Labor reform: Potential impacts

- In international comparisons, Brazil has one of the world’s most inefficient labor markets.
- This report discusses aspects that make the Brazilian labor market inefficient and how the recently-approved labor reform can help to boost productivity, and supply and demand for workers.
- Our analysis suggests that the reform can lift Brazil’s ranking in terms of labor market efficiency to 86th from 117th among 138 nations.
- If this happens, we estimate that Brazil’s GDP per capita can expand 3.2% in the next four years (0.8% p.a.) and lower the structural unemployment rate by around 1.4 p.p. (approximately 1.5 million jobs).

In international comparisons, Brazil’s labor market stands out for its lack of flexibility, high costs and inefficient relations between employees and their employers. The chart below makes this point clear, based on 10 gauges of labor market efficiency set by the World Economic Forum’s Global Competitiveness Report (GCR). In the GCR ranking, Brazil currently scores 3.7 on a 0-7 scale and placed 117th among 138 countries. Therefore, this survey showcases Brazil’s labor market as one of the least efficient in the world, contributing to the economy’s low competitiveness.

The following pages discuss how the recently-approved labor reform (Law 13,467), which goes into effect in November, may contribute to improve the relative position of the Brazilian labor market and potential gains in terms of employment and well-being in the country.

What are the aspects that make Brazil's labor market inefficient and how can the labor reform help?

Based on the GCR ranking, we analyze below the key inefficiencies of Brazil's labor market and how several measures in the labor reform could impact them.

Heavy tax burden

Among 10 sub-items under the GCR’s labor market efficiency item, Brazil is the worst-ranked among 138 nations when it comes to taxes on labor. Heavy taxes and payroll contributions reduce the demand for workers, hurting employment and economic activity. Although the labor reform has few changes on this front, the possibility of partial or intermittent work shifts in lieu of a regular labor contract — which may be inefficient in some instances — could help to reduce costs per working hour and taxes.

Lack of flexibility in hiring and firing practices

Brazil also stands out by the lack of flexibility of its hiring and firing practices, being the second-worst ranked among 138 in the GCR report. The reform changes many aspects that should make the labor market more flexible. Introduction of the concept of intermittent work (which switches between active and inactive periods) will allow employers to hire workers to fit their specific demands, benefitting a wide array of sectors with seasonal demand, such as restaurants, retail and agriculture. From the workers’ perspective, the change will support hiring of those who are free to work just in certain hours of the day (e.g.: a parent who needs to pick up a child from school at a certain time). Home office and part-time work go in the same direction.

The reform also sets a new incentive structure for labor-related lawsuits, as the bill has increased the penalty to employees who initiate lawsuits in bad faith and has created more objective mechanisms to identify bad faith cases. Also, employees who initiate a legal case and skip court hearings will bear the costs of the proceedings. For employers, these measures tend to reduce labor litigation contingency costs. The possibility to terminate the labor contract when employee and employer are in agreement seeks to prevent so-called “fake terminations,” in which the employee accepts to be fired, gives back to the employer the fine related to employment protection program FGTS and becomes eligible for unemployment aid. Finally, firings without reason no longer need to be previously formally approved by unions, also cutting red tape. Taken together, these measures tend to increase employment formalization and decrease worker turnover, thus boosting incentives for employers to spend money on training and human capital development.

Lack of flexibility in wage determination

Brazil ranks 119th in this GCR item. Following the reform, payment of union duties will be voluntary, a situation that could lead to union consolidation, thus facilitating negotiations with employers. Prevalence of collective-bargaining agreements over legislation in many aspects (wages included) goes in the same direction. Prevalence of individual agreements for college graduates with monthly salaries above BRL 11,062.62 and pay based on productivity are even more important measures, allowing compensation to be defined individually. The bank of compensatory hours also enhances flexibility by allowing longer work periods in some instances and shorter stretches in others.

2 For a sectorial analysis of the reform in regards to public companies, please refer to Winners and Winners from the Labor Reform, Itaú Equity Strategy, July 2017.
Low cooperation in labor-employer relations

Brazil ranks 118th in this item, which has a more general nature. Many legislative changes in the reform may contribute to improve cooperation between employees and employers, such as the possibility of intermittent work, home offices, prevalence of individual agreements and pay based on productivity.

Low correlation between pay and productivity

Brazil ranks 88th in this item and has plenty of room for improvement. The reform states that work of equal productivity and technical expertise has the same value, which enables distinct pay levels among people with the same position and time with the firm, encouraging compensation for productivity. The possibility of intermittent work, the compensatory hour bank and more flexible part-time work will allow employers to use workers when they are more productive. The definition of activities not regarded as part of the work shift, such as rest breaks, leisure and religious practice, go in the same direction. Prevalence of individual agreements may clarify targets and goals for employers and employees alike.

Low female participation in the labor force

Brazil ranks 87th in this item. Intermittent work and part-time work should help women who are not available for 8-hour work shifts to find employment. The home office provision may help those who must stay at home.

High termination costs

Brazil does not rank terribly in this item (65th position), probably because measured termination costs do not contemplate spending on labor lawsuits. Collective and individual agreements may help to reduce termination costs, as long as the agreement also protects employees against termination for no reason. For example, if for economic motives a company needs to reduce labor costs, it may agree on a pay cut rather than fire workers. From a broader perspective, contingency costs related to labor litigation should also decline and thus contribute to boost demand for workers.

Importantly, the GCR points out other aspects behind the inefficiency of Brazil’s labor market which are not addressed by the reform, such as the availability of foreign workers and entrepreneurial leadership.

Estimating the positive impact of the reform on the labor market

We argued that several points in the labor reform can contribute to boost efficiency in Brazil’s labor market. But how can we quantify these effects?

Firstly, we listed the main 13 measures of the reform. Secondly, we matched each reform measure with GCR sub-items related to the concept of labor market efficiency, so that we can assess qualitatively how each sub-item will be impacted by the specific characteristics of the reform and classify that impact as “very high”, “high”, “average”, “low” and “null”. For instance, factors such as the availability of foreign workers are unaffected by this reform, but factors such as flexibility in hiring and firing practices should be materially impacted.

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3 Please refer to Appendix 1.
### Brazilian Labor Reform Impact

<table>
<thead>
<tr>
<th>Sub-item</th>
<th>Labor reform's relevant measures*</th>
<th>Qualitative impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxation on labor***</td>
<td>1,11</td>
<td>Small</td>
</tr>
<tr>
<td>Flexibility to hire and fire</td>
<td>1,3,8,9,10,11</td>
<td>Very high</td>
</tr>
<tr>
<td>Flexibility of wage determination</td>
<td>4,5,6,7,12</td>
<td>Medium</td>
</tr>
<tr>
<td>Cooperation in labor-employer relations</td>
<td>1,2,3,4,5,6,7,8,10,11,12,13</td>
<td>Very high</td>
</tr>
<tr>
<td>Attract talent from abroad</td>
<td>-</td>
<td>Null</td>
</tr>
<tr>
<td>Pay and productivity</td>
<td>1,5,6,11,12,13</td>
<td>High</td>
</tr>
<tr>
<td>Female participation</td>
<td>1,10,11</td>
<td>Medium</td>
</tr>
<tr>
<td>Redundancy costs**</td>
<td>4,5</td>
<td>Small</td>
</tr>
<tr>
<td>Reliance on professional management</td>
<td>-</td>
<td>Null</td>
</tr>
<tr>
<td>Skilled labor force</td>
<td>-</td>
<td>Null</td>
</tr>
</tbody>
</table>

* Based on the 13 measures listed in appendix
** Does not contemplate spending on labor lawsuits
*** Fees and contributions paid by the company as a percentage of profits

After the qualitative impact of each sub-item is defined, the next step is to assess the quantitative impact. To that end, we will use the experience of other countries that also implemented reforms in order to make the labor market more flexible. GCR data start in 2007, so our sample includes countries that implemented labor reforms afterward. Using previous research on the subject\(^4\), we listed the following 10 nations: Spain (2012), Ireland (2012), Portugal (2011), Czech Republic (2012), Mexico (2012), Greece (2011,2012), Romania (2011), Serbia (2014), Italy (2009, 2010) and Iceland (2009).

These countries’ scores in labor market efficiency sub-items fluctuated significantly after reforms. We calculated the accumulated score change of each sub-item for each country in the four years\(^5\) following the reform. We defined the reform’s impact for Brazil in terms of standard deviations from the historical experience of these 10 nations: Very high = 2 standard-deviations, High = 1.5 standard-deviations, Average = 1 standard-deviation, Low = 0.5 standard-deviation and Null = 1 standard-deviation.

Hence, we conclude that Brazil’s score in the labor market efficiency index can advance to 4.07 from 3.67, which means climbing the ranking to 86\(^{th}\) from 117\(^{th}\) (assuming that other countries’ positions are unchanged).

The result per sub-item reflects the substantial improvement that the reform may bring in terms of cooperation between employers and employees and for pay per productivity, among other aspects.

\(^4\) *Involvement of the International Monetary Fund in Labour Market Reforms in European Countries*, ITUC Background Paper, February 2013.
\(^5\) The only exception is Serbia, where the reform took place in 2014 and offers just 3 years of available data.
The reform’s impact on GDP per capita

As previously discussed, several labor reform measures tend to boost productivity and, thus, the bill should positively impact Brazil’s GDP per capita. In order to assess this impact, we started with GCR’s global competitiveness index, which evaluates aspects such as the soundness of institutions, infrastructure, business sophistication, along with the labor market efficiency in question. The broader index is clearly useful when we observe its high correlation with GDP per capita, as in the table below.

Brazil scores 4.1 in the global competitiveness index (on a 0-7 scale) and ranks 81st among 138 countries. Among survey components, market size is a positive highlight. Meanwhile, product market efficiency, the macro environment, the soundness of institutions and labor market efficiency are on the negative side.

Considering the estimated impact for the labor market efficiency component, the impact on the global competitiveness index would lift Brazil’s score to 4.09 from 4.06 and increase its ranking out of 138 nations to 78th from 81st.

<table>
<thead>
<tr>
<th>Global competitiveness index</th>
<th>Before reform</th>
<th></th>
<th>After reform</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Score (1 a 7)</td>
<td>Position (138 countries)</td>
<td>Score (1 a 7)</td>
<td>Position (138 countries)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>4.06</td>
<td>81</td>
<td>4.09</td>
<td>78</td>
</tr>
<tr>
<td>1. Institutions</td>
<td>3.24</td>
<td>120</td>
<td>3.24</td>
<td>120</td>
</tr>
<tr>
<td>2. Infrastructure</td>
<td>3.98</td>
<td>72</td>
<td>3.98</td>
<td>72</td>
</tr>
<tr>
<td>3. Macroeconomic environment</td>
<td>3.49</td>
<td>126</td>
<td>3.49</td>
<td>126</td>
</tr>
<tr>
<td>4. Health and primary education</td>
<td>5.30</td>
<td>99</td>
<td>5.30</td>
<td>99</td>
</tr>
<tr>
<td>5. Higher education and training</td>
<td>4.11</td>
<td>84</td>
<td>4.11</td>
<td>84</td>
</tr>
<tr>
<td>6. Goods market efficiency</td>
<td>3.70</td>
<td>128</td>
<td>3.70</td>
<td>128</td>
</tr>
<tr>
<td>7. Labor market efficiency</td>
<td><strong>3.67</strong></td>
<td><strong>117</strong></td>
<td><strong>4.07</strong></td>
<td><strong>86</strong></td>
</tr>
<tr>
<td>8. Financial market development</td>
<td>3.63</td>
<td>93</td>
<td>3.63</td>
<td>93</td>
</tr>
<tr>
<td>10. Market size</td>
<td>5.73</td>
<td>8</td>
<td>5.73</td>
<td>8</td>
</tr>
<tr>
<td>11. Business sophistication</td>
<td>4.01</td>
<td>63</td>
<td>4.01</td>
<td>63</td>
</tr>
<tr>
<td>12. Innovation</td>
<td>3.10</td>
<td>100</td>
<td>3.10</td>
<td>100</td>
</tr>
</tbody>
</table>
At first, the impact seems small, but in a regression of real GDP per capita in purchasing power parity\(^6\) for a selected sample of countries\(^7\) with their respective overall global competitiveness score, we find that the estimated improvement in global competitiveness is compatible with 3.2% growth in Brazil’s GDP per capita within four years (0.8% p.a.).

\[
y = 8133.3x^2 - 53272x + 96387
\]
\[
R^2 = 0.7207
\]

Therefore, our analysis suggests that the labor reform will have positive and significant impact on productivity in the economy. However, to attain higher competitiveness levels, changes in other fronts are required, such as strengthening institutions, the macro environment (including complexity in tax rules) and infrastructure.

**The reform’s impact on employment**

In addition to affecting labor productivity, several labor reform measures may fuel both supply and demand for workers. In order to assess the correlation between employment and labor market efficiency, we estimated a panel model inspired on Bernal-Verdugo, Furceri, Guillaume (2012).\(^8\) The model estimated the impact of improved degrees of labor market efficiency (as per the GCR) on the unemployment rate of countries that implemented reforms, taking into account the stage of the economic cycle by controlling for GDP growth (with one lag), in addition to variables that are typically associated with the structural unemployment level, such as government size (positive) and how much the economy is open (negative). The estimated coefficients show the expected signs and are significant\(^9\).

Results suggest that economic growth has relevant impact on the short term dynamics of the unemployment rate, reinforcing our view that cyclical factors related to the recovery pace in economic activity will be the main drivers for the evolution of unemployment in the coming quarters. However, using our model to forecast the change in Brazil’s labor market efficiency index, we find that the cumulative impact of the reform on the unemployment rate may reach 1.4 p.p. (approximately 1.5 million jobs).\(^10\)

\(^{6}\) World Bank, GDP per capita PPP (at constant 2011 prices).

\(^{7}\) Countries selected have a population of at least 10 million and income per capita above USD 6,000, except for some which are significant for the analysis, such as Uruguay, Paraguay, New Zealand, Singapore and Ireland.


\(^{9}\) See Appendix 2.

\(^{10}\) We assumed that our estimate for improvement in the efficiency index to 4.07 from 3.67 will take place over four years.
Implementation risks

The labor reform shakes some of the pillars of labor relations in Brazil and therefore, the significant legal-institutional structure surrounding labor legislation in the country. Initially, it is reasonable to expect resistance to the changes proposed in the labor reform and a possible increase in the number of lawsuits. In a longer horizon, the new legislation's efficacy will depend on decisions and guidelines that will be established by the superior Judicial instances.

Fernando M. Gonçalves  
Luka Barbosa  
André Matcin

Appendix 1: Key labor reform measures

1. **Intermittent work**: The individual labor contract may be written for intermittent work, with active and inactive periods, regardless of the activity type by employee and employer (except for aeronauts).

2. **Contractors**: With contractors, the contracting company transfers the execution of any of its activities (including core activity) to another legal entity. Employees of the service provider are guaranteed the same conditions offered to employees of the contracting company (meals, training, etc.). Terminated employees must wait 18 months before providing contractor services again for the same company.

3. **Labor lawsuits and legal proceeding costs**: An employee who initiates a lawsuit in bad faith will pay a penalty ranging from 1% to 10% of the amount claimed. Employees who skip court hearings will bear the costs of the proceedings, even when using free public prosecutors, unless there is proof of a justifiable reason. Moral compensation payments are limited to 50x the last salary (in case of very grave offenses).

4. **Prevalence of collective bargaining agreements**: Collective bargaining agreements prevail over legislation when it comes to: work shifts (limited to 12 hours per day and 220 hours per month), divided paid vacation days (as much as thrice), bank of compensatory hours, intra-shift breaks (a minimum of 30 minutes for shifts longer than 6 hours), switching of holidays and workdays, career plans, home office, pay for productivity and individual performance, and profit sharing. Salary cuts may be decided collectively, as long as the agreement protects employees against termination for no reason. The following rights are non-negotiable: 13th monthly salary, FGTS fund deposits, unemployment aid, paid vacation days, termination notice, as well as health, hygiene and safety norms.

5. **Prevalence of individual agreements**: Individual agreements prevail over legislation for college graduates with monthly salaries totaling at least twice the cap for benefits under the Social Security General Regime (currently at BRL 11,062.62).

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11 We express our gratitude to Pedro Fernando Nery and Lourenço Paiva for their contributions to this study, and to Daniel Pastore and Marina Madeira for the review of legal aspects.
6. **Pay for productivity**: Equal work is work executed with the same productivity and technical expertise. Pay for productivity, when collectively agreed, prevails over the law.

7. **Voluntary payment of union duties**: Employees now must previously and openly authorize deduction of union duties from their paychecks. For companies with 200+ personnel, a commission must be elected to represent them, with the purpose of fostering direct understanding with employers.

8. **Termination of work contracts upon agreement**: Work contracts may be terminated when employer and employee come to an agreement, when the following labor dues must be paid: half of the advance notice payment, half of the fine calculated upon the balance of the FGTS account (if indemnified) and other labor dues paid in full. Termination of work contract by mutual agreement does not authorize the worker to claim unemployment benefits.

9. **Termination for no reason**: Terminations for no reason require previous authorization from the union, convention or collective bargaining agreement.

10. **Home office**: Home offices refer to services executed outside the employer’s premises. Work is not limited to a regular 8-hour daily shift. Employees are still in home office if they visit employers’ facilities for specific activities.

11. **Part-time labor**: A maximum of 30 hours per week or 26 hours plus 6 hours of overtime per week (vs. 25 hours per week previously).

12. **Bank of compensatory hours**: The bank may be set up in a written individual agreement, as long as compensation happens in no more than 6 months.

13. **Activities not considered part of the work shift**: Employees’ travel time between home and workplace is excluded from the work shift, as are the following activities: religious practice, rest, leisure, study, meals, social activities, personal hygiene, clothing changes.
**Appendix 2: Panel estimation results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>2.9678</td>
<td>3.0903</td>
<td>0.9603</td>
<td>0.3374</td>
</tr>
<tr>
<td>UR(-1)</td>
<td>0.7294</td>
<td>0.0250</td>
<td>29.1381</td>
<td>0.0000</td>
</tr>
<tr>
<td>DLOG(GDP(-1))</td>
<td>-7.7454</td>
<td>1.4860</td>
<td>-5.2123</td>
<td>0.0000</td>
</tr>
<tr>
<td>LOG(GOV)</td>
<td>1.7373</td>
<td>0.6355</td>
<td>2.7337</td>
<td>0.0065</td>
</tr>
<tr>
<td>LOG(TRADE)</td>
<td>-1.2759</td>
<td>0.4938</td>
<td>-2.5839</td>
<td>0.0101</td>
</tr>
<tr>
<td>DLOG(LABOR_WEF)*(D_REFORMS)</td>
<td>-7.0555</td>
<td>4.0984</td>
<td>-1.7215</td>
<td>0.0858</td>
</tr>
</tbody>
</table>

**Effects Specification**

Cross-section fixed (dummy variables)

- R-squared: 0.9645
- Adjusted R-squared: 0.9598
- S.E. of regression: 0.9474
- Log likelihood: -678.9310
- F-statistic: 201.3904
- Prob(F-statistic): 0.0000

Source: Eviews, Itaú

In which UR is the unemployment rate; GDP is real level GDP; GOV is government spending as a share of GDP; TRADE is (Exports+ Imports)/GDP; LABOR is the WEF’s labor market efficiency index; D_REFORMS is the dummy for reforms (assuming a value of 1 starting in the year of reform implementation).
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