

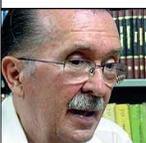
# Quarterly Knowledge Report



## INTERVIEWS



**5** World Bank's Augusto de la Torre urges Brazil to make the most of good times.



**18** David Fleischer analyses Dilma Rousseff's economic and political prospects.

## BRAZIL'S MISSING MIDDLE

EDITORIAL BY MAKHTAR DIOP

With the presidential election over, Brazil has redoubled its focus on the future. In many ways, the Government of Dilma Rousseff faces a very different development context than her predecessors.

Brazil has left behind many of

its more basic social and economic challenges, common to many countries. It has universalized basic education, secured the fiscal foundations for growth, investment and job generation, and has reduced poverty by the tens of millions.

These are great achievements. But Brazil now faces a more complex agenda going forward, with different, and in many cases tougher, development challenges, uniquely related to the country. Central to this agenda is Brazil's unequal

(Continued on page 20)

## INSIDE THIS ISSUE

<i>Editorial</i>	1
<i>Becoming Old in an Older Brazil</i>	1
<i>Brazil's Hour</i>	5
<i>Multidimensional Poverty</i>	8
<i>When South Meets South</i>	12
<i>Rural Credit, Agricultural Production and Productivity</i>	14
<i>Opportunities in Brazil</i>	16
<i>Rousseff's Challenges</i>	18
<i>In the Loop</i>	20

## KEY DATES

- **Dilma Rousseff's Presidential Inauguration**—January 1
- **Brazil Knowledge Day**—Washington, December 7
- **Brazil Country Partnership Strategy consultations**—January-February 2011

## BECOMING OLD IN AN OLDER BRAZIL

**Implications of aging on growth, public finance, services, poverty and inequality**

By Michele Gagnolati

Brazil is in the middle of a profound socioeconomic transformation driven by demographic change. On the one side, the demographic transition in Brazil has resulted in very rapid population aging. While it took France more than a century to double its population aged 65 and above (from 7 to 14 percent of the total), Brazil will achieve that in the next two decades (Figure 1).

On the other side, demographic change is one of the most important forces shaping the outcome of social and economic policy, but it cannot be observed in the short term. This short article touches on the main findings of a World Bank study by Gagnolati, Jorgensen, Rocha and Frutero, that investigates the socioeconomic impacts of demographic change in Brazil under a longer time perspective.

### Economic Growth

Brazil has historically enjoyed a very favorable demographic structure, with a large share of the population in working ages. This is often referred to as *Demographic Bonus*. Over the medium-term, however, the expected changes in the labor force, due to the aging of the population, will pose challenges to economic growth (Figure 2). After the mid-2020s, the growth rate of the 15-59 age group will turn negative. A shrinking labor force means that Brazil will have to rely more on productivity improvements than on new entrants in the labor market to sustain aggregate output growth. The country will thus need to seize the current opportunity and prepare for the structural changes



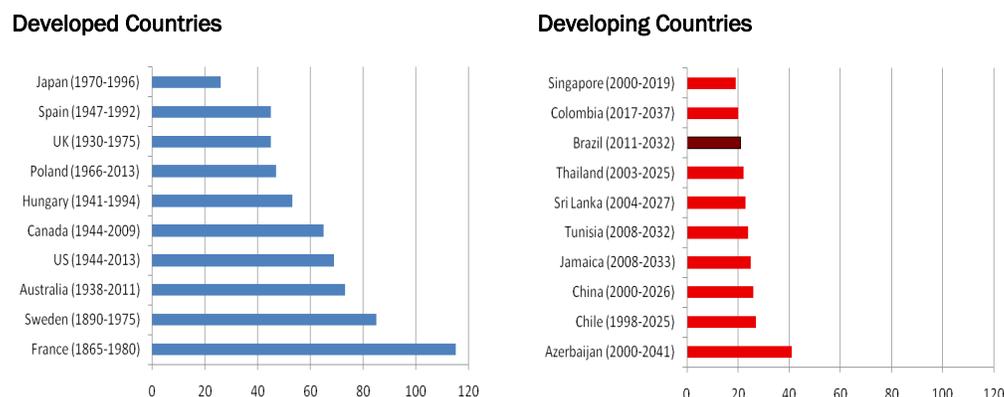
Anna Rigato

it will face over the next decades.

Among the priorities is the creation of enough opportunities for the growing working age population in the short-term. Moreover, to boost the productivity potential of future generations, it would be important to invest in better public



**Figure 1—The Speed of Population Aging—Number of years for population aged 65+ to grow from 7 percent to 14 percent of total**



Source: National Institutes of Health, 2009

education, as well as on incentives and retraining of mature workers.

The pension system also needs adjustments to address distortive effects on the labor market. For example, the length of service and lack of minimum age result in incentives for early retirement. This implies that a portion of the productive labor force is not being used or that they continue working in the informal sector. The availability of a non-contributory program, that transfers a benefit equal to the minimum wage, reduces the incentives for low earners to contribute. Not considering its extremely important social dimension, the scheme is damaging from a purely actuary and sustainability perspective, as a large proportion of the population does not contribute to the social security system during the working age, while benefiting in old age. As the population in Brazil ages, the need to ensure that a larger part of the population contributes to the system will become more and more pressing.

Economic behavior and macroeconomic outcomes also change both systematically and endogenously with population aging. The impact on savings (and consequently on growth) is particularly important. Build-

ing on the potentially increasing saving rates in the future, a key driver of growth is the endogenous accumulation of capital. The economic behavior related to consumption and savings over the life-cycle is directly affected by taxes, transfers and debt dynamics. In order to analyze the implications for capital accumulation and growth, it is therefore crucial to take into account the financing choices for the aging-induced fiscal costs that the government has at its disposal. According to our estimates, a policy response of keeping taxes and debt constant and allowing pension to adjust (downwards) is likely to promote a second demographic dividend and economic growth.

#### Public Finance and Service Delivery

The impact of population aging is clear in long-term projections of public spending on education, health care and pension: the product of the average benefits received by individuals and the age structure of the population. In 2005, total public spending on education, pensions and health care amounted to 17.7 percent of Brazil's GDP, similar to OECD countries, although its population is much younger. This results in markedly lower public

education investment in youth (9.8 percent of average wages in Brazil vs. 15.5 percent in OECD) and markedly higher average public pension benefits (66.5 percent of average wages in Brazil vs. 30.4 percent in OECD.) Aggregate public health care expenditures in Brazil are much below the OECD average – and average health benefits are somewhat lower.

In Education, the decreasing size of school-age population provides a unique opportunity to increase investment per student to OECD levels without burdening public finance. An ambitious expansion of educational spending to reach OECD levels of investment per student within a decade would require an increase of education spending of less than 1 percent of GDP by 2020. After that, the share of GDP devoted to education would follow the decline in the school-aged population – while maintaining investment per student at OECD levels.

One of the key findings of our projections is that Health Care expenditures are likely to increase substantially in Brazil. Indeed, health care is likely to emerge as a major fiscal challenge in the coming decades in Brazil. We project an increase

*“A policy of keeping taxes and debt constant and allowing pension to adjust downwards is likely to promote a second demographic dividend and economic growth”*

of more than 4 percentage points of GDP by 2050. There are two driving forces behind this: the growing proportion of the elderly, and the corresponding increase in demand for health care from that age group.

In terms of public pensions, without the recent reforms (1999 and 2003), spending in pensions would have risen from 10 percent of GDP in 2005 to an astounding 37 percent of GDP, just from the increased number of pensioners due to population aging. Clearly, the old support system would have been very difficult to afford. Our model of the recent set of reforms reveals that they more than halved the projected costs. However, the problem of affordability of pension expenditures has not yet been solved, and pension expenditures are projected to double to 22.4 percent of GDP by 2050. In an alternative scenario, we model a series of reforms that could gradually bring Brazil's pension benefits in line with those of OECD countries. However, even in this scenario the increases in pension expenditures dominate the fiscal outlook for Brazil.

So what policy actions could be taken to help mitigate the un-

avoidable tension from increasing social expenditures driven by rapid population aging in Brazil? As more resources become available per student, it is important that such resources are used to improve the effectiveness of the education system. The United States, Japan, Korea, and European countries used declines in student numbers to shift resources towards quality. In Brazil, some of the resources saved from primary education could support the expansion of day-care and pre-school, which are still far from universal and are among the best strategies for ensuring that children arrive in primary school ready to learn. It could substantially help finance the expansion of higher quality, full-day schooling at the secondary level. The seven million empty seats in primary school could also finance investments in quality for the 24 million primary students who will remain (World Bank, forthcoming)<sup>1</sup>. Moreover, such an ambitious increase in educational investment would likely have profound implications for both economic growth and inequality in Brazil. Indeed, Lee and Mason (2010)<sup>2</sup> present simulation results which suggest that such investments

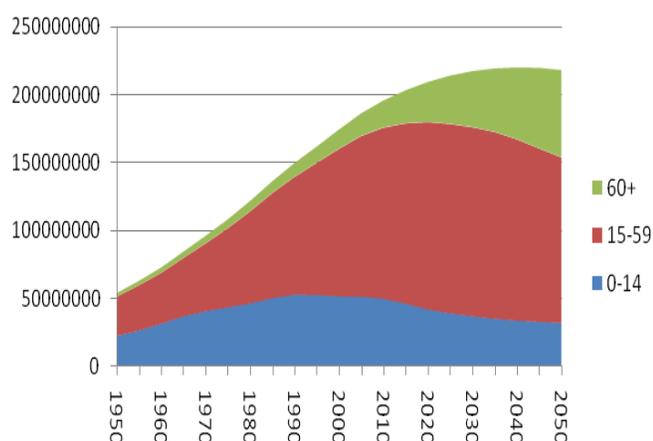
in human capital can offset the costs of population aging.

A second area is the urgent adaptation of the health care system to the different demographic and epidemiological profile of the increasing older population. Although Brazil has left behind the first stages of the epidemiological transition, medical schools are still training doctors for the requirements of the 20th century. Students are schooled in child care and reproductive health but are presented with little about aging-related issues. A doctor graduating in 2010, with an average 40 years of medical practice ahead, will witness a three-fold increase in the elderly population – to 63 million people. In whatever specialty, she will be increasingly confronted with older patients. Curriculum reform in medical schools reflecting Brazil's changing epidemiological situation is critical. As non-communicable diseases emerge as the leading cause of morbidity, disability and mortality, effective programs need to address their main risk-factors: smoking, physical inactivity, alcohol consumption and unhealthy diet.

Finally, the pension system calls for strengthening to become more efficient. The system extends benefit coverage to most of the old age population and provides protection to the poorest segments of society. Programs have contributed to reducing poverty and inequality, particularly in rural areas, but this has been associated with sharp increases in expenditures. These are, to a large extent, a consequence of some characteristics of the pension programs, that lead to early retirement, high replacement ratios and multiple receipts of benefits. The survivors' pension system, meant to ensure that the dependants of the deceased do not fall in poverty, represents an extremely high share of old-age

*“As aging frees more resources per student, it is important that they are used to improve the effectiveness of the education system”*

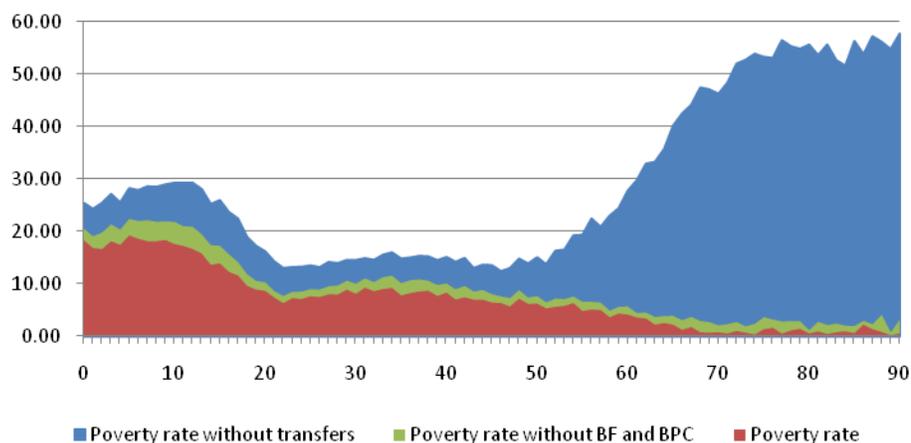
Figure 2—Brazilian Population by Age Group—1950 to 2050



Source: IBGE 2008

*“Brazil cannot afford to simply emulate the policies of richer countries, which have aged over a much longer period and within a context of relative wealth*

Figure 3—Poverty rates by age, with and without transfers (%), 2008



Source: PNAD 2008

pension expenditures, with benefits being accumulated and paid to young individuals with a long life expectancy. The aging of the population will put additional pressure on the system, with consequences on growth prospects. This makes it very important to address these issues as soon as possible.

#### Poverty and Redistribution

Brazil has made huge progress in reducing poverty and inequality. Public transfers have played a significant role in these achievements. The establishment of a non-contributory program and of a program for rural workers has extended coverage to a highly vulnerable part of the population. Moreover, the fast growth in the minimum benefit has resulted in an increase of the income floor for the elderly faster than the growth of the higher retirement benefits, resulting in a reduction in inequality. The pension system is responsible for the almost complete eradication of old-age poverty (Figure 3). However, this has come at a high cost and has resulted in a system with regressive incentives and distortions, as mentioned earlier.

Per capita public transfers to the elderly compared to per

capita public transfers to children are much larger in Brazil than in any other LAC and OECD country with similar welfare systems. At the same time, quality of public education in Brazil is worse than in other LAC and OECD countries. *Bolsa Família*, a federal CCT program, has improved children's social protection, with positive effects on child health and education attainment, but it is insufficient to reduce the gap between human capital outcomes of richer and poorer children and contribute to include the latter group in the most productive sectors of the economy.

A very important concern is the need to maintain horizontal equity by giving equal importance to the needs of all groups in poverty—the elderly, children, persons with disabilities, and working families with low earnings. Grosh and Leite (2009) observe that in many LAC countries the total allocation to non-contributory social assistance programs is under 1 percent of GDP, so they emphasize the need to be very cautious before defining policies that would allocate a similar or greater amount to a subgroup of the poor. This concern leads to the possibility that payments to the elderly be

administered as part of the general social assistance system. Although social assistance expenditures (mostly on the *Benefício de Prestação Continuada* and *Bolsa Família*) are larger in Brazil than in other LAC countries, resources available are not enough to reach all poor groups. Thus, as in other countries, using an integrated framework to administer all resources for social assistance in Brazil would allow policy decisions to reflect explicit trade-offs among competing priorities and possible groups of beneficiaries.

Brazil cannot afford simply to emulate the policies adopted by richer countries which have aged over a much longer period of time, within a context of relative wealth and which are themselves still struggling to address the same issues. Solutions will have to be developed from within the Brazilian society <sup>BET</sup>

1. World Bank (forthcoming). *Achieving World Class Education in Brazil: The Next Agenda*. Washington, DC.

2. Lee, Ronald and Andrew Mason. (2010). "Fertility, Human Capital, and Economic Growth over the Demographic Transition." *European Journal of Population*. May 2010, 26(2), pp. 159-182.

# BRAZIL'S HOUR

By Mauro Azeredo

Augusto de la Torre, the World Bank's Chief Economist for Latin America and the Caribbean, is bullish about Brazil's future economic prospects. The country has weathered the international financial crisis well, and thanks to the recent Pre-Sal oil reserves discoveries, it may become an energy giant.

But de la Torre is also keenly aware of dangers of complacency and of inadequate planning of natural windfalls. As one of the authors of the Bank's flagship regional work for 2010 "Natural Resources in Latin America and the Caribbean: Beyond Boom and Bust," and with extensive public sector experience in his native Ecuador, de la Torre knows that good times offer the best opportunity to prepare for less favorable conditions.

Following are the main excerpts from his interview to BET's Mauro Azeredo.

**BET:** *Brazil has sailed through the crisis and is growing fast. What is the long term outlook for the country?*

**Augusto de la Torre:** One has to be careful talking about the long term because it is, after all, the long term. I think people would agree that we have not seen Brazil in such an auspicious time as the one it is now experiencing, and the future looks very promising. It is promising not only because of the good performance of Brazil in the recent years and during the crisis, but also because of the enormous enthusiasm that the country has raised around the world and among investors. Brazil now is probably one of the prime places to invest money around the world.

On the one hand, among the BRICs Brazil is taking a special prominence for a combination of things. With a more mature economy than China, it now faces more difficult developmental challenges. But on the

other hand there are a number of things that are really leaning in favor of Brazil. The improved macro framework, which has become a national point of consensus; the improved social policy, which has become an example around the world; and the prospects of fast growth and fast increases in investment rates; and the challenge as well as the opportunity of the discovery of oil resources. All of that is creating a configuration where all the stars are aligned for Brazil to perhaps enjoy a long spell of fast growth and prosperity if things are managed appropriately. And the "if" is always worth remembering.

**BET:** *What are those "ifs," that Brazil needs to address to realize this potential?*

**de la Torre:** There are challenges in a number of dimensions. One is managing the potential for fast growth on the basis of domestic saving efforts. Brazil does not have the same saving effort that the East Asian tigers or China have, this means that Brazil should on the one hand strengthen savings, and on the other optimize how savings are used. Another important dimension is how to use foreign savings appropriately. On the first dimension, much of it is about management of the fiscal process, because public finances play a major role in national savings in Brazil. That means that Brazil has to make a big effort to make room in its budget to move resources towards investment. Which means that Brazil has a big challenge to keeping the growth in current expenditures within government under reasonable control. And this will become even more important if and when the resources from the Pre-Sal begin to flow. Brazil will have to learn to appropriately save some of these resources and not consume them all in a hurry, and invest them gradually over time.

The second big challenge is to find a way to transform the



De la Torre: Brazil needs to save more

available savings that Brazil has into appropriate long term financing of big, long-term investments that need to happen in Brazil. And I think that there are two clear areas there: infrastructure is one and the other has to do with human capital. For that, Brazil needs to discuss ways to bring in the private financial sector into the channeling of these resources into long-term investments. A big challenge for Brazil is to develop a more robust market for long term finance. Right now, the country is trapped into short term financing, the longer term financing is mainly with BNDES.

**BET:** *How can the country solve the savings and long term financing bottlenecks?*

**de la Torre:** Let's take savings on the one hand and long term finance on the other. On the savings side, it will be largely about the fiscal stance. The government needs to generate more savings, and that goes through the fiscal process. And essentially, when push comes to shove, the bottom-line is that Brazil needs to have a larger share of investment in the government budget and a lower share of current expenditures. To keep current expenditures under control, Brazil needs to have a clear view and strategy

*"All the stars are aligned for Brazil to enjoy a long spell of fast growth and prosperity, if things are managed appropriately"*

*“The challenge for Brazil is to make a smooth transition to a robust market for long term finance. But that is not going to be easy, because right now the only game in town is BNDES”*

about social security expenditures; and a well articulated plan on how to distribute revenues in the federal system. Such a strategy is key for current expenditures to grow less than GDP over the next years. That will allow Brazil to make room for investments. So in my opinion the story on savings is largely a fiscal story. It will be also a private sector story to the extent that the middle class in Brazil keeps on growing, and that middle class will begin to think more about its future, of the future of their children and of retirement. The private sector will likely play a role, because the middle class can engineer the way it saves, but can only do it with the help of the financial sector.

This is the link to the long term finance. The challenge for Brazil is to make a nice transition to a robust market for long term finance. But that transition is not going to be easy, because right now possibly the only game in town in long-term finance is BNDES. And the private markets, as a result of a long history, are mainly dealing with short term transactions. Brazil went into that equilibrium as a result of past hyperinflation, as an effort of investors to be protected. So how do you make a transition from the current reliance on BNDES and on the short term instruments, towards a more balanced system where the private market is able to channel long time finance? This is not an easy transition and there is no simple formula. But it requires a greater convergence towards a lower interest rate in the SELIC and the transition towards a steeper yield curve that would foster savings in instruments with longer maturity and duration. And I am very happy to note that there is a lot of good thinking in Brazil on other measures that can be done in the tax side, in the regulatory side... small legal changes

that can help create an environment for that transition to happen. But I think that this is a very important challenge for Brazil, because the type of jump in investment that you need to do cannot be done only on the balance sheet of BNDES. It requires the broader balance sheet of the financial system.

**BET:** So BNDES and other public sector long term credit institutions would remain a player?

**de la Torre:** Yes, but complementary to the private markets, and that is a transition that I think will keep Brazil occupied for the next three to four years, because there is consensus that the investment jump needs to be financed, prudently, by broader sources than just one balance sheet.



**BET:** How much of Brazil's growth depends on this long term finance shift?

**de la Torre:** I think that sustainable growth depends on that. The you can have quick growth because Brazil does not have a lack of financing, everybody in the world wants to put money into Brazil. But when the money comes here, it ends up in short term investment or government bonds, it does not find enough supply of long term corporate bonds – housing finance, infrastructure finance. This kind of assets need to be developed to match the availability of a lot of money that is coming both from outside and inside the country into such longer contracts. If you don't do this transformation, what may happen is that you finance long term invest-

ments with a lot of short term money. That's the Lehman Brothers phenomenon where you have short funding and long assets. It would be an accident waiting to happen. So it may not be very important for short term growth, but for sustainable long term growth you want things to be financed through a good matching between the long term investment and long term finance. If there is not sufficient good matching and maturities transformation through the financial system, down the line you are going to have financial problems.

**BET:** You touched upon the issue of the Pre-Sal. You have recently done a flagship report on commodities in Latin America. Brazil is a major exporter of these products, but also has a strong industrial sector and internal market. Should the country privilege one over the other?

**de la Torre:** It is a false dichotomy. What we say in the report is that every country that has an abundance in natural resources needs to be aware of the risks that this abundance can create. But these downside risks are not inevitable.

Countries do not need to be trapped by this dark side of natural resources. They could rather use them as an opportunity for prosperity. What are the two things that countries need to stay away from when they have abundant natural resources? One, they need to make an effort to avoid that natural resources destroy the ability of the country to diversify. That natural resources take up so much of the productive energies of the society that in the end they lose diversification and become extremely dependent on only one commodity.

The second one is that natural resources generate a lot of rents – income or resources that people have access to without effort. And once you

have a lot of rent in a society, you can have a lot of rent-seeking behavior. That can damage your political system, your institutions. So those are the things we have to avoid, and that requires some energy. The most important thing you need to do is to know how to save those resources – which goes back to my first point.

That said, we show in our report quite a few examples of countries that have been able to have diversified economic structures, generate prosperity and keep good institutions while managing natural resources. Take the U.S., a resource-rich country that created diversification. Achieving this will require some careful policy, for instance avoiding to the extent possible excessive overvaluation of the currency. Because diversification is destroyed when a currency is so overvalued that it is no longer profitable to export any thing other than the natural resources. So avoiding overvaluation is an important part of the policy environment that allows you to use commodities well.

**BET:** *This is a very important point right now in Brazil as the real is believed to be much overvalued. In connection to this, there has been talk about Dutch disease and deindustrialization – how do you see the Brazilian situation?*

**de la Torre:** One part of the debate is that the pressures for the appreciation of the Brazilian currency, along with other Latin American currencies such as the Colombian, Peruvian and Chilean, are linked in part to a more global distortion. The argument is: the world needs some rebalancing, and the dollar needs to depreciate. So the dollar needs to depreciate against some currencies, so that the rebalancing happens. In a more orderly rebalancing, goes the argument, it would be the Chinese currency that needs to gain value against the dollar, so that the Brazilian reals and other currencies do not get so

much valued. Right now there is a global impasse where no emerging market wants its currency to gain value against the dollar – but that is the same as saying that we are not allowing the dollar to depreciate. One argument that Brazil has made – I think it is an important argument – is that part of the solution requires global coordination. No matter what are your views about that argument, at the national level you still have the problem of dealing with the pressures for appreciation. Two things are very important in avoiding the excessive appreciation. One is to provide much more support to monetary policy from the fiscal efforts, because right now monetary policy is



handling all of the pressure, and there is a limit to that. Monetary policy has to deal with inflation, and so it can exacerbate the currency pressures, because it raises interest rates bringing money in. So a general message we are giving is that the monetary policies of countries like Brazil, Colombia, Peru, and Chile are overburdened, they are taking much of the adjustment effort and they need to be complemented by a bigger fiscal effort. We know that countries near an election cannot solve the fiscal problem, but we all hope that we go back to this issue, because the balance between monetary and fiscal

needs to be redressed. The second message is that, to deal with issues of currency, you have to deal with a broader issue of how to make sure that all this money coming in does not create financial excesses in the domestic markets. So it is not just an issue of currency. The money comes in and appreciates the currency, it also comes in and generates very fast rates of expansion, pressures on the stock market and so forth. So we have to manage capital inflows not just in respect to the currency but in respect to the financial impacts as a whole. One the point we make is that Latin America has to engage much more vigorously in what is known as macro-prudential tools that mitigate the potential adverse effects of these capital inflows into the financial system. If we develop better macro-prudential tools I think that we will relieve some of the pressures of the currency as a side effect. So the fiscal contribution and the macro prudential agenda are two important aspects in the discussion of the currency appreciation.

**BET:** *Could you give an example of these macro-prudential tools?*

**de la Torre:** I'll give you two good examples. One, with which Brazil is very familiar with, is that when you see that capital inflows are transforming into fast credit growth, the Central Bank may raise the legal reserve requirement. In the past this was sometime seen as an abuse, now it is recognized as a prudential agenda, trying to avoid a credit bubble. Another tool much talked about are the countercyclical provisioning requirements, in which authorities request banks to accumulate more provisions to slow down the exuberance in the good times so that you have more ammunition to deal with the situation when the cycle goes down **BET**

*“To deal with issues of currency appreciation, you have to address the broader issue of how to make sure that all this money coming in does not create financial excesses in the domestic markets”*

# MULTIDIMENSIONAL POVERTY IN BRAZIL

By Guilherme Lichand

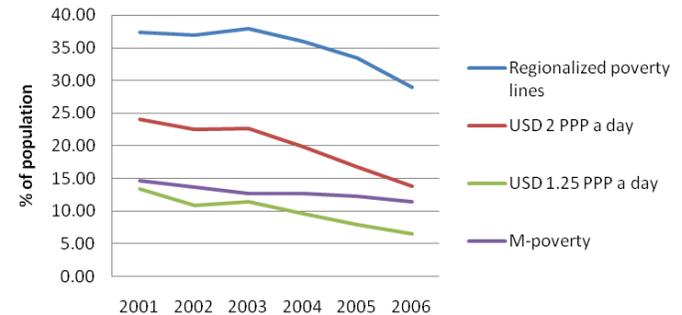
What does it mean to be poor in Brazil? Can we measure poverty just in terms of dollars a day, or should we also take other dimensions into account? How do different measures of poverty affect the design of social policies?

To try to answer these questions, this note calculates a multidimensional (M) poverty index for Brazil between 2001-2006<sup>1</sup>, and compares it with standard measures of income poverty. Our main result is that, while both standard measures of poverty and M-poverty have fallen in the period, the latter has displayed higher persistence. The qualitative dynamics are also different: M-poverty fall was more pronounced for the 2001-03 period, while income poverty declined faster from 2003 on.

From a policy perspective, two conclusions are worth highlighting. First, opportunities are powerful: while the 2002-2003 crisis in Brazil – a surge in inflation followed by a hike in interest rates - pushed some people back to income poverty, multidimensional poverty did not increase as a result. Hence, although it is hard to overcome deprivations, once achieved they are much less sensitive to economic downturns. Second, policies aimed at increasing the income of poorer individuals cannot work alone: M-poverty's faster decline until 2003 can be attributed to the rapid educational catch-up in the period, especially among rural households; in contrast, the relative pace of the reduction in deprivations slowed down during the latter period, in part because of the higher baseline, although there is still large space for improvement in access to public

*“While both standard measures of poverty and multidimensional poverty have fallen, the latter has higher persistence”*

Figure 1—Income-poverty vs. multidimensional-poverty



Source: Author's calculation based upon PNADs 2001 to 2006.

goods, such as water and sanitation.

Recognizing the need for a broader perspective on poverty, the Oxford Poverty and Human Development Initiative (OPHI) organized an effort to develop a multidimensional poverty index, able to account for the several deprivations that define an individual as poor. Economists have always recognized that poverty is not one-dimensional, and that restricting attention to income is reductionist; however, the simplicity, ease of comparability – across countries and throughout time – and the lack of subjectivity required to determine relative weights of poverty thresholds were argued to more than offset the disadvantages of the measure.

A preliminary version of OPHI's Multidimensional Poverty Index (MPI), intended as a complement to other poverty measures, has been just released, with interesting results: in Ethiopia, for instance, 90% of people are MPI-poor compared to the 39% who are classified as living in 'extreme poverty' under income terms alone. On the other hand, 89% of Tanzanians are extreme income-poor, but only 65% are MPI-poor. These differences are because 9 out of 10 Ethiopians are deprived in several

dimensions – including health, education and access to basic services and assets – , despite of the fact that 6 out of 10 have enough income to secure minimum caloric intake, while Tanzanians lack income but not as much access to those key dimensions.

The MPI brings together 10 indicators of health (child mortality and nutrition), education (years of schooling and child enrolment) and standard of living (access to electricity, drinking water, sanitation, flooring, cooking fuel and basic assets like a radio or bicycle). It is thus an extension of its predecessor, the UNDP's Human Development Index, which combined life expectancy, education (literacy + enrolment rates) and GDP per capita. The OPHI team devised the index so that it could be comparably calculated for the highest number of countries and with the highest possible frequency.

## Measuring MPI in Brazil

Since multidimensional poverty is defined at the household-level, information on all deprivations must be extracted from the same database. For the official index, researchers chose not to rely on household surveys, since they do not usually include information on health depriva-

tions, for instance. But turning to health surveys means being able to monitor poverty only at the sparse intervals in which these surveys are carried on. This also means that it is difficult to compare the multidimensional poverty trends with traditional poverty headcounts, which are based on household surveys.

To address this important comparability issue, we constructed a multidimensional poverty index for Brazil based on National Household Surveys (PNADs) data. This allows us to compare the traditional income-based poverty headcounts with the multidimensional one and to see if the latter can help formulate more comprehensive policy responses from poverty monitoring.

Of the dimensions originally included in the MPI, we cannot assess malnutrition (since PNADs do not ask about individuals' height and weight) and car or bicycle ownership. To compensate, we doubled the weight of child mortality<sup>2</sup>,

and replaced information on car ownership with that of mobile phone ownership, restricting the set of other assets analyzed to computer, fridge, refrigerator, radio and television. Though preliminary, estimates are transparent enough to allow for different criteria, according to researchers' interests. Also, we restrict attention to the poverty headcount, which is only a component of the official MPI<sup>3</sup>.

Headcounts are displayed in Table 1 (as a percent of total population). Income-poverty, calculated using IBGE-IPEA-ECLAC regionalized poverty lines<sup>4</sup>, is shown to have been reduced from nearly 37.3% in 2001 to 28.9% in 2006. From 2003 on (with the surge of Bolsa-Familia and of the minimum wage, along with a more recent rise in formality), income poverty falls very fast. From different starting points, the same time trend is documented for two other definitions of poverty – the USD 2 PPP per day and the USD 1.25 PPP per day: poverty

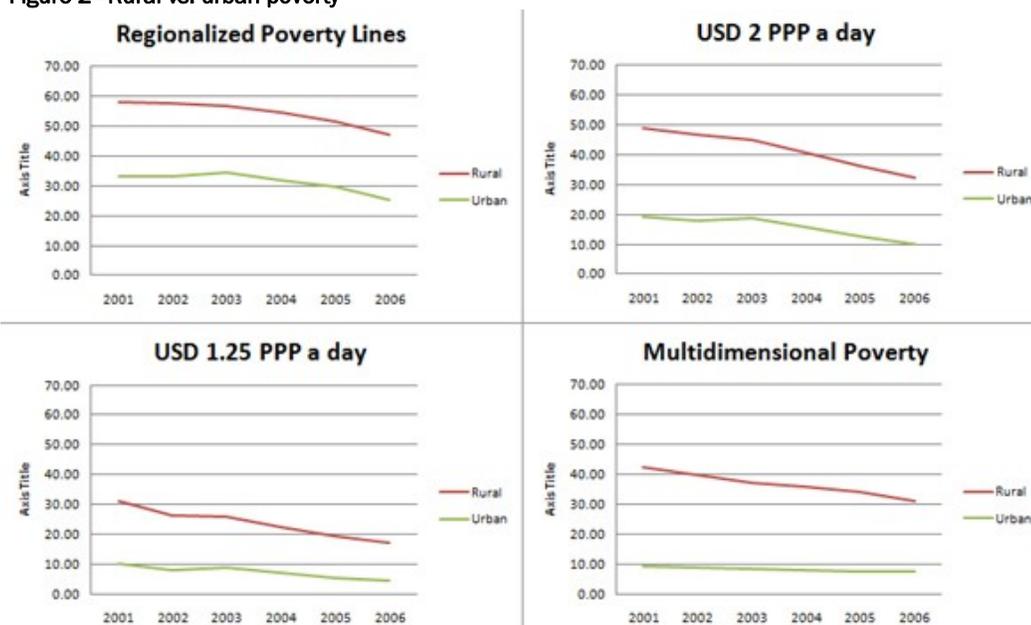
hovers around 23% and 11%, respectively, until 2003, when a sharp decrease takes place, leading the poverty figure to 13.9% and 6.5% of the population, an impressive reduction.

In face of the recent progress in poverty reduction, a relevant question is whether this extra-income and/or other public policies helped reducing deprivations faced by poor individuals to access key public goods. Calculations show that this was indeed the case, but at an uneven fashion: first, multidimensional poverty shows a much higher persistence in time, and second, the decrease in M-poverty is more pronounced for the 2001-2003 period, while the 2004-2006 is characterized by a steady, but slower reduction in overall deprivations.

Besides these differences, is it the case that poverty reduction has been homogeneous in urban and rural areas? Does that assessment vary according to each definition of poverty? Figure 2 shows

*“The recent progress in poverty reduction also helped reducing deprivations faced by poor individuals to access key public goods”*

Figure 2—Rural vs. urban poverty



Source: Author's calculation based upon PNADs 2001 to 2006.

*“One of the most interesting features that this alternative poverty measurement allows is to assess whether income-poor individuals are also multidimensionally deprived”*

that poverty is a lot higher among rural households and that poverty figures have somewhat converged, with rural areas experiencing a sharper reduction, according to every measure; on the other hand, the speed of such convergence widely varies with the definition of poverty at hand.

For instance, rural poverty reduction took place at a 33% faster rate than its urban counterpart using regionalized poverty lines, but at a 144% faster rate for the USD 1.25 PPP definition. M-poverty had the faster convergence (561% faster in rural areas), but this is also because urban poverty was already very low in Brazil in 2001: more than 90% of urban households had access to basic public goods, while more than 40% of the rural ones still lacked it. By the end of the period, more than 10% of rural households had experienced a sufficient decrease in deprivation so as to escape from M-poverty. Thus, the faster pace of M-poverty reduction until 2003 is explained by rural poverty decline, while urban poverty declined steadily throughout

the entire period.

One of the most interesting features that this alternative poverty measurement allows is to assess whether income-poor individuals are also multidimensionally deprived. Figure 3 exploits this decomposition, using the USD 1.25 PPP measure, which seems to best approximate its deprivations' counterpart.

One must realize that the trend for poverty subcomponents is what is behind the different behavior for the aggregate measures: if M-poverty and income-poverty move over time in different ways, this cannot be attributed to their intersection (blue segment), but rather to the behavior of the shares of the income-poor that are not M-poor (red segment) and to that of the M-poor that are not income-poor (green segment). Indeed, the share of those M-but not income-poor reaches its lowest value in 2003, later on hovering about a higher level – matching the behavior of overall M-poverty –, while the share of those income-but not M-poor only starts to fall consistently from 2004 on – while the same is true for

overall income-poverty.

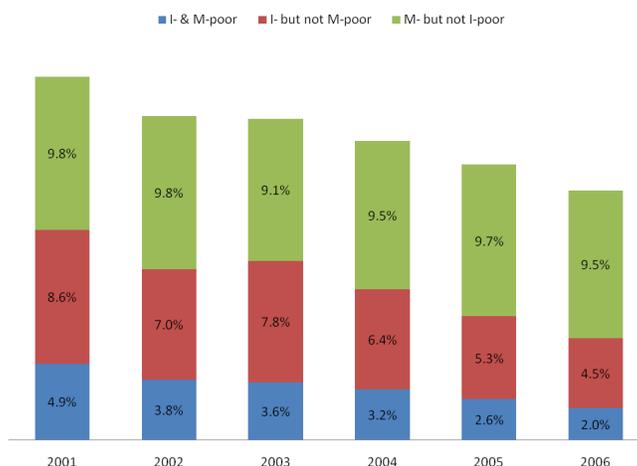
But what are the reasons for these differences? First, extreme poverty was being actively fought already by 2001, but the 2002-03 crisis hindered its reduction, bringing a relevant share of people back to income-poverty. Nevertheless, since M-poverty is much more time-persistent (it is more difficult to eliminate, but once overcome, it displays much lower sensitivity to the economic cycle), these people were not pushed back to M-poverty as well, which fell the most precisely during that period.

Second, the lower speed of M-poverty decline from 2004 on can be attributed to a combination of, on one hand, a true decreased speed of elimination of deprivations – also because of higher baseline access –, and on the other hand, to the faster pace of the reduction of extreme poverty, since, because of M-poverty higher resilience, it is the case that the extreme-poor go up one step a time: from both income- and M-poverty to M-poverty only, before being able to eventually escape overall poverty.

Finally, is it possible to map which deprivations drove M-poverty reduction in Brazil? A word of caution should be raised regarding this sort of decomposition: since poverty is defined at the household-level, it is better to assess the extent of M-poor experiencing each deprivation instead of just mapping average decline in deprivations, since those could have fallen disproportionately among those that were already out of poverty, thus with a limited contribution to poverty reduction. Figure 4 illustrates such decomposition for the period of analysis:

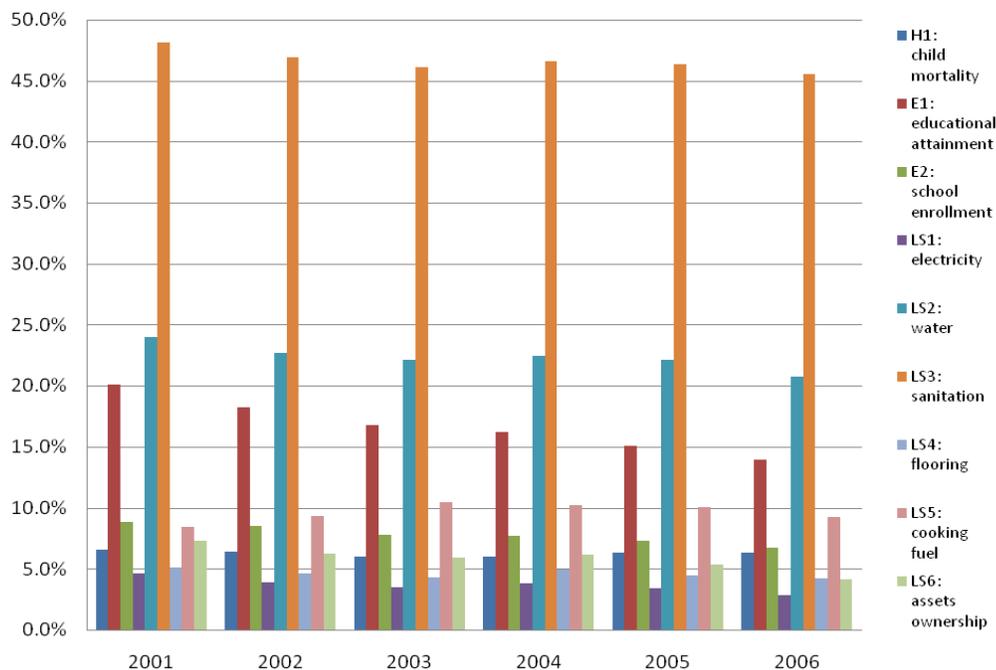
First, it is clear that the major

Figure 3 – Poverty components



Source: Author's calculation based upon PNADs 2001 to 2006.

Figure 4 – M-poverty decomposition (% of the M-poor deprived in each dimension)



Source: Author’s calculation based upon PNADs 2001 to 2006.

deprivations facing M-poor households are a lack of proper sanitation, access to drinkable water, and low educational attainment. Second, while the first two have been quite persistent features of multidimensional poverty through time, educational attainment has improved remarkably.

In particular, educational catching-up of lower income individuals takes place with a much higher speed in the 2001-03 period, especially in rural areas – making it a major candidate for explaining why M-poverty falls faster for the period. For 2004-06, it is asset ownership that improves faster. Taken together, these are evidence that income improvements have indeed allowed individuals to decrease deprivations, but that income alone cannot substitute for the provision of public goods and services. Moreover, while it is unfortu-

nate that a very high share of the poor do not have access to proper water or sanitation, there is a bright side of these figures: policies aimed at the poor can be extremely efficient if targeted at individuals deprived in these dimensions. This shows how multidimensional poverty can be a powerful complementary tool to traditional, income-based poverty monitoring [BET](#)

1. After 2006, it seems to be the case people answer differently to the PNAD’s question I use for tabulating child mortality, with very high figures for the years following 2007. For this reason, and since lacking alternatives for a health indicator (see footnote 2), the analysis was restricted to the 2001-06 period.

2. The only Health variable available for every survey year is child mortality at birth. Mal-

nutrition cannot be proxied by Body Mass Index (BMI) since height and weight are not part of PNAD’s questionnaire.

3. The other component is poverty intensity, measured as the weighted average distance from poor individuals to the deprivation line in each dimension.

4. Each poverty line is calculated with respect to the average price level prevalent at each region. The basic unit of consumption is a basket of goods that would allow a minimum caloric intake as set by nutrition standards.

5. As from James Foster’s presentation late August at the Workshop on Multidimensional Poverty Measurement organized by Jaime Saavedra at the World Bank, which laid the theoretical grounds for the multidimensional assessment of poverty.

***“Multidimensional poverty measurement suggests that policies can be especially efficient if targeted at poor individuals deprived of water and sanitation”***

## WHEN SOUTH MEETS SOUTH

By Ana Francisca Ramirez  
and Mauro Azeredo

Africa and Brazil are pushing the innovation frontier for South-South development cooperation. Instead of country by country initiatives, Brazil and African organizations – with the catalytic support of the World Bank – are seeking to engage a whole continent across agriculture, in a model that could be replicated by other countries and themes.

The first Africa-Brazil Innovation Marketplace is a broad Continental partnership with support from international partners to enhance agricultural innovation and development in Africa. This is the first major initiative coming out of the May 2010 Brazil-Africa Summit that brought more than 20 African Agriculture Ministers to Brazil.

The goal of the Marketplace is to “match” African researchers with Brazilian ones, to support research and development of ideas and partnerships. The matching process is followed by a competitive selection of the best proposals. The first awarding event happened in Brasília, on October 6-7, with more than fifty researchers from fourteen African countries and Brazil. The initiative will cost \$ 3 million over its three year initial period.

“This is a simple, effective mechanism that will result in enormous benefits not only for Africa, but also for Brazil, which will learn much from the Continent’s experience,” said the President of the Brazilian Agriculture Research Company (Embrapa), Pedro Arraes Pereira, during the event. He noted that, when Embrapa was created, Brazil’s agriculture was at a similar stage as Africa is today. In the relatively short span of 30

years, Brazil rose to be one of the world’s breadbaskets. “Brazil and Africa share many soil and climate conditions and have strong historic and cultural affinity. Our experience in tropical agriculture will be very helpful for the Continent to bridge the gap much more quickly,” said Arraes.

For the World Bank’s Director for Brazil, Makhtar Diop, the country is opening new ground in terms of South-South exchanges. “For many reasons, mainly practical, most of these partnerships have been between single countries up to now. Much can and has been accomplished that way, but development knowledge is all about scale – and Africa and Brazil are about as large and akin as it gets. Initiatives such as this will multiply results and impacts enormously.”

According to Diop, who is a Senegal national, agriculture is central to the social and economic development of Africa, and Brazil’s support in areas such as biofuels, agricultural cooperatives, land management, national research systems and commercial and family farming can help African nations in their efforts to achieve the Millennium Development Goals.

### An Africa-Brazil Partnership

The partnership was born out of discussions led by FARA (Forum for Agricultural Research in Africa), Embrapa, the World Bank Group and



DFID, in context of the Brazil-Africa Summit, and now counts with support from IFAD (International Fund for Agriculture and Development) and ABC (Brazilian Cooperation Agency). “It is a great achievement to be here,” said FARA’s Deputy Executive Director, Ramadjita Tabo, for whom Africa needs high level operational and strategic partnerships. According to him, the training of African researchers made possible by the Marketplace will contribute to develop the agriculture of the continent.

The technical partnership seeks to respond to FARA’s strategic needs, to which Embrapa matches its world-class expertise. Out of 61 proposals submitted to this first edition of the Innovation Marketplace, the following 6 projects were selected for funding:

### Exchanging Knowledge, Experience and Expertise

Brazil’s Agriculture Minister Wagner Rossi was impressed by the strong demand from African countries for Brazil’s agricultural knowledge. “In any country, agriculture is the basis for further economic and social improvements. This is especially true in African countries, which are in a quick modernization process

*“This is a simple, effective mechanism that will result in enormous benefits not only for Africa, but also for Brazil, which will learn much from the Continent’s experience”*

and organizing themselves to excel in the sector.”

The Innovation Marketplace supplied the much needed platform for participants (researchers in agricultural innovation) and institutional partners to consolidate and build on the dispersed dialogue between Africa and Brazil.

The learning experience was based on two-way exchanges, fostered by interactive activities such as proposal ‘speed’ rounds and peer assistance in the proposal and pre-proposal stages that allowed African and Brazilian participants to improve their projects. Activities focused on direct peer-to-peer learning, in which the facilitators’ role was secondary.

“In a way, South-South is peer-to-peer learning blown to a global scale,” said Ethel Sennhauser, World Bank Agriculture Sector Manager for Latin America and the Caribbean. “It is as innovative as the extent to which the so-called recipient is a part of the knowledge building team. In this sense, the Marketplace has proven to be the perfect instrument to boost innovative interactions across continents.”

**Knowledge Match-Making Bank**

The Marketplace is also proving to be an opportunity for the World Bank Group to

**Sharing Experiences in Judicial and Public Sector Reform**

Since 2005, Brazil has undertaken extensive and successful judicial reforms that have contributed substantially to the improvement of citizen participation, investment climate and poverty alleviation. The country has also initiated many successful south-south cooperation initiatives in the area, in particular with Latin America and Africa.

The president of the Supreme Court of Brazil, Cezar Peluzo, came to the Bank in November to showcase some of these experiences and exchanges, and ask for the Bank’s support in bringing the Brazilian knowledge to even more countries. During the Law, Justice and Development Week, Mr. Peluzo shared insights and experiences on the modernization of Judiciary with peers from Angola, Mozambique, Cape Verde and Senegal.

The audience also got a unique perspective from the Attorney General of the State of Minas Gerais of how sub-national level public sector management reforms affect the judiciary. Under the celebrated “Management Shock” program, Minas did a series of legal, administrative and structural changes to transform the state’s public administration, including its environmental management system.

sharpen its role as a knowledge match-maker and to explore new ways of adding value to a mechanism under construction. The World Bank Group is uniquely positioned to match a country’s (or continent’s) demand with another country’s supply of expertise.

“The case of the Africa-Brazil Innovation Marketplace has shown that organizations like Embrapa and FARA value the Bank’s role of convening, monitoring and safeguarding project implementation,” said Willem Janssen, World Bank Lead Agriculturalist and Task Manager of the partnership with FARA and Embrapa. “The

Bank Group has a clear role to play as a match-maker and a facilitator, but also as a repository of knowledge and exchanges such as this, to preserve and disseminate innovations and lessons learned.”

**Replicability**

The approach piloted in Brazil could easily be replicated for other topics or countries. Central to its success is to bring together leading organizations from both sides that are able to define the scope of the knowledge exchange and that have the convening power within their country or region to generate the motivation to participate. The smart use of the initiative’s website allows matching partners and initiating collaboration. In this way, South-South collaboration can be moved from an incidental, ad-hoc initiative to a more programmatic, “continental” approach, where a large number of partnerships are being established and supported over a number of years 

*“The approach piloted in Brazil could easily be replicated. Central to its success is to bring together leading organizations that have the convening power in their country or region”*

**Africa-Brazil Marketplace 2010 Winning Projects**

**Burkina Faso** Nutritional Potential of Native Food Tree Species

**Kenya** Rehabilitation of degraded rangeland

**Kenya** Sweet Sorghum varietal adaptation for ethanol

**Mozambique** Knowledge sharing for natural resource management

**Tanzania** Cotton varieties and pest management in Tanzania

**Togo** Pesticide leaching in coastal Togo

# RURAL CREDIT AND AGRICULTURAL PRODUCTION AND PRODUCTIVITY

By Abdoulaye Sy and Barbara Farinelli

Rural credit programs have been a popular policy tool for governments to stimulate agricultural development and lift rural populations out of poverty. In countries such as Brazil, where market interest rates are high, rural credit programs are often heavily subsidized and this, according to many critics, generates allocative inefficiencies which undermine the ultimate objectives of improving agricultural productivity, raising output, and the income of rural populations. Has this been the case in Brazil? By how much did rural credit contribute to the expansion of agricultural production, and how high are the returns to rural credit in Brazil?

In this note, we present some preliminary findings that shed some light on these important questions. More precisely, we assemble information on rural credit and agricultural production for the major crops in Brazil during 1993-2004, by mu-



nicipality<sup>1</sup>. The figure below shows total rural credit and the value of agricultural production. The graph suggests a strong association between rural credit and the increase in agricultural output between 1993 and 2004. We investigate this relationship econometrically and control for factors that may influence both rural credit inflow and agricultural production in a municipality<sup>2</sup>.

We first investigate the role of two main factors that may influence the inflow of rural credit in a municipality: the size of the rural population

and poverty rates. We find that overall, the size of the rural population (1991 population) explains about 85 percent of differences in credit inflow across municipalities within the same state during the period 1993-2004. Moreover, everything else equal, poorer municipalities (1991 poverty rates) received more credit. We find that farmers in the poorest municipalities (top quintile of the distribution of poverty rates) received on average 30% more credit than farmers in the richest municipalities. This effect corresponds to about 400 reais more per rural population per year. The result is

*“Rural credit programs are often heavily subsidized and this, according to many critics, generates allocative inefficiencies which undermine the ultimate objectives of improving agricultural productivity”*

Figure1: Rural Credit and Crop Production

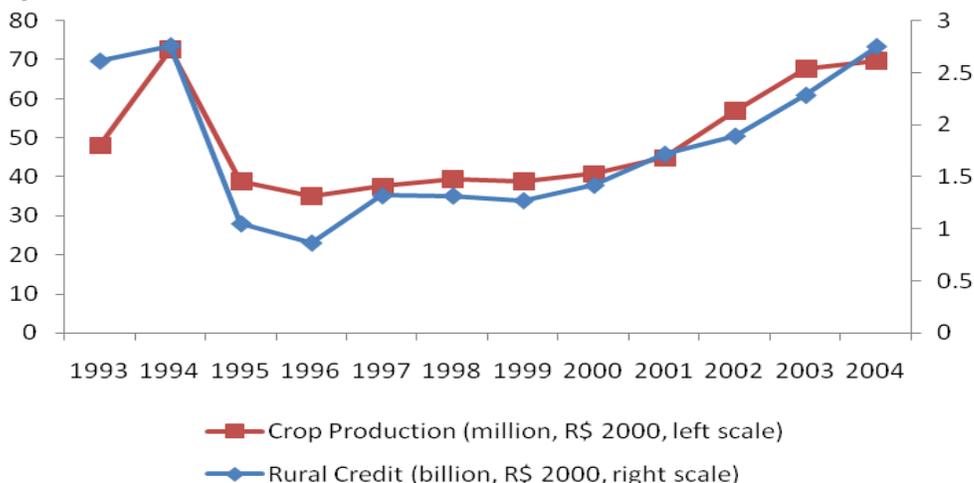


Table 1: Average Returns to Credit, 1993-2004

By Quintile of poverty in 1991		By regions	
1st	0.103	North	0.373
2nd	0.229	South	0.264
3rd	0.300	Center-West	0.225
4th	0.171	Southeast	0.179
5th	0.135	Northeast	0.100

consistent with the introduction of rural credit programs targeted to smaller and poorer farmers (e.g. PRONAF in 1995).

Our main result is that average return to credit appears to be high but these returns are very different across municipalities and regions. Average returns to rural credit are obtained by multiplying the elasticity of agricultural production with respect to credit and the change in credit (as a percentage of average credit) during the period 1993-2004. Our estimates for the elasticity of agricultural production with respect to credit show that a one percent increase in rural credit raises the volume of agricultural production by about 42 percent, the value of production by 34 percent and yield by 22 percent. Using these elasticities we find that the average return to rural credit was about 19 percent during the period 1993-2004. The results also suggest that average returns to rural credit were larger for municipi-

palities in the middle of the income distribution (1991 poverty rates) and in the Northern (37 percent), Southern (26 percent) and Center-West (22 percent) regions.

Our analysis suggests several results of importance for understanding the role of rural credit on the performance of Brazil's agricultural sector. First, we found that the flow of rural credit is relatively well targeted, with municipalities that were initially poorer receiving a higher share of total rural credit, a result consistent with the introduction of more targeted lines of credit such as PRONAF. Second, the return to rural credit may be as high as 30 percent, suggesting that there is scope for reducing the subsidy rates in Brazil's rural credit system. Reduction in subsidy rates will materialize in increases in the number of farmers who could gain access to rural credit programs and consolidate its role as an important rural poverty reduction strategy for Brazil 

1. Municipal-level data on crop production comes from the Pesquisa de Produção Agrícola Municipal (PAM - Municipal Survey of Agricultural Production). The unit of data collection in the PAM is crop type, and, unlike other annual surveys, the PAM does not attempt to follow the same farmers over time. Information on rural credit is from the Anuário do Crédito Rural (Annual Rural Credit Summary) of the Brazilian Central Bank.

2. An instrumental variable strategy is implemented using "initial" differences in the size of the rural population to predict rural credit inflow in a municipality for a given year. More specifically, the instrument is the product between the total credit inflow in a state in a given year and the share of rural population in the municipality in 1991.

***“Reduction in subsidy rates will materialize in increases in the number of farmers who could gain access to rural credit programs and consolidate its role as an important rural poverty reduction strategy for Brazil”***

## IMPROVING OPPORTUNITIES IN BRAZIL

By José Molinas

In recent years, Brazil has made impressive progress in reducing poverty, but severe inequalities still limit the opportunities of many of its citizens, due to circumstances beyond their control. It's an unfortunate fact that a Brazilian child growing up in a rural household is less likely to have access to water and sanitation services needed for a healthy development; and a boy born in a household with illiterate parents is less likely to attend a high-quality primary school than a girl living in a household with parents with complete secondary education. These types of inequalities are a common challenge to many developing countries. In her first speech, President-Elect Dilma Rousseff stated that ensuring equal opportunities for all Brazilians would be one of the key objectives of her administration.

To help better direct social policies aimed at overcoming these unequal opportunities, the World Bank undertook a Brazil study using the Human Opportunity Index (HOI). The HOI estimates how personal circumstances for which an individual cannot be held accountable—like birthplace, race, gender, or socioeconomic background—affect a child's probability of accessing basic services that are necessary to succeed in life, like education, health care, adequate nutrition or running water.

The HOI combines in a single measure the social progress toward providing universal coverage of basic services, and also how equitably these services are distributed. That is, the HOI is an equality of opportunity-adjusted coverage rate of access to key services. Using this information, policymakers can design and target basic services more equitably and pursue the goal of giving all citizens equal opportunities, regardless of their background, since the beginning of their lives.

Our research<sup>1</sup> reports on the evolution of the HOI in Brazil between the late 1990s and the late 2000s in education, health

and housing services, using data from two major household surveys (PNAD and PNDS) and standardized learning tests (SAEB). In broad terms, we find that Brazil is at or near universal provision (HOI of 100) in a number of key human opportunities such as school attendance and child survival to age 5, but may take generations to achieve full coverage in others—like adequate learning in school and coverage of water and sanitation services—if current trends continue.

### Opportunities in Education

Education in Brazil is characterized on the one hand by good opportunities to attend school, but limited opportunities to progress on time and to learn adequately. The country performs strongly in providing equitable opportunities for children to attend basic education. The HOIs for school enrollment for children aged 5-14 and for children not working are both expected to be universal by 2017.

On the other hand, Brazil's HOIs for progressing through school and for acquiring adequate learning are much less promising. The index results for completing 4<sup>th</sup> and 8<sup>th</sup> grade on time were only 63 and 44 in 2009, respectively, and the current rate of change indicates that universality would take roughly three decades. Learning HOIs are worse, with progress indicating that universal adequate knowledge of mathematics (HOI of 22) and reading (HOI of 27) will not be achieved within this century without policy changes.

### Opportunities in Health

Human opportunities for a healthy life in Brazil are characterized by excellent opportunities for child survival, good opportunities for adequate nutrition, and very limited opportunities for an healthy start in life. Brazil has made remarkable progress in



providing the bundle of services necessary for child survival, with neo-natal, infant and under five child survival HOIs projected to be universal by 2015 at the current rate of progress.

The HOI for adequate height/age ratio among children under five is relatively high, and could be close to 100 by 2020. However, the HOI for exclusive breast feeding for children under six months—a good practice for child wellbeing—is low and expanding slowly, with a projected 43 years needed to achieve universality. More troubling, the HOI for adequate weight at birth has decreased slightly in recent years, which indicates inadequate maternal nutrition and pre-natal check-ups.

### Opportunities in Housing

Housing opportunities in Brazil are very good for accessing electricity, but much less promising for the provision of water and sanitation services. Brazil children's have almost universal access to electricity, but equitable progress to universal access to adequate water and sanitation is poor. The HOI for access to electricity is already 98 and the recent pace of expansion is of 1 percentage point per year. However, it will take more than 30 years, maintaining business as usual, to achieve universal access to adequate water (HOI of 50 and changes at 1.3 percentage points per year) and sanitation (HOI of 56 and changes at 1.4 percentage points per year).

*“The Human Opportunity Index estimates how personal circumstances not under one’s control affect a child’s probability of accessing basic services that are necessary to succeed in life”*

### Sources of Exclusion

Defining which circumstances are the most important for the exclusion of children from access to basic opportunities is critical to help policymakers improve the equitable targeting of services needed to expand the HOI. In Brazil, socioeconomic status, gender and rural-urban location appear to play the most important role in defining a child's access to basic opportunities. Family structure and race appear to play a relatively smaller role.

- Socioeconomic status (proxied by parental education, income or wealth) is one of the main sources of exclusion in accessing education, housing, and health services. For example, children with the 10 percent lowest probability to be in pre-school, to complete 4<sup>th</sup> grade on time, to have access to water, sanitation, and electricity, and to be well-nourished have parents with less than three years of education. By contrast, children with the 10 percent highest probability of accessing these services have parents with more than 13 years of education, on average.
- Child gender is particularly important in accessing education services. The vast majority (80 percent) of children least likely to complete 8<sup>th</sup> grade on time are boys, compared to only a third of the children most likely to complete on time.
- Rural-urban location is one of the main sources of exclusion in accessing housing services. All children least likely to access to electricity, water, and sanitation live in rural areas, but no child from the most likely group to access these services does.

### Source of Change in Brazil's HOI and Policy Implications

Changes in the HOI over time arise from either changes in the

distribution of circumstances themselves—that is, an increase or drop in the number of children in a disadvantaged circumstance group (*composition effect*)—or by changes in coverage rates of the different circumstance groups (*coverage effect*). Greater weight to the coverage effect indicates the relatively greater role of sectoral service policies in changing the provision of basic opportunities.

The composition effect has been the main driving force in the changes in access to electricity (55 percent), water (89 percent) and sanitation (79 percent). For services related to neo-natal, infant, and under-five survival rates, the composition effect accounts for between 51-54 percent to HOI expansion, as well as 79 percent to the expansion of the height/age ratio HOI, probably the most important indicator of adequate child nutrition.

Changes in coverage rates have driven expanding HOIs for education and for infant breastfeeding. The coverage effect accounts for between 51-98 percent to the expansion of the different HOIs for education, and 87 percent to the expansion in the HOI for infants fed exclusively by breastfeeding. However, it also accounts for all the decrease of the HOI for children with adequate weight at birth.

The coverage effect can be further decomposed into changes due to equality of opportunity (*equalization effect*) and due to average coverage rates (*scale effect*). This decomposition highlights whether sectoral policies emphasize a more balanced expansion of coverage across all groups, or whether they focus more on equity by favoring opportunity-vulnerable circumstance groups. In all cases where the coverage effect predominates in Brazil, the scale effect has been most prevalent, with the equalization effect (i.e. reduction of inequality of opportunity) accounting at most for around 20 percent of the observed changes.

These results make it clear that

the expansion of the HOI can be accelerated by more effective sectoral policies, especially in the housing and health sectors where the coverage effects seem to play less of a role. One way sectoral policies can be more effective in expanding the HOI is to improve targeting to vulnerable groups as service provision expands.

### Concluding Messages

The results of the HOI study on Brazil present a mixed picture of the country's progress toward ensuring that its children have access to basic human opportunities, irrespective of circumstances such as race, gender, socioeconomic background or place of birth.

On the positive side, Brazil has made excellent progress in a number of areas, notably in achieving near-universal coverage of the bundle of services required to ensure early childhood survival, access to electricity, and attending basic education. However, the HOI for adequate weight at birth has decreased slightly, and indicators for equitable access to water, sanitation and high-quality education services are all poor and improving slowly.

Decomposing changes in the HOI makes it evident that sectoral policies have played an important role in expanding some opportunities such as education but not in housing and health services. And even where sectoral policies have had an impact, they have been mainly through expanding coverage for all rather than targeting the most vulnerable groups. This indicates that better targeting could greatly accelerate improvements in the equitable distribution of basic opportunities to Brazil's children as the country progresses toward universal provision [BET](#)

1. José R. Molinas Vega  
Ricardo Paes de Barros: Human Opportunities for Children in Brazil: An Assessment with the Human Opportunity Index, World Bank Brazil Working Paper Se-

*“Better targeting could greatly accelerate improvements in the equitable distribution of basic opportunities to Brazil's children”*

## ROUSSEFF'S POLITICAL AND ECONOMIC CHALLENGES

By Denise Marinho

David Fleischer has been teaching political science at the University of Brasília for over 40 years, where he is now Professor Emeritus. An American-born naturalized Brazilian, Fleischer is a familiar name to anyone interested in understanding Brazil's complicated political and economic scenario. His interviews and weekly Brazil Focus reports are eagerly used by analysts and policymakers around the world for insights on the country.

In this exclusive interview, Professor Fleischer dissects some of the political and economic challenges and opportunities for the Rousseff government. Following are highlights from his talk with BET's Denise Marinho.

**BET:** *What will be Dilma Rousseff's Government main challenges?*

**David Fleischer:** The main and first challenges are in infrastructure. The air transportation system is at its limit and there are other infrastructure problems like ports, highways and railways, and, of course, electricity.

Other priorities include fiscal and tax reforms, which is mission impossible, because no country has ever undertaken a complete tax reform all at once. They've done in pieces. There is heavy pressure coming from the private sector to reduce the tax burden, to spread it out a little more, to go after tax evaders.

There is also the need to reexamine social security, especially in the private sector, and of course the political reform in the agenda. The other issue is to look at labor legislation reforms, but the objective is to reduce the overhead cost. Dilma talks about *desoneração*, which does not mean flexibilizing or changing the



Fleischer: new president may adopt a more pragmatic shift foreign policy

Photos: Daliane Souza/Unb Agência

*“The new president’s main and first challenges are in infrastructure. Other priorities include fiscal and tax reforms, which is mission impossible”*

labor laws but rather reducing the levies and contributions that businesses have to make on their payrolls.

She had also talked about reducing poverty further. Another thing she talks about is reducing the debt to GDP ratio down to 30% from about 42%.

Brazil has the highest real interest rate in the world, therefore it is very attractive to hot capital. However, foreign capital is needed to finance Brazil's large current account deficit.

**BET:** *What role do you think President Lula will play in her administration?*

**Fleischer:** I think Dilma will try to make it her own Government, with her own brand. Lula's role is the big question.

He apparently turned down some possibilities in Unasul and FAO. There is the Lula Presidential Institute that will be formed and will concentrate in working with Africa and Latin America.

But Lula has said he wants to stay in Brazil and work very closely with the Government to help approve the reforms.

**BET:** *Some analysts expect greater difficulty for Dilma achieving a stable support base in Congress, what is your*

*view?*

**Fleischer:** In principle, Dilma will have better and stronger majorities in both houses of the Congress, especially in the Senate, than her predecessor had. But the problem is maintaining that majority cohesively voting with the Government.

It is going to take a lot of political activity to maintain this functioning. The governing coalition has to be well-attended by Dilma's Government, that means appointments and also budget distribution.

I think the opposition will be more pragmatic in presenting alternatives rather than just saying “no”. Let's not forget, however, that the opposition controls the majority of Brazil's state GDP. But the opposition in some small states is heavily dependent on Federal Government funds.

So negotiations will be very important, especially if the Congress starts to deliberate on tax or fiscal reforms, in which state governors will be very active players as will some mayors.

**BET:** *What are Dilma's main political challenges?*

**Fleischer:** In my view two: how to manage and dialogue with

the opposition and how to manage the coalition, especially the PT and the PMDB, which are the two largest parties in Congress as well as the main parties in her coalition.

Furthermore, many people inside PT think that they will have more influence over Dilma than they did over President Lula. Lula was much larger than the PT, so he could tell the PT what to do, not vice-versa.

Then there are other parties that have expanded, like the PSB, which now have more governors, more senators and now more deputies. And it will probably pressure for more political appointments and resources.

Finally, Dilma will have to be careful with the PSB, because the party, although supposedly a very strong ally, has its eyes on the 2014 election. There are some indications that Eduardo Campos, the reelected Governor of Pernambuco and PSB leader, may be articulating with PSDB's Aécio Neves.

**BET:** *What will be the future of the opposition under Dilma's administration?*

**Fleischer:** The Democrats are in disarray. Whether Aécio Neves will be able to refund PSDB, as he says he will, is a mystery. If he cannot do it, he may form a new party and take half of PSDB with him.

Refunding PSDB means taking the leadership away from São Paulo. Apparently, José Serra will be the president of the Teotônio Vilela Foundation, PSDB's think-thank.

Geraldo Alckmin, the newly-elected Governor of São Paulo, Brazil's most important and rich state, is not a radical politician and he is open to negotiations. However, he is leading a group of states to try to pressure for renegotiation of the debt with the Federal Government, putting Dilma in a very difficult position.

**BET:** *What will be Dilma's agenda in the foreign arena?*

**Fleischer:** Supposedly, Dilma's foreign policy will be more moderate, more pragmatic, less ideological, and concentrated more on resolving economic problems.

Lula's foreign policy became very ideological and very much the foreign policy of the PT and not that of the Brazil. So that could be a tilt.

**BET:** *How do you see her relationship with the multilateral*



*agencies?*

**Fleischer:** This relationship has already been changing and has to do with the new G20. The membership of emerging nations and their voting weight within the IMF is changing. Whether it will change even more, we do not know. The same happens with the World Bank.

I believe Dilma will continue

Brazil's efforts to lead the emerging countries in the G20 for more voice and participation.

She also will probably try to continue the negotiations at the WTO, the Doha Round, and that will be very important for her to have a more active conversation with Obama and other Governments to try to seek out an agreement.

How she will handle Latin America, with Venezuela, Cuba, Bolivia and Ecuador is another question. Maybe the ideological approach may be reduced a little. The question with Iran will probably be shifted to a lower status.

There is a new trade agreement being built which should be, in my view, very interesting: a full trade agreement between Brazil and Mexico. If that is concluded, it would give Brazil a different access to the U.S. and Canada, via Nafta. That would not be just trade and tariffs, but it would represent investments.

**BET:** *Will she continue the Security Council drive at the United Nations?*

**Fleischer:** That will continue because it is a high priority in Brazil's foreign policy and has continued to be so during Lula's Government.

U.S. President Barack Obama supported India, and then he visited Japan and supported Japan for the Security Council. There may be a Dilma-Obama encounter in Washington D.C. next December. And Obama would like to visit Brazil, maybe in the first half of 2011. So that might be a subject on the agenda **BET**

*“It is going to take a lot of work to maintain Rouseff's political base functioning. The coalition has to be well-attended with appointments and resource distribution”*



**The Quarterly Knowledge Report is a publication of the World Bank**



opportunities for all

Sign up to receive BET reports:  
betmail@worldbank.org

**Contacts:**

Tito Cordella

Mauro Azeredo

WB Link: 5761-1000

Ph.: +55 61 3329-1000

**BET Publications**

**BET Daily Report:** the most important daily economic news and indicators about the Brazilian economy [*internal*].

**Brazil Monthly Report:** updated information on economic developments, policy challenges, and economic trends [*internal*].

**Quarterly Knowledge Report:** information about the Bank's analytical work and short knowledge pieces on policy relevant questions.

The Quarterly, Monthly and Daily Brazil reports are in the Brazil Intranet:

<http://go.worldbank.org/EX2K94L7V0>

## EDITORIAL

(CONTINUED FROM PAGE 1)

progress over the years in several key areas, which has left gaps in development that loom increasingly large over the country's future prospects.

For example, now that almost all children attend basic school, the need for greater access and quality in secondary education has become urgent and crucial. There is an evident service gap between basic education and university that needs to be bridged to empower tomorrow's generation to go beyond the achievements of this one. The same is true about job training, health services – where the population has little access to life-saving intermediary care, and in issues such as formal employment, pensions and regional and social inequality – where Brazil remains very much divided between the rich and the poor.

These “missing middle” challenges can be emblematically embodied by Brazil's middle class, which, despite the recent growth, remains quite under its potential in terms of size and services it has access to.

This is a quintessentially middle income development agenda, and Brazil certainly brings a strong development momentum into it. The unifying factor is knowledge - central at the federal, state or municipal levels. As a very decentralized country, with different demands from the federal, state and municipal levels, Brazil is a unique sounding board for middle income country innovation and service delivery.

Some of the Bank's contributions to this agenda will be discussed during the Brazil Knowledge Day, next December in Washington. This issue of the Quarterly also touches on a few of these issues, which are representative of the large complementary analytical program demanded by a sophisticated client.

Brazil has reached a different and higher stage in its journey to become a developed country. It is now turning its efforts to ensure that everyone benefits from the new opportunities and growth that the country is generating. Addressing the “missing middle” issues may be the most efficient way to do this and boost development gains.

*Makhtar Diop*  
Brazil Country Director

## IN THE LOOP

### Some of the quarter's noteworthy events

#### Events

- **International Seminar on Policies to Handle Climate-Related Natural Disasters** with Rio de Janeiro Governor Sérgio Cabral—November 22, Rio de Janeiro
- **Strengthening Carbon Market Institutions BM&FBovespa**—November 12, São Paulo
- **Brazil Judicial Reform: Challenges and Opportunities for South-South Cooperation** with Supreme Court President Cezar Peluzo—November 10, Washington
- **Launch of the Brazil Early Childhood Network**—November 9, Brasília
- **Brazil BBL: “The Pre-Salt Oil Reserves”** with Augusto Mendonça—November 4
- **First Africa-Brazil Agriculture Innovation Marketplace**—October 18, Brasília
- **Brazil BBL: “A Strategic View to the Outcomes of the October 3 General Elections”** with Christopher Garman—October 14
- **Launch of the Flagship Report Natural Resources in Latin America and the Caribbean—Beyond Boom and Bust**—September 13, São Paulo

#### Projects Approved

- **Integrated Health and Water Management Project (SWAp)**—\$ 60 million, November 2
- **Integrated Solid Waste Management and Carbon Finance Project**—\$ 50 million, November 2
- **Reforestation with Native Species Around AES-Tietê Reservoirs (CF)**—\$ 4.9 million, September 29
- **São Paulo Trains and Signaling Additional Financing**—\$ 112.9 million, September 21
- **Second Bolsa Família Project**—\$ 200 million, September 16
- **Santa Catarina Rural Competitiveness**—\$ 90 million, September 2
- **Rio de Janeiro Public Sector Modernization**—\$ 18.7 million, August 26
- **São Paulo Feeder Roads Additional Financing**—\$ 326.8 million, August 3