



# Brazil: Short-term challenges provide long-term opportunity

## WHITE PAPER

June, 2011

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### **INTRODUCTION**

Brazil experienced rapid economic growth in 2010 and secular changes are occurring within many aspects of society. This combination has created a set of challenges for the world's seventh largest economy. Some of the challenges that we examine in this paper will be short term in nature and have identified solutions. Others will be long term and require a strong, coordinated effort over an extended period of time in order to solve. We visited Brazil to understand whether any of the challenges we identified are capable of undermining the increasing consumption power of the lower and middle class – a secular shift that has been the premise of our investment thesis. We returned from our visit with continued optimism that the long-term growth story is still very much alive but realize that all good growth stories have bumps in the road. Challenges create financial market opportunities and our responsibility as investment advisors is to determine if the opportunities can be monetized and if so, how.

### **Renewed focus on infrastructure investment a positive**

Developing an infrastructure system capable of supporting a growing economy is a long-term challenge common to Brazil and other emerging economies. Our experiences at Guarulhos International Airport, Sao Paulo's main airport, confirm much of the research that we have read on Brazil's infrastructure woes and what many would cite in the coming days as the main threat to its continued economic prosperity. Guarulhos is designed to accommodate 20 million passengers annually

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but caters to over 27 million people each year. Visitors endure long custom lines, too few agents, difficulty in finding bags, and long taxi lines. The infrastructure problem is so prevalent that it was repeated in every meeting by every asset manager, strategist, and business leader, without fail. The topic, along with inflation, was at the forefront of nearly every discussion, spurred by acknowledgement that the current system of highways, railroads, and ports are inadequate for sustaining Brazil's recent rate of economic growth. The conversations suggested a sense of urgency because the World Cup (2014) and Olympics (2016) are looming on the horizon.

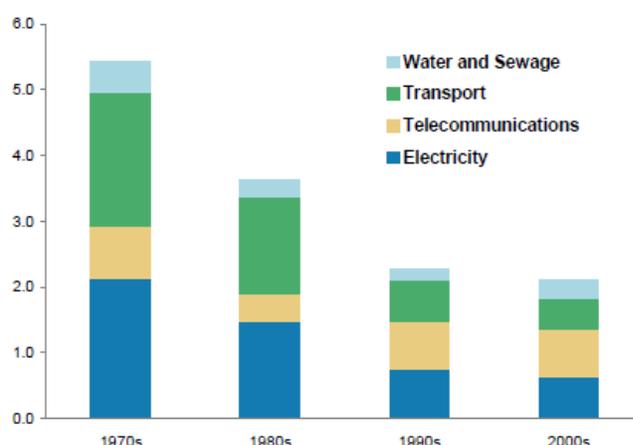
Adequate infrastructure plays a key role in strengthening a country's growth prospects, enabling higher productivity and laying the foundation for private investments. Infrastructure is also vital in ensuring Brazil's key role as a provider of global commodities and allows Brazil to compete with other countries such as Australia to fuel global growth. The country's recent economic growth exposed the limitations of the current infrastructure system and in this paper we will explore why it is underdeveloped and how much additional investment is required to support future growth.

The last sustained period of significant infrastructure investment occurred during the 1970s in Brazil, or during the "Miracle of Brazil" era, when the economy grew 8.6% per year over the decade. During the 1970's, infrastructure investment averaged 5.4% of GDP but has steadily declined each decade, dropping to 2.1% during the 2000s. In contrast, over the past five years East Asia and India have invested roughly 3 times as much into infrastructure (6.2% of GDP and 6.0% of GDP, respectively). The World Economic Forum conducted a survey<sup>1</sup> in 2010 ranking infrastructure development across 133 countries. Brazil ranks 74<sup>th</sup> in the survey, similar to India (76) and below Chile (30). There are numerous explanations as to why infrastructure investment in Brazil steadily declined over the past 30 years and many are beyond the scope of this paper. The issue for investors in Brazil is whether the current administration understands the problems and possesses the appetite to correct them.

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<sup>1</sup> World Economic Forum, Global Competitiveness Report 2009-2010, Retrieved from: [http://www3.weforum.org/docs/WEF\\_GlobalCompetitivenessReport\\_2009-10.pdf](http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2009-10.pdf)

### Brazil: Infrastructure Investment (as % of GDP)



Source: Morgan Stanley, World Bank, IPEA, BNDES.

In 2007 Brazil responded and announced the Growth Accelerated Program (PAC) aimed at investing a total of R\$1.6tr (USD ~\$1 Trillion ) into a variety of social and development programs, including infrastructure. The program is to be deployed in two phases, PAC 1 and PAC 2. To place the investment in context, the American Recovery and Reinvestment Act initiated in 2009 totaled \$787bn, nearly a quarter billion dollars less than the PAC program, for an economy that is seven times larger than Brazil. The program is now entering PAC 2 and over the next four years is expected to deploy R\$960bn from 2011 to 2014 in the following areas:

PAC 2 INVESTMENTS		
R\$ Billion		
PAC 2 Initiatives	2011-2014	Post 2014
Better City	57.1	
Bringing Citizenship to the Community	23	
Housing	278.2	
Water and Light for All	30.6	
Transportation	104.5	4.5
Energy	465.5	627.1
<b>Total</b>	<b>958.9</b>	<b>631.6</b>

Source: [www.brasil.gov.br](http://www.brasil.gov.br)

The PAC program provides a long needed "shot in the arm" to infrastructure investments and is partially aimed at preparing the country for World Cup and the Olympics. Travelers will be happy to know that ~R\$5.0bn is targeted for the upgrade and expansion of twenty Brazilian airports, including Guarulhos. In addition to PAC 2 funds, Brazil's Development Bank (BNDES) is expected to loan R\$310bn from 2010 to 2014 to infrastructure projects. BNDES financing in isolation amounts to roughly 1.7% of 2010 GDP. There is some overlap between BNDES and PAC 2 funds but when we adjust for the two funding sources we believe infrastructure investment as a percentage of GDP could total north of 5% over the next few years.

Morgan Stanley's Latin American research team believes that infrastructure must average 4% of GDP annually for Brazil to sustain 5% GDP growth. Providing additional support for increased investment, an academic study<sup>2</sup> published in 2003 found that an investment of 5% of GDP will maximize the impact to Brazil's economic growth.

Despite the increased spend, there is a healthy dose of skepticism regarding the government's ability to deploy infrastructure funds as quickly as needed. Brazil has strict environmental, regulatory, and legal hurdles that make the deployment of infrastructure capital cumbersome. Many public works projects are still rife with corruption. Brazil's Court of Audit has permanently closed many PAC funded projects for this reason. Further complicating the process, the current administration has a blend of ideologies concerning whether particular projects should be privatized or kept within the public domain. Despite some of these challenges the outlook for infrastructure investment over the successive five years is an improvement and if properly deployed should enable Brazil to grow its economy at a pace above the developed world. We returned with optimism that policy makers have recognized the problem and are investing in its solution but the investments will take time. Multinational events such as the World Cup and the Olympics will prove to be significant tailwinds for the development of Brazil.

### **Arcane labor laws slow to reform**

Unlike its developed peers, developing countries are experiencing low unemployment; Brazil's unemployment rate stands at 6.5% and most believe the unemployment rate for skilled laborers is near zero. The paucity of skilled laborers was a theme that permeated many of our meetings. For example, while in Sao Paulo, we heard stories of competing construction firms advertising day rates on billboards, each trying to outbid the competition and entice laborers to "cross the street".

Many attribute the tight labor market to Brazil's cumbersome labor policies directed at protectionism. The CEO of an upstart airline spoke at a conference that we attended in Sao Paulo. The CEO, Brazilian by birth, is frustrated with many of the bureaucratic obstacles that he faces in building his company. He commented that the country's aviation regulations restrict a foreigner from flying a commercial aircraft of a local airline over Brazil. A severe shortage of qualified Brazilian commercial pilots limits both his ability to expand his fleet and offer additional routes. In addition, few local schools can qualify a pilot to fly large commercial aircraft. To help alleviate the problem, the CEO is now considering opening his own pilot training school in Brazil with the downside being added costs and a steep learning curve for new pilots.

In a separate conversation with a banking professional, we learned that if a Brazilian bank decides to hire a foreigner it must pay that individual the same salary he earned in his prior job. Hiring a banker from New York or London, who earn large paychecks relative to their Brazil peers, places significant wage expense

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<sup>2</sup> Rioja, F, & Glomm, G. (2003, April 14). Populist Budgets and Long Run Growth.

pressure on local banks and places foreign workers at a competitive disadvantage to local talent.

The two examples above reflect the protective measures of Brazil's labor markets. The labor market is governed by a complicated set of labor laws that contain over 900 articles, most of which were drafted in the 1940's by President Getulio Vargas. These laws, aimed at limiting the power of unions, govern nearly every aspect of the relationship between employer and employee. The labor laws, unfortunately, are very supportive of employee turnover; this has negatively impacted productivity. *The Economist*<sup>3</sup> estimates that 1/3 of all Brazilians are fired from their jobs every year for reasons partly attributed to the existing labor laws<sup>4</sup> in Brazil. Labor laws also prevent a company from cutting an employee's salary. When times get tough, companies resort to widespread firing, fueling employee turnover and decreasing productivity.

Brazil's labor laws and protectionist views have been a challenge and unfortunately change does not appear to be forthcoming. Brazil's current President, Dilma Rousseff, and her administration have been more focused on other short-term challenges such as inflation, fiscal budget balancing, tax reform, and foreign trade policy. Labor law revisions do not appear to be a priority despite pressure from business leaders that are seeking more flexibility in the hiring and firing of workers. A less rigid labor market that is more influenced by free market forces and less by laws and restrictions would be beneficial to Brazil and increase its attractiveness to foreign firms. We hope that labor reform becomes a higher focus for President Dilma but expect change to occur slowly.

### **Wage increases continue to fuel prosperity for the lower class**

The labor shortage and nature of the labor laws have resulted in significant wage increases. Increases in the minimum wage are tied to GDP growth and inflation through a formulaic methodology that translates to a 14% nominal increase in 2012. Wage increases are an integral reason why lower economic classes continue to move up the socio-economic structure. Rising wages are also largely responsible for the growth in consumer demand.

Brazil defines its economic classes by monthly household income levels using the following definitions:

- Class A&B: > R\$4807 (upper income class)
- Class C: R\$1116 to R\$4807 (middle income class)
- Class D: R\$804 to R\$1115 (lower middle income class)
- Class E: < R\$804 (lower income class)

Banco Itau estimates that over the period of 2003 to 2008, 21% of Brazilians from Classes D and E have migrated to Classes A through C. The majority of the shift

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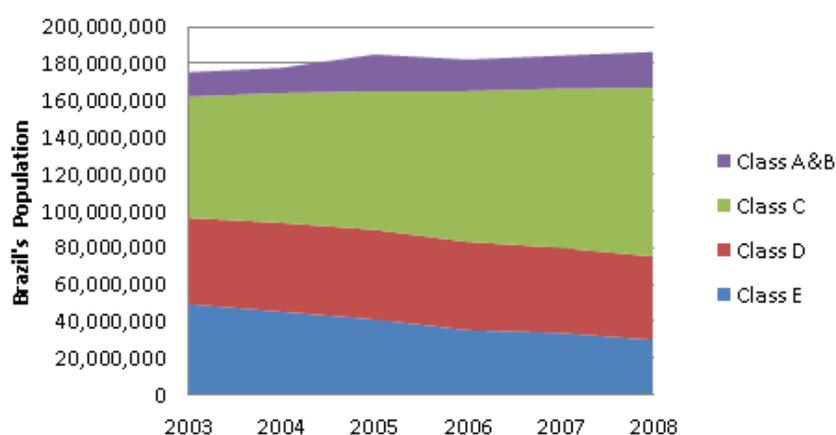
<sup>3</sup> Brazil's Strange Labour Market. Retrieved from:

[http://www.economist.com/blogs/multimedia/2011/03/brazil%E2%80%99s\\_strange\\_labour\\_market](http://www.economist.com/blogs/multimedia/2011/03/brazil%E2%80%99s_strange_labour_market)

<sup>4</sup> Upon hiring, firms are also required to deposit a percentage of a worker's salary in a bank account. If the employee is fired, they will receive the balance of the account plus an additional 40% fine.

has occurred from Class E to Class C, implying a 600% increase in monthly income from R\$402 to R\$2960 at the midpoint. This improvement can be attributed to economic growth providing better jobs, improving education, and wage increases.

### The migration of Brazil's lower class



Source: Banco Itau.

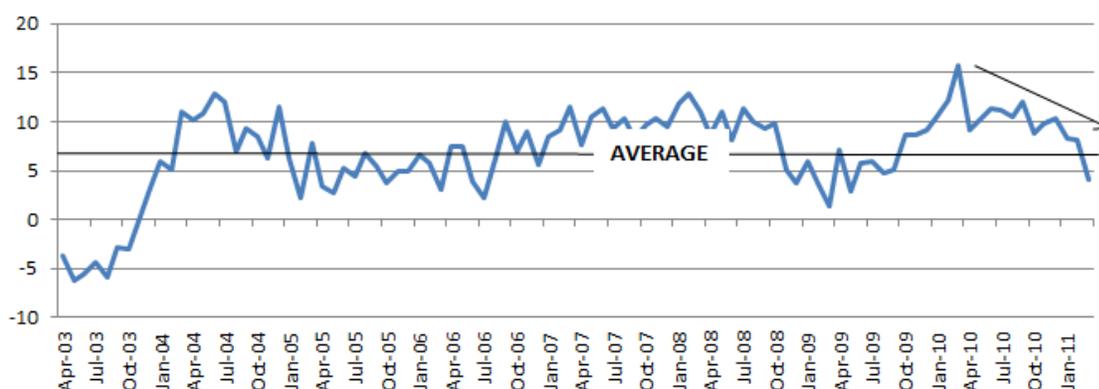
Increases in the minimum wage are expected to be robust in 2011 and 2012 and will be a continued catalyst to propel Brazilians from lower to middle and upper classes. Our consumer investment theme is built on the premise that Brazil's lower class will continue to reap the benefits of its strong economic growth.

### **Consumer spending has slowed short term**

We continue to maintain a long-term bullish view on the consumer but must recognize that recent policy actions by the central bank are likely to slow spending in the near term. Consumption drives nearly 60% of Brazil's economy and if the goal of the central bank is to reduce inflation and slow economic growth to a more sustainable level, then slowing Brazil's consumer must be part of the equation.

Retail sales data is released monthly in Brazil and below we highlight the year-over-year growth rate through March. We note that sales growth has steadily declined since peaking at nearly 16% in March 2010. The recent decline can be attributed to several factors including difficult comparisons from 2009 and 2010 and tighter access to credit as a result of recent policy actions. The most recent data indicates a 4.1% year-over-year sales growth, down from 8.5% in the prior month, and below the long term average in our table of 6.9% (since 2003).

### Brazil Retail Sales Growth (% y/y)

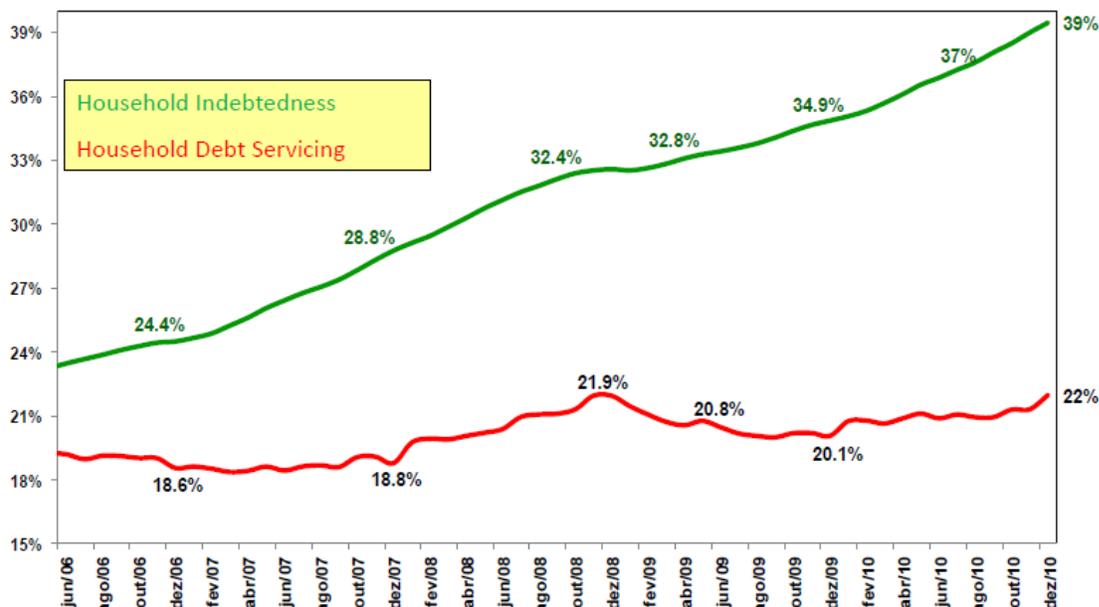


Source: Bloomberg

A review of the recent sales data presents a mixed growth outlook. Several sectors including clothing, medical items, food and fuel show signs of deceleration while other areas such as home furniture and appliances continue to grow at a robust pace. Credit intensive automobile sales declined 13% year-over-year in March, partly because of a tough comparison (due to the expiration of a tax credit) and higher credit standards. The recent data provides some evidence that recent tightening actions have impacted Brazil's historically strong consumer.

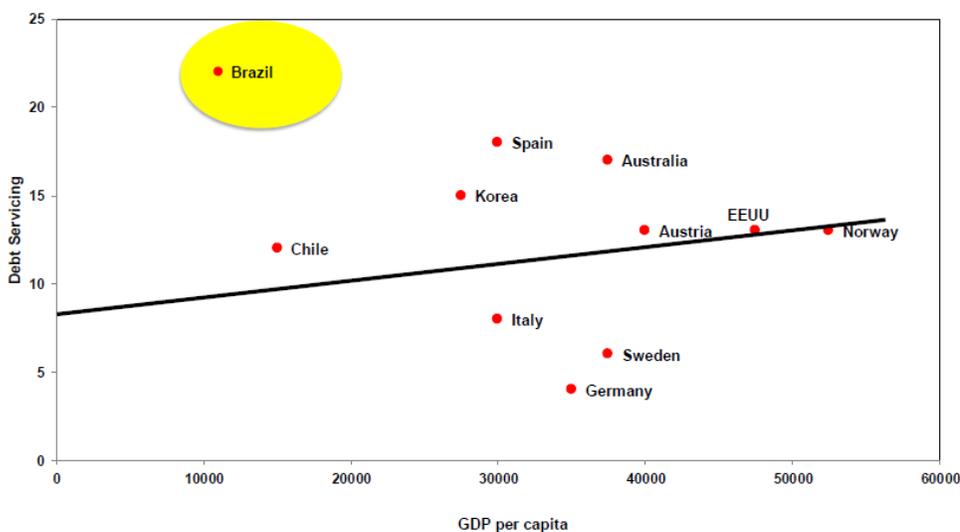
The reliance on credit to fuel consumption has also increased. Brazil's household debt-to-income ratio has doubled over the past five years from 24% to 40%. Despite the increase, many analysts reference the current household debt-to-income level as being in-line with other emerging economies such as China but still significantly below most large, developed economies such as the US and Germany. Analyst research also defends Brazil's consumer through its low debt-to-GDP ratio (20%) which ranks significantly below many emerging and developed countries. Given current levels, neither ratio keeps us awake at night; however, both are focused on the absolute level of debt and not the ability to service it.

Focusing on debt outstanding does not incorporate the cost of debt (interest rate) or the consumer's ability to service it. Brazil's interest rates are among the highest in the world; consumer interest rates can average above 40% per year. High borrowing rates are accepted in Brazil and consumer budgets are accustomed to these levels. Brazil's Debt Service Ratio (DSR) which divides monthly interest and principal payments by monthly disposable income was 22% at the end of 2010 and increasing. To place that number in perspective, the levered US consumer has a DSR ratio of 11.75%. Despite the average Brazilian owning less debt as a percentage of income relative to a US citizen, monthly interest and principal payments occupy a much larger percentage of a Brazilian's disposable income.



Source: Banco Bradesco

Brazil’s DSR ratio continues to slowly move higher as consumers increasingly rely on credit-backed purchases. If DSR ratios reach a level that impairs credit we would expect to see an increase in non-performing loans (NPLs). NPLs, however, have trended down steadily since 2009, from 8.5% to under 6% currently. This provides some evidence that current credit ratios are supported given the existing economic fundamentals in Brazil. Despite its high level, consumer interest rates have fallen dramatically over the past five years as competition for lending has increased. Falling rates, lengthening credit maturity, improving employment and higher wages have all provided an additional financial cushion to keep the DSR ratio at manageable levels.



Source: Banco Bradesco

Our credit research suggests that consumer borrowing is at sustainable levels and credit growth could potentially slow in the short term as indicated by the weakening retail sales data. The decelerating retail sales growth also provides evidence that some of the interest rate increases and macroprudential measures are having success. We view the slowdown in spending as a healthy retracement of a trend that was unlikely to continue without damaging consequences. As our data indicates, the average year-over-year growth rate in consumer spending since 2003 is 7% which we view as a very robust growth rate in a developing economy. Sales growth above 10% is likely to be inflationary and unsustainable over the long run.

### **Inflation is being driven internally and externally**

Inflation poses a significant threat to future economic growth in Brazil and accordingly, is a widely discussed topic. The current cycle of inflation is driven by both higher commodity prices and robust wage growth and has resulted in an inflation rate above central bank target. Since bottoming in September 2009 at 4.3%, the inflation rate in Brazil has increased to 6.5% as of April, 2011. Brazil's central bank has responded by raising its overnight lending rate (SELIC rate) from 8.75% to 12% and has imposed multiple macroprudential measures.

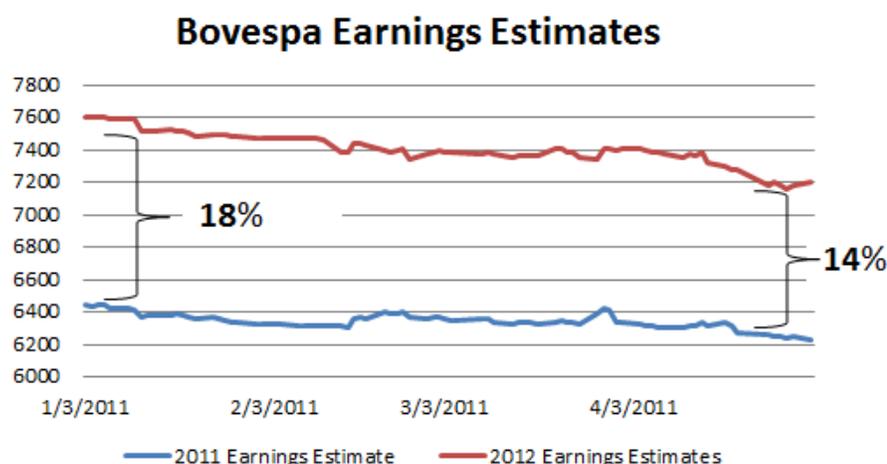
Policy makers and residents of Brazil are intimate with the damage that spikes in inflation can cause to an economy. The 1970s in Brazil was characterized by significant volatility in inflation, averaging over 50% per year during that time period punctuated by a 100% year-over-year increase in the late 70s. Various initiatives launched in the 1980s, such as the Cruzado Plan and Bresser Plan, were aimed at reducing inflation through either indexation or price freezes. These efforts had very little short-term success and, ironically, ultimately contributed to the problem.

Brazil struggled with hyperinflation for decades and the memories of those struggles are still fresh for many individuals. This helps explain why financial markets react aggressively to changing inflation expectations. In addition to conventional measures such as interest rate increases, policy makers in Brazil have enacted a series of macroprudential measures to slow inflation. These include imposing taxes on foreign inflows, enacting budget cutbacks, increasing capital requirements to restrict bank lending, and increasing minimum credit card payments. Brazil's reliance on macroprudential measures is a voyage into uncharted waters and has created skeptics at many levels both inside and outside of the government. Brazil does not have a proven track record in relying on unconventional measures over traditional interest rate increases to reduce inflation.

Recent weakness in commodity prices should help dampen the impact to inflation from food and energy prices in the coming months but inflationary pressure associated with wage growth is likely to persist. Food and energy can represent more than one-third of the basket of goods used to measure inflation and accordingly, any slowdown in prices should serve as a strong inflationary headwind. We believe that slowing inflation could signal the beginning of the end of monetary tightening policies and a likely catalyst for future market performance.

## **Financial markets favor stock selection in the current environment**

Given current central bank policies and investor concerns over future growth, the Bovespa's price to earnings ratio (P/E) for 2011 has contracted from 13x to 10.1x. The Bovespa currently trades at a 30% discount to its historical five and ten year trailing average price to earnings ratio which presents an attractive investment opportunity. The tightening cycle has also resulted in downward earnings revisions to the Bovespa Index. Analysts are now forecasting a 5% contraction in earnings in 2011 over 2010 and expect 14% earnings growth in 2012, revised down from 18% earlier this year.



Source: Bloomberg

The downward revisions have resulted in a 6.8% year-to-date decline (in local currency) in the commodity heavy Bovespa through May 31st. As we noted, the investment opportunity in Brazil is focused in the small cap sector where investors can exploit the consumer demand story. The MSCI Brazil Small Cap Index returned 36% in 2010 but is down 2.8% year-to-date through May 31st (local currency). The performance difference between the two benchmarks supports the case for active management.

## **Short-term headwinds not sufficient to derail long-term growth story**

Despite some of the uncertainties we addressed, we find it difficult to not be optimistic longer term. The current administration's focus on infrastructure should "pave the way" for continued economic growth and enable Brazil to effectively compete with other global commodity producers. Brazil is responsible for providing the majority of the world's sugar and coffee and is a significant producer of iron ore, soybeans, and meat products. The country ranks 5<sup>th</sup> in arable land acreage and has direct access to shipping channels to all destinations through its long coastline. The wealth created from Brazil's abundant natural resources should trickle through the coffers of both the national government and private enterprises.

Today's Brazil is fiscally strong; trade balances are healthy, current account and fiscal budgets are stable, and foreign reserves are high. These factors are just a few that lead us to believe Brazil will not repeat its past as it relates to inflation. The

recent tightening cycle has created investor concerns over growth expectations, both for the consumer and the underlying economy. The change in expectations has resulted in a contraction of market multiples over the prior six months. Current valuation levels are supportive of future higher equity prices but given the uncertainty over other factors, mainly inflation and spending, we prefer active management over passive at the current time. The current environment should favor skilled stock selection and enable active management to exploit the internal consumer demand story that we have conviction in.

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