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Executive summary

- Main findings and key recommendations
Bolstering confidence through prudent macro policies

Rising expenditures have led to a primary fiscal deficit

Brazil has become one of the world’s leading economic powers and has lifted millions of people out of poverty. Macroeconomic stability has been a crucial factor behind this success, but fiscal performance has deteriorated recently and inflation has risen markedly. The fiscal adjustment and the tighter monetary policy now being put in place will help to strengthen confidence. More medium-term constraints, however, are mainly of a structural nature and Brazil should build on its remarkable social and economic progress by implementing the structural reforms needed to sustainably raise living standards for all.

The industrial sector could play a key role for boosting productivity

Labour productivity growth has been slow

Economic growth will need to come increasingly from productivity, as demographic changes will make raising labour participation increasingly more difficult. The industrial sector, where a few key structural reforms could unleash significant unexploited potential, can play a leading role in this respect. Currently, a fragmented indirect tax system, insufficient infrastructure, weak competitive pressures and low integration into international trade are holding back Brazil’s industry, which has not benefited enough from the global trends that have shaped industrial production elsewhere.

Improving public healthcare is crucial for reducing inequalities and enhancing wellbeing

Life expectancy at birth

Significant progress has been made in raising health, due in large part to universal public healthcare. However, inequalities in access persist as waiting times for specialised medical services are long and regional disparities in the public system are significant. A complex governance structure involving several levels of government is complicating the efficient provision of healthcare. Stronger efforts to collect performance indicators, more use of service delivery targets and stronger co-ordination mechanisms could lead to significant improvements. As the population ages, significant challenges related to the provision of long-term care services for the elderly should be anticipated now.
Main findings and key recommendations

<table>
<thead>
<tr>
<th>Macroeconomic policies</th>
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<tbody>
<tr>
<td>The fiscal position has deteriorated and long-term fiscal challenges arise from a rapidly ageing population. Implement the fiscal adjustment in line with medium-term objectives, including a stabilisation of gross debt. Gradually raise the retirement age and index pensions to consumer prices rather than the minimum wage.</td>
</tr>
<tr>
<td>Inflation has risen above the tolerance band, which could undermine the credibility of the Central Bank. To increase policy effectiveness, adjust the directed lending rate in line with the monetary policy rate. Establish fixed-term appointments for the Central Bank governor and the members of the Monetary Policy Committee.</td>
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<table>
<thead>
<tr>
<th>Boosting industrial performance</th>
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<tbody>
<tr>
<td>Taxes are high and compliance costs generated by a fragmented system of indirect taxes are large. Consolidate indirect taxes at the state and federal levels and work towards one value added tax with a broad base, full refunds for input VAT paid and zero-rating for exports. Reduce trade protection steadily by lowering tariffs and scaling back local content requirements. Strengthen competition by streamlining regulation on product markets and implementing planned reductions in entry regulations.</td>
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<tr>
<td>High trade protection and weak competitive pressures have been holding back productivity gains and the integration of the economy into international trade.</td>
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<tr>
<td>Infrastructure bottlenecks drive up transport and logistics costs for industrial companies, in particular with respect to industrial exports. Improve the technical capacity and planning for infrastructure concessions. Elaborate more detailed tender packages prior to launching tender calls.</td>
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<tr>
<td>Difficulties in hiring high-skilled workers hold back productivity growth. Further expand the participation in vocational training to alleviate skill shortages for technical workers.</td>
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<th>Improving public healthcare services</th>
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<tr>
<td>Public healthcare services are facing severe capacity constraints and are unevenly distributed across the country, often reflected in long waiting times for specialised medical services. Enhance spending efficiency, including by developing a more explicit definition of what is covered by the public healthcare system. Raise funding for public healthcare. Implement targets for expanding specialised medical services to reduce waiting times. Train more doctors and nurses and strengthen incentives to reduce geographic imbalances. Improve the collection of performance indicators and enhance the use of benchmarking and incentive-based mechanisms, including pay-for-performance schemes.</td>
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Develop clinical guidelines for the choice of cost-effective drugs, set reference prices for all drugs more in line with international price comparisons and define an exclusive list of reimbursed medicines.

Many healthcare services that are currently provided in hospitals could be provided more cost-efficiently by strengthening primary care services, particularly for patients with chronic conditions. Shift the emphasis away from hospital care and care services.

Provide more long-term care services, especially home care, under the public healthcare system.
Assessment and recommendations

- Macro-economic policies to bolster confidence
- Sustaining future growth
Brazil has become one of the world’s leading economic powers. Since the achievement of macroeconomic stability in the mid-1990s, the economy's growth has outpaced the OECD area and unemployment has been low. Labour market informality has declined and growth has become both more inclusive and more sustainable. Large parts of the population have gained access to better education, and health indicators have improved remarkably. Millions of Brazilians have been lifted out of poverty, and a whole new middle class has emerged. Institutions have strengthened, as reflected by decisive judicial action following recent corruption allegations.

Brazil is now at a turning point. As the tailwinds from high commodity prices have weakened permanently, improving domestic policies will be more important than before. Over the last few years, bottlenecks have emerged, mostly on the supply side of the economy. Resuming the convergence with advanced economies, while continuing to reduce poverty and inequality, requires a three-pronged strategy:

- Fiscal and monetary policies will need to stabilise debt and reduce inflation, and, in doing so, to restore the strong reputation for sound policy that has been established over many years.

- It is crucial to raise productivity, as weak productivity is the main reason why GDP per capita levels are lower than in OECD countries (Figure 1). The industrial sector will play a leading role in this respect due to its large untapped potential for productivity improvements, and Chapter 1 will discuss policy options to boost the performance of the industrial sector.

- The remarkable progress in social policies and public services needs to continue. Despite its huge progress, Brazil performs below OECD countries but similar to or better than

Figure 1. **Stronger growth will require raising productivity**
Labour productivity^1 in thousands of USD at purchasing power parities

1. Labour productivity calculated as real GDP at chained PPPs (in thousands of 2011 USD) divided by employment.

StatLink http://dx.doi.org/10.1787/888933282493
other Latin American countries in many areas of the OECD's Better Life Index, which measures the performance of countries in different areas of material living conditions and quality of life. While Brazil ranks above the OECD average in subjective well-being, work-life balance, and social connections, there is further scope for improvement in areas such as health and education (Figure 2). Chapter 2 will focus on improving healthcare policies; education policies were discussed in the 2013 OECD Economic Survey of Brazil.

Figure 2. Better life index

Macro-economic policies to bolster confidence

Economic growth stagnated in 2014 and fiscal adjustment and tighter monetary and credit policies are still limiting domestic demand in the short term. The ongoing investigations of corruption and bid-rigging in the national oil company Petrobras have raised governance issues and affected confidence, and will delay the recovery of investment, both from domestic and overseas investors. Petrobras accounts for a significant share of national investment and the company has already announced a slowdown of its investment plans. Recent rating downgrades that entailed the loss of investment grade rating for some Brazilian sovereign bonds with a major rating agency may also weigh on investment and increase the cost of capital for some Brazilian companies. Moderating growth in China will limit export demand and prices for Brazil’s commodity exports will likely remain low, but the ongoing depreciation of the Brazilian real may improve market shares in some areas, including for manufactured goods.

With these headwinds, GDP is projected to contract in 2015 and 2016 (Table 1). However, once the fiscal results improve and inflation starts to return to the target, there will be clear growth pay-offs as recovering confidence will support stronger investment and consumption, particularly if coupled with the implementation of structural reforms. Growth is projected to turn positive sometime in 2016, without lifting the annual growth rate for that year into positive territory. During 2017, growth is projected to return gradually towards the economy’s growth potential, which has been curbed by supply-side bottlenecks and low investment in the past.
The labour market has been buoyant despite weak growth, and unemployment in major metropolitan areas has fallen to below 5% in early 2015, from around 11% in 2005, before rising again more recently to 5.9% in August 2015 (Figure 3, Panel A). However, since the beginning of 2013, the employment rate has also fallen and much of the decline in unemployment from there on was the result of labour force participation falling more rapidly than employment. One possible reason for declining labour force participation could be that the rising incomes of low-income households and improved access to educational programmes have allowed youths to stay in education for longer (Cabanas et al., 2014). Indeed, the decline in labour force participation is largely due to the age groups 15-17 and 18-24 (Figure 3, Panel B). This means that a pick-up in unemployment is a risk once these youths leave education, and early signs of this are already apparent in the increase in youths who are neither in education or employment (NEET).

Negative risks to the outlook include a failure to implement the reforms, including a credible medium-term fiscal adjustment, possibly due to political divisions between the executive and legislative branches of government or further revenue shortfalls. This could reduce confidence and investment, and may lead to further rating downgrades. Confidence could also suffer if monetary policy fails to deliver significant reductions in inflation. Fallout from the events unfolding at Petrobras could be stronger than expected in the event

Table 1. Brazil: Macroeconomic indicators

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<tbody>
<tr>
<td>Real GDP growth</td>
<td>1.8</td>
<td>2.7</td>
<td>0.1</td>
<td>-3.1</td>
<td>-1.2</td>
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<tr>
<td>Potential GDP growth (OECD estimate)</td>
<td>3.1</td>
<td>2.9</td>
<td>2.6</td>
<td>2.1</td>
<td>1.9</td>
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<td>Inflation (average for the year)</td>
<td>5.8</td>
<td>5.9</td>
<td>6.4</td>
<td>9.1</td>
<td>6.7</td>
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<tr>
<td>Inflation (end of period)</td>
<td>5.6</td>
<td>5.8</td>
<td>6.5</td>
<td>9.4</td>
<td>4.9</td>
</tr>
<tr>
<td>Unemployment</td>
<td>5.5</td>
<td>5.4</td>
<td>4.8</td>
<td>6.7</td>
<td>7.2</td>
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<tr>
<td>Fiscal balance (per cent of GDP)</td>
<td>-2.3</td>
<td>-3.1</td>
<td>-6.2</td>
<td>-7.4</td>
<td>-7.2</td>
</tr>
<tr>
<td>Primary balance (per cent of GDP)</td>
<td>2.2</td>
<td>1.8</td>
<td>-0.6</td>
<td>0.1</td>
<td>0.7</td>
</tr>
<tr>
<td>Current account balance (per cent of GDP)</td>
<td>-2.2</td>
<td>-3.4</td>
<td>-3.9</td>
<td>-3.4</td>
<td>-2.7</td>
</tr>
</tbody>
</table>


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of further cancellations of planned investment projects, or if the investigations lead to further bankruptcies in upstream activities, including in the construction sector. Although water reservoir levels have recently risen, a small possibility of energy or water rationing in the coming years remains. Such rationing had significantly dented growth in the early 2000s. Volatility on international capital markets could return in the context of monetary policy normalisation in the United States, but Brazil’s high foreign currency reserves of USD 371 billion (25% of GDP) provide a strong cushion. Further currency depreciation could imply difficulties for corporate borrowers, although a significant fraction of corporate debt is hedged against currency risks. A further slowdown of growth in China, the export destination for many of Brazil’s commodity exports, and in Latin America, an important export destination for manufacturing exports, could also reduce growth in Brazil.

Table 2. Basic economic indicators

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</thead>
<tbody>
<tr>
<td>GDP (in current BRL billion)</td>
<td>1 202.4</td>
<td>3 886.8</td>
<td>4 374.8</td>
<td>4 713.1</td>
<td>5 157.6</td>
<td>5 521.3</td>
</tr>
<tr>
<td>GDP (in current USD billion)</td>
<td>657.1</td>
<td>2 210.3</td>
<td>2 613.5</td>
<td>2 411.5</td>
<td>2 387.9</td>
<td>2 345.4</td>
</tr>
<tr>
<td>GDP per capita (in current USD)</td>
<td>7 016.6</td>
<td>11 306.1</td>
<td>13 239.9</td>
<td>12 103.5</td>
<td>11 878.0</td>
<td>11 566.8</td>
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<tr>
<td>GDP growth rate (real, in per cent)</td>
<td>4.4</td>
<td>7.6</td>
<td>3.9</td>
<td>1.8</td>
<td>2.7</td>
<td>0.1</td>
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<tr>
<td>Supply</td>
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<tr>
<td>Agriculture</td>
<td>2.7</td>
<td>6.8</td>
<td>5.6</td>
<td>-2.5</td>
<td>7.9</td>
<td>0.4</td>
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<tr>
<td>Industry</td>
<td>4.4</td>
<td>10.4</td>
<td>4.1</td>
<td>0.1</td>
<td>1.8</td>
<td>-1.2</td>
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<td>Services</td>
<td>3.8</td>
<td>5.8</td>
<td>3.4</td>
<td>2.4</td>
<td>2.5</td>
<td>0.7</td>
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<tr>
<td>Demand</td>
<td></td>
<td></td>
<td></td>
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<td>Private consumption</td>
<td>4.0</td>
<td>6.4</td>
<td>4.8</td>
<td>3.9</td>
<td>2.9</td>
<td>0.9</td>
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<tr>
<td>Public consumption</td>
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<td>3.9</td>
<td>2.2</td>
<td>3.2</td>
<td>2.2</td>
<td>1.3</td>
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<tr>
<td>Gross fixed investment</td>
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<td>17.8</td>
<td>6.6</td>
<td>-0.6</td>
<td>6.1</td>
<td>-4.4</td>
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<tr>
<td>Exports</td>
<td>12.9</td>
<td>11.7</td>
<td>4.8</td>
<td>0.5</td>
<td>2.1</td>
<td>-1.1</td>
</tr>
<tr>
<td>Imports</td>
<td>10.8</td>
<td>33.6</td>
<td>9.4</td>
<td>0.7</td>
<td>7.6</td>
<td>-1.0</td>
</tr>
<tr>
<td>Public finances (consolidated public sector, in per cent of GDP)</td>
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<td></td>
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<tr>
<td>Primary balance</td>
<td>3.2</td>
<td>2.6</td>
<td>2.9</td>
<td>2.2</td>
<td>1.8</td>
<td>-0.6</td>
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<td>Nominal balance</td>
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<td>-2.4</td>
<td>-2.5</td>
<td>-2.3</td>
<td>-3.1</td>
<td>-6.2</td>
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<tr>
<td>Gross debt1</td>
<td>...</td>
<td>51.8</td>
<td>51.3</td>
<td>54.8</td>
<td>53.3</td>
<td>58.9</td>
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<td>Balance of payments (in USD billion)</td>
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<tr>
<td>Current account balance</td>
<td>-24.2</td>
<td>-47.3</td>
<td>-52.5</td>
<td>-54.2</td>
<td>-81.2</td>
<td>-91.3</td>
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<tr>
<td>In per cent of GDP</td>
<td>-3.7</td>
<td>-2.1</td>
<td>-2.0</td>
<td>-2.2</td>
<td>-3.4</td>
<td>-3.9</td>
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<td>Trade balance</td>
<td>-0.7</td>
<td>20.1</td>
<td>29.8</td>
<td>19.4</td>
<td>2.3</td>
<td>-4.0</td>
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<tr>
<td>Exports</td>
<td>55.1</td>
<td>201.9</td>
<td>256.0</td>
<td>242.6</td>
<td>242.0</td>
<td>225.1</td>
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<tr>
<td>Imports</td>
<td>-55.8</td>
<td>-181.8</td>
<td>-226.2</td>
<td>-223.2</td>
<td>-239.7</td>
<td>-229.1</td>
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<tr>
<td>International reserves (gross)</td>
<td>33.0</td>
<td>288.6</td>
<td>352.0</td>
<td>373.1</td>
<td>358.8</td>
<td>363.6</td>
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<tr>
<td>FDI (net inflows)</td>
<td>32.8</td>
<td>48.5</td>
<td>86.7</td>
<td>65.3</td>
<td>64.0</td>
<td>62.5</td>
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<td>Outstanding external debt</td>
<td>216.9</td>
<td>256.8</td>
<td>298.2</td>
<td>312.9</td>
<td>308.6</td>
<td>348.5</td>
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<tr>
<td>In per cent of GDP</td>
<td>33.0</td>
<td>11.6</td>
<td>11.4</td>
<td>13.0</td>
<td>12.9</td>
<td>14.9</td>
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<td>Exchange rate and prices</td>
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<tr>
<td>Exchange rate (BRL per USD, period average)</td>
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<td>1.8</td>
<td>1.7</td>
<td>2.0</td>
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<td>2.4</td>
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<tr>
<td>CPI inflation (IPCA, in per cent, end-of-period)</td>
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<td>5.9</td>
<td>6.5</td>
<td>5.8</td>
<td>5.9</td>
<td>6.4</td>
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<tr>
<td>Core inflation (in per cent, end-of-period)</td>
<td>3.9</td>
<td>5.6</td>
<td>6.8</td>
<td>5.8</td>
<td>6.1</td>
<td>6.4</td>
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<tr>
<td>Labour market</td>
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<tr>
<td>Unemployment rate (in per cent)2</td>
<td>...</td>
<td>6.7</td>
<td>6.0</td>
<td>5.5</td>
<td>5.4</td>
<td>4.8</td>
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</table>

1. General government only. In this table, gross debt does not include treasury bills on the central bank balance sheet not used under repurchase agreements.
Source: IBGE, Central Bank of Brazil, National Treasury, IMF.
Achieving a substantial fiscal adjustment will be seen as a litmus test for improved macro-economic policies. If achieved, the ensuing confidence boost could be more powerful than expected, particularly when coupled with progress on the structural reform agenda. Given the significant scope to improve the business climate, a few key reforms could make a significant difference for productivity and growth, particularly in tradable sectors. A major step towards opening up international trade could unleash the competitive pressures required to raise productivity and reduce the costs of imported intermediate inputs. Recent policy initiatives to reduce barriers to entry as of end-2015 could also strengthen competition significantly. Additional upside risks include a larger than expected demand boost from the 2016 Olympic Games to be held in Rio de Janeiro, and an improvement of economic conditions in Argentina, which would increase the demand for Brazilian manufacturing goods.

Consolidating public finances

Although Brazil has made significant progress in building up a reputation for sound fiscal policy since it passed the fiscal responsibility law in 2000, the credibility of fiscal accounts has been challenged recently. A primary fiscal surplus is necessary to put debt on a declining path, but fiscal results posted a primary deficit for the first time in 2014 (Figure 4). Changes to legal definitions and a series of unusual accounting measures brought this poor result into line with budget rules, but the Supreme Audit Institution has found some of these measures incompatible with the fiscal responsibility law and the constitution (TCU, 2015a, 2015b). In light of improvements in public accounts, such a situation is less likely to occur in the future.

In recent years, significant tax exemptions and increasing financial support to public banks have led to a deterioration of fiscal accounts. Part of the tax exemptions have been revoked since and the government has announced an end to capital transfers from the treasury to public banks in 2015. The deteriorating fiscal balance led to an increase in gross debt from 52% of GDP in 2010 to 59% in 2014. This is lower than in many advanced economies, but it is high in light of the interest rate of over 13% that Brazil pays on its debt. Brazil's sovereign credit rating was downgraded to below investment grade by one rating agency in September 2015. In the longer term, estimates suggest that population ageing will require additional annual expenditures of 3% of GDP between now and 2030, putting further pressures on long-term fiscal sustainability (Figure 4, Panel B). Risks related to the composition of public debt have decreased over the last years, due to an increasing share of fixed-rate and inflation-linked bonds and a lower share of debt indexed to short-term interest rates or the exchange rate.

In January 2015, a new economic team initiated a fiscal adjustment, and current primary surplus targets are 0.15% of GDP for 2015 and 0.7% for 2016, followed by a gradual increase to 2% by 2018. These targets can be reduced if concession revenues fall short of expectation or if congress fails to approve some of the consolidation measures. Besides plans to raise taxes, the adjustment also includes an end of transfers from the treasury to public-sector banks, which had led to an expansion of directed credit, although the effectiveness of this expansion for raising corporate investment has been questioned (Bonomo et al., 2014). The new targets were defined on the basis of market forecasts for macroeconomic variables. Reaching these targets will require a significantly larger fiscal effort than was originally foreseen due to significant expenditures decided in late 2014 with payment dates in early 2015, which will affect 2015 fiscal accounts. Tax revenues have
also fallen short of expectations in 2015. This fiscal consolidation involves trade-offs as it comes at a time of weak growth and there is significant uncertainty about how fiscal multipliers have evolved (IMF, 2015b), but it is necessary to reinforce the credibility of fiscal policy.

Consolidation plans include spending reductions, which often have a more long-lasting impact. The efficiency of social transfers has been improved by reducing distortions leading to frequent job turnover and the scope for abuse has been narrowed by tightening eligibility rules for certain benefits. Fiscal support for electricity distributors, which had emerged as a result of postponed tariff increases and accumulated debts in the energy sector, has been discontinued. These corrections will deliver long-run benefits going beyond their immediate fiscal impact. In the short run, however, Brazil’s rigid fiscal framework is limiting the reduction in current expenditures through built-in delays, earmarking and mandatory spending shares. Partly as a result, the burden of adjustment may once again fall on public investment, as it has in previous consolidation episodes, which is unfortunate given the need to reduce bottlenecks and spur demand. Planned consolidation measures are also on the revenue side, including rolling back several of the
earlier tax breaks, a number of which had distortional effects that may have hurt investment and productivity, and higher fuel taxes.

Debt simulations suggest that these targets will significantly slow down the expansion of gross debt relative to GDP, which could reach almost 70% of GDP by 2025 according to OECD simulations (Figure 5). These simulations assume that transfers to public banks, which averaged 1.9% of GDP per year from 2012 to 2014, will stop as announced. If these continued, the debt to GDP ratio would rise to 92% by 2025, all else equal.

Beyond the current plans until 2018, further consolidation would reduce the burden of interest expenditures, which currently exceeds 8% of GDP. For comparison, Chile and Mexico spent 0.6% and 2.7% of GDP on interest expenditures in 2014, respectively. Considering future fiscal pressures from population ageing, consolidation may be easier now than in the future and would likely reduce the interest rate paid on public debt. As an example, generating a primary surplus of 3% of GDP after 2018 would reduce public debt to the average of Latin America countries, approximately 50% of GDP, by 2035. Achieving this debt reduction by 2030 would require primary surpluses of 3.4% of GDP.

In the longer term, there is a need for a better targeting of social expenditures. Reforming Brazil’s pension and social assistance system, which costs over 10% of GDP and whose expenditures are increasing rapidly, would be an essential ingredient of a sustainable consolidation. Despite its young population, Brazil already spends more on old-age pensions than many OECD countries (Figure 6, Panel A). Going forward, the same demographic transformation that unfolded over 60 years in the United States will take place in only two decades in Brazil (World Bank, 2011). Projections suggest that social security expenditures will rise from 8.5% of GDP to over 13% by 2040 if the current indexation mechanism remains unchanged (Figure 6, Panel B). This excludes the separate pension system for civil servants. Civil servant pensions amount to 2.2% of GDP, but their long-term fiscal burden will decline due to a successfully implemented reform of 2012.

Figure 5. Possible debt trajectories

1. The current plans scenario assumes a primary surplus of 0.15% in 2015, 0.7% in 2016, 1.3% in 2017 and 2.0% of GDP from 2018 onwards. The second scenario assumes the announced primary balance targets for 2015–17, and higher primary surpluses thereafter. The first two scenarios assume no further transfers to public banks, while the third assumes a continuation of these transfers as in 2012-14. Macroeconomic assumptions are an average real GDP growth as in Table 1 for 2015-16, 1.7% for 2017 and 2.0% thereafter. Inflation assumptions are as in Table 1 for 2015 and 2016 and 4.5% thereafter. SELIC interest rate assumptions are based on current market expectations for 2015 and 2016, with a 0.5 percentage point decrease every year from 2017 onwards. For 2015-19, the assumed average Selic is 12.6% and for 2020-25 it is 9.8%.
Several policy measures could contribute to containing pension and social assistance expenditures, but changing the indexation mechanism of minimum benefits will be an inevitable feature of any pension reform that would effectively contain expenditure growth. Currently, the minimum benefit is equal to the minimum wage, and two-thirds of pensioners receive this benefit level. This has led to real increases in the minimum pension of almost 90% over the last 10 years and the net replacement rate (individual net pension benefit divided by net pre-retirement earnings) is currently 91% in Brazil, compared to an OECD average of 63%. The current indexation mechanism has also led to a compression of pension benefits, as higher pensions have been indexed only to prices. This reduces the incentives to contribute more to the system. Given the strong political pressures for further minimum wage increases, keeping the minimum benefit indexed to the minimum wage is likely to result in rapid real pension increases. Extending the current indexation mechanism for minimum pensions to higher pensions, as recently proposed by the legislative branch, would raise pension expenditures even more rapidly, although it would end the compression of pension benefits.

By contrast, preserving the purchasing power of pension and social assistance by indexing current levels in line with the relevant consumer price index for low-income households (INPC) would roughly stabilise pension expenditures at 10.3% of GDP as of 2030. Alternatively, pension benefits could be indexed to an average of consumer price inflation and average wage increases, as for instance in Switzerland, although they would then rise substantially.

A more comprehensive pension reform would also include raising Brazil’s low average retirement ages of 55 years for men and 50 years for women, and the recent drop in the

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1. IMF estimates of adjustment needs for health and pension expenditures based on long-term debt targets.
2. Social security benefits include urban, rural and social assistance pensions, but exclude pensions for civil servants. The “baseline scenario” assumes average real GDP growth of 2.0% over 2015-2040, with a frontloaded recovery and average inflation of 4.6%. The number of social security beneficiaries is assumed to grow on average by 3.1%, in line with elderly population growth (age 55+). Minimum pensions are assumed to be indexed to the minimum wage, which is projected according to the current indexation rule based on past consumer prices plus past GDP growth.
3. The “comprehensive pension reform” assumes indexation to CPI instead of minimum wage for minimum pension earners; increase in pension age to 65 for both men and women; and changes in survivor pension eligibility criteria that are assumed to lead to decrease in survivor pension beneficiaries by half.

participation rate of older workers underlines the need to reduce incentives for early retirement. This could be done by strengthening financial incentives to retire later, for example by offering higher pension payments, and by introducing a binding minimum retirement age. This minimum retirement age could be raised gradually to avoid disruptive costs and increase public acceptance. In OECD countries, men retire on average at age 64 and women at age 63 (OECD 2013a). In the future, the retirement age could be linked to rising life expectancy so as to make adjustment automatic and thereby avoid using up political capital in a routine reform process. Raising retirement ages to the levels of OECD countries would allow stabilising public pension expenditures at slightly below 8% of GDP, close to current levels. Recent proposals made by the legislative branch and later adjusted by the executive branch are likely to lead to lower penalties for early retirement. This would reduce rather than raise effective retirement ages, which can undermine the sustainability of the pension system.

Beyond the pension system, there is scope for further improvements in the efficiency of social programmes. The in-work transfer programme *Abono Salarial*, which costs 0.3% of GDP, should be re-evaluated. The programme pays formal sector workers who earn monthly labour incomes between one and two times the minimum wage, corresponding to the 56th and the 83rd percentile of the income distribution, a social benefit equal to one monthly minimum wage at the end of the year. Limiting this benefit to individuals who earn the minimum wage, instead of the current range, would save 80% of the money now spent.

These reforms would not compromise the commitment to reduce income inequality. In fact, better targeting of social benefits could accelerate Brazil’s social progress. First, less rapid real increases of transfers whose recipients are situated at the 56th percentile of the income distribution, which is where the minimum wage stands, will hardly increase inequality. Second, part of the savings could be used to expand transfers with a strong inequality impact, like the conditional cash transfer programme *Bolsa Familia* which currently costs less than 1% of GDP (see Chapter 2 of the 2013 OECD Economic Survey of Brazil). Such a focus on more efficient redistribution instruments would achieve the objective of reducing income inequality at a lower cost, or allow further reductions in inequality. For example, microsimulations using household data suggest that during 2012 and 2013, Brazil could have achieved 63% more in inequality reduction as measured by the GINI coefficient than it actually experienced if benefits had been indexed to inflation rather than to the minimum wage and the resulting savings had been spent as conditional cash transfers to poor households.

On the revenue side, closing a number of loopholes could strengthen revenues and reduce distortions. For example, besides paying out dividends to shareholders, companies have an option to pay them “interest on capital” (juros sobre capital próprio), which is treated as an expense, i.e. not subject to corporate income taxes (CIT). For the shareholder, this is taxed at the same rate of 15% that is levied on dividends. This has regressive effects on income distribution and reduces corporate savings. Applying the standard CIT tax rate instead would generate additional revenues of 0.1% of GDP. In addition, tax rates for independent service providers filing income taxes as a business can be as low as 5%, with no dividend withholding tax applied, compared to the top marginal income tax for labour income of 27.5%. This creates strong incentives to file taxes as a company, and results in unequal tax treatment across different activities. Current plans for moderate increases of inheritance taxes may also be worth pursuing, as inheritance taxes improve the equality of
opportunities. At less than 0.1% of GDP, Brazil’s revenue from inheritance taxes is less than half of the OECD average. Further increases in fuel taxes would be warranted from an environmental perspective (see below).

Spending has grown rapidly in recent years. One way to ensure prudent fiscal management for the future could be to adopt an expenditure rule that should include all expenditure items. Since automatic stabilisers operate predominantly through the revenue side, an expenditure rule would not be very pro-cyclical. In the context of Brazil’s rigid budget process which is characterised by large shares of revenues earmarked for specific expenditures and mandatory spending shares for certain policy areas, operating an expenditure rule will not be easy, and will require rethinking some of these rigidities. Still, the alternative of continuous tax increases that have traditionally been used to solve situations of fiscal imbalances in Brazil has reached its limits, and an effective expenditure control may force a discussion of undoing some of the budget rigidities.

An expenditure rule is also an attractive choice because it is easier to calculate, explain to a wider audience, and monitor than a cyclically-adjusted balance rule. The experiences of Peru and the Netherlands with such a rule has been positive (Ayuso-i-Casals, 2012; Carranza et al., 2014; Cordes et al., 2015). Ensuring that the fiscal framework is implemented and that existing discretion is not abused requires clarity about all fiscal and quasi-fiscal operations. Brazil already has a number of institutions with a fiscal monitoring role. For example, the Supreme Auditing Institution has been very effective in scrutinising fiscal accounts ex post. Nonetheless, an independent fiscal institution charged with ex-ante monitoring of compliance with the fiscal rule and transparency requirements may help to avoid major fiscal slippages in the future. To this end, many countries – and recently all European Union countries – have established independent fiscal councils in some form.

**Ensuring a return to the inflation target**

Although the economy has been growing below potential since mid-2013, inflation and core inflation have been close to the 6.5% upper bound of the tolerance band around the inflation target of 4.5% (Figure 7, Panel A). Significant wage pressures resulting from a

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**Figure 7. Inflation and exchange rates**

1. Shown as a 6-month moving average.
Source: Central Bank.
tight labour market, expansionary fiscal and credit policies and the existence of formal and informal indexation mechanisms can help explain these developments. Recently, increases in administered prices have accounted for a large share of increases in headline inflation, reflecting difficulties in the electricity sector and adjustments that had been postponed in the past. These effects are likely to decline over time. The Brazilian real has been on a depreciating trend since 2011, both against the US dollar and in effective terms (Figure 7, Panel B). A continued depreciation of the Brazilian real could add to inflationary pressures in the future.

The monetary authorities have responded to above-target inflation with several hikes of the policy rate Selic (Figure 8). However, policy inconsistencies have limited the impact of these hikes. In particular, public sector banks continued to drive an expansion of credit with the help of transfers from the treasury, even as tighter monetary policy tried to contain credit growth. With tighter fiscal policy and no further transfers to public banks, monetary policy is likely to become more effective.

Since October 2014, the Central Bank has reaffirmed its commitment to bring inflation back to the 4.5% inflation target by the end of 2016. This is an appropriate objective, but it will require monetary policy to remain vigilant and raise policy rates further in case additional inflationary pressures emerged. In the short term, further adjustments in administered prices and further exchange rate depreciation will also create one-off price pressures, but need not in themselves threaten the inflation target.

While the Central Bank has successfully complied with the rules of the inflation targeting framework so far, the effectiveness of monetary policy could be improved further by strengthening its perceived independence. One way to do this would be to set a fixed term for appointments of the central bank governor and the other members of the monetary policy committee, during which they cannot be dismissed. Most inflation-targeting countries have such a fixed term (Hammond, 2012). The recent decision to narrow the tolerance band to 1.5% around the 4.5% target as of 2017 will enhance the commitment of the Central Bank and should contribute towards a better anchoring of inflation expectations.

Figure 8. Monetary policy

Source: Central Bank.
Monetary policy effectiveness will also be strengthened by current plans to reduce directed credit volumes and to adjust the interest rate charged for directed credit (TJLP) more frequently in line with the policy rate Selic. So far, the monetary policy rate Selic has affected only the roughly half of outstanding credit that was subject to market conditions. By contrast, the interest rate charged for directed credit is determined by the TJLP, which is set by a national monetary council consisting of the Minister of Finance, Minister of Planning and the Central Bank governor. Over the past 5 years, the TJLP has been very stable, and has not followed changes in the Selic, although it has been adjusted upwards twice in 2015.

The government has undertaken efforts to foster the development of long-term capital market, including a reduced role for the public development bank BNDES. These efforts also include mandatory private co-financing requirements for BNDES loans, as recommended in the 2013 OECD Economic Survey of Brazil. Moreover, long-term infrastructure bonds are playing an increasing role in the financing of infrastructure projects.

**Reducing medium-term vulnerabilities**

*Financial soundness indicators compare well but debt service costs are high*

With credit levels of 70% of GDP according to the IMF definition, credit markets are still smaller than in other emerging economies and are still deepening (Figure 9). Banking capitalisation exceeds what is required by international standards, and banks are well provisioned. Brazil has adopted Basel II and 2.5 standards, and the regulations implementing Basel III standards will enter into effect gradually with full implementation by 2019, according to an internationally agreed timeline. A recent assessment conducted by the Basel committee on Banking Supervision concluded that these regulations are compliant with Basel III recommendations. The exposure of the financial system to external shocks has decreased due to the accumulation of foreign exchange reserves and there are strict limitations on foreign-currency funding of banks (Box 1). Non-performing loans have fallen since 2012.

Since the end of 2014 arrears up until 90 days, which are sometimes seen as a leading indicator for default rates, have edged up slightly, particularly in the corporate sector, where leverage is already high by international standards (Figure 10). These developments should be monitored closely by the Central Bank. A rising share of mortgage loans and payroll-deductible loans in household debt has extended average maturities, keeping debt service levels constant despite rising leverage, and improved the quality of banks’ loan portfolios. Still, household debt service levels of around 22% of disposable income are higher than in other countries, owing largely to high interest rates and short maturities (BIS, 2015). The rising arrears in corporate loans, particularly SME loans, and increasing risks in consumer loans should also be closely monitored. Given its sheer size and its widespread ramifications with other sectors of the economy, the financial health of the state-owned oil company Petrobras could also be a source of risk, as the company is highly indebted and has suffered significant losses mainly due to price interventions that kept retail prices below import costs in the past, but also due to corruption.
Figure 9. Financial system indicators

A. Credit (Definition of Brazilian Central Bank)

B. Credit (Definition of Brazilian Central Bank)

C. Domestic credit to private sector (IMF definition)

D. Bank capitalisation

E. Non-performing loans and provisions

F. Household debt service levels

Source: Central Bank of Brazil, IMF (2015c), CEIC.
External imbalances have widened

The current account deficit has widened over the past two years to 4.3% of GDP, up from 2.1% in 2011. This is largely due to a steady erosion of the trade balance, which has declined from a surplus of USD 30 billion in 2011 to a USD 4 billion deficit in 2014, as Brazil’s terms of trade have deteriorated significantly. More recently, given the contraction of domestic demand, stronger exports, currency depreciation and a lower oil price, the current account deficit has fallen and the year-to-date trade balance has returned into positive territory in 2015. Foreign direct investment (FDI) inflows are sizeable, but no longer fully covered the current account deficit in 2014. Moreover, the composition of FDI inflows has shifted. In particular, the share of loans to affiliated entities in Brazil, which are considered FDI by the IMF’s Balance of Payment Manual, has risen substantially in 2014. This development, which is common to several emerging market economies, has led to calls of caution because in some cases, such loans cannot be considered as stable as equity FDI, and imply higher vulnerability to external shocks (BIS, 2014; Gruig and Wooldridge, 2015). In fact, the risk sharing characteristics of such loans can be closer to those of portfolio...
inflows than those of foreign equity (IMF, 2015a). Sixty percent of net capital inflows into Brazil are now made up of portfolio debt and intercompany loans (Figure 11).

The high current account deficit and the structural changes in the financial account hint at rising exposure to volatility on international capital markets. As a result, a reduction in investor appetite for emerging market assets could make it more difficult for Brazil to finance its current account deficit, although the flexible exchange rate would act as a shock absorber, and Brazil’s foreign exchange reserves amount to 25% of GDP. Corporate balance sheets are unlikely to suffer much from exchange rate volatility in the short term, given the widespread evidence of hedging in the corporate sector.

Figure 11. **External imbalances have widened**

In percent of GDP

![Graph showing external imbalances](image)

Source: CEIC, Central Bank of Brazil.

Box 2. **Main policy recommendations for macroeconomic policies**

**Key recommendations**

- Implement the fiscal adjustment in line with medium-term objectives, including a stabilisation of gross debt.
- Gradually raise the retirement age and index pensions to consumer prices rather than the minimum wage.
- Establish fixed-term appointments for the Central Bank governor and the members of the Monetary Policy Committee.
- Adjust the directed lending rate TJLP more frequently in line with the monetary policy rate Selic.

**Other recommendations**

- Adopt an expenditure rule and reduce budget rigidities such as revenue earmarking and fixed expenditure shares. Consolidate fiscal oversight to monitor compliance with the fiscal rule ex-ante.
Sustaining future growth

As Brazil’s population ages, growth will no longer be supported by a rising labour force as it has in the past. As a result, economic growth will have to come increasingly from productivity improvements, partly by reforming some of the policy settings that currently hold back stronger productivity growth. Large scope for achieving productivity gains lies in the industrial sector, where a few key structural reforms could unleash significant unused growth potential (see Chapter 1). There is also scope for productivity improvements in the services sector, even if automation often proves more difficult in services than in industrial activities. The agricultural sector stands out for its strong productivity gains in the past, but pushing agricultural productivity higher may at some point result in rising pressures on environmental resources. The challenge for sustaining growth in the future involves raising productivity while ensuring the responsible use of environmental assets and maintaining the momentum in reducing poverty and inequality.

Boosting industrial performance

Brazil has a large industrial base whose origins can be traced back to at least the 1930s. At that time, significant policy efforts to industrialise what was then a primarily agrarian, commodity-based economy were successful in building up higher value-added activities in the country. By the 1980s, industry had risen to over 30% of GDP and had become highly diversified, including into consumer durables, intermediate and capital goods, partly on the back of import-substitution strategies and strong trade protection. Since then, however, the role of the industrial sector in the economy has declined significantly, at the same time as industrial growth kept on strengthening steadily across many East Asian countries (Figure 12). Even in comparison with other countries in Latin America, the declining role of Brazil’s industrial sector has been remarkable. Unlike in several other emerging market economies where the industrial sector has been a key driver of aggregate GDP growth, real industrial output as a share of GDP in Brazil has been basically flat for 20 years. In fact, most of the recent economic slowdown can be traced back to the subpar performance of the industrial sector. Over the last decade, real annual growth in the industrial sector has averaged only 2%, while overall real GDP growth has averaged 3.4%.

Figure 12. Value added share of industry
In per cent of GDP, current prices

1. The original series for Brazil contains methodological breaks in 1990 and 1995, and was hence reconstructed in line with the methodology suggested by Bonelli and Pessoa (2010) and Bonelli and Pinheiro (2015).
Source: OECD Calculations based on IBGE and IPEADATA for Brazil, World Bank for other countries.
http://dx.doi.org/10.1787/888933282603
This weak performance is largely the result of low productivity, which has fallen short of other countries (Figure 13). Global trends that have shaped industrial production have largely bypassed Brazil’s industry. These include a growing fragmentation and optimisation of value chains, which have allowed companies to focus on their core capabilities, and increasing integration into international trade. Globally, intermediate inputs have come to represent a large share of world trade flows as part of the emergence of global value chains. While many countries nowadays use significant amounts of imported goods to produce exports, almost 90% of the value added of Brazil’s exports is domestically produced (OECD, 2015a). Aggregate productivity gains are also increasingly driven by the reallocation of resources towards firms with higher productivity levels, but in Brazil, the functioning of reallocation mechanisms appears weak. As a result of these factors, Brazil has not shared in the productivity gains from these global developments and has failed to become the major industrial power that it could be. Recent years have been particularly difficult for Brazil’s industry, and real industrial output has been declining since late 2013. Still, Brazil hosts many highly competitive industrials in sectors as diverse as food and aircraft.

**Figure 13.** Industrial performance and integration into global trade

A. Manufacturing productivity is low and stagnant

B. Brazil trades little for a country of its size

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1. In thousands of constant 2005 USD per employee.


StatLink: [http://dx.doi.org/10.1787/888933282619](http://dx.doi.org/10.1787/888933282619)
Principal explanations for the low performance of industrial companies are related to both costs and incentive structures. Costs beyond the influence of firms make it harder for them to compete with external competitors both on domestic and export markets, limiting their ability to exploit scale economies. Distorted incentives, including low competitive pressures, mean that firms will not exploit the full potential of internal productivity improvements. They can also impede the functioning of market mechanisms that reallocate resources towards the most productive firms, including new entrants.

Reducing the "Brazil cost"

The high costs of Brazil’s industry as a result of weak policy settings are often referred to as the "Brazil cost". First among these is a fragmented and inefficient indirect tax system. Where Brazil stands out most are the large compliance costs of indirect taxes (World Bank, 2015; CNI, 2014). A benchmark manufacturing firm requires 2 600 hours per year to comply with taxes, as opposed to 356 in the average Latin American country and 184 in the average OECD country (Figure 14). The largest of Brazil’s 6 indirect taxes, called ICMS, is levied by Brazil’s states and each state applies its own tax code, tax base and tax rates. Brazil applies a mixture of the origin and destination principles to interstate commerce and companies wishing to offer goods and services nationwide are required to comply with each state’s individual tax rules. Credits for interstate transactions are regularly delayed or refused (CNI, 2014). Brazil’s indirect taxes are somewhere in between a sales tax and a value-added tax, because they allow tax credits for intermediate inputs only if the latter are embodied in the final good sold (the so-called “physical credit” principle). The burden of proof regarding how much of an input goes directly into the final product lies with taxpayers, resulting in extensive use of tax accountants and frequent lawsuits over disputes.

The ideal way forward would be to consolidate the different indirect taxes into one value-added tax with simple rules. The federal government could lead the way by consolidating its own indirect taxes into a single value added tax with a broad base, full refund for input VAT paid and zero-rating for exports. Once such a tax were established, it might be easier to integrate the state-level ICMS into this system, possibly as state-specific surcharges on the same tax base that preserve current revenues. It is clearly possible to accommodate the desire for different states to tax at different rates, as long as taxation

Figure 14. Hours required to prepare taxes
For a benchmark manufacturing company, 2014
strictly follows the destination principle and tax refunds for interstate transactions are easy. The European Union applies such a system, for example. If that still leaves revenue shortfalls for some states, the central government could create a fund to compensate these losses temporarily.

Infrastructure bottlenecks, resulting from many years of low infrastructure investment, are at the root of high transport and logistics costs for industrial companies, in particular with respect to industrial exports. Against this background, recently announced infrastructure projects including roads, airports, ports and rail are welcome. However, despite a long-standing eagerness to engage private investors in the construction and financing of new infrastructure, and improvements in the mechanism used for concessions and public works that can strengthen competition, progress has been held back by a lack of administrative capacity and technical experience of public institutions involved in infrastructure projects. Tender calls for public works and concessions should be prepared more thoroughly and costs be made more predictable by better specifying physical, legal, environmental and judicial details and risks. Investing more time and resources in the planning phase would reduce renegotiations once a concession has been granted and competition can no longer be harnessed. In many advanced economies, the planning phase of infrastructure projects accounts for almost half of the total time, while in Brazil project planning is often being conducted in parallel with the actual beginning of the works. Strengthening the capacity and independence of relevant regulatory agencies, including in transport, electricity, communications, could also support faster progress in infrastructure. Competition in the construction sector is likely to be strengthened by recent legislative changes that enhanced the scope for foreign participation in public tenders.

Given that most future infrastructure projects are likely to be realised in the form of concessions, it will also be important to take effective measures to prevent collusion among bidders and corruption. Such practices deprive society of the benefits of a truly competitive public procurement by diverting public resources and impede new and more competitive firms from emerging. It would be useful to undertake a thorough assessment of public procurement laws, in particular how their many complexities and exemptions affect integrity and competition in the tendering process. Rules pertaining to conflicts of interests, incompatibilities and impartiality in public procurement could be streamlined and strengthened. Whistleblowing and leniency procedures are presently hampered by concurrent competences and parallel systems for similar offences, which make it difficult to protect whistleblowers effectively. Besides, it would also be useful to improve training for officials in contracting authorities on how to detect collusion.

An important factor behind the low productivity levels of Brazil’s industry is the low qualification level of the labour force, and empirical analysis confirms a strong role for educational achievements in enhancing productivity (Arnold and Flach, 2015). Skill shortages affect particularly the industrial sector, with 65% of industrial companies finding hiring high-skilled workers an obstacle to their productivity and growth (CNI, 2013). The share of students both at the secondary and tertiary levels enrolled in professional and technical degrees in Brazil is low in international comparison and wage premiums of up to 20% for secondary level graduates with technical training over those without reflect Brazil’s dearth of technical skills (CNI, 2013). Brazil is addressing this issue by creating additional vocational training opportunities under the umbrella of the Pronatec programme. Further expanding the participation in vocational training programmes would alleviate the skill shortages faced by industrial (and other) companies and allow stronger productivity gains.
Improving the incentives for stronger productivity growth

Poorly designed policies also affect the incentives that drive the behaviour of industrial companies. For example, the difficulties in claiming tax credits for intermediate inputs in the indirect tax system distort the organisation of the value chain towards excessive vertical integration. Corporate taxes based on company turnover, such as those put in place in 2014 together with payroll tax deductions, have the same effect as taxes paid on externally sourced inputs cannot be deducted from the tax base. This reduces the possibilities to achieve productivity gains by sourcing intermediate goods and services from potentially more efficient external providers and to mimic the fragmentation of the value chain that has become common in most leading industrial countries.

A key challenge for improving incentives in the industrial sector is to strengthen competition. Competition is what ultimately creates incentives to adopt the most efficient production technologies and reach global best practice, to introduce new innovative products and to orientate existing products better to customer needs. Brazil’s innovation policies are not much different from those used in other countries. In fact, public support for business innovation has increased steadily over the years, both through direct support measures and through R&D tax credits. But what really pushes firms to innovate in the first place is not the availability of public support, but the competitive pressures they face in their markets. For example, the Information Technology Law of 1991 allocates tax breaks worth BRL 4 billion per year to domestic electronics producers, but evidence suggests that this has failed to stimulate R&D or raise productivity in the sector (Kannebley and Porto, 2012). A lack of competition on many product markets, evidenced by high levels of concentration and rigid industry structures, seems to be one of the principal reasons behind the low innovation performance of Brazilian industrial firms (Pinheiro, 2013; IEDI, 2011; IEDI, 2014). Empirical evidence shows that Brazilian firms that were exposed to competition in foreign markets displayed higher product innovation efforts at home (de Araújo, 2005).

Competition is also the driving force behind productivity-enhancing industry dynamics, allowing strong performers to grow at the expense of firms with lower productivity, which implies entry and exit of firms. Evidence suggests that these reallocation mechanisms do not work well in Brazil’s industrial sector, and it is often the less productive firms within a sector that enjoy large and even increasing market shares (Chapter 1). Regulatory barriers to entrepreneurship, including administrative burdens on start-ups and other entry barriers may be part of the explanation. Brazil’s rules and procedures for firm entry have long been significantly more restrictive than in OECD countries, and lack transparency and simplicity, according to the OECD Product Market Regulation indicators (Figure 15). Comparative analysis by the World Bank has confirmed this picture, as Brazil ranks at 167 out of 185 economies surveyed (World Bank, 2015). In fact, starting a business has so far required 12 procedures in Brazil and takes 83 days, while the same can be done in Chile, Mexico and Colombia in less than 11 days.

Recent government initiatives aim to reduce these administrative burdens significantly. A pilot reform project that permits the opening of a company in less than one hour was started in the capital district of Brasilia in mid-2015. These rules allow the beginning of operations while awaiting the formal license in the case of low-risk activities, which include about 90% of all activities. A nationwide rollout of these simplified rules is scheduled to be completed by the end of 2015. Already as of February 2015, closing a company can be done in only 1 hour, whereas before administrative burdens to closing a
company were almost prohibitive. These reforms, if implemented as planned, are likely to result in significant productivity improvements, as empirical analysis using a large firm-level data set suggests that high administrative burdens for entry are associated with lower firm productivity across Brazilian states (Arnold and Flach, 2015). Developing deeper capital markets could also improve the prospects for the entry of new and innovative firms with high productivity potential.

It is important to design industrial policies in a way that they do not create obstacles to new entry, the post-entry growth of successful firms, including on the expense of incumbents, or the exit of less productive firms, which is essential for releasing the resources that more successful firms need to grow to an efficient scale. Policies meant to support the industrial sector have often had a tendency to bolster the status quo rather than to allow the best businesses and industries to thrive. Going forward, aggregate productivity growth could be best supported by allowing the natural selection of firms to happen and ensuring that policies are neutral with respect to the treatment of incumbents and entrants, and with respect to sectors of activity. While a few countries have had success with targeted industrial support policies, this has only been the case where such policies were designed to generate learning effects, which implies that they should be temporary and have a clear schedule for withdrawal (Rodrik, 2004, 2008).

More firm turnover could in principle imply adjustment costs for employees who have to find a new job, but in Brazil, most job turnovers currently take place at the initiative of employees, including due to incentives built into the unemployment insurance scheme. In manufacturing, over 50% of employees change jobs within one year (DIEESE, 2014). A rise in firm turnover rates is therefore unlikely to make much difference for Brazil's already high job turnover rate among low-paid workers.

Brazil's industry also remains significantly more shielded from international competition than that of many other countries, including in Latin America. Although tariffs have come down, Brazil's average tariff of 10% is twice the level of Colombia's or other BRIICS countries (Figure 16). Local content requirements linked to public procurement, tax reductions or financing from public banks have added to shielding domestic producers from foreign competition, and model simulations suggest that these
have led to significant reductions in imports and exports (Stone et al., 2015). In addition to reducing competition, trade barriers on inputs make intermediate inputs or capital goods more expensive, thus reducing competitiveness. Although a tariff exemption scheme for capital goods is in place, it is applicable only if no equivalent domestic product exists, and Brazil has a sizeable capital goods industry. Intermediate input tariffs can also curb productivity by limiting the access to more varieties and to high quality intermediate inputs (Grossman and Helpman, 1991; Amiti and Konings, 2007).

High levels of trade protection weaken competition and incentives to improve productivity, even though they have not prevented the gradual decline of the industrial sector in favour of non-tradable services. In this regard, the intermediate choice of having substantially higher tariffs than its foreign competitors while still exposing its industrial sector to some foreign competition has been a particularly unfavourable combination and has prevented Brazil from reaping the full benefits of trade. The way forward is to embrace international trade more fully by reducing effective trade protection. Brazil’s advances in the area of trade facilitation are a step into this direction, but cannot replace reductions in trade protection including tariffs and local content restrictions, which should proceed gradually according to a pre-announced schedule. A major trade liberalisation involves trade-offs as it would lead to resource allocations between sectors, including job losses in some sectors and job creation in others. However, model simulations suggest that the overall employment would rise by more than 1% (Araújo and Flaig, 2015). As most of these new jobs would be for unskilled workers, trade liberalisation in Brazil would raise the returns to unskilled labour relative to capital and disproportionately help the poor (Harrison et al., 2014).

Producer services have also become an important intermediate input into manufacturing activities, representing 65% of manufacturing value added in industrial countries (CNI, 2014). Empirical research has demonstrated the significant role that services inputs can play for manufacturing productivity (Arnold et al., 2011; 2015). Cost-effective and innovative services, including from abroad, are therefore highly relevant for productivity, the competitiveness of the Brazilian industrial sector and the integration into global value chains. Brazil’s regulations are more restrictive than the OECD average according to the OECD’s Services Trade Restrictiveness Index, particularly so in the area of
logistics, legal services, architecture and engineering services, telecoms, banking, insurance, air and rail transport and courier services. Across all sectors, the scope for using imported producer services is further limited by the taxation of many imported producer services under the CIDE tax, with effective tax rates between 40% and 50%.

Box 3. Key policy recommendations for improving the business climate and boosting industrial performance

- Consolidate indirect taxes at the state and federal levels and work towards one value added tax with a broad base, full refunds for input VAT paid and zero-rating for exports.
- Reduce the level of trade protection steadily by lowering tariffs and scaling back local content requirements.
- Strengthen competition by streamlining regulation on product markets and implementing planned reductions in entry regulations.
- Improve the technical capacity and planning for infrastructure concessions and elaborate more detailed tender packages prior to launching tender calls.
- Further expand the participation in vocational training to alleviate skill shortages for technical workers.

Improving the carbon footprint of the economy

Brazil has made remarkable progress in reducing greenhouse gas emissions, which is one of the key challenges for making growth sustainable from an environmental perspective. From a peak in 2004, greenhouse gas emissions have declined by more than half, owing largely to declining deforestation rates (Figure 17, Panel A). Better monitoring coupled with stricter law enforcement, enlarging protected areas and strengthening incentive-based measures such as rewards for forest preservation have reduced deforestation in the Amazon region by 75% from its 1996-2005 average, and the 80% reduction target set for 2020 is likely to be reached. Brazil should build on these impressive advances and continue its efforts to reduce deforestation. Still, an area of nearly 5 000 km²

Figure 17. Greenhouse gas emissions by sector of origin

A. By sector of origin

B. Per thousands of USD of GDP at purchasing power parities, 2010

1. Including emissions from land use, land-use change and forestry (LULUCF).

was deforested in 2014, and necessary further reductions may become increasingly difficult and costly as they tend to take place in more remote areas and on a smaller scale (Godar, 2014). In absolute numbers, Brazil is currently the world's sixth-largest emitter. Although relative to GDP emissions have decreased significantly (Figure 17, Panel B), they are above the OECD average, while emissions per capita are below it.

The emission reductions due to slower deforestation have been partly offset by rising emissions from agriculture and energy, including energy used for transportation. Direct emissions in agriculture are largely the result of enteric fermentation and organic waste from cattle. Farming is the second main reason as strong adoption of chemical fertilizers has been used by farmers to expand grains production. Improving soil fertility by proper nutrition selection, less tillage and the application of organic substrates can help increase the productivity of the sector and has significant mitigation potential (McKinsey 2013, FAO, 2013). Brazil’s Low Carbon Agriculture Plan (Plano ABC) aims to reduce GHG emissions from farming.

Brazil has been a leader in clean energy production. Renewable sources account for 41% of total primary energy supply, well above the world average of 13%. More than three quarters of the country's electricity comes from hydropower and the use of wind energy is also expanding. A vast majority of cars in Brazil can use ethanol, a substitute for petrol.

But in the transport sector, a rising demand for cars from a growing middle class and a strong reliance on road transport for cargo are increasing emissions. Moving some cargo off the roads would reduce transport emissions, and could be facilitated by strengthening regulatory frameworks in railroads and cabotage (Chapter 1). However, the use of ethanol has fallen short of its potential due to implicit subsidies for petrol. These have vanished, but in case of future oil price increases, regular adjustments of petrol prices would be required to avoid a resurgence of these implicit subsidies. The 2012 zero-rating of the petrol and diesel tax CIDE has recently been undone, but excise taxes on gasoline and Diesel fuel are still far below international averages and could be raised further (Figure 18). The potential negative effects on consumption are likely to be mitigated by the possibility for private vehicle owners to switch to ethanol, which leads to less carbon emissions. There may also be scope for raising the efficiency of energy use beyond the transport sector. More details on Brazil’s environmental performance can be found in OECD (2015b).

Figure 18. Fuel excise taxes are low in international comparison

![Graph showing fuel excise taxes comparison across countries](external_url)

1. The chart considers only specific excise taxes, not broad-based consumption taxes, which are higher in Brazil than in other countries. Source: OECD (2015c).
Making growth more inclusive and improving well-being

Brazil has made substantial efforts to achieve more inclusive growth and its progress on several dimensions of well-being has been remarkable, although high inequalities with respect to income and other well-being indicators remain. Over the last two decades, income inequality and poverty have fallen substantially (Figure 19). Moreover, labour

Figure 19. Poverty and income inequality in international comparison and over time

A. Absolute poverty, relative poverty and Gini coefficient, 1995-2013¹

B. Gini coefficient, last available year²

1. Poverty is defined as the percentage of the population with per capita income below a poverty line. Absolute poverty refers the poverty line of USD 2 a day, as set out in the Millennium Development Goals of the United Nations. The absolute poverty number for 2013 is estimated based on IPEA data. Relative poverty refers the line at 50% of the median income. The Gini coefficient measures the inequality of income distribution on a scale between 0 and 1 with higher values representing more income inequality.

2. The last available year is 2012 for most countries.

Source: IBGE, OECD, “Income Distribution”, OECD Social Expenditure Statistics (database), except for non-OECD countries for which the source is World Bank (2013a): Argentina, Brazil, China, Colombia, Costa Rica, Indonesia, India, Paraguay, Peru, Russian Federation, South Africa, Uruguay.

http://dx.doi.org/10.1787/888933282670

Box 4. Main policy recommendations for improving the use of environmental resources

- Consider further increases in fuel taxes.
- Avoid a resurgence of implicit petrol subsidies in case of future oil price increases by adjusting petrol prices regularly.
market informality has declined, life expectancy has risen by 6 years and the average time spent in education has risen from 6 to 9 years.

Social transfers, in particular the conditional cash transfer programme Bolsa Família, have effectively contributed to reducing poverty, but earnings opportunities have also improved significantly for low-income households. A new Brazilian middle class has emerged as income growth has been particularly rapid at the lower end of the income distribution. Improved public services, particularly in the areas of education and health, have been instrumental for making growth more inclusive, as Brazilians have moved into better-paid and less precarious jobs and enjoyed better health. Improving these public services further will remain crucial for making growth more inclusive in the future.

**Education is the key to a better income distribution in the long run**

As discussed in the 2013 OECD Economic Survey of Brazil, Brazil has made significant advances in access to education and educational attainment has been rising, especially among the young and people from low-income backgrounds. This has resulted in better competencies, reflected in better results in the OECD’s PISA study (Figure 20). Nonetheless, Brazil’s level of human capital still lags significantly behind OECD standards, particularly in upper secondary and tertiary education. A high number of drop-outs exacerbates inequalities. Often the causes of unsatisfactory performance in the school system can be traced back to students’ failure to acquire essential skills during their early childhood, which could be addressed by further expanding early childhood education (ECE). ECE tends to improve student competencies significantly and has been found to add more to reading outcomes than one additional year of formal schooling (OECD, 2012a). While 37% of 3-year olds are enrolled in ECE programmes in Brazil, the OECD average at that age is 70%, and a number of countries (Belgium, France, Spain, United Kingdom, Italy) reach almost full coverage (OECD, 2014a). Also important are remedial interventions in basic education to assist children who are at risk of falling behind. Similarly in secondary education, early detection and tailored support with tutoring classes should be pursued to reduce drop-out rates.

Having expanded access, the next important challenge is to improve the quality of education. Offering longer school days would be one way to achieve this. Many schools still schedule up to three daily shifts to compensate for a shortage of class rooms, reducing the

**Figure 20. PISA scores on reading and mathematics**

Average of scores in reading and in mathematics

Source: OECD Programme for International Student Assessment (PISA), 2012.

StatLink: http://dx.doi.org/10.1787/888933282688
time that children can spend in schools. Moving towards universal full-day schooling would require building more physical school infrastructure (World Bank, 2012b). There are also ways to improve governance mechanisms, and some Brazilian states have illustrated how good governance and well-designed policies can result in rapid progress. Successful regional experiences have included incentive mechanisms such as performance-based pay for teachers and principals, and even the distribution of tax revenues across municipalities has been tied to educational outcomes, creating a healthy competition of municipalities for improving their schools. Teacher quality can also be raised by supporting continuous improvement through more in-service teacher training, an area where a number of states have made significant investments. It is important for Brazil to take stock of these experiences, evaluate them systematically and expand successful local initiatives nationwide.

**Improving public healthcare services**

Access to quality healthcare is an important dimension of reducing inequalities and Brazil has made significant progress in population health over recent decades. The development of publicly provided primary care and specific interventions (vaccination and prevention campaigns, maternal and child health services) have played a major role in raising Brazilians’ health (Gragnolati et al., 2013). Conditionalities attached to cash transfer benefits have also strengthened the incentives for vaccinations and health-check-ups for children and pregnant women. Life expectancy at birth has increased by nearly 15 years between 1970 and 2013, although countries like Chile and Korea managed to achieve greater improvements from a similar starting point (Figure 21).

![Figure 21. Selected health indicators](http://dx.doi.org/10.1787/health-data-en)
The backbone of Brazil’s success is the Unified Health System (Sistema Único de Saúde; SUS) that entitles every Brazilian citizen to free healthcare at the primary, secondary and tertiary level. The SUS is a decentralised system and the responsibility for service delivery lies with states and municipalities, which receive transfers from the central government. Since its establishment in 1989, health service delivery has been significantly expanded and 48% of the population access primary health care through so-called Basic Health Units (Ministério da Saúde, 2015).

Current challenges for the SUS include improving funding and the efficiency with which current resources are used, and raising the quality of healthcare. Even though funding has expanded over the years, severe capacity constraints are visible, often reflected in long waiting times for specialised medical services. In addition, access to prescription drugs is a challenge for many. More than half of Brazilians could not obtain drugs at public facilities and half the patients who decided not to purchase a prescription drug did so for lack of financial resources (Boing et al., 2013). Brazil’s average total per capita expenditures of USD 1 471 at PPP are less than a third of the OECD average at purchasing power parity (Figure 22). More importantly, the average number masks stark differences in health expenditures between those who use only publicly funded healthcare and the 25% of Brazilians who subscribe to private insurance plans to get better quality care (Victora et al., 2011). Per capita health expenditures for those with private insurance (USD 2 678 at PPP) are similar to the levels of Spain, Portugal or Slovenia, while healthcare spending is similar to the level of Mexico or Turkey for the remainder of the population (USD 1 028 at PPP).

In part, current capacity constraints for medical services are related to an underlying tension between the constitutional entitlement to coverage for all primary, secondary and tertiary care and the fact that resources for public healthcare are limited. A more explicit definition of what is or is not covered, in conjunction with a clarification of the decision-making process and assessment criteria upon which such decisions are based, may lead to a more efficient allocation of resources. This in turn could alleviate capacity constraints for those healthcare services that are considered priority. The current practice to give priority to SUS patients without private health insurance is also a way to ensure the best use of existing resources.

Figure 22. **Per capita expenditures on health**

In 2013 USD at purchasing power parities

Going forward, new challenges are emerging as the causes of illness and death increasingly resemble those of high-income countries with ageing populations. Non-communicable diseases such as diabetes, circulatory diseases, cancer and chronic respiratory diseases are significant challenges today (Figure 23). Cancer mortality rates have risen, unlike in many other countries. At the same time, communicable diseases are still relevant (Schmidt et al., 2011).

Besides efficiency enhancements, improving public healthcare is likely to require more public funding in the future, and as Brazil’s population ages, additional spending pressures are likely to emerge. OECD projections of health and long-term care expenditure suggest that public spending on health could rise from the current 4.7% to 12% of GDP by 2060 (de la Maisonneuve and Martins, 2013).

However, in light of the current fiscal situation, there are a limited ways to find new resources. One way to free resources and to improve the allocation of health-related spending would be by phasing out the current tax deductibility of private health expenditures, which has regressive distribution effects, as only households with higher incomes (about 10% of the working-age population) pay income taxes from which to deduct these expenses (Castro, 2014). This tax break costs about 0.3% of GDP, equivalent to 7% of public health expenditures. Similarly, employer contributions to private health plans should be taxed as ordinary income under the PIT. But adding these resources to the SUS may not be sufficient. Exploiting efficiency gains and improving resource allocation will be necessary and are possible, as other countries manage to achieve better health outcomes with similar resources. Empirical analysis based on data envelopment analysis suggests that with current health expenditures, Brazil could achieve significant improvements in health outcomes by raising the efficiency of health spending (see Chapter 2). This could help meet the three main challenges facing the SUS: facilitating access to all, improving the governance of the system and preparing for population ageing.

**Figure 23. Non-communicable diseases are a significant challenge**

A. Mortality rates due to diseases of the circulatory system, 2013 or nearest years

B. Prevalence estimates of diabetes, adults aged 20-79 years, 2011

Making the public system more cost-efficient

More remains to be done to develop outpatient care. Hospitals currently account for 70% of federal public healthcare spending, compared to an average of 40% in the OECD. International experience has shown that many services can be provided at lower costs outside of hospitals. Although the SUS has managed to reduce the role of hospitals as the “usual source of care” and increased the reliance on primary care facilities, more than half of emergency room visits could have been treated in primary care (TCU, 2013; Machinko, 2011; Machinko et al., 2004).

Payment mechanisms are key instruments for increasing efficiency, but the current payment mechanism in Brazil provides little in terms of incentives for hospitals to do so. Public SUS hospitals rely on line-item budgets calculated on the basis of historical trends, which could be replaced by alternative payment mechanisms. One option would be to move towards global budgets that are linked to performance or outputs. These can be coupled with diagnosis-related group (DRG) payment systems, used in 14 out of 34 OECD countries, for which international evidence suggests that they can reduce the length of hospitalisation without much impact on health outcomes (Busse and Quentin, 2011).

Further progress could also be achieved in reducing the cost of drugs. Brazil’s regulatory body should set reference prices for all drugs more in line with international price comparisons, update them regularly and develop clinical guidelines for the use of cost-effective drugs, as international evidence suggests that the associated cost-savings can be substantial. Based on these guidelines, Brazil should define an exclusive list of reimbursed medicines to end the current practice of patients suing the state to cover their drug expenses with no regard to their cost-effectiveness. Court orders issued on the basis of the constitutional guarantee that health is the duty of the state have led to growing costs for the SUS, and are problematic both on efficiency and equity grounds, as wealthier and more educated patients may find it easier to rely on the judicial system to pursue their claims. Brazil’s National Health Surveillance Agency (ANVISA) may be well-placed to take a leading role in developing these guidelines and setting reference prices. There is also scope to increase the use of generic drugs, which is lower than in OECD countries, by strengthening financial incentives for those prescribing, buying or selling drugs (OECD, 2013c).

Facilitating access to all

Since its establishment in 1989, the SUS has invested heavily in the expansion of its network of public facilities at the primary level. However, despite the wide network of so-called Basic Health Units that provide primary care services, long waiting times are frequent for specialised medical services, and delays and difficulties to access treatment were considered the main problem by 55% of survey respondents in 2012 (Figure 24). This is part of the reason why so many Brazilians choose to pay for private health insurance.

A general scarcity of doctors and their uneven distribution across the country are partly to blame for this, and would suggest a need for scaling up recent efforts to expand training capacity and incentives to move to underserved areas (Figure 25). These efforts have included the “More Doctors” programme that managed to increase the number of primary doctors by 18 000. Beyond primary care, difficulties in quality and access rise with the complexity of care in the public system. To address this issue, Brazil could set up explicit targets for expanding capacity. In some countries, regulations on maximum waiting times have been helpful in this context. For example, England introduced a target
Figure 24. **Perceived main problem of the public healthcare system**

- Delay or difficulty in access
- Shortage of doctors
- Poor condition of health facilities
- Mismanagement
- Lack of medicines
- Lack of care
- Overcrowding
- Lack of equipment, units, investments


StatLink: [http://dx.doi.org/10.1787/888933282721](http://dx.doi.org/10.1787/888933282721)

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Figure 25. **Practising medical staff per population and geographic imbalances**

A. Practising doctors per 1 000 population, 2013 (or nearest year)

B. Practising nurses per 1 000 population, 2013 (or nearest year)

C. Registered doctors per 1 000 inhabitants by state, 2013

1. Data include not only doctors or nurses providing direct care to patients, but also those working in the health sector as managers, educators, researchers etc, which can add another 5-10% of doctors.

2. Data refer to all doctors or nurses licensed to practice. This results in a significant over-estimation of the number of practising doctors in Portugal.


StatLink: [http://dx.doi.org/10.1787/888933282734](http://dx.doi.org/10.1787/888933282734)
regime ratcheted to 18 weeks which has led to a significant reduction in waiting times. Waiting time targets used in Denmark and Finland in certain segments of the health sector have also improved satisfaction among patients (Siciliani et al., 2013).

The level of out-of-pocket spending on drugs remains high in Brazil despite a federal programme to subsidise or give out essential drugs in public pharmacies (Farmácia Popular) has been in place since 2004. The number of participating pharmacies has increased significantly over the years, although geographical disparities are stark, with 84% of municipalities covered in the South and Southeast but only 29% in the North. More should be done to improve access to medicines in poorer areas, which may require more funding. Access to prescription drugs could be improved by making the public drug procurement process more efficient (Emmerick et al., 2015; Boing et al., 2013). A recent audit conducted by the Supreme Auditing Institution revealed that a majority of hospital units lacked drugs due to malfunctions in purchasing, inventory control, distribution and consumption of these materials (TCU, 2013).

**Improving the governance of the public health system**

The governance of the SUS is complex as it includes an intricate web of consensus-building mechanisms at all levels of government, and with civil society. This was meant to serve as a system of checks and balances, but it has also resulted in a system of shared responsibilities that is hard to manage and monitor. To improve the governance of the system, further progress could be made in three directions, including ensuring better co-ordination, improving performance monitoring, and strengthening incentives.

Better co-ordination could be achieved by giving a stronger focus on the development of regional networks as a way to ease the tension between municipalities’ strong autonomy on one hand and limited capacity and scale on the other. For example, certain diagnostic services, such as for cancer, can be less costly if managed by a regional centre rather than individual hospitals. Although a 2006 federal regulation laid the grounds for regional networks, the implementation has been limited and no clear consensus has emerged yet as to their best design (La Forgia and Couttolenc, 2008; dos Santos and Giovanella, 2014; Vargas et al., 2014). States could play a stronger role in co-ordinating regional health services. The experience of Denmark and Japan, for example, can provide guidance for finding the right balance between national guidance and regional planning (OECD, 2013b; OECD, 2015d).

Significant efficiency improvements could result from better performance monitoring. Monitoring performance and benchmarking across regions have been a challenge due to the absence of sufficiently detailed and comparable indicators on health outcomes and costs at the local level. Improving the collection of comprehensive performance indicators at the local level would be a first essential step. The availability of more comprehensive indicators for health outcomes, including at the level of individual healthcare units and hospitals, would allow the replication of the federally-funded incentive schemes that have proven highly successful in the area of education.

The perception of better quality in the private sector is likely related to better incentives. This suggests that tools that are used in the private sector could be applied more widely in the public sector to create the right incentives, particularly with respect to strengthening care co-ordination, fostering the accreditation of healthcare providers and providing adequate performance incentives. Strengthened co-ordination could avoid duplication of services and unnecessary hospital stays. The gradual rollout of Brazil’s
National Health Card that began in 1999 is a step in this direction and should be continued (OECD, 2010). Licensing and accreditation of hospitals and physicians are tools to improve the quality of healthcare services. Regarding medical staff, pay-for-performance schemes have been used successfully in hospitals in several OECD countries. In Brazil, the use of such schemes has been limited to pilot projects, mainly in the private sector. Providing incentives for state and municipal governments to improve performance could significantly affect the quality of healthcare services.

As Brazil’s population ages, the share of older people is set to rise strongly over the next decades. The proportion of people 65 and over is projected to increase to 23% by 2050, from currently 7% (OECD, 2015e). The majority of elderly people requiring long-term care services are currently supported by informal carers like families and friends, or through hospitals in the critical cases. Long-term care services are less costly and better alternatives to long hospital stays. They also relieve stress on families and allow them to keep working. Pilot projects for long-term care have started in developing countries including Thailand. Brazil has initiated a federal programme that provides home care as a substitute to existing health care services, called “Melhor em casa” (Better at home). The scale of the programme is small at present, but the programme can serve a useful starting point.

Box 5. Main policy recommendations for health policies

Key recommendations

- Enhance spending efficiency, including by developing a more explicit definition of what is covered by the public healthcare system, and raise funding for public healthcare.
- Implement targets for expanding specialised medical services to reduce waiting times.
- Train more doctors and nurses and strengthen incentives to reduce geographic imbalances.
- Improve the collection of performance indicators and enhance the use of benchmarking and incentive-based mechanisms, including pay-for-performance schemes.
- Develop clinical guidelines for the choice of cost-effective drugs, set reference prices for all drugs more in line with international price comparisons and define an exclusive list of reimbursed medicines.
- Shift the emphasis away from hospital care and strengthen primary care services, particularly for patients with chronic conditions.
- Provide more long-term care services under the SUS, with a particular focus on expanding formal home care services.

Other recommendations

- Gradually phase out the tax deductibility of private healthcare expenses to free more resources for the SUS.
- Strengthen the role of regional health networks through stronger leadership at the state level, including with respect to financing mechanisms and budget allocation.
- Provide stronger incentives for accreditation of hospitals and strengthen the licensing process, including enforcement mechanisms.
- Introduce output and performance targets into payment mechanisms for public and private SUS hospitals.
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ANNEX

Progress in main structural reforms

This table reviews action taken on recommendations from preceding Surveys. Recommendations that are new in this Survey are listed in the relevant chapters.
### Past recommendations vs. Actions taken and current assessment

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<tr>
<th>Category</th>
<th>Recommendation</th>
<th>Action taken/Current Assessment</th>
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<tbody>
<tr>
<td><strong>A. Consolidating confidence in macroeconomic policies</strong></td>
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<tr>
<td>Monetary policy has been tightened since October 2014 and inflation expectations for 2016 are starting to converge towards the 4.5% target. The tolerance band will be reduced by 0.5 percentage points as of 2017, potentially increasing credibility of inflation targeting.</td>
<td>No action taken regarding Central Bank independence, but communication on monetary policy has been kept to the Central Bank lately.</td>
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<tr>
<td>Solidify the credibility of monetary policy by establishing fixed-term appointments for its governor and the members of the Monetary Policy Committee, and by keeping communication on monetary policy to the Central Bank.</td>
<td>No action taken on redesigning the fiscal rule and on consolidating fiscal oversight. Quasi-fiscal operations have been sizeable until the end of 2014, but have been significantly reduced since.</td>
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<td>Redesign the fiscal rule to take account of the business cycle, for example by adopting an expenditure rule. Consolidate fiscal oversight to monitor compliance with the fiscal rule ex-ante. Increase clarity by limiting quasi-fiscal operations.</td>
<td>No action taken. A recently passed law will reduce penalties for early retirement in the short run.</td>
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<td>Reduce the fiscal burden of the pension system by severing the automatic link between pension benefits and the minimum wage and by raising effective retirement ages.</td>
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<td><strong>B. Boosting productivity and cost competitiveness</strong></td>
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<td>Move forward on new infrastructure projects and concessions as planned.</td>
<td>A new concession plan amounting to 200 billion BRL (3.6% of GDP) was announced, including roads, railroads, airports and ports. Nominal expenditures in the infrastructure programme PAC2 grew 21% in real terms in 2014 relative to the previous year, but have almost halved in the first 5 months of 2015.</td>
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<td>Continue efforts to consolidate indirect taxes into a single value added tax and reduce the use of turnover taxes. To protect the purchasing power of the minimum wage while allowing a gradual reduction relative to the median wage, index annual minimum wage increases to the consumer price index for low-income households plus only part of productivity gains for some time, in replacement of the current rule.</td>
<td>No action taken on a single value added tax. A partial reversal of payroll tax breaks is underway, which will reduce the use of turnover taxes.</td>
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<td>Gradually phase out financial support to BNDES, and focus BNDES lending on the financing of infrastructure, small and medium enterprises and innovation. In the transition, continue efforts to facilitate the development of private long-term capital markets, including by requiring private co-financing of BNDES loans.</td>
<td>No action taken. The current minimum wage indexation to inflation and GDP growth of the second previous year has been extended until 2019.</td>
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<td>Reduce tariff protection, and phase out local content requirements and targeted support to specific sectors.</td>
<td>No action taken. Budget transfers to BNDES stopped as of 2015, the interest rate differential between subsidised lending rates and market rates has been narrowed and parts of future BNDES loans will require private co-financing.</td>
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<td><strong>C. Improving the responsible use of resources</strong></td>
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<td>Remove implicit price support for fossil fuel by adjusting petrol prices in line with import costs, which would, among other things, promote the use of ethanol.</td>
<td>The implicit price subsidy has disappeared through a combination of higher domestic prices and a lower oil price. Fossil fuel taxes have been raised.</td>
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<td>Strictly enforce the new forest code and enhance incentive-based measures, such as rewarding forest preservation, to further reduce deforestation.</td>
<td>A rural environmental cadastre has been set up in order to implement incentive-based measures as foreseen in the new forest code. Over half the lands that need to be registered have been registered by now.</td>
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<td><strong>D. Maintaining the momentum of reducing poverty and inequality</strong></td>
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<td>Scale up early childhood education and early detection and tutoring classes to reduce drop-outs and grade repetition in secondary schools. Continue expanding in-service teacher training and strengthen performance incentives.</td>
<td>The number of childcare centres and enrolment in early childhood education have increased during 2012-14. By contrast, the number of teachers with tertiary education has fallen, both in absolute terms and relative to the number of teachers.</td>
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<td>Build more schools where needed to ensure full-day schooling nationwide.</td>
<td>The number of schools up to secondary education decreased. Average hours spent in school remained stable from 2012 to 2014.</td>
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<td>Increase resources for Bolsa Família and other programmes within the Brasil sem Miséria framework. Raise the level of benefits paid by Bolsa Família.</td>
<td>Bolsa Família benefits levels and eligibility thresholds were raised slightly in 2014. Average benefit levels and total expenditures with the program increased around 18% from 2012 to 2014 in real terms.</td>
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<td>Strengthen the progressivity of labour taxation by reviewing the rate schedule, exemption thresholds and the cap on social security contributions.</td>
<td>Personal income tax rates have not changed but brackets were adjusted in 2015. This will lead to some “cold progression”, with effective rates on very high incomes rising, but not for lower incomes.</td>
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Chapter summaries
Chapter 1

Raising industrial performance

Brazil’s economic growth will depend increasingly on productivity, as the scope for increasing labour participation has diminished. The industrial sector, where a few key structural reforms could unleash significant unexploited potential, can play a leading role in this respect. Industrial productivity has been low and stagnating, as weak policy settings have been responsible for high costs and incentive structures that have not been conducive to productivity gains. Taxes are high and compliance costs generated by a fragmented system of indirect taxes are a key driver of costs. Infrastructure bottlenecks, due to many years of low infrastructure investment, drive up transport and logistics costs for industrial companies, in particular with respect to industrial exports. Labour costs and difficulties in contract enforcement have also been concerns for industrial firms. Partly as a result of weak competitive pressures and high trade protection, Brazil has not benefited from the productivity gains associated with global trends that have shaped industrial production elsewhere, including a growing fragmentation of the value chain, the rising integration of the economy into international trade and a fluid reallocation of resources across firms. Innovation performance has also been held back by a lack of competition. The costs and benefits of targeted policy interventions for specific sectors are hard to ascertain in the absence of systematic and regular policy evaluations, which would allow a better focus on the more effective policy measures.
Improving public health services

Brazil has made remarkable progress in health over the last decades and improved access to healthcare has reduced inequalities. The backbone of Brazil’s success is the public Unified Health System (SUS), which entitles every Brazilian citizen to integrated healthcare free of charge. The SUS is facing severe capacity constraints, leading to long waiting times for specialised medical services, and access to medicines and specialist care can be difficult, particularly in poorer areas. A complex governance structure involving several levels of government is complicating an efficient provision of healthcare provision. To facilitate access to health care, Brazil should train more doctors and nurses, especially in family medicine, and strengthen incentives for them to move into underserved areas. Explicit targets for expanding capacity to reduce waiting times could also help to ease difficulties in access. Improving the governance of the system requires strengthening the role of regional networks and a better co-ordination of health care services, especially beyond primary care. Improving performance indicators and strengthening incentives to meet targets could lead to efficiency improvements at all levels of care. As Brazil’s population ages, public health spending is set to increase and the associated challenges could best be anticipated by providing more home-based long-term care services for the elderly under the SUS.
This Survey was prepared in the Economics Department by Jens Arnold, Yuki Murakami (ELS), Matheus Bueno and Sônia Araújo under the supervision of Pierre Beynet.

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