

Brazil: Policy Responses to the Global Crisis and the Challenges Ahead

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Abstract

This paper explores how Brazil has fared during the ongoing global financial crisis, with a focus on the different policy tools used and their relative effectiveness. The financial crisis of 2008 and its aftermath, particularly the policy responses by developed economies, have spawned a number of challenges for Brazilian policymakers. Exchange rate overvaluation resulting from the unprecedented monetary easing by the US Federal Reserve and the European Central Bank has severely affected the economy, particularly the manufacturing sector, already afflicted by domestic structural problems. The Brazilian authorities were thus forced to adopt a series of unconventional measures, including stricter capital controls, to contain the disruption. Moreover, the macroeconomic framework was remodeled in order to better adapt to changing global conditions. This notwithstanding, many challenges remain. The prospect that growth in developed economies will be severely restrained by the debt overhang problem and the ensuing policy consequences, such as a prolonged period of lax monetary conditions, may require the Brazilian authorities to step up their reform efforts in order to contain further negative spillovers, particularly to those sectors which have already suffered some damage. The paper offers a view on these issues and on how they might be helped by a concerted effort towards a comprehensive reform of the global monetary system.

Keywords: global liquidity, macroprudential policies; monetary policy; policy coordination

JEL Classification: E50, E60

Introduction

“By ‘uncertain’ knowledge, let me explain, I do not mean merely to distinguish what is known for certain from what is only probable. The game of roulette is not subject, in this sense, to uncertainty; nor is the prospect of a Victory bond being drawn. Or, again, the expectation of life is only slightly uncertain. Even the weather is only moderately uncertain. The sense in which I am using the term is that in which the prospect of a European war is uncertain, or the price of copper and the rate of interest twenty years hence, or the obsolescence of a new invention, or the position of private wealth owners in the social system in 1970. About these matters there is no scientific basis on which to form any calculable probability whatever.”

John Maynard Keynes
The General Theory of Employment, 1937

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The financial crisis of 2008 has permanently altered the macroeconomic landscape with which markets and policymakers had become used to in the years leading up to the collapse. No longer are we in an environment where the structural variables that guide policymaking – the natural rate of unemployment, the potential rate of GDP growth – are known with any degree of certainty. In fact, it appears that the world has left behind the period commonly known as the Great Moderation, the era of low macroeconomic volatility, and entered a new age of heightened uncertainty. As John Maynard Keynes so brilliantly defined in the 1930s, dealing with extreme uncertainty is notoriously difficult. The absence of “a scientific basis on which to form probabilities” hampers policymaking and leads to a type of experimentalism that is akin to a series of trial and error exercises with little knowledge of how economic variables will be affected in the short and medium runs.

The global economy currently abounds with different types of monetary policy experimentalism. The various forms of “Quantitative Easing” adopted by most major central banks, the new communication strategy and policy guidance on interest rates notably used by the Fed, and the possibly unlimited sovereign bond buying operations contemplated by the European Central Bank – the so-called Outright Monetary Transactions – have brought new challenges to the emerging market economies (EMEs). The unprecedented amounts of global liquidity and the volatility in world commodity prices that have resulted from these operations have led to changes in policy frameworks across EMEs, notably in Brazil. The fiscal problems facing the developed world and the resulting lack of policy instruments, leaving only monetary policy as the tool to sustain domestic demand and avoid deflationary spirals, means that the current challenges affecting EMEs are likely to persist.

How should EMEs cope with greater exchange rate volatility, erratic capital flows and liquidity shocks? The Brazilian authorities, as well as other EMEs, have responded to these problems through the use of various macroprudential² tools. According to a recent policy paper by the Brazilian Central Bank (BCB)³, the abundant liquidity flowing into the country in 2009-10 required a forceful response by the authorities. Rising tensions between monetary and financial stability objectives led to the adoption of controls on capital flows, more stringent intervention

² According to Sales and Barroso (2012), macroprudential policies may be defined as financial sector measures devised to minimize aggregate risks *ex-ante*, often creating buffers and policy space to be used *ex-post* during a crisis. Critically, policy calibration must be made with reference to macroeconomic events, as otherwise one falls into the framework of standard prudential regulation. The paper by Galati and Moessner (2011) presents various macroprudential policies defined from the standpoint of systemic, rather than institutional, risks.

³ See Sales and Barroso (2012).

in exchange rate markets, as well as measures to contain excessive easing of domestic credit conditions. Concerns that capital inflows might lead to resource misallocation and a harmful credit boom that could potentially increase the risks to financial stability fueled the early and widespread use of macroprudential measures, placing Brazil amongst the group of countries that have most extensively used these unconventional policy instruments. This is a different type of experimentalism in its own right, a response to the one conducted by the major central banks across the developed world.

In this paper we discuss the Brazilian experience after the financial crisis of 2008 in an attempt to draw some conclusions regarding policy responses in an environment of extreme uncertainty. How should Brazil respond to the many challenges that lie ahead? Assuming that a multicurrency system will emerge over the coming years as a result of the monetary disarray caused by the issuers of the major reserve currencies how does this impact Brazil? What are the effects on the country of the internationalization of the renminbi (RMB)? What are the authorities' current views on the internationalization of the Real?

In order to address these questions, one must first have a clear understanding of how Brazil has fared during the subsequent episodes of global turmoil that have plagued the world economy since 2008, what policies have been adopted and how the macroeconomic framework has been adapted, and the gravity of some of the structural problems that have since emerged. The paper is thus structured as follows: in the second section, we briefly discuss the main macroeconomic developments prior to and during the financial crisis, as well as Brazil's policy responses thereafter; the third section addresses the structural problems facing the economy and the difficulties in dealing with these issues in a dysfunctional global environment; given the overall context outlined in the previous sections, Brazil's role in a likely new international monetary system where there may be multiple reserve currencies is then analyzed in the fourth section; the fifth section concludes.

Brazil after 2008: Policy Responses

The Brazilian policy response to the events of 2008 and beyond can only be properly gauged after a brief characterization of the country's macroeconomic landscape between 2003 and 2010, the years that marked President Lula's administration. Throughout most of this period, Brazil enjoyed an extremely favorable global setting while reaping the benefits of the macroeconomic stabilization efforts that were set in motion under President Fernando Henrique Cardoso with the launching of the Real Plan, and continued under President Lula's leadership. After coming into office in 2003, President Lula immediately embraced the policy framework that had managed to bring down inflation from the chronic hyperinflation of the early nineties to single digits by the end of the decade. The framework included a strict inflation

targeting regime, fiscal targets defined under the Fiscal Responsibility Law introduced in the early 2000s, and flexible exchange rates following the disastrous experiences of EMEs during most of the nineties with fixed and adjustable currency regimes.

Between 2003 and 2010, Brazilian terms of trade soared on the back of strong growth in other EMEs, notably China and India (Figure 1). Two separate time periods marked the movements in the terms of trade. The first was the period between 2004 and 2008 when the global economy was growing robustly, at a clip of about 4% per year. During this time, Brazilian terms of trade accumulated gains of some 16%. In the second period, between 2009 and 2011, the increase in the terms of trade was even larger, of the order of some 20% achieved in only half the time that characterized the previous movement. This was the direct result of lax global liquidity conditions associated with the synchronized monetary policy responses to the events of 2008 in both EMEs and developed economies, as well as by the large fiscal stimulus packages launched by many countries, most notably China with its significant infrastructure expenditure plans.

Not only did the terms of trade rise to unprecedented levels, but the Brazilian economy also enjoyed a large increase in capital inflows during President Lula's administration, most notably in foreign direct investment. Brazil's attainment of the investment grade rating in May 2008 provided further impetus to these flows. These extremely favorable external conditions played a significant role in the country's growth throughout most of the first decade of the 21st century, a very important departure from the past, when the economy was plagued by boom-bust cycles due to adverse external shocks and macroeconomic instability.

Between 2003 and 2010, the economy grew, on average, some 4.5%, spurred by robust domestic demand. Consumption expanded by about 5.5%, while investment grew more than 7.5% yearly, on average. Investment as a share of GDP climbed to 20% in 2010, the highest level in more than twenty years, although significantly lower than that observed in its EME peers.

The terms of trade boom and the boost in capital inflows constituted important wealth effects for the economy, allowing the government to promote social inclusion policies (the so-called "Bolsa Família" program and other benefits for the lower income classes) without jeopardizing the budget. Inflation was subdued largely as a result of the appreciation of the exchange rate that marked most of this period.

When the financial crisis erupted in 2008, Brazil had established a solid track record of macroeconomic stabilization and had built up a large stock of international reserves – this stock has recently reached US\$ 380 billion, having been equivalent to just about US\$ 50 billion in the late 1990s. This allowed the country to withstand the global turmoil fairly well, leaving it relatively unscathed in the immediate aftermath of the financial meltdown. For the first time in

recent memory, the country had the required policy space to lower interest rates, expand credit and domestic liquidity conditions, and increase government expenditures without fearing an inflationary backlash or a sharp balance of payments problem. Brazil was thus among the first group of countries to emerge from the global synchronized recession that hit the world in late 2008 and early 2009, with activity making a strong comeback in the second half of 2009. The rapid resumption in activity was helped by a series of expansionary policies adopted by the government, as well as by the coordinated stimuli orchestrated by many countries, including China's aggressive infrastructure investment plans. These plans helped to boost industrial commodity prices, such as iron ore, which resulted in a boon for Brazil's exports, hence explaining the 20% gains in the terms of trade observed between 2009 and 2011, as previously indicated.

Unlike President Lula, President Dilma started her term in 2011 facing a very hostile external environment. Japan's earthquake and nuclear disaster in the first quarter of 2011 crippled global manufacturing, with a significant impact on the Brazilian industrial sector, which by then was also facing its own homegrown competitiveness problems. Then the global economy was hit by the developing fiscal problems in US, brought to the forefront by the disastrous debt ceiling debate and the loss of the triple A rating on its sovereign debt, followed by an abrupt worsening of the European banking/debt crisis. The world was suddenly forced to recognize that the fiscal problems afflicting the developed economies were more severe and more deeply entrenched than previously thought.

As a result of worsening global conditions and emerging domestic macroeconomic problems, President Dilma's first year in office was disappointing: the economy grew only 2.7%, after having expanded a hefty 7.5% in 2010. Consumption still expanded at a healthy rate of 4.4%, but investment took a tumble, growing only 2.4%.

Policy Responses after 2011

The aggressive monetary stance undertaken by advanced economies in 2009 and 2010 and the resulting build-up in global liquidity hit the Brazilian economy sharply in early 2011. The rise in commodity prices led to inflationary pressures, while the increase in capital inflows eased credit conditions and resulted in a significant appreciation of the Brazilian real. To illustrate the significance of the rise in capital flows, the average net inflow (the sum of portfolio flows and FDI) between 1995 and 2008 amounted to some 2.7% of GDP, while in the twelve months to August 2011, these flows were equivalent to 6.1% of GDP.

As can be seen in Figures 5 and 6, in August 2011 the government took steps to revert persistent exchange rate appreciation. According to the authorities this was needed in order to

avert a disruptive depreciation scenario, which tends to follow persistent appreciation trends⁴. The key steps undertaken by the government to revert the trend in the exchange rate were:

1. More aggressive exchange rate intervention: although Brazil has a floating exchange rate regime, minimizing volatility falls explicitly within the BCB's mandate. Spot market interventions which had been the norm since 2004 with the explicit goal of minimizing volatility and increasing international reserves were complemented by interventions in the futures markets. A study by Silva (2011) justifies the levels of intervention undertaken since 2011 by calculating the costs of carrying a large stock of reserves – some 1.3% of GDP – and weighing them against the costs of a loss in output resulting from a balance of payments crisis and exchange rate disruptions, over 14% of GDP according to Brazil's history⁵.
2. Capital Controls: in October 2009, Brazil increased the Financial Operations Tax (IOF) on capital inflows from 0% to 2%, exempting FDI flows. One year later, in October 2010, the Ministry of Finance increased the IOF tax on inflows from 2% to 4%, and, a few weeks later, from 4% to 6%. An additional tax of 6% was introduced on margin deposits for exchange rate derivative transactions. In early 2012, renewed concerns over the pace of economic activity, coupled with worries over the effects of exchange rate overvaluation, led the Brazilian authorities to reopen the so-called "currency war" debate and to announce further measures to curb external capital inflows; in January total inflows registered an astounding US\$ 13 billion, or some 1% of GDP. In early March, the Finance Minister extended the financial transactions tax of 6% (IOF) to cover all loans maturing within three years and in mid-March expanded this to five years. Previously, the tax covered loans maturing over a period of two years. These measures have since gone back to covering only two year corporate loans.
3. An interest rate easing cycle, started in August 2011, and lasting through October 2012. Brazil's policy rate, the Selic, was reduced by 525 basis points, from 12.5% to 7.25%. This was, perhaps, the most significant measure in reversing the appreciation trend. The Brazilian real has since depreciated and is currently stable, also as result of capital controls and direct intervention by the BCB.

⁴ See Sales and Barroso (2012).

⁵ See Silva, A. (2011).

The decision to reduce interest rates in August 2011 when inflation was peaking, already having exceeded the target ceiling of 6.5%, was a controversial one⁶. It incited a number of criticisms, including a raging debate on whether the BCB had in fact abandoned the inflation targeting regime. In part, the criticism was also a result of previous policy experimentalism: in early 2011, the BCB introduced macroprudential measures apparently in lieu of the usual interest rate hikes to stem inflationary pressures and normalize credit and liquidity conditions. These measures included a substantial increase in reserve requirements, which had been reduced in 2008 to counteract the effects of the global crisis, as well as stricter regulations on risk-weighted capital to curb excessive lending by banks for the purchase of durable goods, especially automobiles. The monetary authority also reduced the allowed size of banks' short positions in foreign currency and restrained carry-trade operations. At the time, the BCB justified these measures by stating that they would help to normalize monetary conditions, complementing the usual policy of raising interest rates.

The language on “policy complementarity” between macroprudential measures and interest rate cycles sparked speculation that the BCB was emulating other EME central banks, namely the Turkish monetary authority, which had decided to avoid interest rate increases in order to prevent further currency appreciation. This led to a loss of credibility in policymaking, unhinging inflation expectations, which remained above the midpoint of the target range, 4.5%, despite the BCB's best efforts at communicating its strategy. In the event, after inflation started falling, corroborating the authorities' views that the worsening global environment would bring out significant disinflationary pressures, the BCB was finally able to convey the message that its use of macroprudential measures was essentially geared towards attaining the financial stability objective, as explained in Silva and Harris (2012) and Silva, Sales and Gaglianone (2012).

This notwithstanding, many market participants continue to believe that the BCB's reaction function has changed significantly since the worsening of the global turmoil in the aftermath of 2008, particularly in light of the effects of lower global growth – due to the fiscal problems in the advanced economies and the slowdown in China – on domestic activity. To boost growth, the Brazilian authorities have adopted a series of measures, which we discuss at greater length in the next section, but have reinstated many times their intention of maintaining interest rates at the unprecedented low level of 7.25%. This type of “forward guidance” has induced some to declare that rather than an inflation target, the BCB now has an “interest rate target”.

⁶ Brazil's inflation targeting regime is defined within a band with a midpoint of 4.5%. The floor is set at 2.5%, while the ceiling is established at 6.5%.

In a recent study, we have uncovered evidence consistent with the idea that what Brazil actually has, in practice, is a type of nominal GDP target. Nominal GDP targets have, in fact, been recently advocated by some renowned economists as a way around the uncertainty which now surrounds the level of key structural variables for monetary policy decisions, such as the potential growth rate of GDP, the neutral real interest rate, and the natural rate of unemployment⁷.

What is the Monetary Policy Target in Brazil?

In a recent article⁸ we have tested the simple Taylor rule advocated by Orphanides and Wieland (2012) for the eurozone. The authors argue that because of heightened uncertainty, monetary policy and economic agents are better served by a simple rule relating interest rates to an inflation objective and a growth objective, rather than by the more complicated optimal policy rules stemming from structural models of the economy. This is because extreme uncertainty leads to a lack of knowledge akin to Keynes' definition, that is, to the impossibility of calculating probabilities and mapping out reasonable scenarios for the structural economic parameters.

The exercise in Bolle and Simões (2012) consisted in estimating a simple Taylor rule defined as:

$\Delta i = \alpha(\pi - \pi^*) + \beta(g - g^*)$, where π^* is the inflation target and g^* is a growth objective.

In Brazil, we assumed that g^* is equal to 4.5%, the authorities' stated preferences for the expansion of economic activity, and that π^* is also 4.5%, the midpoint of the inflation target. Our findings are consistent with the idea that prior to 2010, inflation deviations were more important to the BCB than growth deviations, i.e. that the coefficient α was statistically greater than β . However, after 2010, we cannot reject the hypothesis that $\alpha = \beta$, which implies that the BCB is *de facto* setting interest rates according to a nominal GDP growth target of 9%. This is not incompatible with an inflation targeting regime. It is also indistinguishable from what the recent literature has called *flexible* inflation targeting⁹, that is, a simultaneous focus on inflation trends and growth deviations, even when the central bank does not have an explicit dual mandate.

Dealing with Structural Problems in a Dysfunctional Global Environment

⁷ See McCallum, B. (2011).

⁸ See Bolle and Simões (2012).

⁹ See Mishkin, F. (2011).

As we have previously discussed, the slowdown in economic activity, which started in 2011 and continued into 2012, prompted the Brazilian government to launch a series of expansionary measures. At first, the authorities appeared to be overly concerned with exchange rate developments, arguing that excess global liquidity stemming from overt monetary easing by major central banks was taking a toll on the Brazilian manufacturing sector – this was the “currency war” rhetoric mentioned in the previous section. The argument was that the excessive appreciation of the real was hampering the domestic industry by diverting consumption towards imports and away from domestically produced goods. Some of the measures taken to stem exchange rate appreciation discussed in the previous section were therefore also intended to help the manufacturing sector, by attempting to boost competitiveness.

Manufacturing production, however, did not react as expected following the devaluation of the currency. The government came thus to understand that the problems were more deep rooted and ingrained. In fact, the global slowdown after 2010 – driven by the worsening fiscal problems in the advanced economies and the growth transition in China – exposed the entrenched structural issues which were hampering competitiveness and that needed to be addressed. These issues had thus far been masked by the favorable external environment, which now seemed to have turned decidedly hostile. Hence, the authorities realized what many critics and analysts had been saying throughout most of 2011 and 2012, namely that the so called “Custo Brasil”, the cost of doing business in the country, had reached unpalatable levels. Severe infrastructure and logistical bottlenecks, an overly onerous tax burden – equivalent to 37% of GDP, amongst the highest in the world, according to the OECD –, rigid labor market legislation and a lack of skilled labor were damaging the Brazilian industry. Moreover, other transformations had occurred.

As we discussed in the previous section, Brazil’s boom years, the period between 2003 and 2010, allowed the adoption of social inclusion policies which had profound implications for the structure of the economy. Some 37 million people entered the “middle class” and labor market formalization rose to more than 50% of total employment for the first time in recent history. The appreciated exchange rate allowed consumption of manufacturing goods to shift from domestic to external suppliers, increasing imports. Additionally, the overall gains in consumption, also spurred by easier credit conditions, increased services expenditures. The combination of these two factors led to a shift away from the manufacturing sector towards the more labor intensive services sector, a movement along the economy’s transformation curve, as shown in Figure 9.

To illustrate the argument in a stylized way, it was as if the boom years between 2003 and 2010 led to an upwards shift in the economy's transformation curve. This shift, combined with an expansion in the services sector, led the economy to operate on a point such as B rather than Z (Figure 9), where there is spare capacity in manufacturing and full employment in the economy as a whole at the same time – Brazil's unemployment rate is currently at an all-time low of 5.3%. To complicate matters, higher labor demand from the services sector has added to the manufacturing sector's woes by raising labor costs. Brazil's stringent labor laws have induced companies to hoard labor, in fear of incurring the hefty severance payments and benefits associated with firing workers.

Recognizing all of these problems, the government has recently embraced the competitiveness agenda, by launching an ambitious plan to reinvigorate the industrial sector. These measures include:

1. The greater availability of public credit at very favorable terms;
2. Changes in the tax structure and attempts to reduce the tax burden without an outright tax reform, which would be politically very difficult;
3. A planned reduction in energy tariffs;
4. The introduction of national content requirements, particularly in the automotive sector;
5. An ambitious plan to overhaul the country's transport logistics and infrastructure;
6. The enlargement of the export financing program (PROEX).

It is still too early to fully evaluate the likely impact of these measures on domestic activity. However, many fear that they will be insufficient to boost investment, which is expected to fall as a share of GDP this year, from some 19.5% in 2011. Private investment has been affected by many of the structural problems previously discussed, but also by the dysfunctional global environment. The very high level of uncertainty surrounding the global outlook is taking a toll on companies' ability to plan ahead. Moreover, policy uncertainty, particularly the effects of the new rounds of quantitative easing already announced by the Fed, the monetary expansion by the Bank of England as well as by the Bank of Japan, and the likely actions by the European Central Bank in the Eurozone's sovereign debt markets all add to doubts about the Brazilian government's future responses. Further bouts of capital inflows might require, for instance, a new round of capital controls, making it more difficult for companies to finance themselves abroad. The previously mentioned measures instituted in early in 2012 to curb external

corporate loans could be brought back in case domestic liquidity management takes a turn for the worse.

The private sector is also concerned about the fiscal headwinds coming from the advanced economies. Fears of the so-called fiscal cliff in the US, as well as over Europe's austerity plans have led to a high degree of caution in investment expenditures, particularly in the case of companies that are more exposed to these markets. This is also the reason why China and the other BRICs economies have become an important focus point for Brazilian entrepreneurs and government officials alike.

This said Brazil's recent protectionist bias could be an obstacle to achieving greater integration with other markets. The authorities have frequently rebuffed accusations that they are embracing protectionism, arguing that their aim is to protect the domestic market from currency misalignments generated by global monetary dysfunction. However, Brazil's economy is amongst the least open in the world – trade flows, the sum of exports and imports over GDP, amount to less than 20%. One might argue that a better way to protect the country from the headwinds coming from the advanced economies would be to open up to international trade, allowing export companies to be integrated into global trade and manufacturing networks. This could well serve to boost domestic productivity by transferring knowledge, innovation and labor skills to the country, removing some of the current obstacles to growth.

Monetary Imbalances in the Developed World and Brazil's Response Going Forward

The difficulties involved in resolving the fiscal and financial crises engulfing the developed world imply that the global economy has probably entered a phase of persistent low growth combined with high uncertainty and macroeconomic volatility. As Carmen Reinhart and Kenneth Rogoff have extensively documented in their seminal book¹⁰, financial crises that originate from an excessive build-up of debt are typically long-lasting and often require monetary leniency and some degree of inflation tolerance. This, in turn, suggests that monetary dysfunction will be enduring, requiring EMEs to adapt to this new environment.

For Brazil, this may present specific challenges. As discussed in the previous section, the global crisis has unveiled a number of structural problems that had, as recently as 2010, been masked by the commodity price boom and the favorable external environment, despite the events of 2008. China's transition to a new growth model, oriented towards domestic consumption rather than by large investment expenditures and a pronounced focus on the external sector, coupled with India's deceleration, imply that Brazil will have to find its own sources of growth,

¹⁰ See Reinhart and Rogoff (2009).

without the aid of the fast-growing EMEs. The authorities' concerns with the pace of private sector investment growth over the medium term coupled with worries over exchange rate appreciation, competitiveness and the protection of domestic markets, may translate into some reluctance in lifting capital controls and other measures intended to guard Brazil against the excessive liquidity creation in the developed world. This may pose problems for the internationalization of the currency, as we discuss below.

Whither the Real in a Multiple Currency World?

Precisely because monetary dysfunction in the developed world and heightened policy uncertainty may be predominant over the coming years, many renowned economists have insisted that the role of the dollar as the chief international reserve currency will gradually disappear¹¹. The new international monetary system that is likely to emerge from the crisis is one where multiple currencies will be used as reserve and/or trade currencies. Despite the fact that China's financial account is still fairly closed, the RMB has already gained ground in becoming an important global medium of exchange, in light of the country's large share of global trade.

According to *The Economist*, the RMB is likely to become the world's main reserve currency within the next ten years. This is supported by a number of studies regarding the sterling-dollar transition, as documented by Eichengreen (2011). These studies suggest that once a country becomes economically dominant in the global landscape, currency ascendancy follows within a relatively short time span. Both the Chinese and the Brazilian authorities defend a new international financial order that is "fair, just, inclusive and orderly" according to previous G-20 statements. Moreover, they share the view that the outbreak of the crisis and its spillover to the entire world reflects the inherent vulnerabilities and systemic risks in the existing international monetary system.

How are countries to address these challenges going forward? From the Brazilian point of view, it is in the country's interest to deepen relations with China, especially as the Asian economy has rapidly become one of Brazil's main trading partners (Figure 12). In this context, strengthening economic ties would at some stage include the denomination of trade flows between the two countries in local currencies.

As a matter of fact, the two countries already seem to be moving in that direction. On June 21, 2012, the BCB announced that it had signed a memorandum of understanding with the China Banking Regulatory Commission to enhance the exchange of information related to the

¹¹ See Eichengreen (2011).

supervision of financial institutions. At that time, the Brazilian Ministry of Finance also revealed that there would be a R\$ 60 billion (some US\$ 30 billion) currency swap with China, as part of a ten year plan of cooperation between the two countries. The amount agreed could be used to shore up reserves in times of crisis or to boost bilateral trade.

China has recently embarked on an aggressive campaign to internationalize the RMB, signing currency swap agreements with many countries other than Brazil, ranging from Argentina to Australia and the United Arab Emirates. While the Brazilian authorities understand and support China's intention to internationalize the RMB, there are pending concerns over competitiveness and the implications for Brazil's manufacturing sector, already under great pressure. The Brazilian government has a long-standing worry that while the country exports mostly unprocessed commodities to Asia, the economy has been flooded with cheap manufactured goods from the region, most of them from China. This tension is underscored by some of the recent protectionist measures imposed in Brazil, including national content requirements and outright barriers to entry of some industrial goods. The recent appreciation of the RMB has not placated such concerns.

This said, however, the Brazilian authorities seem to be comfortable with the idea that some Chinese companies move to the country to take advantage of the large consumer market, as long as they abide by the local content regulations. A case in point has been the announcement of the new automotive regime, which has attracted Chinese car makers JAC Motors and Chery, despite the stringent rules embedded in the regulations.

Like China, Brazil also has its own ambitions of internationalizing the domestic currency. In 2010, the Brazilian Federation of Banks (Febraban), the futures and stock exchanges (BM&F/Bovespa) and the Brazilian Association of Financial and Capital Market Institutions (Anbima), announced the "Omega Project" ("Projeto Ômega"). The plan is to transform the city of São Paulo into an international financial center, fully liberalizing the exchange rate and internationalizing the real. To make this viable, it will be necessary to dismount capital controls, which, as we have already discussed, have gained prominence over recent years as an important policy tool to preserve domestic financial stability. Implementation of the Omega Project would thus require that some of these measures be treated as only temporary, along with the heavy interventions that have kept the real trading at a seemingly narrow band against the US dollar since July 2012 – between R\$ 2 and R\$ 2.10 to the USD (Figures 5 and 6). Greater trade openness and a less protectionist stance would also be instrumental in making the real attractive as global medium exchange, since a country's standing in global trade flows is a key aspect of any international currency. Currently, the Brazilian authorities are not moving in this direction.

In fact, the government's stance shows an excessive preoccupation in stemming the "monetary tsunami", as President Dilma recently dubbed the monetary experimentalism in advanced economies. The expression has frequently been used to justify the use of unconventional policy tools, such as macroprudential measures and capital controls, as argued in Sales and Barroso (2012). According to this view, "macroprudential measures, including capital controls and foreign exchange interventions which facilitate the accumulation of international reserves, have higher payoffs in a complex and uncertain environment". As this environment is likely to be persistent, it is difficult to envisage when the authorities will be inclined to adopt a stance that is more conducive to the internationalization of the real, despite the fact that the rhetoric and the long term objectives all seem to point in that direction.

Concluding Remarks

Brazil has come a long way since the 1990s, when relatively small external shocks were often enough to throw the domestic economy into complete disarray. A concerted and lengthy effort towards macroeconomic stability, together with the promotion of social inclusion policies started with the administration of President Fernando Henrique Cardoso and deepened under President Lula and President Dilma Rousseff, have placed the country on new footing. A stable inflationary environment, solid fiscal accounts, ample international reserves, and a growing domestic market have allowed the country to benefit enormously from the extremely favorable global conditions which came to an abrupt end following the financial crisis of 2008.

Like many other EMEs, Brazil currently faces the challenge of dealing with a hostile global environment and dysfunctional monetary policies across the developed world. As part of the BRICs group of large EMEs, the country is keen to contribute to the debate on the new design of the international monetary system and to work towards greater integration with its emerging market peers. The recent currency swaps agreed with China, as well as the policy intentions declared in the context of G-20 summits and other key global financial and economic forums, are a step in this direction.

This said, however, there are marked differences between Brazil and its BRICs partners which may prevent the country from advancing as quickly on the issue of currency internationalization, the topic of this conference. Unlike China, which has embarked on an aggressive campaign to internationalize the RMB, Brazil is struggling to regain growth momentum, restrained as it is by the significant structural problems unveiled by the worsening external environment. The authorities' current concerns over how to reignite growth and private domestic investment in the midst of fiscal headwinds and monetary "tsunamis" from developed countries imply a different sense of urgency regarding currency internationalization and further integration with the BRICs economies.

As we have discussed throughout the paper, Brazil's structural problems are severe and thus unlikely to be resolved in the near term, despite the government's best efforts. An extreme concern with the preservation of domestic markets and with guarding against financial and exchange rate instability stemming from excess global liquidity create the incentives for maintaining a cautious stance. This stance is consistent with an interventionist approach as regards the functioning of markets that is detrimental to currency convertibility and trade integration, both necessary conditions for the internationalization of the real. Sustained capital controls, significant exchange rate management and a protectionist bias are not conducive to the desired internationalization of the Brazilian currency. At this juncture, it is difficult to envisage when the Brazilian authorities will feel confident enough with the soundness of the domestic economy to start laying the groundwork towards this objective.

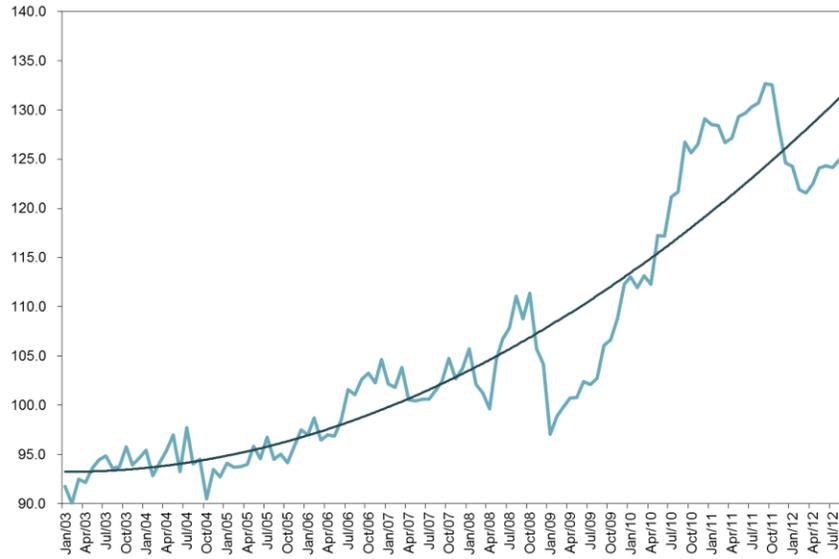
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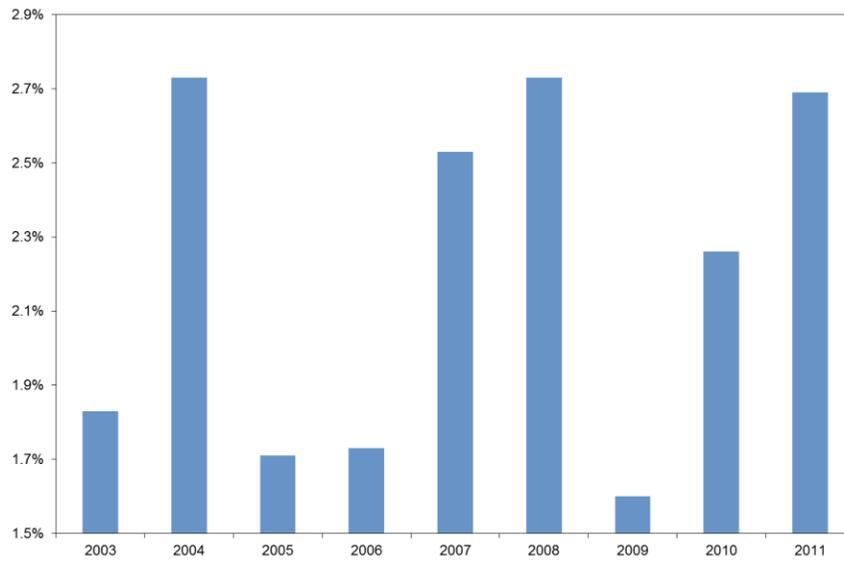
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Figure 1 – Brazil: Terms of Trade, 2003-2010



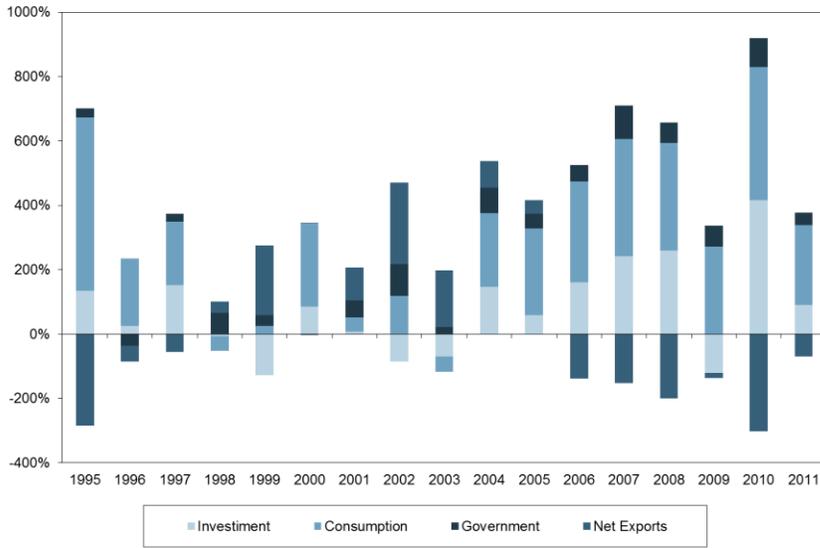
Source: Funcex

Figure 2 – Brazil: FDI as a Share of GDP



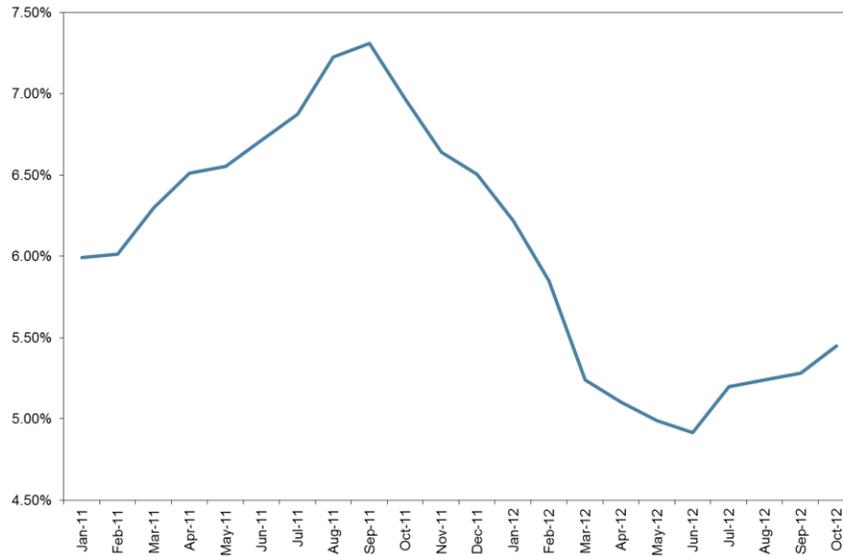
Source: Central Bank of Brazil

Figure 3 – Brazil: Aggregate Demand Components and Their Contributions to GDP Growth



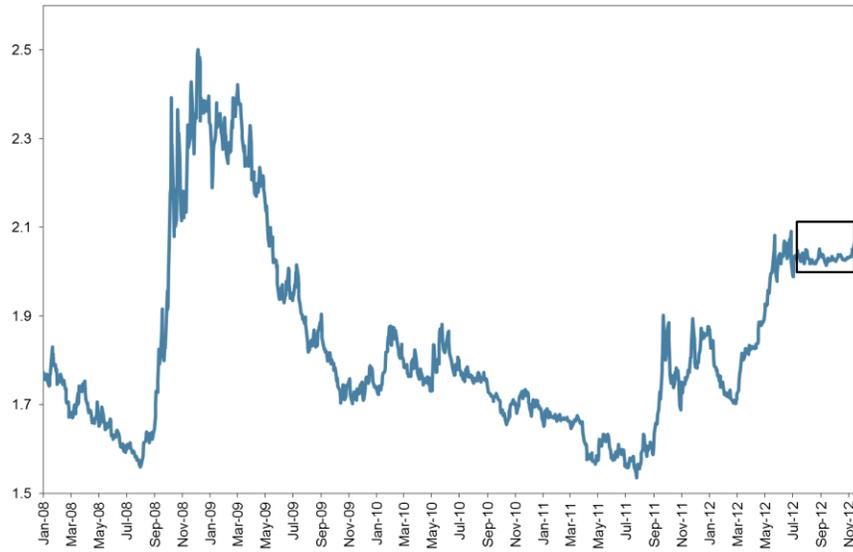
Source: IBGE and Galanto Consultants

Figure 4 – Brazil: Inflation in 2011 and 2012



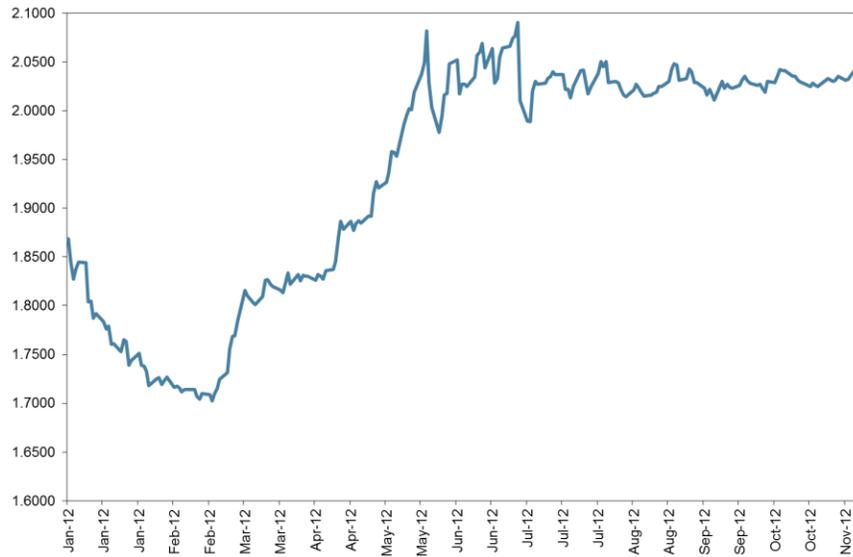
Source: IBGE

Figure 5 – Brazil: The R\$/\$/USD Rate Since 2008



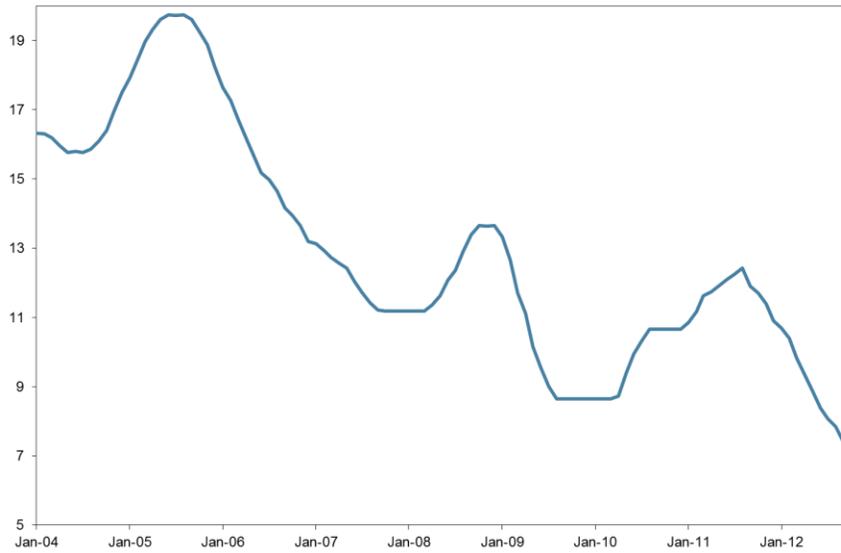
Source: Central Bank of Brazil

Figure 6 – Brazil: The R\$/\$/USD Rate Since 2012



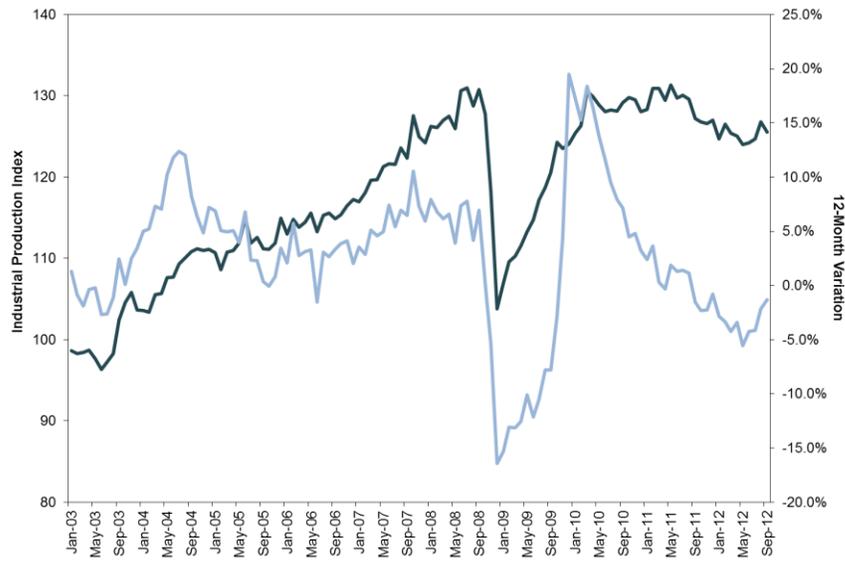
Source: Central Bank of Brazil

Figure 7 – Brazil: Policy Interest Rates



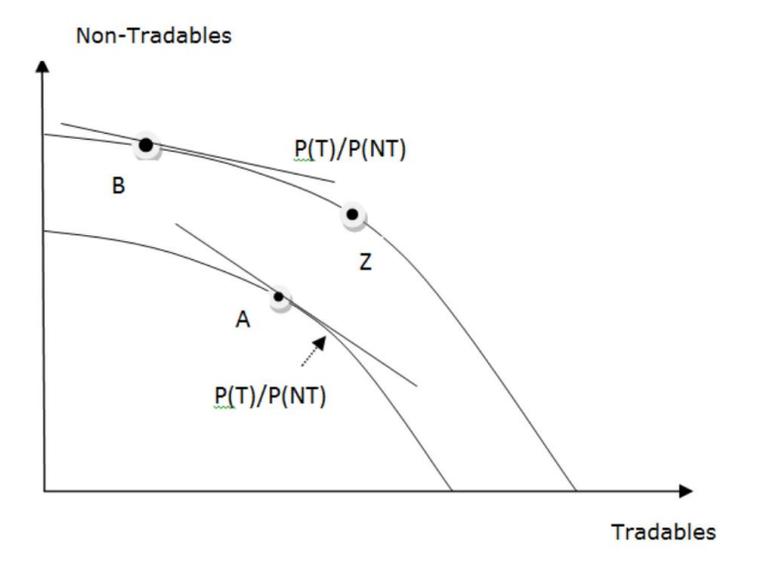
Source: Central Bank of Brazil

Figure 8 – Brazil: Industrial Production



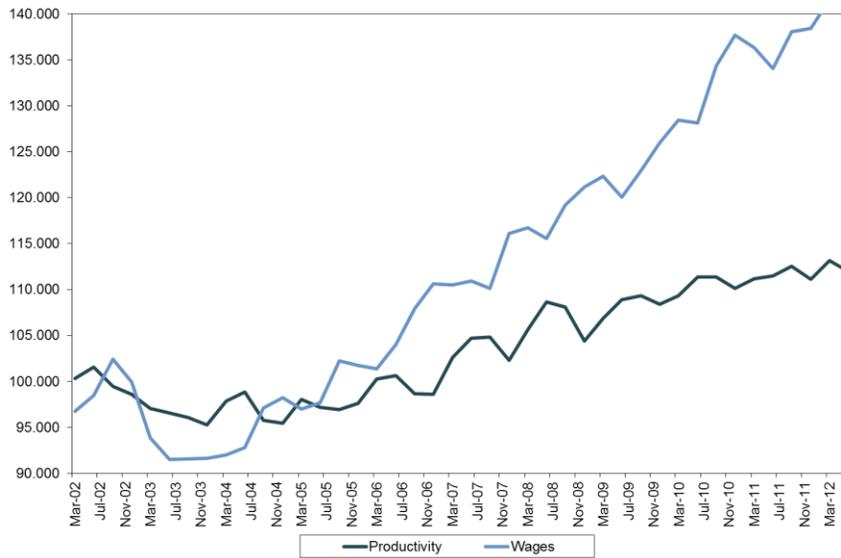
Source: IBGE

Figure 9 – Brazil: Transformation Curve



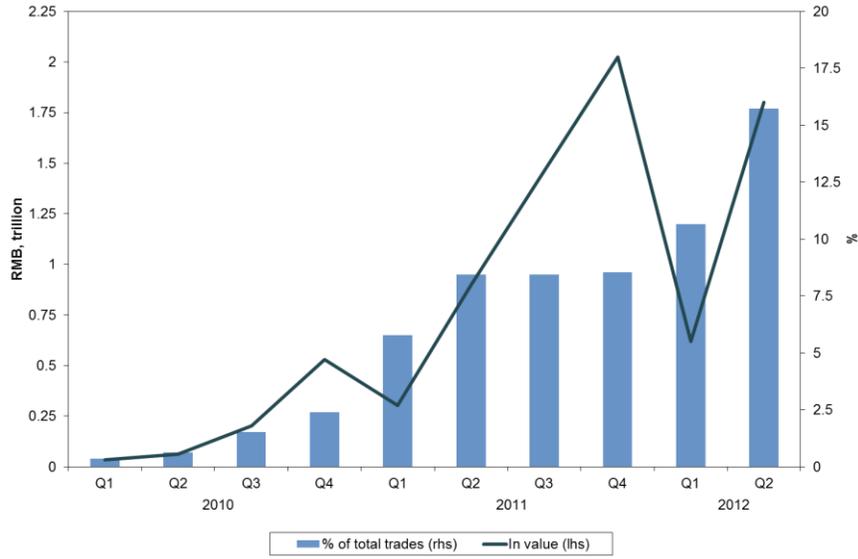
Source: Galanto Consultants

Figure 10 – Brazil: Wage-Productivity Gap in the Services Sector



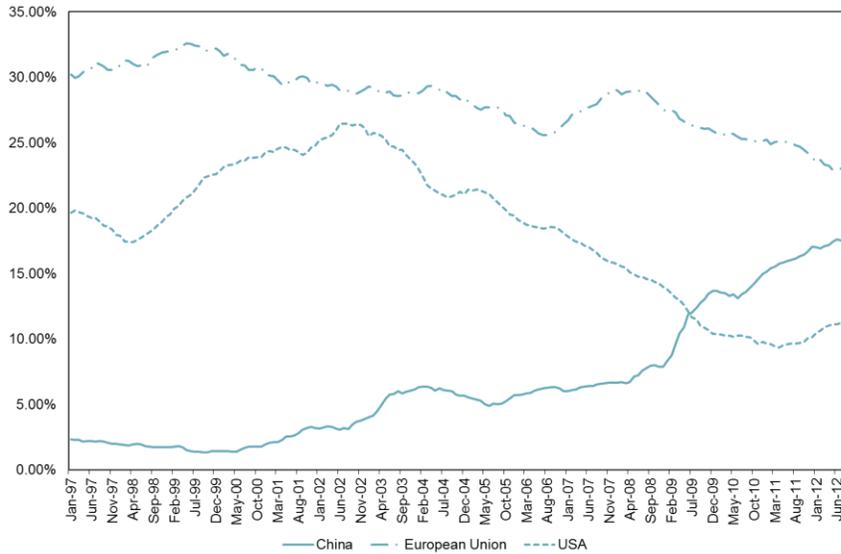
Source: IBGE and Central Bank of Brazil

Figure 11 – China: The Rise of the RMB



Source: GaveKal Data

Figure 12 – Brazilian Exports by Destination (as a Share of Total Exports)



Source: Alice Web