforts to Overhaul its Labor Code Stirs Heated Debate, The New York Times. Retrieved from http://www.nytimes.com/2001/12/09/world/brazil-s-effort-to-overhaul-its-labor-code-stirs-heated-debate.html.

Seligmann, J. (2012). IDB Country Strategy with Brazil. Inter-American Development Bank, 150.

Soares F, Ribas R, Osorio, R. (2010). Evaluating the Impact of Brazil's Bolsa Familia: Cash Transfer Programs in Comparative Perspective. Latin American Studies Association, 45, 2, 174-187.

Stone, S. (1996). Economic Trends in the Timber ndustry of the Brazilian Amazon: Evidence from Paragominas. Collaborative Research in the Economics of Environment and Development, 6, 1-24.

United Nations. (2013). Brazil, The Land. Retrieved January 23rd, 2013 from http://www.un.int/brazil/brasil/brazil-land.htm.

World Bank. (2011). Population Databank. Retrieved January 23rd ,2013 from http://data.worldbank.org/indicator/SP.POP.TOTL.

World Trade Organization. (2009). Promoting market competition would help sustain economic growth. The World Trade Organization. Retrieved 1 December 2012, from http://www.wto.org/english/tratop_e/tpr_e/tp312_e.htm