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## **Is there a new Brazilian model of development? Main findings from the IRIBA research programme**

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**Abstract:**

It has been suggested that Brazil's unexpected successes in the last two decades are the outcome of a new model of development, with strong inclusive growth at its core. The paper reviews the main findings of the IRIBA research programme examining the contribution of macroeconomic stability and financial reform, agricultural exports and productivity, and social policies to inclusive growth. Based on this research, the paper argues that Brazil's recent success is due to a unique combination of economic and social policies and institutions working together and reinforcing each other.

**Keywords:** Brazil, inclusive growth, development, poverty

**JEL classification:** O1, O5, I3

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## Introduction

Brazil's ascent to prominence on the international economic stage has been a prolonged affair. Perhaps the most curious feature of Brazil's economic and political development has been an enduring discrepancy between the country's size and obvious potential on the one hand, and its surprisingly low international profile on the other. Whereas the past couple of decades have witnessed an unremitting focus on the rise of the Asian emerging economies, for much of this time far-reaching changes in Brazil appear to have gone largely unremarked by international observers. Compared to the flood of studies dedicated to the rise of China and India, for example, those concerning Brazil have been a tiny trickle. Now, however, the spotlight has begun to turn belatedly towards Brazil.

Since the mid-1990s, despite occasional short-lived crises, Brazil appears to have embarked on a new developmental trajectory in which reasonable growth performance has been combined with an increasingly effective assault on poverty and inequality. The pro-poor character of economic growth in Brazil during the contemporary era stands in marked contrast to the experience of previous boom periods. For example, during the so-called 'miracle years' under military rule between 1967-73, Brazil's growth record, though very impressive by historical standards, could not overshadow the fact that income inequality widened and very little progress was made in tackling entrenched poverty (Baer 2014). Indeed, during this period, a combination of rapid industrialization and rural migration cemented in place urban marginalization and deprivations, which remain troubling features of contemporary Brazil. This is in sharp contrast to conditions in the last two decades in which strong growth has gone hand in hand with a historic reversal of poverty and inequality trends. The fact that Brazil appears to be retreating from this unfavourable legacy and not repeating the mistakes of the past is heartening and forms the background to this paper.

This paper provides a synthetic perspective on the main findings from a research programme on Brazil's recent economic success implemented in 2013-2014. The programme engaged leading researchers from Brazil, the USA, and Europe. Specifically, we set out to address the following question: are there salient features of Brazil's recent economic and social achievements that collectively might suggest the contours of a 'Brazilian' model of development? Is something genuinely new at work?

Researchers are deeply divided on what might constitute a correct answer to these questions.<sup>1</sup> Some researchers argue that a new development model can be found in the new modalities of state intervention, a determination to tackle poverty and inequality, and a renewal of the social contract (Alston et al., 2010). Others reject the view that a new model is in place and argue that Brazil's recent economic success is conjunctural and contingent; and variously attributed to the benefits from an international commodity price boom allied to a more orthodox macroeconomic policy framework (Giambiani and Schwartzman, 2014). Recent social and economic trends in Brazil provide ample scope for

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<sup>1</sup> See inter alia Baer (2014); Fishlow (2011); Roett (2010).

pursuing these hypotheses. The size of the state has risen in line with the tax/GDP ratio, which now stands close to 35 percent. The revenue growth has enabled successive fiscally responsible centre-left coalitions to introduce innovative developmental policies without stoking opposition from existing interest groups. Critics argue that expenditure on developmental and redistributive policies have crowded out public investment while private investment is constrained by high taxes. Brazil's agriculture and agroindustry have been an unqualified export success. Brazil is now a world leader in the export of grains and meat, but also in paper and agricultural technology. Critics argue that this success is contingent on high demand for commodities from China's fast growing domestic markets. They point to the slow growth in industry and manufacturing as a harbinger of a middle income country trap. The significance of a renewal of Brazil's social contract after the re-establishment of democracy is widely acknowledged, but the public demonstrations of June 2013 and in the run up to the World Cup appear to suggest the broad public support for the status quo is faltering.

The researchers engaged in our research programme have thrown considerable light on these issues. Their insights helped us arrive at a firmly grounded response to the main research question, but also at an understanding of the large knowledge gaps which remain. This paper will map out our main findings and remaining gaps as they emerge from our assessment of the broad research outputs from this project. Readers will find more detail, and perhaps also dissenting views, in the IRIBA working papers.<sup>2</sup>

In brief, our assessment is that a unique combination of economic and social policies is primarily responsible for the unexpected success shown by Brazil. There are specific features of the institutions of economic management developed after the stabilization plan of 1994 which together with innovative social policies emerging from municipal activism and a favourable social contract, set a new course for Brazil. A renewed consensus or 'social contract' is acutely significant in ensuring the conditions for a positive evolution of these institutions. It ensures economic and social policies work together and reinforce each other. This is what we mean by a 'model'. Of course, not all policies fitted together always. Important areas such as infrastructure lacked effective policies; while others like the effective prosecution of corruption cases were stymied by institutional bottlenecks.

Research programmes need strong motivators to be successful and influence researchers and policy-makers. In addressing the issue whether there is a new Brazilian development model, we are also motivated to examine whether the Brazilian experience can yield any useful lessons for the sub-Saharan Africa (SSA) region. This will be the focus of the next stage of the research programme, but it has also helped shape the research presented in the collection of the working papers of phase one of the research programme.

The rest of this paper has six main sections. Section 1 examines Brazil's recent inclusive growth performance. Section 2 discusses the role of institutions for macro stability in providing the basic foundations for inclusive growth policies. Section 3 considers the

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<sup>2</sup> Available at: <http://www.brazil4africa.org/publications/>

contribution of agriculture and agri-business to Brazil's export success. Section 4 assesses the contribution of social policies to the reduction of poverty, inequality and exclusion. Section 5 discusses the sustainability of Brazil's development model and potential limits to inclusive growth. A final section concludes.

## **1. Brazil's inclusive growth**

In 'Redistribution with Growth', Chenery et al. (1974) made an early attempt at defining a new strategy for inclusive growth. Acknowledging that sustained growth in developing countries had been accompanied by rising and persistent inequality, they argued "for a revision in the way development policy is formulated" (p. 38), discarding the "conceptual separation between optimum growth and distribution policies that lies at the heart of traditional welfare economics" (p.xiii). Although the development framework which came to dominate the quarter of the century following the publication of this book did not take this advice on board, theoretical and policy debates in the new century are doing so. 'Redistribution with Growth' advanced "the notion of a development strategy having growth implications for different groups in society that can be modified by fiscal measures only within narrow limits" (p.xiii). Does Brazil's recent experience delineate the contours of a new development strategy with inclusive growth as its core?

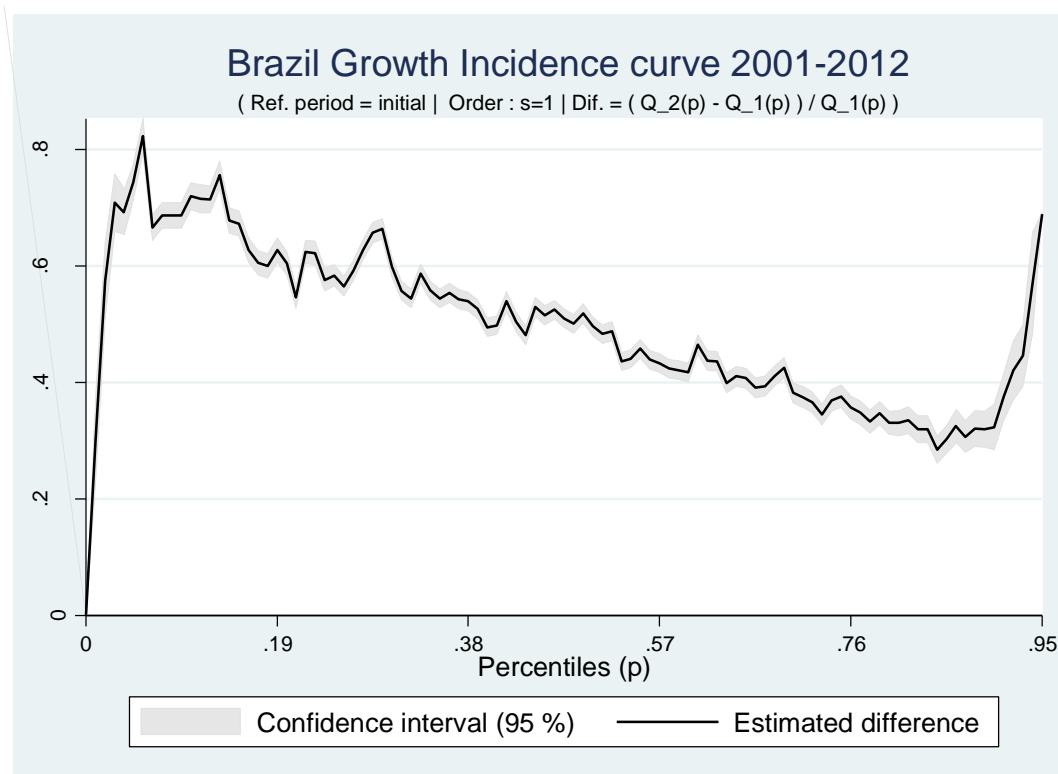
The defining feature of Brazil's recent economic success is not the fact that the economy grew steadily during the first years of the new century. GDP growth rates have averaged 3 percent since the mid-1990s. Brazil did not achieve Chinese or even Indian rates of economic growth. It is the quality of its economic growth that is noteworthy. It is the fact that the lowest deciles of income grew at Chinese rates, while the wealthiest deciles of income did much less well, growing at Cote d'Ivoire rates as Barros et al. (2007) have eloquently stated. Positive, but not spectacular, rates of growth allied to larger improvements in household income for the poorest sections of the population define Brazil's inclusive growth performance (Ferreira, Leite, and Ravallion 2010).

Figure 1.a below shows growth incidence curves for per capita household income in Brazil for 2001 and 2012. The household income data come from PNAD, the Pesquisa Nacional por Amostra de Domicílios, a nationally representative annual household survey for Brazil. The measure of income includes all household income including transfers. The sample of households in PNAD averages around 110,000, once household with missing income data and households with zero reported income data are excluded. As the Figure shows, the total income of households in the bottom decile grew at between 7-8 % in the period under examination, whereas the incomes of the richest decile grew at between 3-4%. The growth rate of household income for the poorest is around twice that of the richest. This is the defining feature of Brazil's recent economic success.

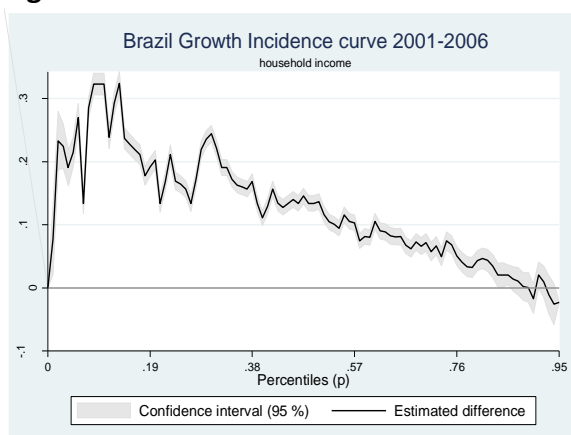
It is informative to distinguish the period before the 2007 global financial crisis and the period after it. This is done in Figures 1.b and 1.c. The 2001-2006 period shows a very

pronounced tilting of the growth incidence curve. The peak income growth rate belongs to households in the 10<sup>th</sup> percentile at over 3%, while households in the 95<sup>th</sup> percentile show negative growth.<sup>3</sup> The second period, 2006-2012, shows a more moderate tilting of the growth incidence curve. The rate of income growth is just below 4% for the majority of the population, except for the poorest and richest percentiles. Income growth for the 3<sup>rd</sup> to the 7<sup>th</sup> percentiles is above 4% and there is steep climb for the rates of growth of income growth of the richest 90<sup>th</sup> to 95<sup>th</sup> percentiles. The latter in particular seem to recover well from the stagnation in their incomes in the first half of the decade.

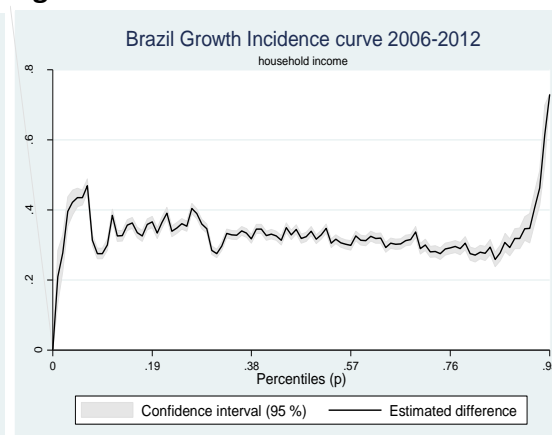
**Figure 1.a**



**Figure 1.b**



**Figure 1.c**



<sup>3</sup> In the analysis, the top 5 percentiles were top coded and are not shown in the Figure.

Source: Authors' calculations based on PNAD data.

While the shape of the growth incidence curve is similar in both periods, the fact that it flattens in the second period raises concerns regarding the sustainability of inclusive growth in Brazil. In any case, the trends identified by the growth incidence curves are in sharp contrast to those of the 1990s. Ferreira et al. (2010), for example, compute a growth incidence curve using the same PNAD survey data for the period 1985 to 1993 which rises from -1 income growth for the poorest percentile, then after the 20<sup>th</sup> percentile it flattens out at around -0.5 income growth for the rest of the distribution. Inclusive growth since 2000 is in contrast to the decade and a half after the return to democracy.<sup>4</sup>

While the growth incidence curves provide a diagnostic of inclusive growth, they raise two challenging questions: What factors explain Brazil's inclusive growth? And is it sustainable? The next sections provide a basis for addressing them.

## **2. Institutions for macro stability and inclusive growth**

The cornerstone of Brazil's successful economic transition has been a process of cumulative institutional reforms. These have affected the formulation of fiscal and monetary policy in addition to the operation of the financial sector. Taken together these reforms have underpinned the price and financial stability, which have in turn facilitated the pursuit of inclusive growth. As the paper by Afonso and Araújo (2014) makes clear, the critical turning point in the transition to inclusive growth came two decades ago with the elaboration and implementation of a complex stabilization plan, the Plano Real (Real Plan). Introduced under the Minister of Finance and later President, Fernando Henrique Cardoso, between 1993 and 1994 the plan combined both heterodox and orthodox macroeconomic elements (Amann and Baer 2000). The challenge faced by policymakers at the time was substantial: inflation was running on an annualized basis at more than 1000% while the economy had suffered huge contractions in output at the start of the decade in the wake of a failed stabilization plan implemented by President Collor de Melo. The Real Plan differed from its unsuccessful predecessors in that it was introduced gradually and cleverly employed a pegged exchange rate. Allied with trade liberalization this maintained an external check on domestic price formation without stifling growth (see Figure 2). Prior to the Real Plan, a key challenge in containing inflation stemmed from the fact that the economy, which had employed an inward orientated industrialization strategy, was effectively insulated from the potentially moderating influence of import prices on the general price level.

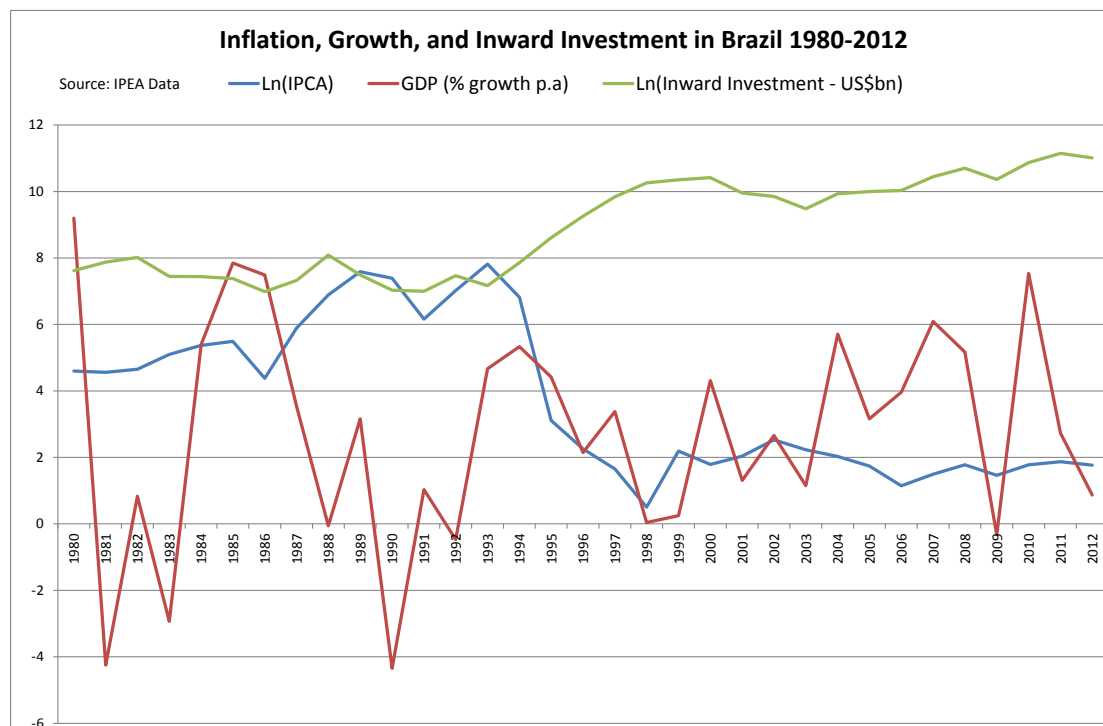
Since the implementation of the Real Plan, by contrast, a comparatively solid national currency, combined with unprecedented openness to imports has, albeit with periodically unfavourable consequences for the trade balance, proved highly effective in backstopping price stability. It is interesting to note that, unlike its predecessor currencies, the Real has

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<sup>4</sup> Inclusive growth during the first decade of the new century is not exclusive to Brazil. Other Latin American countries also achieved it (CEDLAS and The World Bank, 2012).

managed to maintain a respectable external valuation. This is despite the abandonment of a formal currency peg at the end of the 1990s that was replaced with an inflation targeting framework (which envisaged no specified target band for the exchange rate) (Averberg 2002).

**Figure 2**



Source: Data were assembled by the authors from IPEA Data in 2014.

Accompanying the introduction of a new and pegged currency, the Real policymakers added a firmly orthodox plank to their counter-inflationary strategy by setting targets for the fiscal balance. As Afonso and Araújo (2014) argue, the strategy here combined more effective constraints on public spending with limited reform of the taxation system. The centrepiece of the reform programme was the formulation of a fiscal targeting framework, an institutional innovation which would go on to prove very effective in ensuring the continuation of price stability, while building credibility among outside investors. Afonso and Araújo (ibid.) also note the importance of new institutional arrangements surrounding the fiscal behaviour of sub-national governments (i.e. the states and municipalities). Previously, these had enjoyed considerable fiscal autonomy. This had proven a serious obstacle to driving down the scope of public borrowing and effectively regulating activity and price levels. As the Real Plan encountered challenges in the 1990s, however, the federal government proved capable of overcoming entrenched opposition to fiscal reform affecting other levels of government. On this basis, it became possible for the centre to exert much greater control over spending conducted by states and municipalities. Over time, this hard-won institutional reform has provided one of the foundations of improved fiscal performance. However, as Afonso and Araújo (ibid.) acknowledge, reform of the taxation



system has proceeded far more slowly<sup>5</sup>, underlining the sense in which fiscal reform is still very much a work in progress rather than a completed project.

Despite the difficulties presented by incomplete reform, the tax raising powers of the various levels of government have proven impressive by emerging market economy standards, accounting for over 30% of GDP (Bernardi et al. 2008). As growth accelerated following stabilization it has consequently proven possible for the federal government to combine fiscal rectitude with a rise in spending on social programmes such as the celebrated Bolsa Família, a theme which will be examined more thoroughly in Section 4.

The clever technical design of the stabilization programme aside, one of the key reasons for its enduring success has to do with the manner in which it has secured a broad political consensus in its favour across political party divides, business, trade unions and civil society (Roett 2010). The greatest political challenge of the early years of the programme was to overcome resistance to the abolition of income indexation in the formal sector. That this was successfully achieved reflects two factors; first, a collective recognition of the exhaustion of the previous model which had effectively 'locked in' hyperinflation and, second, the politically adept, consultative and inclusive approaches of the Franco and Cardoso administrations. The fact that indexation could be progressively abolished before the Real Plan had had time to demonstrate a sustained track record on tackling inflation is, it is possible to argue, one of the most significant and lasting political achievements since the return to civilian rule in 1985.

The depth of the 'buy-in' across the political spectrum was revealed once more, following the election of the Workers' Party (PT) President Lula in 2002. Both Lula and his successor, Dilma Rousseff, have retained in place the core elements of the Real Plan minus, of course, its exchange rate peg component (which had been abandoned under the Social Democratic administration of President Cardoso) (ibid.). The continuity of macroeconomic policy over the past decade has proven effective, not only in containing inflation, but also in providing a relatively predictable platform for both domestic and foreign investors. This, in turn, has served to underpin the more favourable growth record of recent years.

The institutional and policy innovations so far discussed are widely recognized in terms of their contributions to achieving macroeconomic stability and inclusive growth. Less well known, but of critical importance have been a series of institutional reforms undertaken in the financial sector. These form the focus for the paper by Torres, Machyba and Zeidan (2014).

As Figure 3 indicates the period since the inception of the Real Plan in the mid-1990s has seen a considerable expansion of credit to households, firms and to finance the expansion of housing stock. The expansion of credit has proven an important driver of growth and by 2011 credit extended to the private sector had reached 61% of GDP (against a global average of 58%). This represents something of a transformation: historically, compared with other developed and emerging economies, credit in Brazil tended to be scarce and only

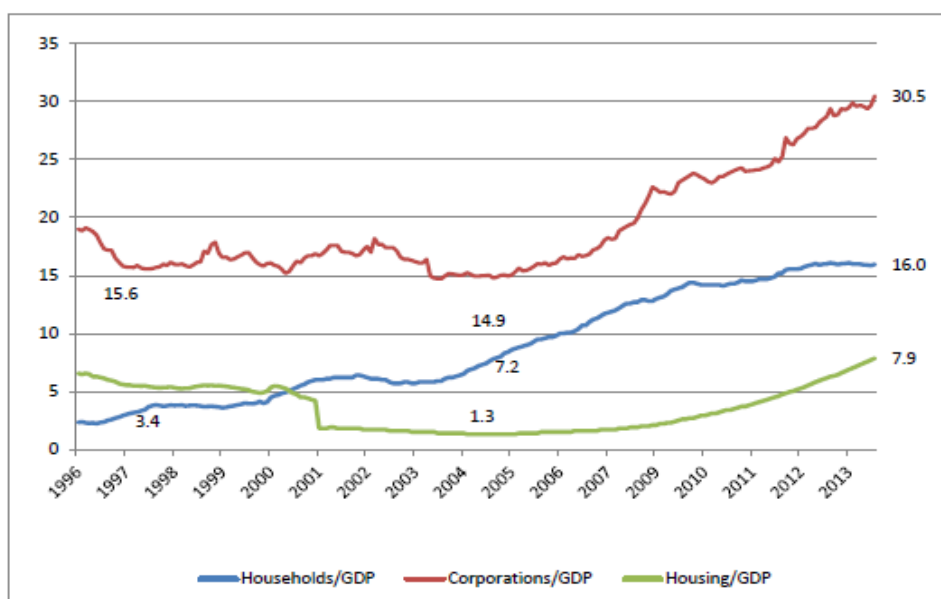
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<sup>5</sup> Not least the continuing prevalence of cascading indirect taxes, a long-term target of reform.

available at exceptionally high real interest rates. However, innovation in the private financial sector, the introduction of more effective legal sanctions to enforce bad debts and a decline in real interest rates (as the authorities got on top of inflation) all fuelled an expansion of credit. That this continued through the late 2000s is all the more remarkable given the shock to the global financial system that followed the collapse of Lehman Brothers in 2008. Torres et al. (2014) argue that a series of institutional and policy measures combined to secure this favourable outcome.

**Figure 3**

**Outstanding Bank Loans for Corporations, Households and Housing (in %)**



Source: Torres et al. (2014).

In limiting the impact of international financial contagion following the Lehman Brothers collapse, among the most important measures was the prudential regulation of the financial system, in particular the maintenance of high capital to asset ratios. This regulatory stipulation, which dated from the 1980s and 1990s, meant Brazilian institutions were much better placed to cope with external financial shocks than many of their European and North American counterparts. Second, Torres et al. (2014) argue that the maintenance of public sector financial institutions, notably the BNDES development bank and the Banco do Brasil commercial bank allowed the government to maintain the supply of credit even when, following Lehman, the private sector retracted its supply (which had up to that point been expanding healthily). Torres et al. (2014) also stress the extent to which the BNDES, through its ability to direct credit to strategic sectors, has been able to contribute towards the alleviation of structural bottlenecks notably in the field of infrastructure. As Section 6 will argue, however, the challenges here are far from being overcome.

### 3. Agriculture: Success by design or default?

One of the key elements of Brazil's economic transformation over the past two decades has been the resurgence of exports. Their sharp rise since the beginning of the 2000s has strongly contributed to GDP growth and has helped to keep the trade imbalances from widening,<sup>6</sup> consequently contributing towards a reduced need to take on external debt. A combination of solid trade balance performance allied to capital inflows dominated by direct rather than portfolio inflows means that Brazil has been able to grow in a manner consistent with a sustainable evolution of the external accounts. Such a situation stands in sharp contrast to the debt with the growth strategy of the 1970s and the endemic current account crises of the 1980s and early 1990s. A cornerstone of Brazil's export success over the past two decades has been the agricultural sector, which forms the focus for papers by Bacha, Mueller and Mueller and Figueiredo.

As Mueller and Mueller (2014) suggest, any notion that the agricultural sector had the potential to become an export dynamo would have seemed highly improbable during the 1970s and 1980s. Then, having stagnated during the import substitution industrialization (ISI) period, a common diagnosis of Brazilian agriculture was that in the absence of land reform and greater government intervention to remove multiple market failures, the sector would not manage to modernize and would remain a drag on economic growth, failing to live up to its export potential. Today agriculture still continues to be based, as before, on large properties rather than family farms and, though sector-specific policy innovations have occurred, government intervention has retracted significantly.

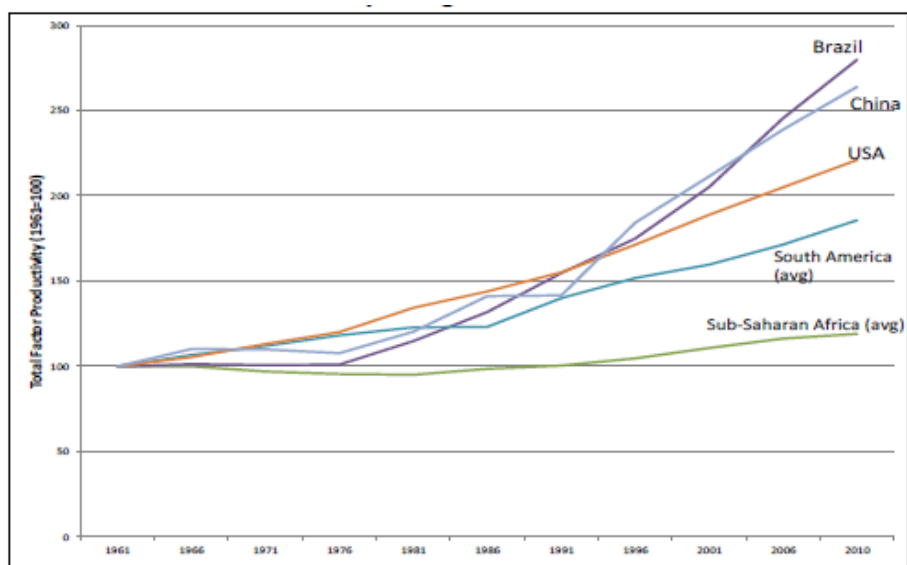
Nevertheless the sector has undergone a dramatic transformation, making it one of the major breadbaskets of the world: in 2010 Brazil was the world's foremost producer of sugar, coffee, orange juice and poultry, the second main producer of soybeans, the third main producer of corn, and the fourth main producer of pork. To an increasing extent, Brazil has achieved success in penetrating new export markets, taking advantage of a surge in demand across fast-developing markets in Asia. Encouragingly, it is fair to say that Brazil's current agricultural boom is far broader based than its counterpart in the 19<sup>th</sup> century which was largely centered on coffee, rubber and cotton. While Brazilian agriculture only accounts for 5.5% of GDP, it has supported a diversified and fast-growing agribusiness sector which now answers for almost one quarter of national output.

The transformation of Brazilian agriculture has involved not simply the incorporation of more land but also dramatic improvements in productivity. Whereas the total area of land in agriculture has remained basically the same since the mid-seventies, production has increased by nearly 300%. As Figure 4 indicates, the surge in agricultural productivity experienced by Brazil has comfortably outstripped that of other countries in the region and has outpaced that of China and the USA.

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<sup>6</sup> In fact, for a number of years since 2003 Brazil has generated a healthy trade surplus.

**Figure 4: Total Factor Productivity for Agriculture, Selected Countries 1961-2010**



Source: USDA – Economic Research Service: International Agricultural Productivity  
<http://www.ers.usda.gov/data-products/international-agricultural-productivity.aspx#UsVs67SzSJQ>

The success of Brazilian agriculture in increasing exports, production and productivity in a relatively short period of time has drawn much attention to the policies and programmes that might be behind this transformation. Interest has centered on the fact that the transformation was achieved from a relatively backward starting point, similar to that found in many other poor and developing countries. The fact that the changes in Brazilian agriculture were achieved in tandem with a significant and unprecedented drop in poverty and inequality since 1995 have made the lure of a Brazilian model even more enticing for poor countries. In particular, a sense has arisen that the Brazilian model would be particularly well suited for Africa. This partly stems from sharp similarities that exist in climatic and soil conditions between parts of Brazil and areas of the African continent.

What factors, then, lie behind Brazil's agricultural success? Mueller and Mueller (2014) highlight the fact that, perhaps surprisingly, throughout the expansion of the agricultural sector official sector-specific policy measures had very limited control over what actually took place; broader institutional changes exercised a much more important role. The paper argues that the remarkable transformation in Brazilian agriculture only really emerged when sustainable, inclusive institutions created a fiscal, monetary and political environment in which the sector could succeed through long term investment and innovation. Thus, the renaissance of Brazilian agriculture should not be seen in terms of expansion of factors of production but also in terms of institutional and technological innovations, not all of which could be described as sector-specific.

The sense therefore is that Brazil did not follow a carefully laid out, predetermined strategy whose aim was to turn the country into the international agricultural giant which it is today. Rather, as Bacha et al. (2014) argue, Brazil pragmatically adapted its light touch market-oriented agricultural policies in order to seize opportunities opening up in both domestic

and international markets. Policies were also progressively shaped over time to bring vast areas of land into arable production and take advantage of its favourable climatic conditions.

Two of the most noteworthy features of Brazil's agricultural renaissance have been an acceleration in exports and a surge in productivity. Bacha et al. (ibid.) provide a quantitative insight into the drivers of the agricultural export boom. Running an econometric model of export supply on dataset from 1991 through to 2011 Bacha et al. show that global GDP growth and the increase in Brazilian agricultural production itself, rather than the international prices, have been the main drivers of Brazilian agricultural and agro-industrial exports. Each one percent increase in both World GDP and Brazilian agricultural production increased Brazil's agricultural and agro-processed exports by 1.41% and 0.9%. This is an interesting result since commonly held views assume that the surge in commodity prices over the past decade have been the overarching driver of exports. The sense that rises in Brazilian exports are being partly driven by improvements in productivity and competitiveness is underscored by Bacha's observation that the country has taken an increased share of the global agricultural market at the expense of the USA and the European Union: Brazil's market-share of world agricultural exports jumped from 2.4% in 1990 to 5.6% in 2011, while the EU's share dropped from 46.8% to 40.7% and the USA's share decreased from 13.8% to 10.5%.

A key driver of the productivity gains experienced by the Brazilian agricultural sector has been a strong record of innovation, one area where the state has played an active and consistent role. Figueiredo (2014) highlights the role of EMBRAPA, a federally funded agricultural research agency. This has funded research and facilitated research networks linking agricultural producers, research laboratories and private sector suppliers of agricultural seeds, technology and equipment. Figueiredo's study indicates how, with EMBRAPA's assistance, innovative research and dissemination activities within the soybean and pulp and paper sectors have enabled them to achieve world-leading technological and commercial positions. This has involved producers within these sectors, not only driving up productivity, but also adding value and improving the quality of the product. In this sense, the agricultural transformation of Brazil should not simply be understood in terms of a quantitative increase in production and exports; there have also been qualitative improvements which have allowed producers to seek out new – and lucrative - market niches whether domestically or in the global marketplace. This appears to offer valuable lessons to agriculturally-dependent economies elsewhere: with investment in technology a natural resources-based export strategy may offer dynamic market opportunities and the chance to move up the value chain.

#### **4. Social Policy: Inclusion and Productivism?**

A highly distinctive feature of government policy in Brazil in the last two decades has been the attention paid to social policy. Social policy has been a core component of the Brazilian development model, making a significant contribution to inclusive growth. Transfers-in-kind, as in education, training and healthcare, and transfers in cash, as in social insurance and social assistance, have been the object of policy activism. Labour market regulation, and the minimum wage policy in particular have been an extremely important and effective redistributive tool (Souza 2011; Saboia 2007; Castro 2011).

The 1988 Constitution, with its emphasis on social inclusion, marks a watershed. It enshrined a raft of social rights to education, health and social protection subsequently embedded in new policies and institutions. Following President Henrique Cardoso's Real Plan, health and education reforms deepened. The Unified Health System and the new Family Health Programme, established in 1990 and 1994 respectively, extended health provision to lower-income groups. A programme providing financing and technical support to upgrade basic education, the FUNDEF (Fundo de Manutenção e Desenvolvimento do Ensino Fundamental) was also introduced in 1994, raising education expenditure per student and in the process redistributing resources from better-off states and municipalities to poorer ones.

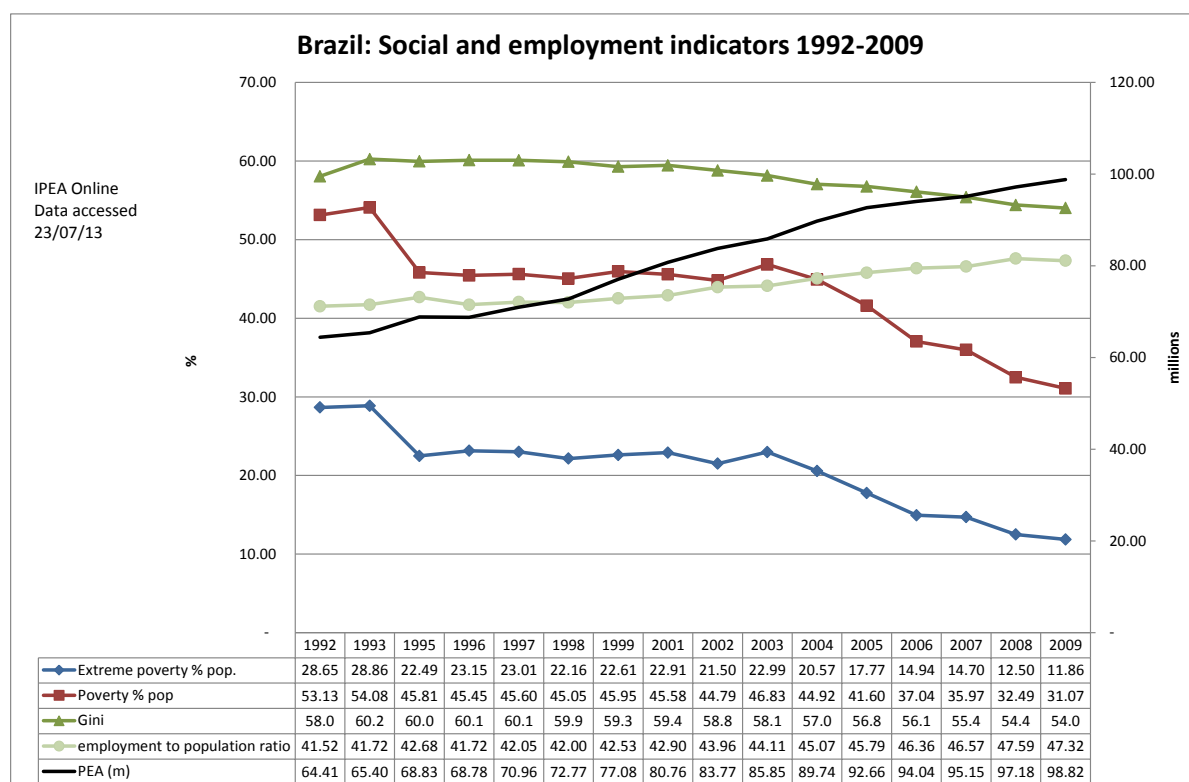
On income transfers, the Rural Social Insurance scheme (Previdencia Social Rural) was introduced in 1993 with the aim of including rural informal workers within the Social Insurance Fund focused exclusively on formal workers (Delgado and Cardoso 2000). In 1996, a non-contributory pension scheme, the Benefício de Prestação Continuada, began to provide transfers to poorer older people and people with disabilities. These two initiatives marked a break with the Bismarckian paradigm which had dominated social protection in Brazil (Schwarzer and Querino 2002). A further break with past social policy came in 1995, when municipal activism led to the emergence of guaranteed income programmes focused on families and children in extreme household poverty, Bolsa Escola. Together with five other guaranteed income transfer programmes, it combined regular income supplements for households in extreme poverty with conditions ensuring children's school attendance and primary healthcare utilization. The Lula administrations (2003-11) consolidated all federal guaranteed income programmes into Bolsa Família while at the same time expanding the target population. Bolsa Família quickly became the government's flagship programme and the centrepiece of the newly established ministry of social development (Ministerio de Desenvolvimento Social) tasked with addressing poverty and social exclusion (Campello and Neri 2013).

A new formula for indexing of minimum wages to take account of changes in consumer prices and real GDP growth, agreed in tripartite fashion, ensured significant gains in the value of minimum wages in real terms, around 10% per year in the second Lula administration (Souza 2011). In Brazil, minimum wages provide a floor for labour earnings in formal employment and a benchmark for the wage settlements of informal workers (the lighthouse effect). In addition, minimum social insurance pensions and non-contributory pensions become indexed to the minimum wage. A single policy lever was used to ensure

the gains from growth are distributed to lower-income groups (Saboia 2007). It also enabled the government to reach the majority of low-income and vulnerable groups, with Bolsa Família reaching the remainder.

The emphasis on social policy has paid significant dividends in contributing to an improvement in social indicators in Brazil. Figure 5 provides information on trends in key indicators, including a significant fall in poverty, extreme poverty, and income inequality; and rising employment rates. Yet there is also an indirect contribution to inclusive growth associated with facilitating and sustaining the social contract.

**Figure 5: Brazil: Social and employment indicators, 1992-2009**



Source: Authors' calculations based on IPEA data.

The emergence of social policies which support and reinforce inclusive growth has been far from linear. The record contains a fair share of dysfunctional policy decisions and wrong turnings. The key to their effectiveness lies in their fit with other policy dimensions. The papers in the IRIBA research programme make a welcomed contribution to our understanding of these issues.

### *Productive capacity*

Social policy innovations in Brazil have focused on improving inclusion, welfare, but also productive capacity, among the population and especially disadvantaged groups. In health and education the main objective of reforms has been to improve provision and reduce the

large disparities in access to services across states and municipalities. Souza (2011) notes that illiteracy rates fell among 15-24 year olds from 7.1% in 1995 to 1.9% in 2009; while the proportion of the economically active population with completed primary (and secondary) education increased from 34.5 (20.7) % to 61.7 (44.1)% in the same period. As a result the Gini index of years of schooling for the economically active population dropped from 0.413 to 0.288. These figures show large improvements, but disparities in provision have attenuated rather than disappeared.

Human development conditional transfer programmes are focused on improvements in the schooling, health and nutrition of children. Bolsa Escola and PETI (a programme for the eradication of child labour) were designed specifically with the objective of facilitating improvements in the productive capacity of children in households in extreme poverty (Camargo 2004). The evidence from impact evaluations show that they are effective in reaching disadvantaged groups, suggesting further improvements in the productive capacity of younger cohorts (de Brauw et al. 2014). Improvements in schooling have also been observed for transfer programmes without an explicit focus on children (Carvalho 2008; Ponczek 2011).

The IRIBA working paper by Barrientos, Debowicz and Woolard (2014) reviews the evidence on the mean impacts of antipoverty transfers in Brazil. It also contributes new information on another dimension of the link between antipoverty transfers and inclusive growth, by examining the distribution of Bolsa Familia outcomes across municipalities in Brazil. The findings suggest that programme effects on school attendance by girls, for example, are greater in more disadvantaged municipalities. A common concern with income transfer programmes focused on low-income and disadvantaged groups is the potential effect that the additional income and eligibility conditions might have on the labour supply of beneficiaries (Moffitt 2002). The Barrientos et al. (2014) paper finds no significant Bolsa Familia effects across municipalities, confirming the overall findings in studies focused on mean individual level effects (Oliveira and Soares 2012) and mean municipal level effects (Foguel and Barros 2010), and rejects the suggestion in some studies that Bolsa Familia might have adverse effects on urban labour supply (Ribas and Soares 2011). Antipoverty transfers contribute to inclusive growth through improvements in the productive capacity of disadvantaged households and also through a reduction in disparities across municipalities.

The 'productivist' approach characterizing social policy in Brazil will be reinforced with a new integrated policy framework under Brasil sem Miséria which aims explicitly to support employment and economic inclusion (Barros, Mendonça and Tsukada 2011).

### *The fiscal contract and the tax/GDP ratio*

Research on social policy commonly focuses on the scope and effectiveness of government policies, the design of programmes and their institutional frameworks, and the impact on households. In studying Brazilian social policy over the last two decades, it is essential to pay attention to their financing. Raising revenue can be costly in terms of the impact of taxation on incentives, as captured by the marginal cost of public funds. In the context of Brazil,



financing the expansion of social policy has been relatively unproblematic due to the steep rise in the tax/GDP ratio since the mid-1990s. Brazil has managed a remarkable 7 percentage point increase in tax revenue as a percentage of GDP between 1995 and 2010, from 26.9% in 1995 to 34% in 2010. Even if we exclude social insurance contributions, the tax/GDP ratio shows an increase of almost a quarter, from 21.6% to 27%. The IRIBA working paper by Melo, Barrientos and Canuto (2014) investigates this issue.

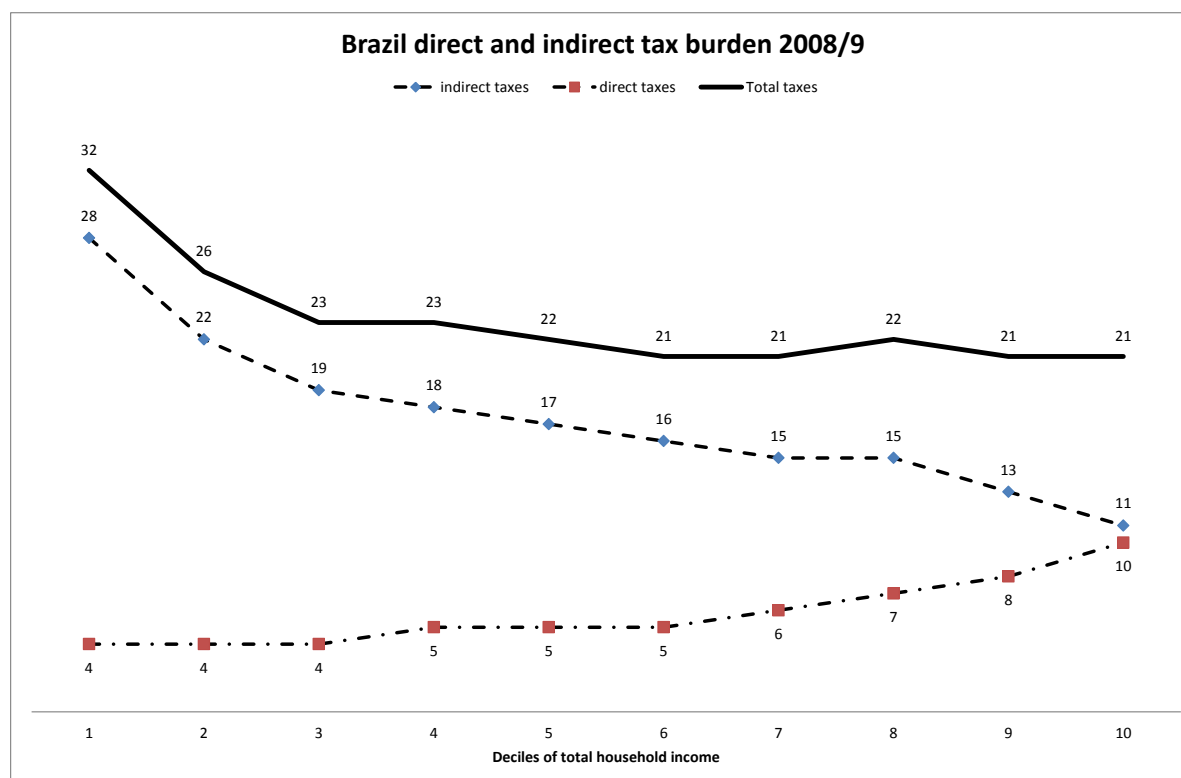
The rise in the tax/GDP ratio in Brazil is intriguing because it is associated with neither a change in the tax code nor a change in tax administration. The absence of significant reforms to the tax code and tax administration indicates that policy models are of limited relevance to explaining the rise in the tax/GDP ratio. Instead, the paper argues that Brazil's tax revenue outcomes are best studied from a political and political economy perspective (Melo 2007). Although it might be possible to attribute the rise in the tax/GDP ratio to a combination of fiscal illusion and policy drift, the size of the change and the repeated attempts at tax reform from incoming administrations appear to rule out this as a potential explanation.<sup>7</sup> The paper develops and tests an alternative explanation: that a combination of baseline conditions, namely strong bureaucratic capacity; and the process of democratisation, partisan competition, fiscally responsible centre-left coalitions, and executive power, created the conditions in which strong preferences for redistribution became embedded in effective redistributive social policy. Between 1995 and 2005, social expenditure rose from 9.3% to 12.7% of GDP, a significant increase in resources given that GDP increased by about 10% in the same period (IPEA 2005). Social expenditure therefore managed both an absolute and a relative increase in its share of resources (Castro et al. 2008). Until recently, the rise in tax/GDP ratio did not provoke public and political contestation, suggesting an underlying association with the social contract in Brazil. The recent public interest in tax and tax policy perhaps signals new tensions, and boundaries, in the social contract.

A second intriguing issue about the rise in the tax/GDP ratio in Brazil is to do with the fact that this rise did not change the distribution effects of the tax system taken as a whole. Taxes have very little impact on the distribution of income in Brazil, because of the relative significance of (regressive) indirect taxes as against (progressive) direct taxes. As Figure 6 demonstrates, the tax burden for households in Brazil is almost neutral in its distributive effects.

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<sup>7</sup> The 1988 Federal Constitution provides the institutional framework for the current Brazilian tax system. Since its promulgation, over 29,600 thousand laws, decrees and administrative rulings affecting the tax system at the national level have been enacted. They include 15 constitutional amendments, 1,470 laws, 203 provisional measures (*medidas provisórias*), and 1593 federal decrees (Amaral et al. 2013).

**Figure 6: Brazil direct and indirect tax burden 2008/9**



Source: Silveira et al. (2011).

### *Labour market institutions*

Labour market institutions have facilitated inclusive growth. The IRIBA working paper by Ferreira, Firpo and Messina (2014) throws considerable light on this issue by focusing on possible explanations for the decline in the inequality of labour incomes for the period 1995 to 2012. As the most important component of household income, the inequality in labour incomes reproduces the declining trends in household income. The Gini of labour incomes declined in Brazil from 0.54 to 0.41, a reduction of just below one quarter. There are several competing explanations for this trend. They include rising levels of educational achievement in the labour force perhaps leading to a decline in the wage skill premium, changes in the composition of employment, and the influence of policies and institutions on employment and wage setting, such as social protection transfers and minimum wage policy.

The analysis in the paper decomposes changes in the Gini measure labour income with the aid of rigorous statistical methods. Regressing labour earnings on a range of independent variables, they distinguish the contribution of changes in the coefficients attached to these variables from the contribution of changes in the composition of the labour force, i.e. the changes in their characteristics. They conclude that demographic and spatial factors, as well as informality jointly account for the bulk of the reduction in the Gini coefficient of labour incomes in Brazil. The decline in earnings inequality can be attributed to lower gender and race wage gaps, and to lower urban and regional wage premia. Not only did average earnings rise, but they rose by most for groups of workers who used to earn the least. On

their own, changes in education levels would have generated greater inequality, *ceteris paribus*.

The IRIBA working paper by Klasen and Villalobos (2014) examines the impact of vocational training on labour market outcomes. The paper traces the evolution of the 'S' system, principally SENAI, its scope and financing. In Brazil vocational training has a complementary role relative to the education system. The analysis in the paper finds that participation in vocational training generates positive and significant effects on employment and pay; but the fact that it fails to reach more disadvantaged groups implies little impact on existing disparities in the labour market. These findings echo an emerging literature for Germany and other European countries suggesting that vocational training might prove a constraint on social mobility.

### *Growth multipliers*

The recent growth in social expenditure in Brazil is likely to have a direct effect on growth through their effect on demand. Estimates of the multipliers applying to government expenditure suggest that the focus on disadvantaged groups in the expansion of social policy had measurable effects on economic growth. IPEA (2010) has estimated that the GDP multiplier of social expenditure taken as a whole was of the order of 1.37 in the mid-2000s, while the social expenditure multiplier in household income growth rates was higher at 1.85.<sup>8</sup> Figure 5 shows the estimated multipliers by type of expenditure. Expenditure on social assistance transfers, as expected, shows the highest estimates for household income growth, an additional 1 percentage of GDP allocated to Bolsa Família transfers raises household income by 2.2 percentage points.

The main conclusions emerging from this discussion show that the expansion of social policy in Brazil is likely to have made a significant contribution to inclusive growth. It also facilitated far-reaching institutional change. The orientation of social policy towards low-income and disadvantaged groups not only enabled them to benefit from growth, but also consolidated public and political support for social policy innovations.

## **5. The limits of the model**

In the last few years, a variety of signals suggest the Brazilian model could be running against hard constraints. The IRIBA working papers acknowledge these signals while recognizing that the Brazilian economy has become far more resilient to external shocks than was the case 20 or 30 years ago. The 2007 global financial crisis did not have an immediate effect on the Brazilian economy, in fact poverty and inequality continued their declining trend into the second decade of this century. The impact of the crisis arrived

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<sup>8</sup> The multipliers were estimated on a 2006 SAM for Brazil.

through other channels: the slow-down of growth experienced by the Chinese economy and other emerging economies added to the fall in demand for commodities associated with recession and austerity in high income countries. The expected winding down of the stimulus package in the USA has slowed down the inflow of investment into emerging economies, as interest rates are expected to climb in high income countries. There is growing public concern with the incidence of taxation and the destination of government expenditure, which spilled over into opposition to the infrastructure investment associated with the 2014 World Cup. The eruption of popular protests in mid-2013, if nothing else, serves to underline the fact that Brazil's economic and social reforms are still very much a work in progress. The IRBA working papers explicitly recognize this fact and provide strong arguments for their continuation despite the political, financial and technical obstacles involved. The paper by Afonso and Araújo (2014), for example, sets out a strong case for further fiscal reform, an area where the initial impetus of reform in the 1990s has notably slowed. In the field of infrastructure – a central issue in the 2013 demonstrations – Amann et al. (2014) point out that a sustained failure to finance and effectively regulate has led to significant deficiencies in transport and communications networks. As the paper by Prado and Carson (2014) notes, there continues to be a strong public perception of graft and corruption, which generates resistance to sustained infrastructure planning and investment.

At the same time, the research by Torres et al. (2014) shows that the reformed financial system survived the stress-testing imposed by the global financial crisis. In contrast to previous financial shocks, the financial system showed resilience under the support and supervision of the Brazilian National Development Bank, BNDES. Brazilian exports have proved resilient, reinforcing the growing significance of agro-industries in the Brazilian economy. Antipoverty transfers and upgrades in the level of minimum wage have cushioned the effects of the growth slow down on low income groups. And while public attitudes surveys show a growing perception that Brazil has become a high tax country, there are few proposals for wholesale change in tax policy, aside from those ubiquitous demands coming from the business community. In fact, there are emerging voices demanding a more redistributive tax system. While there is a tightening of conditions in the policy environment, in some areas the model appears resilient. It is perhaps too early to assess whether the current conjuncture will lead to significant changes in Brazilian economic and social policy, and its aim to stimulate inclusive growth.

## **Conclusions**

There is a growing interest in Brazil's success in combining economic growth with large reductions in poverty and inequality. Interest has gone hand in hand with a more prominent role for Brazil in the global economy and institutions. Is there a Brazilian model of development other developing countries could emulate?

The paper has argued that Brazil has implemented distinctive economic and social policies since the early 1990s which set a new course for its economy and society. In combination,

they add up to a new developmental model. What is distinctive about Brazil is the fact that a renewed social contract or political consensus, beginning with the stabilization plan in 1993/4, has created the conditions for a unique combination of economic and social policies to emerge and evolve in ways which reinforce favourable outcomes. The paper has reviewed the main economic and social policies and pointed to their grounding in this consensus.

The global commodity boom has contributed to the growth of the Brazilian economy, but it is unlikely to explain the large improvement in economic and social indicators. The complexity of Brazil's tax system makes it particularly difficult to reform. The introduction of new taxes on financial transactions and sales to support an extension of social policy in the early 1990s generated, in the context of high growth, a large expansion in fiscal space. Social expenditures grew in both absolute and relative terms, enabling inclusive and innovative social policies to expand without adversely affecting existing constituencies. The productivist orientation of new social policies supported growth.

In terms of economic reforms, the period since the start of the 1990s has seen the unfolding of a programme of market and trade liberalization. These supply-side reforms have served to open up the economy and are largely responsible for the surge in inward investment which Brazil has experienced. While the result has been greater economic flexibility, there is no doubt that microeconomic reforms are still a work in progress; there remain substantial bottlenecks, not least in relation to transport and energy infrastructure. Productivity growth in Brazil has also lagged behind that of other major emerging economies despite economic liberalization.

Still, these concerns aside, the specific combination of economic and social policy at the core of Brazil's success merits close attention by other developing countries, and African countries in particular.

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