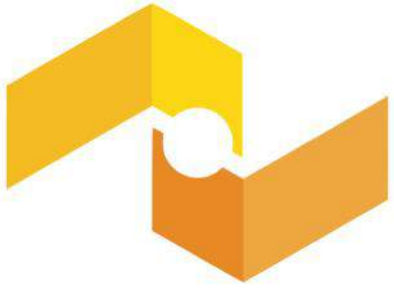

IOLW

INTERNATIONAL OBSERVATORY OF LIVING WAGES

A Collaborative Research Project

Universidad La Salle México

Brazil's Wage Gaps

Wage rates for all employed in manufacturing

2019 Report

Manufacturing wage gaps for Brazil vis-à-vis selected developed and "emerging" economies, with available wage and PPP data (1996-2017)

(see definitions and sources at the end of report)

Manufacturing wage gaps for Brazil vis-à-vis selected developed and “emerging” economies, with available wage and PPP data (1996-2017).

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The Argument for Wage Equalisation
Using Purchasing Power Parities (PPPs)

- **Classic Problem Scenario**

  - With market liberalisation, MNCs sell their products in both the host countries and in all other markets where they are active, including their home country, at the same or at a very similar sales price,

  - They achieve maximum profitability when the manufacturing process in their developing countries' operations is at par in quality and production efficiency with the standards used in their home operations but their cost of labour is dramatically lower,

  - The MNCs' markets and their manufacturing and marketing operations are *globalised* but their labour costs remain strategically very low in order to achieve maximum competitiveness and shareholder value at the expense of the South's workers,

  - The resulting situation is one where MNCs get all the benefit. Sometimes the salaries that they pay are higher than the legal minimum wage in the host country. Yet, these wages still keep workers in dire poverty. A minimum wage does not make a living wage even in the most developed economies,

  - What has occurred, with market globalisation, is the dramatic widening of the gap between wages in the North and in the South,

  - While the standard of living of a worker in the North provides the basic means to make a living and afford a basic standard of comfort, a worker working for the same company, doing the exact same job with the same level of quality and efficiency, lives in a shanty town in a cardboard house with no sewage, water and legal electricity,

  - In this way, the huge differential in labour costs is added to the profit margin, keeping the part (the surplus value) that should have provided the worker with an equivalent standard of living to that enjoyed by the same workers in the North. This surplus value from the labour factor is the part rightfully belonging to workers, and that they should have received from inception, as their fair share of the income resulting from the economic activity.

The Argument for Wage Equalisation
Using Purchasing Power Parities (PPPs)

- **The Argument**

  - In true democracy the purpose of all governments is to procure the welfare of every rank of society, especially of the dispossessed, with the only end of all having access to a dignified life in an ethos where the end of democratic societies is the social good and not the market. The market is just one vehicle to generate material wellbeing,

  - In this ethos, and with markets globalised, workers performing the same or an equivalent job for the same business entity, in the generation of products and services that this entity markets at global prices in the global market, must enjoy an equivalent remuneration,

  - This equivalent remuneration is considered a living wage, which is a human right,

  - A living wage provides workers in the South with the same ability to fulfil their needs, in terms of food, housing, clothing, healthcare, education, transportation, savings and even leisure, as that enjoyed by equivalent workers in the North, which we define in terms of the purchasing power parities (PPP) as defined by the World Bank and the OECD,

  - The definition of a living wage of The Jus Semper Global Alliance is as follows: *A living wage is that which, using the same logic of ILO´s Convention 100, awards "equal pay for work of equal value" between North and South in PPPs terms,*

  - The premise is that workers must earn equal pay for equal work in terms of material quality of life for obvious reasons of social justice, but also, and equally important, for reasons of long-term global economic, environmental and social sustainability.

The Argument for Wage Equalisation
Using Purchasing Power Parities (PPPs)

- **The Argument**
  - The argument of an equivalent living wage is anchored on three criteria:

    ➡ Article 23 of the UN Universal Declaration of Human Rights on the following points:
    a. Everyone, without any discrimination, has the right to **equal pay for equal work**,
    b. Everyone who works has the right to just and favourable remuneration ensuring for himself and his family an existence worthy of human dignity, and supplemented, if necessary, by other means of social protection.

    ➡ Article 7 of the UN's International Covenant of Economic, Social and Cultural Rights of 1966: (i) Fair wages and equal remuneration for work of equal value without distinction of any kind, in particular women being guaranteed conditions of work not inferior to those enjoyed by men, with equal pay for equal work; (ii) A decent living for themselves and their families;

    ➡ ILO´s Convention 100 of "**equal pay for work of equal value**'", which is applied for gender equality, but applied in this case to North-South equality, using PPPs as the mechanism,

  - The proposal is to make workers in the South earn living wages at par with those of the First World in terms of PPPs in the course of a generation (thirty years),

  - There will not be any real progress in the true sustainability of people and planet –reversing environmental degradation and significantly reducing poverty– if there is no sustained growth, in that period, in the South's quality of life, through the gradual closing of the North –South wage gap; attacking, in this way, one of the main causes of poverty, and pursuing concurrently sustainable development –rationally reducing consumption in the North and rationally increasing it to dignified levels in the South, thus reducing our ecological footprint on the planet,

  - Just as the International Labour Organisation's Decent Work Agenda states, the decent work concept has led to an international consensus that productive employment and decent work are key elements to achieving poverty reduction,

  - The material quality of life in Jus Semper's The Living Wages North and South Initiative (TLWNSI) is defined in terms of purchasing power, so that equal pay occurs when purchasing power is equal,

  - Purchasing power is determined using purchasing power parities (PPPs),

  - Purchasing power parities (PPPs) are the rates of currency conversion that eliminate the differences in price levels between countries.

The Argument for Wage Equalisation
Using Purchasing Power Parities (PPPs)

- **Concept of Living Wage Using PPPs**
  - The concept of a living wage using PPPs is straightforward. To determine real wages in terms of the purchasing power of any country in question, the PPPs of this country are applied to nominal wages. These are the real wages for each country,
  - Purchasing power parities reflect the amount in dollars required in a given country to have the same purchasing power that $1 US has in the United States; e.g.: if the PPP index in one country is 69, then $0,69 are required in that country to buy the same that $1 buys in the US; thus, the cost of living is lower. If the PPP were to be higher than 100, say 120, then $1,20 is required in that country to buy the same that $1 buys in the US; the cost of living is, thus, higher,
  - To calculate a living wage, the real wage of a specific category of US workers is used as the benchmark, and the PPPs of a country in question are then applied to the US wage,
  - This provides the equivalent living wage that a worker in the country in question should be earning in order to be at par in terms of purchasing power to the material quality of life enjoyed by the equivalent US worker. This is the equalised wage in terms of purchasing power,
  - In this way, the comparison between the actual real wage of the country in question exposes the gap, in real terms, between the current real wage of the worker of the country in question and the living wage it should be earning, in order to be equally compensated in terms of PPPs,
  - In practice, since the PPPs vary annually, due to the dynamics of economic forces, the pace of the gradual equalisation of wages, through small real-wage increases, needs to be reviewed annually.
  - It must be pointed out that this rationale does not even take into consideration that the neoliberal paradigm of staunch support for supply-side economics has consistently depressed for three decades the purchasing power of real wages in the US, the benchmark country for wage equalisation. This has been attempted to be resolved by women joining the work force and, fictitiously, through over indebtedness, which eventually has brought us down to the great implosion of capitalism in 2008. In this way, this equalisation analysis is made in the context of a course set forth during three decades of global depression of real wages in favour of international financial capital.

The Argument for Wage Equalisation
Using Purchasing Power Parities (PPPs)

A Classic Example in 2017

- Equivalent manufacturing workers in Mexico and Brazil earn only 23% and 33%, respectively, of what they should be making in order to be compensated at par with their US counterparts in terms of purchasing power,
- US Workers earn $39,36/hour whilst Mexican and Brazilian workers earn only $4,95/hour and $9,13/hour, respectively,
- Since costs of living in PPP terms in Mexico and Brazil are $0,54 and $0,70, respectively, for each $1 US dollar, equivalent Mexican and Brazilian manufacturing workers should be earning instead $21,15/hour and $27,41/hour, respectively, in order to enjoy equal purchasing power compensation,
- The difference is the wage rate gap that employers actually rob to increase profits,
- Canada, in contrast, has a much smaller gap with its US counterparts, since its nominal wage rate ($33,63) is 83% of the equivalent wage rate ($40,63) needed to be at par, with a PPP of $1,03 per each $1 US dollar.

Nominal, Real and Equalisation Wage Rate for All Employed in Manufacturing by Using Purchase Power Parities (PPPs) Benchmark

	Nominal Hourly	PPP	PPP	Equalised Nominal Hourly	Equalisation
2017	Wage Rate	2017	Real Wage Rate	Wage Rate	Index
United States	39,36 US$	100	39,36 US$	39,36 US$	100
Canada	33,63 US$	103	32,58 US$	40,63 US$	83
	85 %		83 %	103 %	
Mexico	4,95 US$	54	9,21 US$	21,15 US$	23
	13 %		23 %	54 %	
Brazil	9,13 US$	70	13,11 US$	27,41 US$	33
	23 %		33 %	70 %	

Sources:

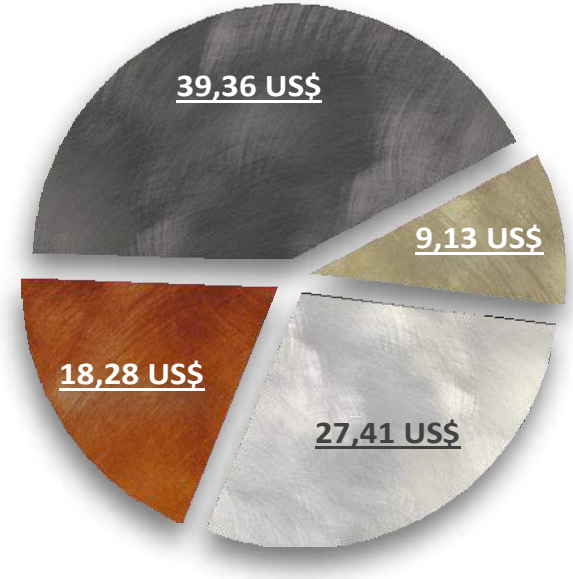
International Observatory of Living Wages 2019.

The Conference Board, International Labor Comparisons program, February 2018.

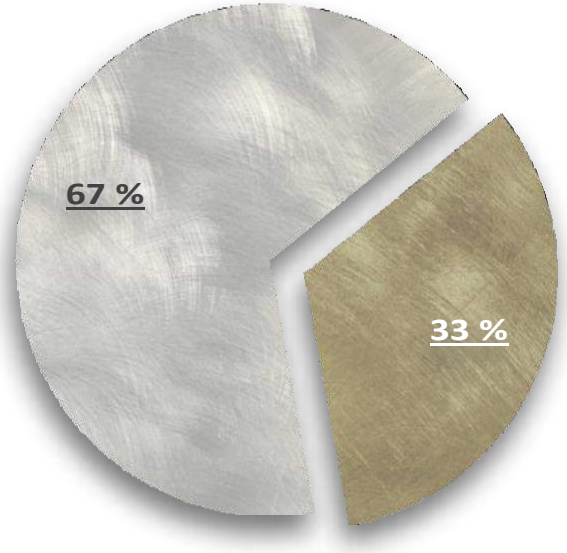
Data base of World Bank's World Development Indicators, 1975-2017, (private consumption PPP indicator)

The Argument for Wage Equalisation
Using Purchasing Power Parities (PPPs)

- **A Classic Example in 2017**
  - From a graphic perspective, the first pie chart shows the U.S. real wage rate for all employed in the manufacturing sector, which is always the benchmark. In the case of Brazil, the pie chart exhibits the nominal wage rate earned, the nominal wage rate equalised with the U.S. wage rate –always in purchasing power parity terms, and the difference retained inappropriately (deliberately).
  - The nominal equalised wage rate of $27,41 is what all employed in Brazil's manufacturing sector should earn to be equally remunerated (in purchasing power terms) for performing an equivalent task (because Brazil's PPP cost of living is 70% the cost in the US). Yet, workers only earn $9,13 instead of $27,41, thus the employer deliberately retains $18,28, which constitutes the greater part of the surplus value that legitimately belongs to Brazil workers, according to TLWNSI's concept.
  - In this way, the second pie chart shows how the employer retains inappropriately 67% of labour's surplus value, or labour share of income, by only allocating to the worker 33% of what he/she is entitled to.



Nominal wage rate earned
Equalised nominal wage rate
Difference inappropriately retained by the employer
U.S. equivalent wage rate (benchmark for equlisation)



Nominal wage rate earned
Difference inappropriately retinaed by the employer

Sources: WB, U.S. BLS, TCB, IOLW

Wage rate gap comparisons for selected economies

- **2017 is the first year in the 22-year span in this report that US hourly wage rates dropped (0,9%). This enabled the vast majority of countries to reduce their comparative wage gaps or increase their surpluses in their manufacturing wage equalisation index (Eq- Idx) or at least keep their position** (For full details see Table T5, starting in page 28)**.**

- After Brazil widened its manufacturing wage gap in 2014 and 2016, due to the devaluation of its currency since 2010 under a sustained recession, it managed to remain stable in 2017, despite the fact that the neoliberal government of Michele Temer passed a law that put a freeze on public spending effectively ending compliance with the minimum wage appreciation law. Minimum wage policy serves as an indicator for all other wages and directly influences manufacturing wages. Consequently, with a 2,1% inflation rate in 2017, the manufacturing hourly rate increased 1,4% in local currency units, effectively dropping in real terms. However, the appreciation of Brazil's real (BRL) and the drop of the US hourly manufacturing rate, allowed its equalisation index to remain at 33. Hourly rates and the Eq-Idx are bound to drop in 2018 and 2019, given that Bolsonaro's new government is deepening the anti-labour policies initiated by the Temer government.

- In 2017 Japan has reversed the downward trend in living-wage equalisation (Eq-Idx) that began in 2013, increasing its Eq-Idx by three points, to a 69 index. This is the result of the combination of the drop of the US hourly rate, an increase of Japan's hourly rate in local currency and the drop of PPP cost of living, despite a decrease of its hourly rate in US dollars. South Korea sustained the growing trend of its Eq-Idx that resumed in 2014 after a brief downturn in 2013, and it is now at 71, three points below its highest index in 2012. This is the result of the combination of the drop of the US equivalent rate, an increase of the local currency rate, and a currency revaluation that produced a 4% increase of its hourly rate in US dollars. South Korea has also been able to remain ahead of Japan's Eq-Idx. A strong drop of Singapore's hourly rate in local currency produced a 1 point loss in its Eq-Idx.

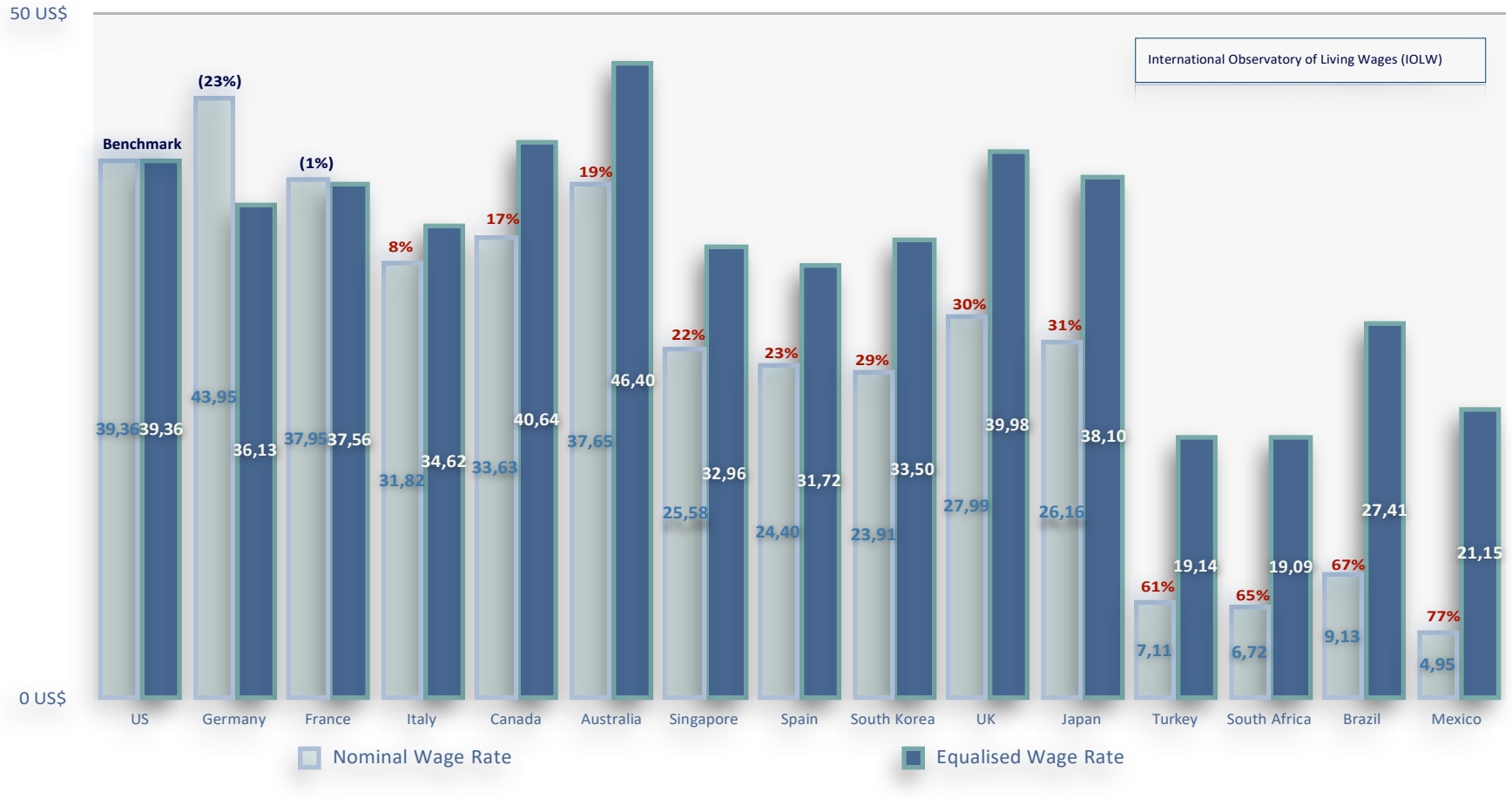
- In the euro zone, Spain, Germany and France stopped their downturn that began in 2012, after steady and stronger growth of the US hourly rate vis-à-vis the growth of their comparative hourly rates in euros. In the case of France and Germany, they recovered some ground in their equalisation due to the revaluation of the euro in 2017 and no change in their PPP cost of living, despite the drop of their hourly rates in local currency. In the case of Spain the revaluation of the euro combined with a +2% growth of its hourly rate in euros and again no growth of the PPP cost of living, enabled it to gain four points in its Eq-Idx. In contrast, Italy's drop of its hourly rate of almost 4% in local currency and 2% in US dollars, produced further erosion of its Eq-Idx that began in 2014.

- The United Kingdom reversed the sustained erosion of its Eq-Idx that began in 2008 and gained four points from its 2016 position. This resulted from the devaluation of its currency and a drop of its PPP cost of living, combined with a 2,2% growth of its hourly rate in local currency and the nearly 1% drop of the US rate. In contrast, Australia continued to decrease its Eq-Idx that began in 2014, with 4,4% drop of its hourly rate in local currency and a 1,9% increase in the PPP cost of living. In the case of Canada, the combination of its hourly rate increase in Canadian dollars of 9,4%, its currency revaluation of 2,2% and the 0,9% US rate decrease, produced an 11,8% increase of its hourly rate in US dollars between 2016 and 2017. This enabled its living wage equalisation index (Eq-Idx) to grow 10,2%, from 75 to 83, its highest since 2010. South Africa is a new economy incorporated into this report, showing a steady increase of its Eq-Idx since 2004, the earliest year with available data. But little growth of its hourly rate in local currency (1,9%) combined with strong inflation that pushed up its PPP cost of living almost 14% did not allow it to sustain its Eq-Idx growth in 2017, despite the fact that a strong currency revaluation increased its hourly rate +12% in US dollars. Extremely strong growth of hourly rate in local currency (41%) at a much higher rate than strong currency devaluation (17%) produced a strong 31% increase of Turkey's Eq-Idx, the highest of all economies included in our reports.

- Mexico's track record since 1996 exposed a deliberate state policy of maintaining modern-slave-work real wages between 1996 and 2015. However, wage policy appears to have changed in 2017 after the execution of consistent supply-side policies over more than three decades. For the first time the Federal minimum wage was increased above inflation in 2017 and 2018. Through a so-called "Independent Recovery Amount", the minimum wage for 2017 was increased arbitrarily by 9,6%, including 3,9% to offset the estimated CPI inflation rate. The same criterion was applied for 2018, for a total minimum wage increase of 10,4%, including a 3,9% increase to offset CPI inflation. In 2019, Mexico's new government, touting to implement a strong minimum wage recovery policy, increased the minimum wage by 16,2%, including a 5% increase to offset inflation. The change of policy has had a direct positive impact on manufacturing wages in real terms and on its equalisation with comparative US wages. Between 2014 and 2017 the hourly rate in local currency increased 41,2%, but the peso experienced a steep devaluation of 29,8%, Thus the hourly rate in US dollars decreased slightly by 0,8%. However, due to the devaluation of the Mexican peso and low inflation, the PPP conversion factor dropped 23,6% for the same period. This allowed the Eq-Idx to gain four points, to 23, both in 2016 and 2017, the highest recorded index in the 22 year span of time. Yet, Mexico continues to have one of the widest living-wage gaps among the 41 countries included in all our reports, just ahead of China, India and the Philippines.

2017 gaps between nominal and equalised wage rates with US wage rates using PPPs for private consumption

(Total hourly manufacturing compensation costs in US dollars – US is benchmark)



Gap between Nominal and Equalised wages rates in terms of purchasing power parities

1) If lighter bar is greater than darker bar= Nominal wage rate is superior to rate required to be at par with U.S.
2) If darker bar is greater than lighter bar= Nominal wage rate is less than wage required to be at par with U.S.
3) If both bars are in equilibrium= Nominal wage is equivalent to nominal wage in U.S. in terms of purchasing power

(The size of wage gap is expressed in percentages. If negative, there is a wage advantage instead of a wage gap for nominal wage rate is superior to rate required to be at par with U.S.. Comparisons are in terms of hourly compensation costs as explained in T5.)

Sources: The Jus Semper Global Alliance analysis using the sources below. (Sources with X indicate that some of their data is directly incorporated in the table:)

- The Jus Semper Global Alliance: Living Wage Gaps Analysis in the manufacturing sector using:
- The Living Wages North and South Initiative (TLWNSI) using "Equal Pay for Work of Equal Value" Methodology.

x Database of World Bank's World Development Indicators, 1975-2017.
x U.S. Bureau of Labor Statistics, August 2013 and The Conference Board (TCB), International Labor Comparisons Program - Manufacturing Hourly Compensation Costs, February 2018.
x The Conference Board (TCB) — International Comparisons of Manufacturing Productivity and Unit Labor Costs 2017, July 2018
– Purchasing Power Parities and Real Expenditures of World Economies. Summary of Results and Findings of the 2011 International Comparison Program. World Bank 2014.

Main features of minimum wage rates and manufacturing wage rate equalisation in Brazil

With the Temer and Bolsonaro governments against demand-side economic policies, Brazil's labour remunerations are bound to lose in real terms. Temer's government passed a new law (PEC 55) that freezes all public spending for 20 years, which implies that constitutionally-protected government expenditures in the areas of health, education and other social sectors would remain stunted until 2036. This has in practice ended Brazil's commitment to sustain its minimum wage appreciation policy, after the minimum wage had more than doubled in real terms since 1996. Manufacturing wages actually lost ground since 1996, until the minimum wage appreciation policy began to have a positive influence from 2009 onwards. But with a renewed recession during the 2014-2016 period that is only beginning to subside and the staunchly neoliberal supply-side approach followed by Bolsonaro's new government, Brazil will no longer sustain the closing of its Eq-Idx and it is likely to actually increase its equalization gap with comparative wages in the US.

- Brazil's wage policy was redefined with its 2010 legally-binding wage-appreciation plan to annually raise the real minimum wage above inflation. The plan was scheduled to continue until 2023 by following the simple formula of increasing the wage rate by adding the rate of GDP growth for the year two years prior to the inflation rate of the previous year. If GDP did not increase or actually dropped, only CPI inflation was considered. This policy was instituted by legislation 12.255/2010, but was repeatedly replaced by new legislation to cover the periods 2012-2015 (12.382/2011) and 2016-2019 (13.152/2015). Yet in practice the annual increases to the minimum wage were determined by decrees. Despite opposition to sustain the minimum wage appreciation policy (an appeal to render it unconstitutional was rejected by Brazil's high court) the annual increases largely followed the formula of GDP plus the inflation rate, even with the Temer government. Hence, the gap between the actual nominal increases and the formula increases is of only 15 $BRL, equivalent to 1,5% less than the formula by 2019, as can be observed in the graphic on page 14.

- A fact that should be emphasised is that the minimum wage in Brazil has been consistently increased above inflation regardless of this policy. Indeed, before the minimum wage appreciation policy came into effect in 2010, the monthly minimum wage was increased in nominal terms an average of 10,4% versus 6,5% for the consumer price index (CPI), equivalent to 3,9% points above the CPI during the government of Henrique Cardoso (1996-2002) or ($BRL of 195 vs 157 for CPI). With the Lula government the minimum wage was increased in nominal terms an average of 13,1% versus 7,2% for the CPI, equivalent to 5,9% points above the CPI ($BRL of 461 vs 317), for the period 2003-2009. Subsequently, during the actual years of the official minimum wage appreciation policy that began in the last year of Lula's government and the six years of Rousseff's government (2010-2016), the minimum wage was increased an average of 9,7% versus 6,5% for the CPI, equivalent to 3,2% points above the CPI ($BRL of 880 vs 718). As for the 2017-2019 period during the Temer government, the minimum wage was increased an average of 4,3% versus 4% for the CPI, equivalent to 0,3% points above the CPI ($BRL of 998 vs 990); a clear change of policy no longer committed to the appreciation of the minimum wage. Nonetheless, as can be observed in the chart on page 15, overall minimum wages have increased exponentially from R$108 to R$998 between 1996 and 2019, whereas if they were increased only at the same rate as the CPI, they would have increased to only $R448. This is equivalent to a gain of 123% in real terms from their 1996 level. It is also evident that the Lula da Silva government gave maximum priority to reducing the gap as much as possible between the minimum wage and the cost of the basic food basket (BFB), as also shown on page 15. His underlying goal was to reduce inequality in a very meaningful way. The Rousseff government complied closely with the policy. Minimum wages increased slightly above the formula for her first two years but slightly below for the remaining four years, but every year they grew in real terms. By the same token, the Temer government increased the minimum wages slightly below the formula, except for 2019, when the minimum wage was clearly increased above inflation. It should be noted that for the 2017 and 2018 increases the GDP of two years prior was not incorporated for it was negative (-3,55% for 2015 and -3,31% for 2016). Thus in can be asserted that despite the change to supply-side economics with the Temer government, the increases complied with the minimum wage appreciation policy. Overall, looking at the entire 23-year period from 1996 to 2019, the 123% increase of the minimum wage in real terms made it possible for the number of minimum wages required to buy the BFB for a household of four to drop very significantly from 7,2 in 1996 to 4 in 2019 as shown on page 15. As for the Bolsonaro government, it is expected to completely detach itself from this policy and increase the minimum wage at the most in line with the CPI.

- In great contrast, the behaviour of manufacturing wages is starkly different. Hourly manufacturing wages were decreased in real terms during the Henrique Cardozo government every year except for 2001. Indeed, hourly manufacturing wages in Brazil were increased below inflation, growing annually in nominal terms an average of 4,1% versus 6,5% for the CPI, equivalent to 2,4% points below the CPI during the government of Henrique Cardoso (1996-2002) or ($BRL of 8,99 vs 10,36 for CPI). Conversely, with the Lula government the hourly manufacturing wage was increased in nominal terms an average of 8,8% versus 7,2% for the CPI, equivalent to 1,6% points above the CPI ($BRL of 16,24 vs 14,61), for the period 2003-2009. By the same token, during the actual years of the minimum wage appreciation policy with the last year of Lula's government and the six years of Rousseff's government (2010-2016), the hourly manufacturing wage was increased an average of 8,5% versus 6,5% for the CPI, equivalent to 2% points above the CPI ($BRL of 28,73 vs 25,29). As for 2017 with the Temer government, the hourly wage was increased 1,4% versus 6,6% for the CPI, equivalent to 5,2% points bellow the CPI ($BRL of 29,14 vs 30,62); clearly a refusal to at the very least sustain the real value of wages in the manufacturing sector. As a result, since 1996, nominal hourly wages for all employed in manufacturing increased from R$7,11 in 1996 to R$29,14 in 2017, whereas if they were increased only at the same rate as the CPI, they would have increased to $R27,95. This is equivalent to a meagre gain of only 4,25% in real terms from their 1996 level. It should be noted however, that during the Henrique Cardoso government real hourly manufacturing wages lost 13,2% in real terms, with Lula they gained 11,2% up to 2009. Then during the 2010-2016 period, with the minimum wage appreciation policy in place, manufacturing wages gained 13,6% in real terms. Thus, for the 2003-2016 period of Lula and Rousseff, manufacturing wages were increased clearly above inflation for eleven out of the fourteen years, increasing a yearly average of 8,7% versus 6,9% for the CPI, a difference of 1,8 percentage points above inflation. This represents a gain of 26,2% in real terms for the period (R$28,73 vs R$22,77 for CPI). The chart on page 16 shows how a widening gap develops between nominal hourly wages and their value when indexed to inflation during the Cardoso years (1996-2002), and then how gradually the gap begins to narrow until it crosses and starts gaining ground in real terms in 2010, the year when the minimum wage appreciation policy comes into place. As for 2017, the first year of the Temer government, the hourly manufacturing rate dropped 4,8% in real terms. Despite the drop, nonetheless, from 2003-2017, the hourly manufacturing wage rate gained 20% in real terms (R$29,14 vs R$24,27 for CPI) for the period, vis-à-vis a 78% gain for the minimum wage. This can also be clearly observed in the smaller chart on page 16.

Main features of the state of manufacturing wage rate equalisation in Brazil

- In summary, manufacturing hourly rates gained ground at a clearly lower pace than the minimum wage rate during the Lula and Rousseff governments,. Furthermore, because of the preceding years of the Cardoso government and the drop in 2017, they gained a meagre 4,25% in real terms since 1996, in contrast with 121% increase for the minimum wage for the same period, a dramatic difference in results. This has a direct effect in the equalization of manufacturing hourly rates with the rates of equivalent US workers, under the principle of equal pay for equal work of equal value, as assessed from a global perspective in the next page. Evidently, market drivers in Brazil refused to gradually close the enormous gap from a global perspective. Relative to how manufacturing wage rates performed against the cost of the basic food basket, they lost ground in real terms. As can be observed on the first chart on page 18, in 1996 manufacturing workers needed 65% of their gross monthly wage to buy the BFB. This increased to 74% by 2017; the result of growing in nominal terms 310% versus an increase of 363% to the cost of the BFB for the same period.

- Assessing the trend followed by hourly wage rates for all employed in manufacturing —from a global perspective— in terms of their equalisation, the 1996-1998 period shows the best position, just before the crisis, with a 33 index (using private consumption PPPs) vis-à-vis equivalent US wages. The equalisation indices subsequently dropped to as low as 28 between 2002 and 2004 as a result of Brazil's economic recession at the turn of the century, with the exchange rate dropping 50% to 2003, when the Eq-Idx reached its nadir recording 28. As the economy recovered, equalisation indices also slowly recovered, and, after 2010, once the minimum wage recovery plan was implemented, the equalisation index in the manufacturing sector reached its best position in 2012 (36). However, a series of steep devaluations of almost 10% in 2013, 8% in 2014, a deep collapse of the BRL of 29,3% in 2015 and a drop of 4,7% in 2016, produced a total decline of 44,1% of the BRL value since 2012. In 2017 the BRL revalued 9,4% but dropped again 12,7% in 2018 and so far (November 2019) it has lost another 12%. Yet, despite the steep and recurrent devaluations, inflation has not exploded as it did in previous crises in the last century, recording, according to DIESSE, a CPI of: 6,2% in 2012, 5,6% in 2013, 6,2% in 2014, 11,3% in 2015, 6,6% in 2016, 2,1% in 2017, 3,3% in 2018, and it is expected to be around 3% in 2019. Thus, inflation appears to be under control after two decades of volatile behaviour.

- As a consequence, living wage equalisation of manufacturing hourly wages have not made any improvement whatsoever. The hourly rates recovered gradually after the turn of the century recession but by 2017 their equalization with equivalent US wages are back to exactly the same 33 index of 1996. Moreover, the current trend signals the continuation of their equalisation erosion. The Eq-Idx has gradually lost ground from 36 in 2012 and was able to remain at 33 in 2017 only because the BRL revalued 9,4% that year whilst the US hourly rate lost almost 1%. However, with the Temer and Bolsonaro governments bringing back economic policy in support of employers, the prospect for living wage equalisation appears grim.

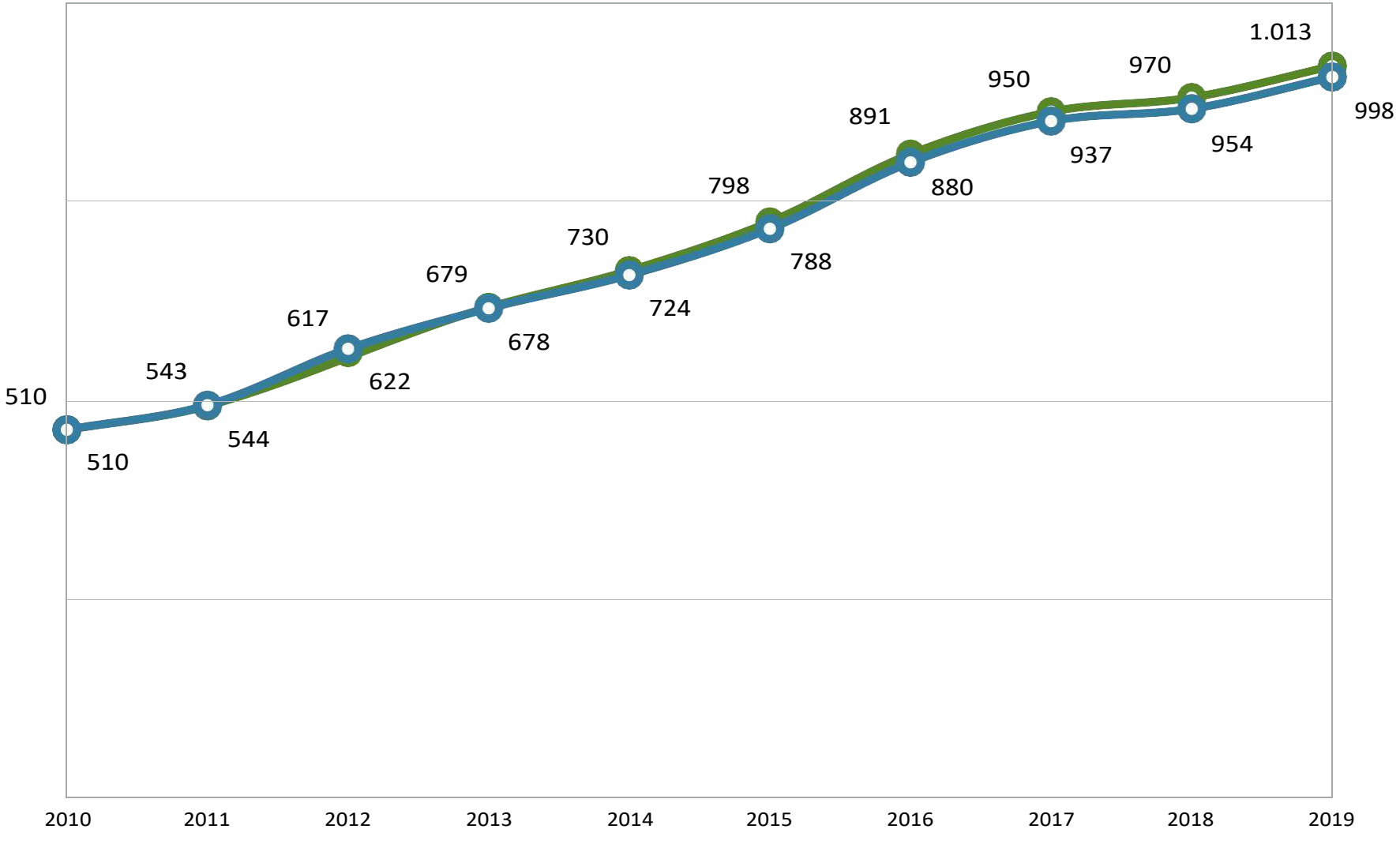
- Technically, the biggest obstacles to sustaining the closure of the wage rate gap are the PPP cost of living and GDP growth. In 1996 the PPP cost of living for private consumption was $0,94 dollars or 94% the US cost of living. Then, at the deepest point of Brazil's recession, the PPP had dropped to $0,41 in 2002. Subsequently, Brazil's recovery made the cost of living extremely expensive again, to the point that by 2011 Brazil had become as expensive as the U.S, with a PPP cost of living of $0,99 or 99% the US cost of living. The combination of the BRL's devaluation and a relatively tamed inflation ensued a steep drop of the PPPs by dropping to $0,83 in 2013, $0,80 in 2014, $0,61 in 2015, and steering slightly up again to $0,63 in 2016 and to $0,70 in 2017. The higher the PPP, the higher the equalisation wage rate required. If the PPP is 99% of the US rate, then the nominal Brazilian wage rate required in US dollars, to be fully equalised with the US wage rate, must be 99% of the US wage rate. If inflation is higher than in the US and the BRL's value is sustained the PPP will grow and viceversa. Exchange rates have a direct bearing on the PPP. Equalisation depends on the combined behaviour of wage rates and PPPs. As previously explained, the PPP is the rate of currency conversion that equalises the purchasing power of currencies. Thus, it acts as the estimated effective exchange rate used to reflect the real cost of living in a given country. The factors directly affecting the PPP are the NCPI (inflation rate) and the exchange rate.

- For the entire 1996-2017 period, Brazil's hourly wage rate in dollar terms increased 29,2% in nominal terms and 74,6% in PPP terms. But the equalisation index is still the same after twenty-one years, because the US hourly rate increased 75,2% during the same period (for further detail see table T5 on page 28).

- For Brazil to consistently reduce its living wage gap to equalise real wages with those of its US counterparts for all employed in manufacturing, it must put inflation in check (below 5%) and continue to increase nominal wages above inflation rates. Concurrently, Brazil must recover its momentum and resume good economic growth rates of at least 3 to 4% of the annual GDP. Between 2002 and 2005 Brazil averaged a 3,3% GDP; for the 2006-10 period it averaged a 4,5% GDP growth, and between 2011 and 2014 it averaged a 2,3% growth. However, GDP dropped in 2015 to -3,6%, -3,3% in 2016 and is now barely beginning to recover recording 1,1% in 2017, 1,2% in 2018, and it is expected to record another 1,1% GDP in 2019. It will almost be impossible for Brazil to continue improving its manufacturing equalisation index with equivalent US wages unless it resumes economic growth and keeps inflation in check, even if the hourly wage rate increases in nominal terms.

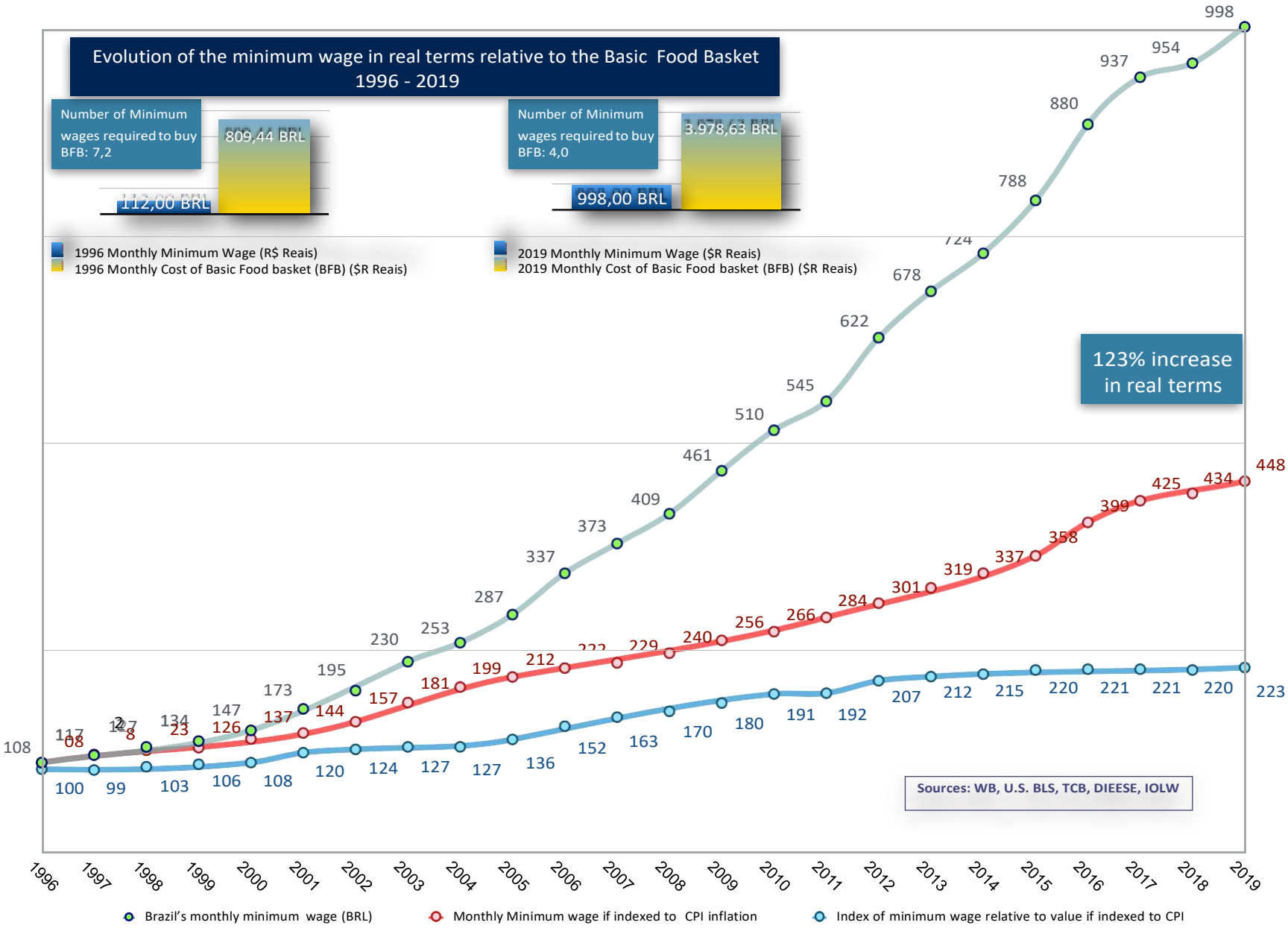
- As could be expected, with Temer and even more so with the Bolsonaro government adamantly against increasing the labour share of income, the picture for the coming years appears to be of a decrease in real terms of both minimum wages and manufacturing hourly rates and consequently of living wage equalisation in manufacturing from a global perspective.

Gap between actual monthly minimum wage and minimum wage as per CPI+GDP formula

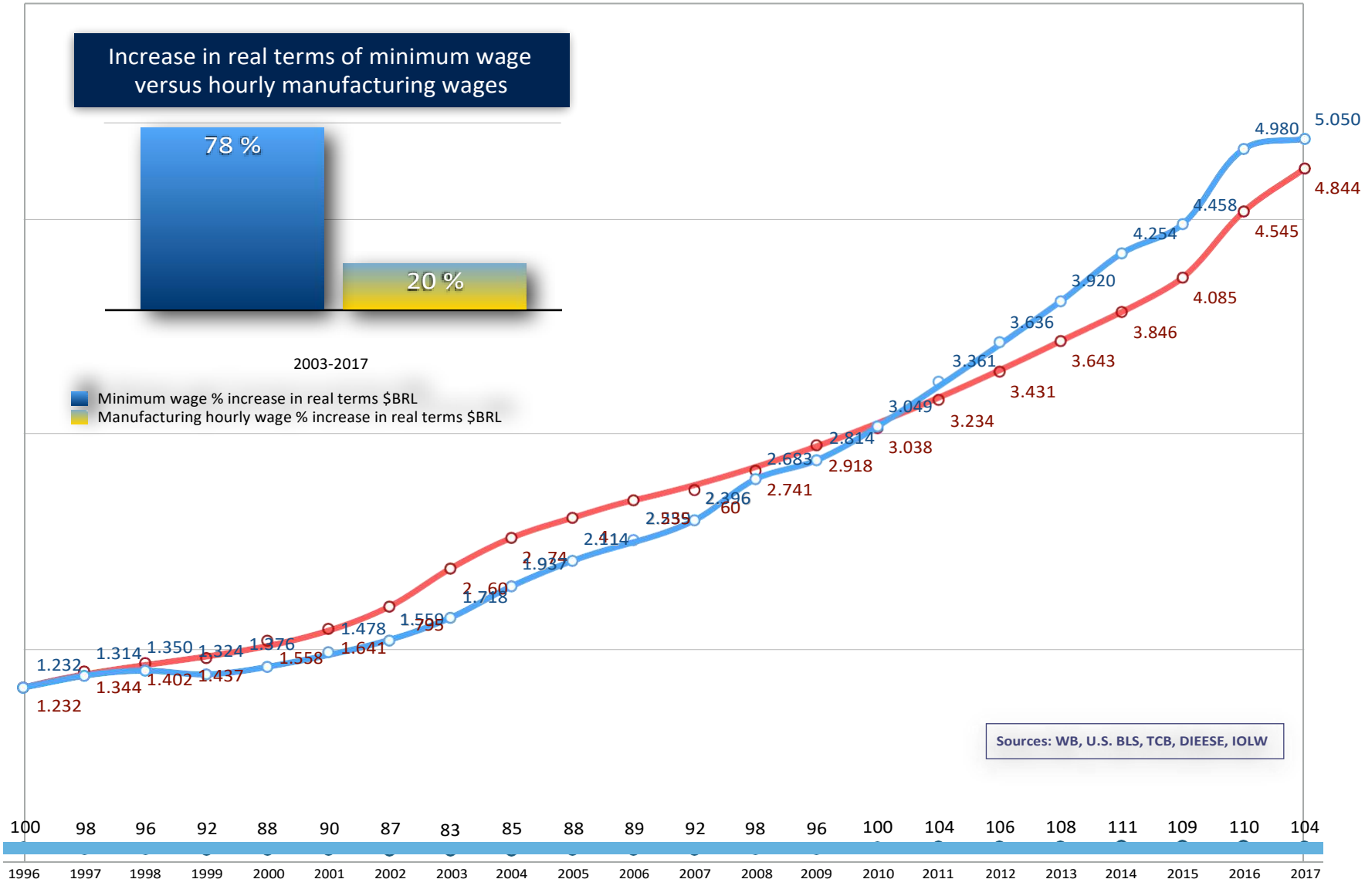


Sources: WB, U.S. BLS, TCB, DIEESE, IOLW

Evolution of minimum wage in real terms relative to value if indexed to CPI

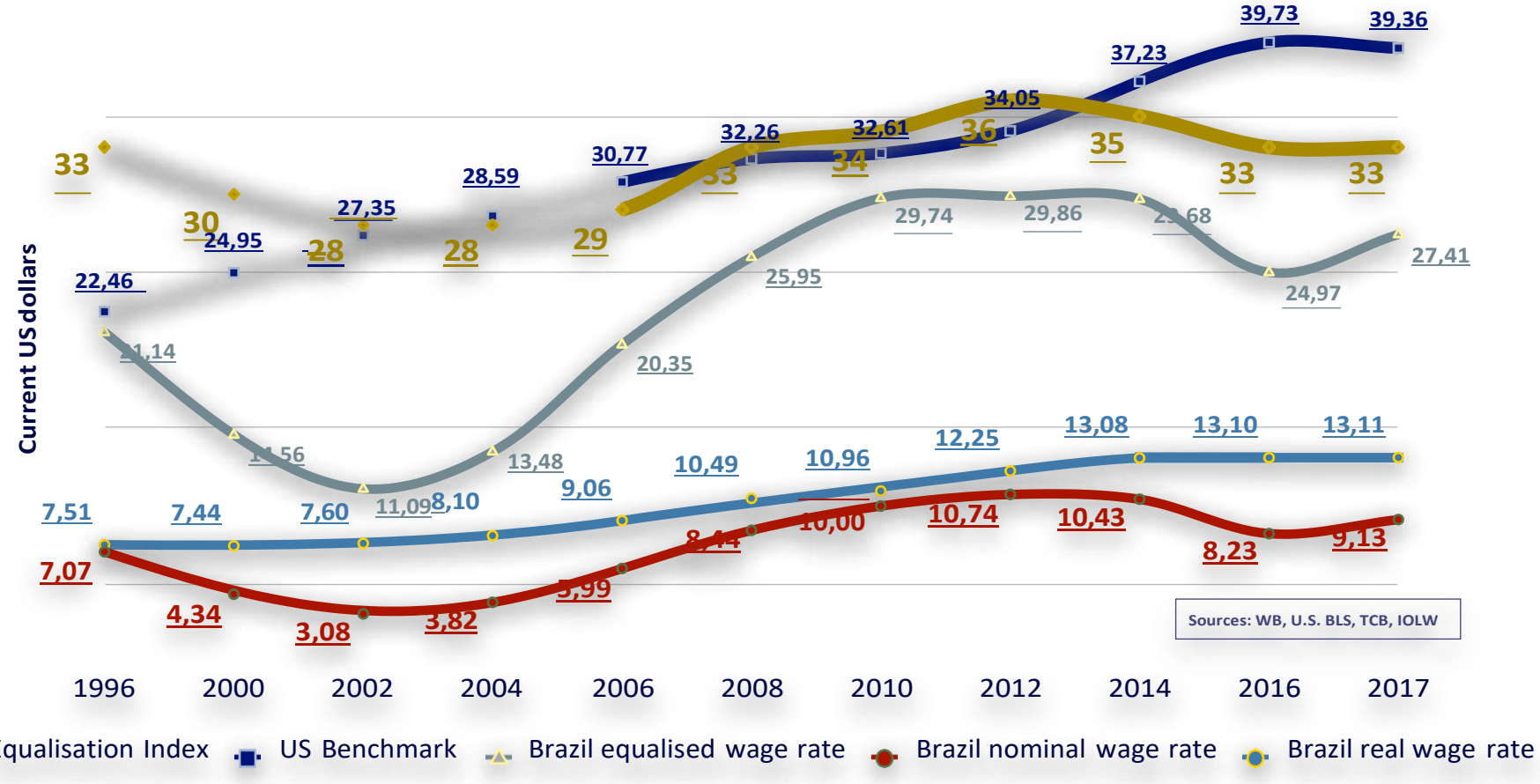


Evolution of manufacturing wage rates in nominal terms in local currency versus CPI



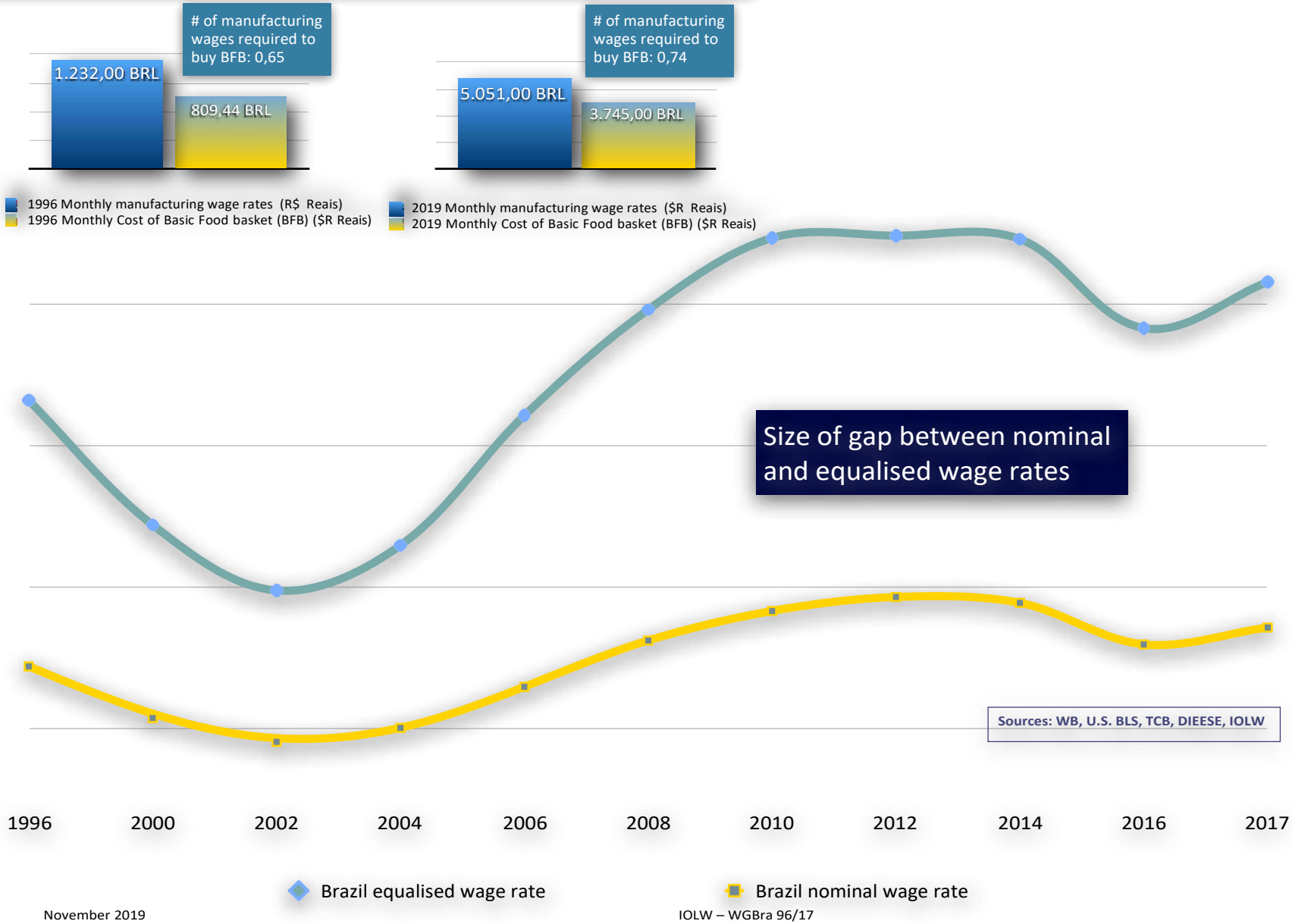
Equalisation Index with US Manufacturing Real Hourly Wage Rates via PPPs

The chart below provides a complete illustration of the behaviour of Brazil's manufacturing wage rates vis-à-vis US wage rates since 1996. Between 1996 and 2002, the US hourly wage rate increased 22%, but Brazil's nominal rate dropped by 56% whilst its equalised nominal rate dropped by 48%. As a result, the Eq-Idx dropped from 33 to 28. Then, between 2002 and 2017, the US rate grew 43,9% and Brazil's nominal rate increased 196%, with the equalised rate growing by 147%. Consequently, the Eq-Idx improved five points since 2002, but nothing since 1996. This is explained by the fact that Brazil's real wage rate increased 74,6% since 1996, which is almost the same as the 75,2% that the US wage rate increased during the same time period. Yet, if inflation was kept in check to reduce the PPP cost of living with GDP growing at least 3-4%, Brazil should have been able to resume and sustain the growth of its equalisation index (for further detail see table T5 on page 28). However, with the current supply-side policies of the current government this is no longer possible for the foreseeable future.

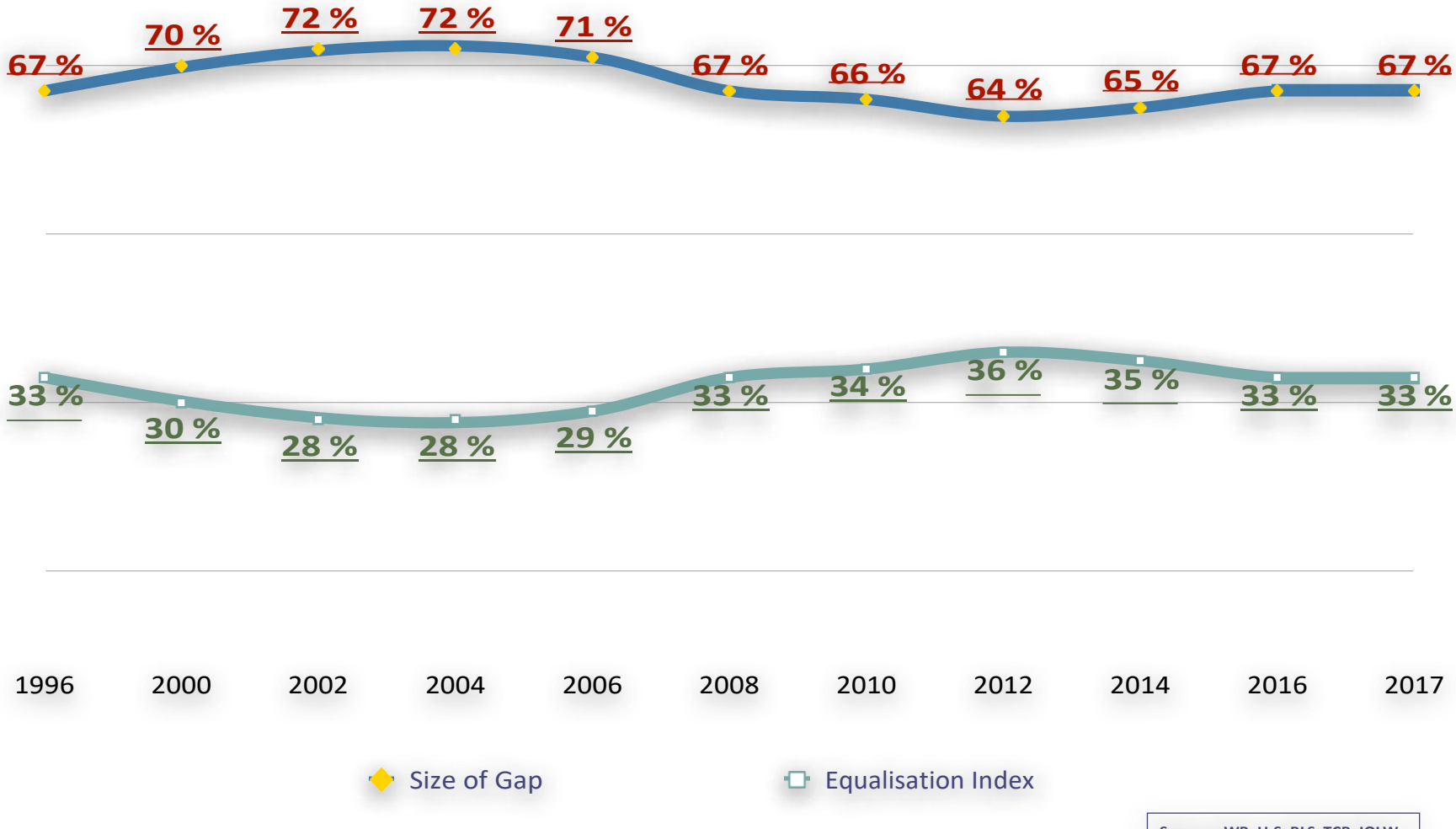


Gap between hourly nominal and equalised wage rates in PPP terms for all employed in manufacturing with equivalent US real wage (current dollars)

Evolution of the manufacturing rates in real terms relative to the Basic Food Basket 1996 - 2017



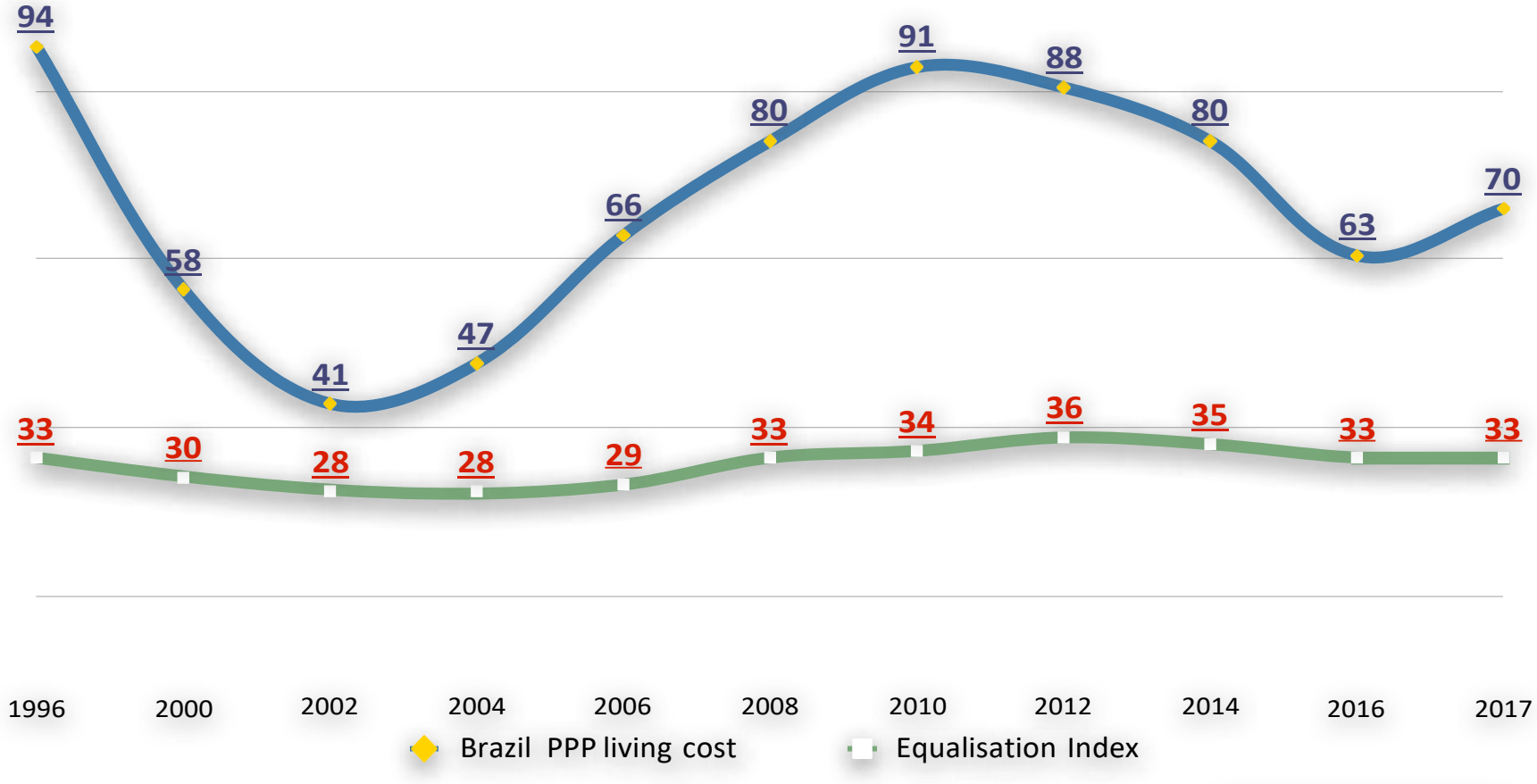
Gap between equalisation index and size of manufacturing hourly real wage rate gap in Brazil vis-à-vis US real wage rate



Sources: WB, U.S. BLS, TCB, IOLW

Performance of equalisation indices of Brazil's PPP manufacturing hourly real wage rate vis-à-vis US counterparts and behaviour of Brazil's purchasing power parity indices (cost of living in PPP terms – US= 100)

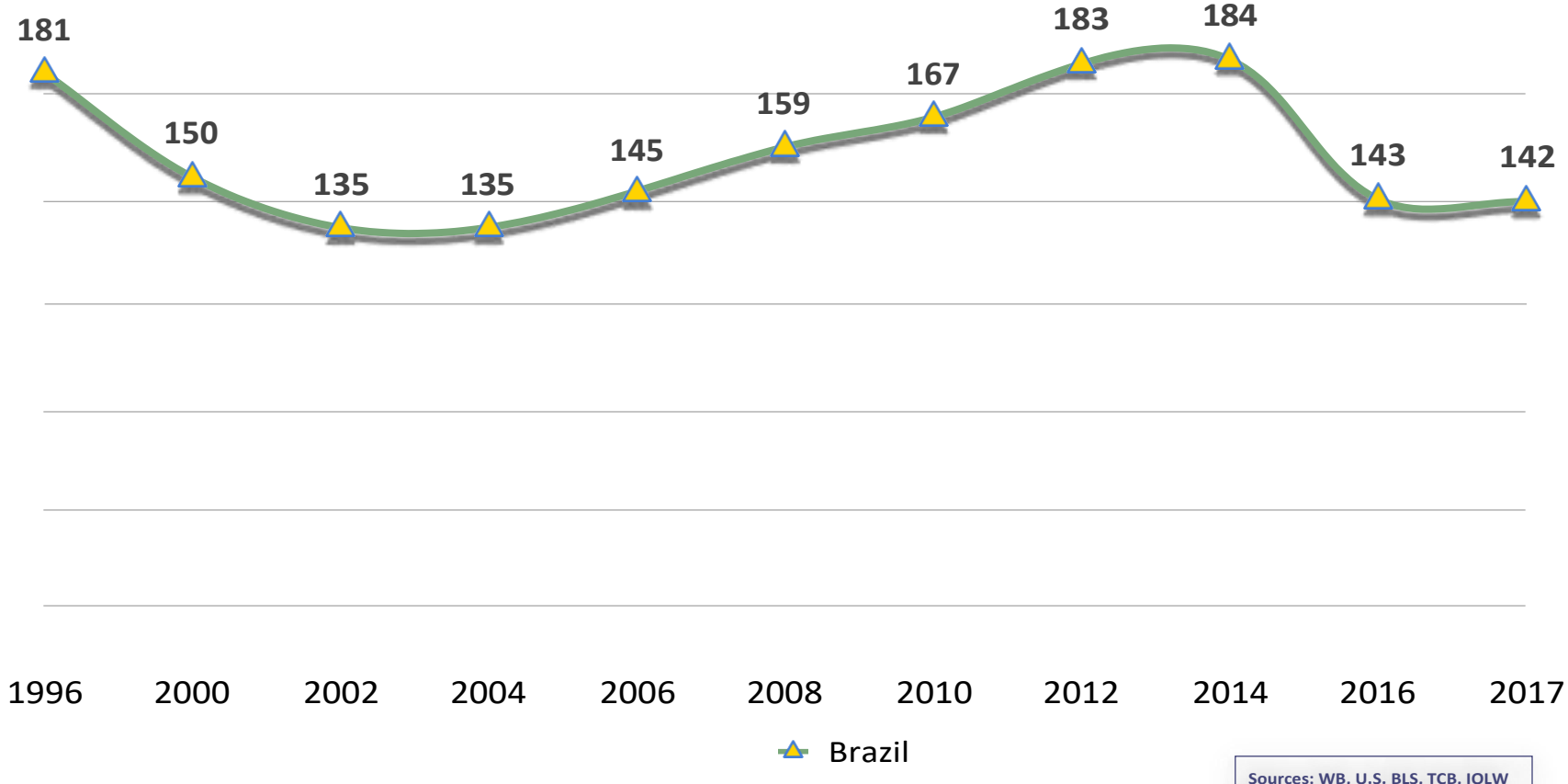
From 2002 Brazil experienced a sharp increase in its cost of living due to a sustained growth of inflation, which began to drop in 2012. The NCPI averaged 6,6% between 2002 and 2017, whilst it averaged 2,1% in the US. Every increase in the PPP increases Brazil's equalised nominal wage rate vis-à-vis the US. To sustain equalisation, Brazil's PPP must decrease with lower inflation rates –or at least not grow at even higher rates– and real wage rate growth must be sustained.



Sources: WB, U.S. BLS, TCB, IOLW

Behaviour of comparative indices of Brazil's manufacturing hourly real wage rate vis-à-vis the equivalent Mexican wage rate (Mexico = 100)

When comparing Brazil's manufacturing sector real wage rates with those of Mexico, the second largest economy in Iberian America, the former amounted to 1,81 times the value of the latter in 1996 to then drop 25% at the lowest point of its recession in 2002. Since then Brazil's manufacturing wage rates recovered but Mexico's wage rates began to close the gap in 2016.

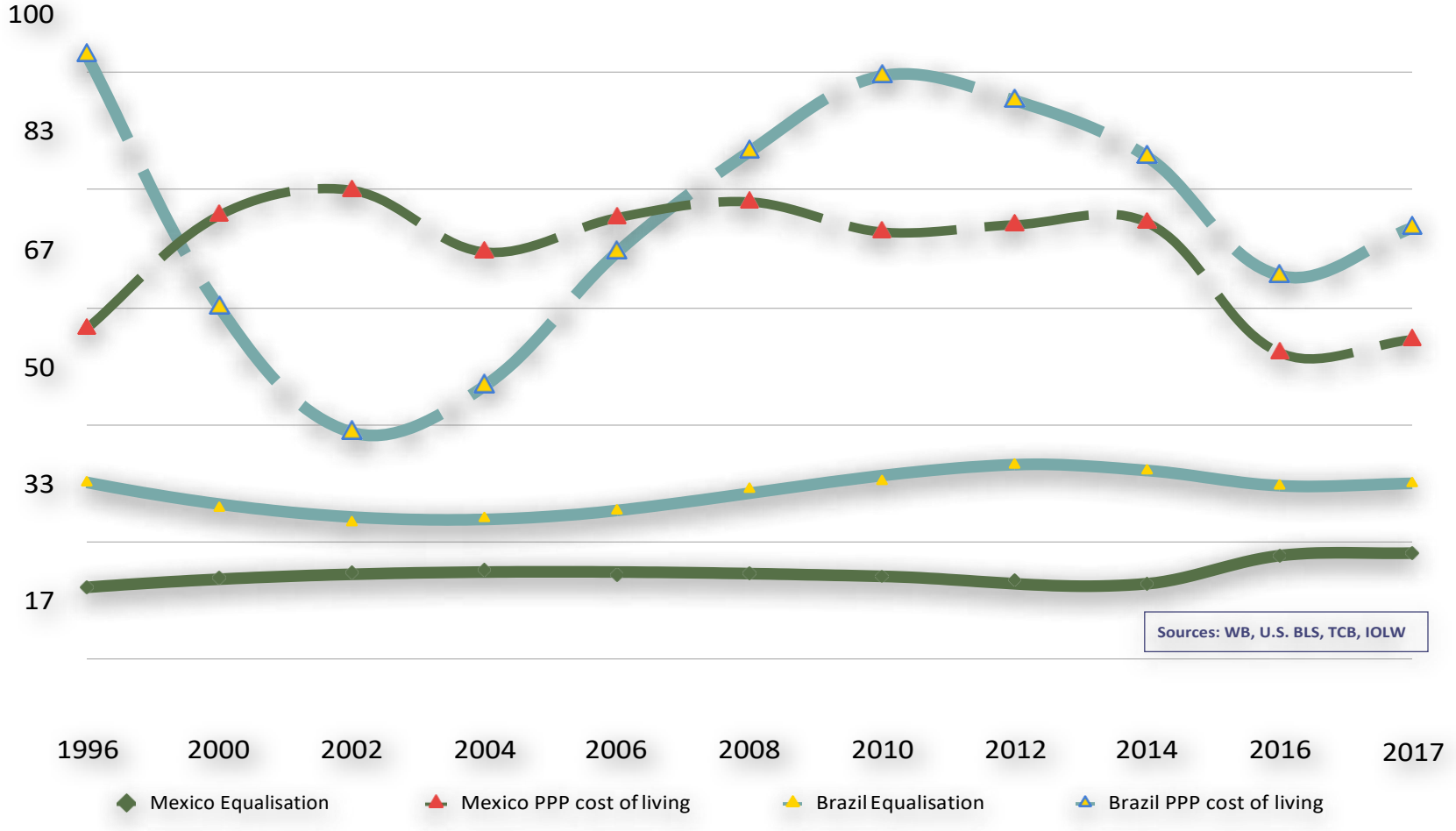


Sources: WB, U.S. BLS, TCB, IOLW

Performance of equalisation indices of PPP manufacturing hourly real wage rates of Brazil and Mexico with US counterparts and behaviour of purchasing power parity indices

(cost of living in PPP terms – US= 100)

When comparing the relationship between the PPP cost of living and the Eq-Idx achieved by Brazil and Mexico, Mexico, in stark contrast with Brazil, does not experience a steep surge of its PPPs, and yet Mexico exhibits almost a flat line in its Eq-Idx, which is due to a well-documented deliberate policy of wage contention. Conversely, Brazil's Eq-Idx is indeed affected by the steep increase in the PPP after 2002 and yet its equalisation index recovers to 1996 levels, whereas Mexico's remains a flat line until 2016 regardless of changes in its PPP.



Twenty-three year projection of the closing of the real wage rate equalisation gap

- **Projection of real wage rate equalisation for all employed in the manufacturing sector between Brazil and the United States in the term of twenty-three years or less, based on TLWNSI's concept**

- **Background.** At the end of 2009, the Brazilian State makes the decision to redefine the future of its wage policy by clearly establishing a commitment to increase the minimum wage in real terms in a very meaningful way. This would influence manufacturing wages not just with their return to their 1996 level –when they recorded their best position vis-à-vis the US– but with their equalisation with the equivalent wages in the main economies of the system. Beginning in 2010 a plan for the annual increase of the minimum wage –described by the government as the "minimum wage appreciation policy"– is put in place (Media Provisória No 474, de 23 de dezembro de 2009: Dispõe sobre o salário mínimo a partir de 1o de janeiro de 2010 e estabelece diretrizes para a política de valorização do salário mínimo entre 2011 e 2023). As is the case in most countries, the minimum wage operates as the benchmark to assess the wage level of all jobs in the economy. Thus, every increase in the minimum wage puts pressure to increase all other wage racks. In this way, for 2010, the Brazilian government increased the minimum wage 5,87% above inflation. The increase amounts, in nominal terms, to an increase of **9,68%** or BRL$ 510 monthly. The measure constitutes a direct action of real wage recovery, regardless of business performance. Inevitably, this will transfer income from employers to workers, thus increasing labour's share of income within the economy. The measure transfers wealth from capital to labour, consequently moving forward towards a living wage ethos.

- Even of more importance, Brazil's government sent to Congress in 2010 a legislative project with three proposals to adjust the minimum wage, for the periods 2012 to 2015, 2016 to 2019 and 2020 to 2023. The plan clearly shows the intention of gradually closing the wage gap with the wages of the major economies up to 2023. The specific formula used by Brazil is the sum of the national consumer price index (NCPI) plus the variation of the GDP recorded for the year two years prior, if it is positive. For example, if a year's inflation is 5% and GDP grows 4%, the nominal increase will be 9% and the real growth 4%. The project was approved into law in 2011 with the same criteria. In this way, for 2011, the 2010 NCPI was computed to be 6,47%, and since there was an actual drop of -0,6% of GDP in 2009, the new minimum wage for 2011 approved was R$545 (rounded up from R$543), an increase of **6,86%** (SUBCHEFIA DE ASSUNTOS PARLAMENTARES – EMI nº 27/MF/MTE/MP/MPS – 7 de fevereiro de 2011). A negative GDP is not taken into account. Taking into account that these nominal increases are much larger than average wage increases in the US (of 3% or less), living wage equalisation was bound to improve substantially as long as inflation was maintained below a ceiling of 5% in general, which did not happen during the minimum wage appreciation policy period of 2010-2017 except for 2017. For the minimum wage, the combined nominal increase in local currency for the 2010-2017 period is now of **103,3%**, a yearly average of **9,3%** while the NCPI's combined growth was of 66%, a yearly average of 6,6%, or 2,7 percentage points more in real terms, and the increase in US dollars for the same period is 27,3%. As for Brazilians employed in manufacturing, the combined nominal wage rate increase for the 2010-17 period is **79,4%**, a yearly average of **7,6%** in local currency or one percentage point more in real terms, and 12,4% in US dollars. In this way, in real terms, the increase of the minimum wage for the 2010-2017 period is **37,3%** in local currency, whilst the increase of the manufacturing wage rate is **13,4%**. In PPP cost of living terms for private consumption, however, manufacturing wages increased 25,3% for the same period.

- The core element in the reduction of poverty is, undoubtedly, the transformation of Brazilian wages from their current undignified condition into living wages, through the equalisation of real wages in the entire economy with those of their counterparts in the most developed economies under the principle of equal pay for equal work of equal value. The scope of the Brazilian plan of wage appreciation was set up to last at least until 2023. As we shall see ahead, our analysis indicates that it is implausible that Brazilian wages would have been equalised –in purchasing power parity terms– with those of their US counterparts –the international benchmark– in the term of fourteen years (2010 to 2023). Yet, it would be possible to place the wages of some major economic sectors –such as manufacturing– by 2023 in ranks not as distant as today to those of economies currently regarded as developed, such as South Korea and Spain. The plan up to 2023, if inflation were put under control, would have placed a great deal of labour compensations halfway into living wages. This would have constituted a great breakthrough in the reduction of poverty, but the time span would be not even close to what it takes to fully close the wage gaps between Brazil and the major economies. If and only if Brazil is able to resume economic growth at the rate of at least 3-4% per annum and keep inflation below 5% annually, it would need, at the very least, twenty-three years (2018 - 2040), as is indicated ahead. This of course is no longer the plan since 2017, and it is impossible to foresee what will happen given the current political crisis that has ensued in Brazil, with the ultra far right Bolsonaro government and the military on one side and Lula —already released from prison after a completely political judicial process was deemed by Brazil's high court as inadmisible— and the Labour party on the other side. Nonetheless, we are projecting what would happen in a scenario where economic policy would still be supporting the increase of labour's share of income —by increasing real minimum wages— to show the nominal and real wage increases required to equalise manufacturing wages with equivalent US wages in PPP terms for private consumption in the time span of not more than thirty years.

Twenty-three year projection of the closing of the real wage rate equalisation gap

- **Affinity with TLWNSI"s concept.** Brazil's wage appreciation concept uses two criteria that are quite similar to TLWNSI's criteria. In order to determine the increase to be applied to the minimum wage, this policy uses the sum of the inflation index, or (NCPI), of the immediately preceding year and the growth of GDP recorded for the year two years prior. TLWNSI's conceptual framework also uses the sum of the inflationary index of the immediately preceding year plus several percentage points. The exact amount of additional points depends on the size of the gap and the term that each government imposes on itself to fulfil the goal of closing the wage gap. TLWNSI's goal is the equalisation of wages –in purchasing power parity terms– of developing countries with their US counterparts in the term of not more than thirty years or a generation. TLWNSI's research indicates that, to fulfil the goal –in the maximum term of thirty years– most economies need to increase wages annually an average of 5% (+/- 2%) above inflation. Thus, if inflation averages 5%, wages would increase nominally an average of 10% to reach TLWNSI's goal. There is one weakness in the Brazilian criteria, nevertheless, which is that if there is no GDP growth, then there is no real wage growth. After two years of GDP "degrowth", Brazil managed to barely increase its GDP above 1% in 2017 and 2018, and a similar performance is expected in 2019. Consequently, unless Brazil changes its criteria to increase the minimum wage in real terms to at least 3-5% above inflation, if there is no GDP growth, real wages in general and the equalisation of manufacturing wages in particular would remain stagnant if this policy is no longer applied.

- **Projection layout.** Using as benchmarks all employed in manufacturing wage rates for Brazil and the US in 2017, following is a twenty-three year projection for the equalisation of Brazilian real wages with those of their US counterparts. The projection makes the assumption that the Brazilian State keeps increasing minimum wages annually as if its minimum wage appreciation policy would still be in place. Parting from our analysis in previous pages, it is assumed that real wages for workers in all sectors of the economy will increase in real terms if the Brazilian State increases the minimum wage above inflation even without GDP growth. This is so given that the minimum wage operates as the benchmark for the wage increases applied –or not– to all other wage racks. If real minimum wage increases take place, employers would feel compelled to raise other wages at a similar pace to maintain their competitiveness in the labour market.

- Despite the fact that Brazil's wage appreciation policy is no longer in place, the purpose of this projection is to assess what would happen in the future to manufacturing wages if Brazil raises the minimum wage in line with the aforementioned minimum wage appreciation criteria. In this way, the projection lets us observe with precision what is the wage rate equalisation index at the end of year 2023, as the Brazilian wage appreciation policy was originally set. Moreover, given that the equalisation gap will not be closed at all by 2023, it determines the number of additional years that would be required to reach wage equalisation with the United States in the manufacturing sector. The projection assumes that Brazil increases the minimum wage in real terms by 5% and by 10% in nominal terms annually, regardless of its GDP performance.

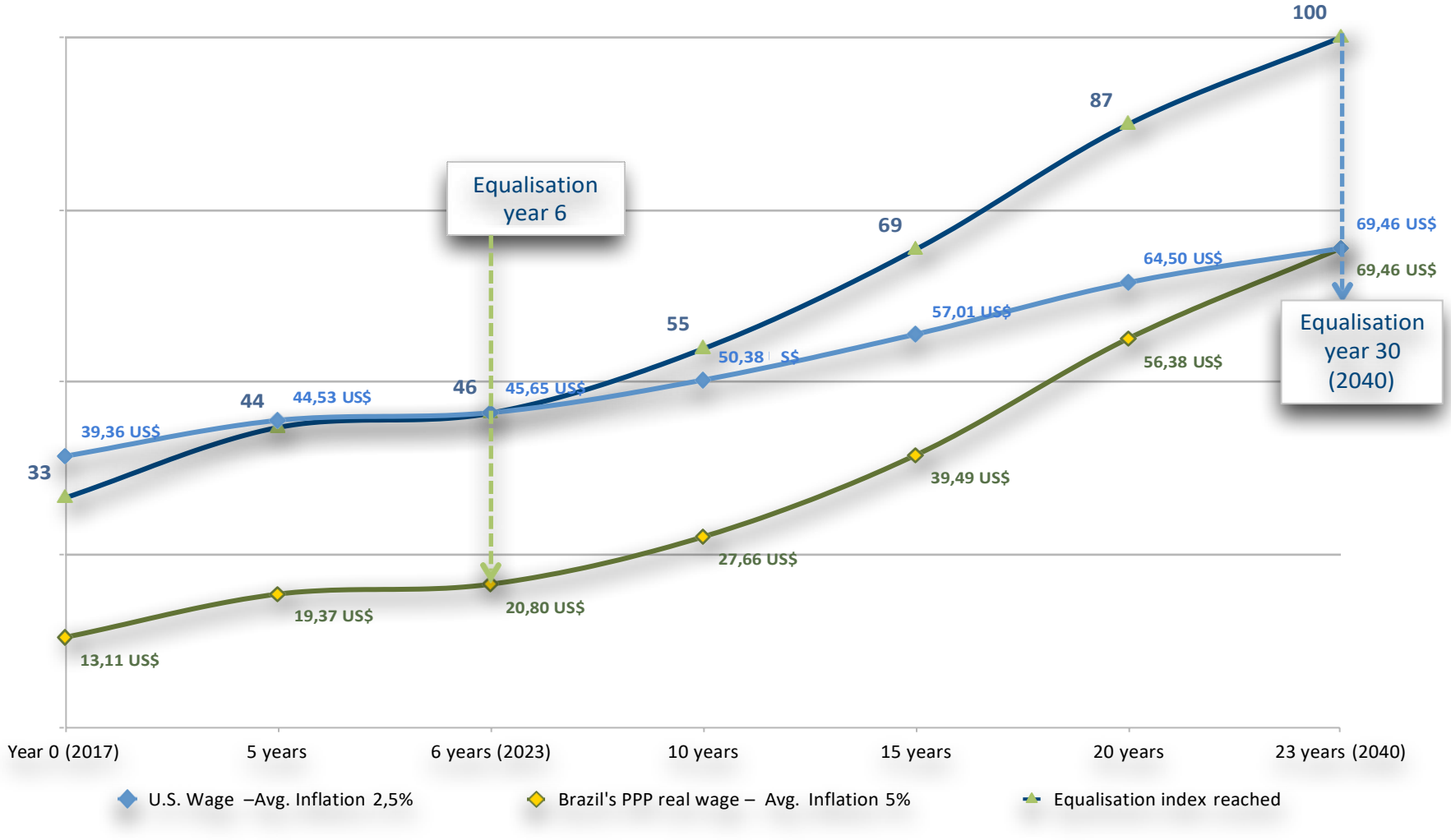
- The projection assumes that the start of the Brazilian plan takes place in 2018. Hence the benchmark used is the wage rate recorded for 2017 for all workers employed in the manufacturing sector. As in the case of all previous charts, the analysis uses as its source the nominal wage rate data reported previously by the US Department of Labour and currently by The Conference Board, using the same methodology and sources. Moreover, to calculate the cost of living and the size of the wage rate gap, the purchasing power parities that the World Bank estimates annually and applies to many economic indicators are applied herein as well. This analysis uses the PPP for private consumption for Brazil, generated by the World Bank's economic indicators database.

Twenty-three year projection of the closing of the real wage rate equalisation gap

- **Criteria applied in the projection:**
  - ➡ Average US inflation: 2,5%, (average of 1,8% between 2010 and 2018).
  - ➡ Average Brazilian inflation: 5% for the entire 23 years of the projection, (average of 6% between 2010 and 2018).
  - ➡ Brazil's average GDP growth: 5%, (average of 1,4% between 2010 and 2018).
  - ➡ Average nominal increase of Brazilian wages in local currency of 10,% for 22 years and of 9,455% for year 23.
  - ➡ Exchange rates applied include a 12,7% devaluation for 2018, 12,9% for 2019 and 5% thereafter for every year until 2047. The average local currency yearly devaluation was 6,3% between 2010 and 2019.
  - ➡ Inflation rates of 3,4% for 2018 and 3% for 2019 are already incorporated into the projection and a 5% inflation rate is assumed thereafter.
  - ➡ Real value of wages in the US remains constant, increasing 2,5% annually their nominal value to neutralise inflation. US nominal manufacturing hourly wage rates have increased an average of 1,9% between 2010 and 2017, about 0,1% above inflation.
  - ➡ The benchmarks –and starting point– used in this projection are the real PPP manufacturing wage rates for both economies for the year 2017 (Brazil: $13,11 and United States: $39,36) and nominal rates (Brazil: $9,13 and United States: $39,36). This twenty-three year projection covers the 2018 to 2047 span of time.
  - ➡ The projection is entirely estimated in US dollars. Inflation is accounted for through the World Bank's PPPs conversion factor for private consumption, and then projected to increase an annual average of 5% in US dollars. PPPs are the rates of currency conversion that eliminate the differences in price levels between countries.

- **Results of the twenty-three year projection:**
  - ➡ This projection at no time pretends to forecast what would be the inflationary indices, exchange rates or the rates of wage rate increases that will occur in Brazil or the US in the future. For this projection, the average behaviour of these indicators has been established by making assumptions in a discretionary manner – based on the data recorded in the last few years– with the only purpose of projecting what would be the level of nominal wage rate increase, the equalisation indices and the time span for equalisation in the context of the minimum wage appreciation plan that the Brazilian government had in place.
  - ➡ At the end of the six-year term (2023) covered by the Brazilian plan (6 years beginning in 2018), the closing of the wage rate gap has not been met but progress has been achieved, with an Eq-Idx of 46 in 2023 versus 33 in 2017. Once the average devaluation of the BRL drops to 5% yearly, progress is achieved in the Eq-Idx more rapidly.
  - ➡ For Brazilian wages to be fully equalised with the wages of their counterparts in the United States, it is necessary to maintain the same pace of annual nominal wage increases of 10,% for a total of 22 years –for a real wage annual increment of 5% in real terms. For year 23, only a 9,455% increase is needed to achieve 100% equalisation.
  - ➡ In this way, wage equalisation with the US would take 29 years of real wage increments, at this pace, to be fulfilled. A slower pace would evidently require more than twenty-three years.
  - ➡ Once full equalization is achieved, nominal wages in Brazil are only increased at the same pace of inflation, so as to maintain their real value and the parity already equalised with the wages of their US counterparts, assuming that US wages keep increasing at the same rate. If they are not, the rate to be increased must be adjusted accordingly.
  - ➡ Evidently, to achieve this goal, Brazil must keep inflation rates in check at an average of 5%, which is one point less than the average for the 2010-2018 period. The fundamental factors are to keep inflation low and maintain a healthy GDP growth. This would also keep the BRL eroding at a low and stable rate. As long as the NCPI is kept at not more than 5% and nominal wages are increased annually at an average of 10%%, equalisation would progress, if future governments have the political will to increase the workers's share of income by reactivating the aforementioned policy.
  - ➡ As the data from The Conference Board becomes available for subsequent years, we will assess how closely the minimum wage increases are reflected in manufacturing wages. For now, the average nominal increase to the manufacturing wage rates in local currency for 2010 thru 2017 was 7,6% for the eight-year period, 82% the average rate increase to the minimum wage for the same period (9,3%). Even if future governments do not reactivate the minimum wage appreciation policy, we will continue to project the closing of the wage gap of manufacturing wages in the span of not more than thirty years.

Twenty-three year projection of real wage equalisation in the manufacturing sector for all employed in Brazil's manufacturing sector with their US counterparts, at an annual average nominal increase of 10% until reaching equalisation (5% in real terms)



Not a forecasting analysis. This projection at no time pretends to forecast what would be the inflationary indices, exchange rates or the wage rate increases that will occur in Brazil or the US in the future. For this projection, the average behaviour of these indicators has been established by making assumptions in a discretionary manner – based on the data recorded in the last few years– with the only purpose of projecting what would be the level of nominal wage increase, the equalisation indices and the time span for equalisation in the context of the minimum wage appreciation plan that the Brazilian government had in place.

Sources: WB, U.S. BLS, TCB, IOLW

- Parting from the implications carried by the shift from demand-side to supply-side economic policy in Brazil's preceding and current governments, it appears to be unlikely that any meaningful progress will be achieved in increasing manufacturing wages and wage rates for the entire economy in real terms. In the best case scenario, wages will keep their current value.

- Nonetheless, if minimum wages were to be increased in real terms in a sustainable manner, it could be asserted that manufacturing wages would also increase in real terms at a lower rate, which currently it averages at around 80% the rate of the minimum wage since 2010, but would increase meaningfully, and equalisation with equivalent wages in the US would make significant progress. This would generate, in all certainty, rather meaningful social and economic benefits in all economic sectors.

- Indeed, if Brazil's future governments were to apply a demand-side economic policy, this would generate multiplying effects that would consolidate social development, anchored on the generation of aggregate demand. This would increase not just wages, but formal employment, tax revenue, the sustainability of the social security system, economies of scale and the competitiveness of the Brazilian economy in the global context, among other things. To be sure, the greatest benefit would be the drastic decrease of poverty and an abatement of innumerable social problems engendered by the underlying systemic causes that engendered poverty and exclusion. In this way, Brazil would move ahead and approach, meaningfully, the making of an ethos where a majority of Brazil's society would have full access to the enjoyment of a broad array of human rights instrumental in the development of their capacities to carve a dignified life.

- One of the greatest benefits of the appreciation of real wages of any country –in the context of a living wage ethos– is the direct impact on the eradication of the conditions of inequality and exclusion; conditions that have prevailed in Brazil in a rather brazen manner. Thus, if Brazil seriously commits to the long term materialisation of this central objective of social justice, it will accomplish the transformation of its society into one where equality and a high degree of wellbeing prevail –the sine qua non attributes of truly democratic societies.

- Unfortunately, it is necessary to emphasise that these assumptions are made in the context of a market-dominated ethos, which, by definition, is unsustainable both in the core and the periphery of the system, for the additional consumption to be generated is unsustainable in the long term. Consequently, for a living wage ethos to emerge and become sustainable in the long term, eventually, consumer societies will have to transform themselves into societies with a new paradigm centred on the welfare of people and planet and not on the market, with an ecological footprint that drastically reduces the consumption of resources. This will require not just a radical change in economic policy but a radical cultural change in all societies in a global context. Needless to say that concepts such as GDP and salary in and on itself would no longer make any sense in a truly sustainable paradigm.

- Hence, it is indispensable that Brazilians become fully aware about the need to permanently get involved in the public matter to make sure that future governments work for the benefit of society and not for the owners of the market and their very private interests, as the vast majority of governments enthusiastically pursue in most countries today. Brazilians must increase their involvement in the public matter to ensure that those they choose to govern work in pursuit of the welfare of people and planet and NOT the market. Demand-side and other socially-oriented policies will lose any meaning as inequality keeps increasing and life as we know it becomes unsustainable. Furthermore, we are running out of time globally. The capitalist system is completely unsustainable and we are already on the brink of being unable to secure the sustainability of a planet where all living things, including our species, can survive.

Table-T5: Living-Wage-Gap and Equalisation analysis (vis-à-vis the U.S.) for 14 Selected Economies – for all employed in the manufacturing sector– in PPP for private consumption terms 1996-2017 (based on the methodology of Jus Semper's "The Living Wages North and South Initiative (TLWNSI)", following the principle of "Equal pay for equal work of equal value" of UN and ILO's international conventions).

	(PPP conversion factor for private consumption)	1996	2000	2002	2004	2006	2008	2010	2012	2014	2016	2017
Benchmark	**1. U.S. Hourly Manufacturing Wage Rate*** (Hourly compensation costs)	**22,46**	**24,95**	**27,35**	**28,59**	**30,77**	**32,26**	**32,61**	**34,05**	**37,23**	**39,73**	**39,36**
Canada	PPP conversion factor (in country currency)	1,263	1,270	1,287	1,273	1,287	1,302	1,296	1,284	1,311	1,337	1,340
	Exchange rate	1,3635	1,4854	1,5703	1,3013	1,1343	1,0671	1,030	0,9994	1,105	1,326	1,298
	PPP conversion factor (in U.S. dollars)	US$ 0,93	US$ 0,85	US$ 0,82	US$ 0,98	US$ 1,13	US$ 1,22	US$ 1,26	US$ 1,28	US$ 1,19	US$ 1,01	US$ 1,03
	2. Equalised PPP nominal wage rate US $	**US$ 20,80**	**US$ 21,33**	**US$ 22,42**	**US$ 27,97**	**US$ 34,92**	**US$ 39,36**	**US$ 41,02**	**US$ 43,75**	**US$ 44,19**	**US$ 40,06**	**US$ 40,64**
	3. Actual PPP Real wage rate US $	**US$ 20,12**	**US$ 21,45**	**US$ 22,04**	**US$ 24,21**	**US$ 25,19**	**US$ 26,29**	**US$ 27,23**	**US$ 28,53**	**US$ 29,04**	**US$ 29,83**	**US$ 32,57**
	4. Actual Nominal wage rate US $	**US$ 18,63**	**US$ 18,34**	**US$ 18,06**	**US$ 23,69**	**US$ 28,58**	**US$ 32,08**	**US$ 34,25**	**US$ 36,69**	**US$ 34,47**	**US$ 30,08**	**US$ 33,63**
	Compensation Deficit in US $ (2 minus 4)	US$ 2,17	US$ 2,99	US$ 4,36	US$ 4,28	US$ 6,34	US$ 7,28	US$ 6,77	US$ 7,06	US$ 9,72	US$ 9,98	US$ 7,01
	Wage Equalisation index (4÷2 or 3÷1)	**0,90**	**0,86**	**0,81**	**0,85**	**0,82**	**0,82**	**0,84**	**0,84**	**0,78**	**0,75**	**0,83**
Brazil	PPP conversion factor (in country currency)	0,946	1,067	1,184	1,379	1,438	1,475	1,605	1,711	1,876	2,194	2,222
	Exchange rate	1,0051	1,829	2,920	2,925	2,175	1,834	1,759	1,953	2,353	3,491	3,191
	PPP conversion factor (in U.S. dollars)	US$ 0,94	US$ 0,58	US$ 0,41	US$ 0,47	US$ 0,66	US$ 0,80	US$ 0,91	US$ 0,88	US$ 0,80	US$ 0,63	US$ 0,70
	2. Equalised PPP nominal wage rate US $	**US$ 21,14**	**US$ 14,56**	**US$ 11,09**	**US$ 13,48**	**US$ 20,35**	**US$ 25,95**	**US$ 29,74**	**US$ 29,86**	**US$ 29,68**	**US$ 24,97**	**US$ 27,41**
	3. Actual PPP Real wage rate US $	**US$ 7,51**	**US$ 7,44**	**US$ 7,60**	**US$ 8,10**	**US$ 9,06**	**US$ 10,49**	**US$ 10,96**	**US$ 12,23**	**US$ 13,08**	**US$ 13,10**	**US$ 13,11**
	4. Actual Nominal wage rate US $	**US$ 7,07**	**US$ 4,34**	**US$ 1,08**	**US$ 3,82**	**US$ 5,99**	**US$ 8,44**	**US$ 10,00**	**US$ 10,74**	**US$ 10,43**	**US$ 8,23**	**US$ 9,13**
	Compensation Deficit in US $ (2 minus 4)	US$ 14,07	US$ 10,22	US$ 8,01	US$ 9,66	US$ 14,36	US$ 17,51	US$ 19,74	US$ 19,12	US$ 19,25	US$ 16,74	US$ 18,28
	Wage Equalisation index (4÷2 or 3÷1)	**0,33**	**0,30**	**0,28**	**0,28**	**0,29**	**0,33**	**0,34**	**0,36**	**0,35**	**0,33**	**0,33**
Mexico	PPP conversion factor (in country currency)	4,202	6,750	7,238	7,470	7,744	8,159	8,710	9,221	9,354	9,682	10,172
	Exchange rate	7,599	9,456	9,656	11,286	10,899	11,130	12,636	13,169	13,292	18,664	18,927
	PPP conversion factor (in U.S. dollars)	US$ 0,55	US$ 0,71	US$ 0,75	US$ 0,66	US$ 0,71	US$ 0,73	US$ 0,69	US$ 0,70	US$ 0,70	US$ 0,52	US$ 0,54
	2. Equalised PPP nominal wage rate US $	**US$ 12,42**	**US$ 17,81**	**US$ 20,50**	**US$ 18,92**	**US$ 21,86**	**US$ 23,65**	**US$ 22,50**	**US$ 23,85**	**US$ 26,20**	**US$ 20,61**	**US$ 21,15**
	3. Actual PPP Real wage rate US $	**US$ 4,16**	**US$ 4,97**	**US$ 5,64**	**US$ 6,01**	**US$ 6,25**	**US$ 6,62**	**US$ 6,55**	**US$ 6,68**	**US$ 7,09**	**US$ 9,16**	**US$ 9,21**
	4. Actual Nominal wage rate US $	**US$ 2,30**	**US$ 3,55**	**US$ 4,23**	**US$ 3,98**	**US$ 4,44**	**US$ 4,85**	**US$ 4,52**	**US$ 4,68**	**US$ 4,99**	**US$ 4,75**	**US$ 4,95**
	Compensation Deficit in US $ (2 minus 4)	US$ 10,12	US$ 14,26	US$ 16,27	US$ 14,94	US$ 17,42	US$ 18,80	US$ 17,98	US$ 19,17	US$ 21,21	US$ 15,86	US$ 16,20
	Wage Equalisation index (4÷2 or 3÷1)	**0,19**	**0,20**	**0,21**	**0,21**	**0,20**	**0,21**	**0,20**	**0,20**	**0,19**	**0,23**	**0,23**
France	PPP conversion factor (in country currency)	6,579	0,916	0,906	0,943	0,928	0,925	0,898	0,886	0,859	0,861	0,847
	Exchange rate	5,1155	1,0854	1,0626	0,8054	0,7971	0,6827	0,7550	0,7781	0,7537	0,9040	0,8874
	PPP conversion factor (in U.S. dollars)	US$ 1,29	US$ 0,86	US$ 0,85	US$ 1,17	US$ 1,16	US$ 1,36	US$ 1,19	US$ 1,14	US$ 1,14	US$ 0,95	US$ 0,95
	2. Equalised PPP nominal wage rate US $	**US$ 28,88**	**US$ 21,52**	**US$ 21,31**	**US$ 33,48**	**US$ 35,83**	**US$ 43,72**	**US$ 38,77**	**US$ 38,78**	**US$ 42,45**	**US$ 37,82**	**US$ 37,56**
	3. Actual PPP Real wage rate US $	**US$ 21,63**	**US$ 24,73**	**US$ 27,03**	**US$ 27,43**	**US$ 29,07**	**US$ 30,72**	**US$ 32,84**	**US$ 36,22**	**US$ 38,61**	**US$ 39,62**	**US$ 39,77**
	4. Actual Nominal wage rate US $	**US$ 27,82**	**US$ 21,33**	**US$ 23,04**	**US$ 32,12**	**US$ 33,83**	**US$ 41,63**	**US$ 39,04**	**US$ 41,25**	**US$ 44,03**	**US$ 37,72**	**US$ 37,95**
	Compensation Deficit in US $ (2 minus 4)	US$ 1,06	US$ 0,19	US$ 0,27	US$ 1,36	US$ 1,98	US$ 2,09	US$ (0,27)	US$ (2,47)	US$ (1,58)	US$ 0,10	US$ (0,39)
	Wage Equalisation index (4÷2 or 3÷1)	**0,96**	**0,99**	**0,99**	**0,96**	**0,94**	**0,95**	**1,01**	**1,06**	**1,04**	**1,00**	**1,01**
Germany	PPP conversion factor (in country currency)	1,889	0,943	0,931	0,909	0,898	0,876	0,853	0,831	0,820	0,822	0,805
	Exchange rate	1,5048	1,0854	1,0626	0,8054	0,7971	0,6827	0,7550	0,7781	0,7537	0,9040	0,8874
	PPP conversion factor (in U.S. dollars)	US$ 1,26	US$ 0,87	US$ 0,88	US$ 1,13	US$ 1,13	US$ 1,28	US$ 1,13	US$ 1,07	US$ 1,09	US$ 0,91	US$ 0,91
	2. Equalised PPP nominal wage rate US $	**US$ 28,19**	**US$ 21,67**	**US$ 23,97**	**US$ 32,27**	**US$ 34,68**	**US$ 41,42**	**US$ 36,83**	**US$ 36,35**	**US$ 40,48**	**US$ 36,13**	**US$ 35,70**
	3. Actual PPP Real wage rate US $	**US$ 26,18**	**US$ 28,88**	**US$ 30,91**	**US$ 33,01**	**US$ 34,47**	**US$ 36,41**	**US$ 38,80**	**US$ 42,52**	**US$ 45,52**	**US$ 47,48**	**US$ 48,46**
	4. Actual Nominal wage rate US $	**US$ 32,86**	**US$ 25,09**	**US$ 27,09**	**US$ 37,25**	**US$ 38,85**	**US$ 46,75**	**US$ 43,82**	**US$ 45,40**	**US$ 49,50**	**US$ 43,18**	**US$ 43,95**
	Compensation Deficit in US $ (2 minus 4)	US$ (4,67)	US$ (3,42)	US$ (3,12)	US$ (4,98)	US$ (4,17)	US$ (5,33)	US$ (6,99)	US$ (9,05)	US$ (9,02)	US$ (7,05)	US$ (8,25)
	Wage Equalisation index (4÷2 or 3÷1)	**1,17**	**1,16**	**1,13**	**1,15**	**1,12**	**1,13**	**1,19**	**1,25**	**1,22**	**1,20**	**1,23**

Table-T5: Living-Wage-Gap and Equalisation analysis (vis-à-vis the U.S.) for 14 Selected Economies – for all employed in the manufacturing sector– in PPP for private consumption terms 1996-2017 (based on the methodology of Jus Semper's "The Living Wages North and South Initiative (TLWNSI)", following the principle of "Equal pay for equal work of equal value" of UN and ILO's international conventions).

	(PPP conversion factor for private consumption)	1996	2000	2002	2004	2006	2008	2010	2012	2014	2016	2017
Benchmark	**1. U.S. Hourly Manufacturing Wage Rate*** (Hourly compensation costs)	**22,46**	**24,95**	**27,35**	**28,59**	**30,77**	**32,26**	**32,61**	**34,05**	**37,23**	**39,73**	**39,36**
Italy	PPP conversion factor (in country currency)	1641,957	0,850	0,878	0,890	0,881	0,847	0,819	0,829	0,825	0,799	0,780
	Exchange rate	1542,947	1,0854	1,0626	0,8054	0,797	0,6827	0,7550	0,7783	0,7537	0,9040	0,8874
	PPP conversion factor (in U.S. dollars)	US$ 1,06	US$ 0,78	US$ 0,83	US$ 1,11	US$ 1,11	US$ 1,24	US$ 1,08	US$ 1,07	US$ 1,10	US$ 0,88	US$ 0,88
	2. Equalised PPP nominal wage rate US $	**US$ 23,90**	**US$ 19,54**	**US$ 22,59**	**US$ 31,60**	**US$ 34,01**	**US$ 40,03**	**US$ 35,37**	**US$ 36,28**	**US$ 40,77**	**US$ 35,10**	**US$ 34,62**
	3. Actual PPP Real wage rate US $	**US$ 19,73**	**US$ 21,21**	**US$ 22,43**	**US$ 24,48**	**US$ 25,78**	**US$ 28,13**	**US$ 31,17**	**US$ 32,58**	**US$ 34,51**	**US$ 36,77**	**US$ 36,18**
	4. Actual Nominal wage rate US $	**US$ 21,00**	**US$ 16,61**	**US$ 18,53**	**US$ 27,06**	**US$ 28,49**	**US$ 34,93**	**US$ 33,81**	**US$ 34,71**	**US$ 37,79**	**US$ 32,49**	**US$ 31,42**
	Compensation Deficit in US $ (2 minus 4)	US$ 2,90	US$ 2,93	US$ 4,06	US$ 4,54	US$ 5,52	US$ 5,18	US$ 1,56	US$ 1,57	US$ 2,98	US$ 2,61	US$ 2,80
	Wage Equalisation index (4÷2 or 3÷1)	0,88	0,85	0,82	0,86	0,84	0,87	0,96	0,96	0,93	0,93	0,92
United Kingdom	PPP conversion factor (in country currency)	0,790	0,778	0,764	0,743	0,750	0,763	0,778	0,787	0,799	0,798	0,789
	Exchange rate	0,6410	0,6609	0,667	0,5462	0,5435	0,5440	0,6472	0,6330	0,6077	0,7406	0,7770
	PPP conversion factor (in U.S. dollars)	US$ 1,23	US$ 1,18	US$ 1,15	US$ 1,36	US$ 1,38	US$ 1,40	US$ 1,20	US$ 1,24	US$ 1,31	US$ 1,08	US$ 1,02
	2. Equalised PPP nominal wage rate US $	**US$ 27,69**	**US$ 29,37**	**US$ 31,32**	**US$ 38,87**	**US$ 42,47**	**US$ 45,28**	**US$ 39,21**	**US$ 42,34**	**US$ 48,92**	**US$ 42,82**	**US$ 39,98**
	3. Actual PPP Real wage rate US $	**US$ 14,42**	**US$ 17,52**	**US$ 19,24**	**US$ 20,95**	**US$ 22,57**	**US$ 24,11**	**US$ 24,10**	**US$ 24,86**	**US$ 25,10**	**US$ 26,36**	**US$ 27,36**
	4. Actual Nominal wage rate US $	**US$ 17,77**	**US$ 20,63**	**US$ 22,03**	**US$ 28,49**	**US$ 31,15**	**US$ 33,84**	**US$ 28,98**	**US$ 30,91**	**US$ 32,98**	**US$ 28,41**	**US$ 27,39**
	Compensation Deficit in US $ (2 minus 4)	US$ 9,92	US$ 8,74	US$ 9,29	US$ 10,38	US$ 11,32	US$ 11,44	US$ 10,23	US$ 11,43	US$ 15,94	US$ 14,41	US$ 11,59
	Wage Equalisation index (4÷2 or 3÷1)	0,64	0,70	0,70	0,73	0,73	0,75	0,74	0,73	0,67	0,66	0,70
Spain	PPP conversion factor (in country currency)	128,188	0,769	0,755	0,789	0,791	0,802	0,801	0,786	0,744	0,730	0,715
	Exchange rate	126,66	1,0854	1,0626	0,8054	0,7971	0,6827	0,7550	0,7783	0,7537	0,9040	0,8874
	PPP conversion factor (in U.S. dollars)	US$ 1,01	US$ 0,71	US$ 0,71	US$ 0,98	US$ 0,99	US$ 1,18	US$ 1,06	US$ 1,01	US$ 0,99	US$ 0,81	US$ 0,81
	2. Equalised PPP nominal wage rate US $	**US$ 22,73**	**US$ 17,68**	**US$ 19,42**	**US$ 27,99**	**US$ 30,54**	**US$ 37,91**	**US$ 34,60**	**US$ 34,38**	**US$ 36,76**	**US$ 32,08**	**US$ 31,72**
	3. Actual PPP Real wage rate US $	**US$ 15,30**	**US$ 17,47**	**US$ 19,42**	**US$ 20,21**	**US$ 21,93**	**US$ 23,49**	**US$ 25,08**	**US$ 26,59**	**US$ 28,55**	**US$ 29,03**	**US$ 30,28**
	4. Actual Nominal wage rate US $	**US$ 15,48**	**US$ 12,38**	**US$ 13,79**	**US$ 19,79**	**US$ 21,77**	**US$ 27,60**	**US$ 26,61**	**US$ 26,85**	**US$ 28,19**	**US$ 23,44**	**US$ 24,40**
	Compensation Deficit in US $ (2 minus 4)	US$ 7,25	US$ 5,30	US$ 5,63	US$ 8,20	US$ 8,77	US$ 10,31	US$ 7,99	US$ 7,53	US$ 8,57	US$ 8,64	US$ 7,32
	Wage Equalisation index (4÷2 or 3÷1)	0,68	0,70	0,71	0,71	0,71	0,73	0,77	0,78	0,77	0,73	0,77
Turkey	PPP conversion factor (in country currency)	—	—	—	0,907	1,018	1,058	1,115	1,230	1,369	1,550	1,681
	Exchange rate	—	—	—	1,426	1,428	1,302	1,503	1,796	2,1885	1,0201	3,6481
	PPP conversion factor (in U.S. dollars)	—	—	—	US$ 0,64	US$ 0,71	US$ 0,81	US$ 0,74	US$ 0,69	US$ 0,63	US$ 0,51	US$ 0,46
	2. Equalised PPP nominal wage rate US $	—	—	—	**US$ 18,19**	**US$ 21,93**	**US$ 26,22**	**US$ 24,20**	**US$ 23,33**	**US$ 23,29**	**US$ 20,39**	**US$ 18,14**
	3. Actual PPP Real wage rate US $	—	—	—	**US$ 6,62**	**US$ 7,00**	**US$ 7,92**	**US$ 8,48**	**US$ 8,79**	**US$ 9,93**	**US$ 11,86**	**US$ 15,43**
	4. Actual Nominal wage rate US $	NA	NA	NA	**US$ 4,21**	**US$ 4,99**	**US$ 6,44**	**US$ 6,29**	**US$ 4,02**	**US$ 6,21**	**US$ 6,09**	**US$ 7,11**
	Compensation Deficit in US $ (2 minus 4)	—	—	—	US$ 13,98	US$ 16,94	US$ 19,78	US$ 17,91	US$ 17,31	US$ 17,80	US$ 14,30	US$ 11,03
	Wage Equalisation index (4÷2 or 3÷1)	—	—	—	0,23	0,23	0,25	0,26	0,26	0,27	0,30	0,39
Japan	PPP conversion factor (in country currency)	193,385	176,466	163,075	150,594	137,513	129,061	121,030	112,664	109,182	109,247	108,572
	Exchange rate	108,78	107,77	125,39	108,19	116,30	103,36	87,78	79,79	105,94	108,79	112,17
	PPP conversion factor (in U.S. dollars)	US$ 1,78	US$ 1,64	US$ 1,30	US$ 1,39	US$ 1,18	US$ 1,25	US$ 1,38	US$ 1,41	US$ 1,03	US$ 1,00	US$ 0,97
	2. Equalised PPP nominal wage rate US $	**US$ 39,93**	**US$ 40,86**	**US$ 35,57**	**US$ 39,79**	**US$ 36,38**	**US$ 40,28**	**US$ 44,96**	**US$ 48,08**	**US$ 38,37**	**US$ 39,90**	**US$ 38,10**
	3. Actual PPP Real wage rate US $	**US$ 13,31**	**US$ 15,29**	**US$ 16,49**	**US$ 18,15**	**US$ 20,32**	**US$ 22,01**	**US$ 23,03**	**US$ 24,96**	**US$ 26,14**	**US$ 26,35**	**US$ 27,03**
	4. Actual Nominal wage rate US $	**US$ 23,67**	**US$ 25,01**	**US$ 21,45**	**US$ 25,26**	**US$ 24,03**	**US$ 27,48**	**US$ 31,75**	**US$ 35,25**	**US$ 26,94**	**US$ 26,46**	**US$ 26,16**
	Compensation Deficit in US $ (2 minus 4)	US$ 16,26	US$ 15,83	US$ 14,12	US$ 14,53	US$ 12,35	US$ 12,80	US$ 13,21	US$ 12,83	US$ 11,43	US$ 13,44	US$ 11,94
	Wage Equalisation index (4÷2 or 3÷1)	0,59	0,61	0,60	0,63	0,66	0,68	0,71	0,73	0,70	0,66	0,69

Table-T5: Living-Wage-Gap and Equalisation analysis (vis-à-vis the U.S.) for 14 Selected Economies – for all employed in the manufacturing sector– in PPP for private consumption terms 1996-2017 (based on the methodology of Jus Semper's "The Living Wages North and South Initiative (TLWNSI)", following the principle of "Equal pay for equal work of equal value" of UN and ILO's international conventions).

	(PPP conversion factor for private consumption)	1996	2000	2002	2004	2006	2008	2010	2012	2014	2016	2017
Benchmark	**1. U.S. Hourly Manufacturing Wage Rate*** (Hourly compensation costs)	**22,46**	**24,95**	**27,35**	**28,39**	**30,77**	**32,26**	**32,61**	**34,05**	**37,23**	**39,73**	**39,36**
South Korea	PPP conversion factor (in country currency)	716,616	823,900	871,604	887,224	871,617	882,091	907,525	914,934	994,758	961,143	962,003
	Exchange rate	804,45	1130,96	1251,09	1145,32	954,79	1102,05	1156,06	1126,47	1052,96	1160,43	1130,42
	PPP conversion factor (in U.S. dollars)	US$ 0,89	US$ 0,73	US$ 0,70	US$ 0,77	US$ 0,91	US$ 0,80	US$ 0,79	US$ 0,81	US$ 0,94	US$ 0,83	US$ 0,85
	2. Equalised PPP nominal wage rate US $	**US$ 20,01**	**US$ 18,18**	**US$ 19,05**	**US$ 22,15**	**US$ 28,09**	**US$ 25,82**	**US$ 25,60**	**US$ 27,66**	**US$ 35,17**	**US$ 32,91**	**US$ 33,50**
	3. Actual PPP Real wage rate US $	**US$ 10,72**	**US$ 13,21**	**US$ 14,70**	**US$ 16,30**	**US$ 19,02**	**US$ 20,99**	**US$ 22,70**	**US$ 25,17**	**US$ 25,01**	**US$ 27,74**	**US$ 28,10**
	4. Actual Nominal wage rate US $	**US$ 9,55**	**US$ 9,62**	**US$ 10,24**	**US$ 12,63**	**US$ 17,36**	**US$ 16,80**	**US$ 17,88**	**US$ 20,44**	**US$ 23,63**	**US$ 22,98**	**US$ 23,91**
	Compensation Deficit in US $ (2 minus 4)	US$ 10,46	US$ 8,56	US$ 8,81	US$ 9,52	US$ 10,73	US$ 9,02	US$ 7,72	US$ 7,22	US$ 11,54	US$ 9,93	US$ 9,59
	Wage Equalisation index (4÷2 or 3÷1)	0,48	0,53	0,54	0,57	0,62	0,65	0,70	0,74	0,67	0,70	0,71
Singapore	PPP conversion factor (in country currency)	1,319	1,238	1,193	1,161	1,102	1,124	1,148	1,200	1,203	1,174	1,156
	Exchange rate	1,4100	1,7240	1,7906	1,6902	1,5889	1,4149	1,3635	1,2497	1,267	1,382	1,381
	PPP conversion factor (in U.S. dollars)	US$ 0,94	US$ 0,72	US$ 0,67	US$ 0,69	US$ 0,69	US$ 0,79	US$ 0,84	US$ 0,96	US$ 0,95	US$ 0,85	US$ 0,84
	2. Equalised PPP nominal wage rate US $	**US$ 21,01**	**US$ 17,92**	**US$ 18,22**	**US$ 19,64**	**US$ 21,35**	**US$ 25,62**	**US$ 27,46**	**US$ 32,69**	**US$ 35,34**	**US$ 33,77**	**US$ 32,96**
	3. Actual PPP Real wage rate US $	**US$ 12,75**	**US$ 14,32**	**US$ 18,22**	**US$ 19,21**	**US$ 19,83**	**US$ 23,75**	**US$ 22,91**	**US$ 25,43**	**US$ 28,26**	**US$ 31,47**	**US$ 30,55**
	4. Actual Nominal wage rate US $	**US$ 11,93**	**US$ 11,72**	**US$ 12,14**	**US$ 13,20**	**US$ 13,76**	**US$ 18,86**	**US$ 19,29**	**US$ 24,42**	**US$ 26,82**	**US$ 26,75**	**US$ 25,58**
	Compensation Deficit in US $ (2 minus 4)	US$ 9,08	US$ 6,20	US$ 6,08	US$ 6,44	US$ 7,59	US$ 6,76	US$ 8,17	US$ 8,27	US$ 8,52	US$ 7,02	US$ 7,38
	Wage Equalisation index (4÷2 or 3÷1)	0,57	0,65	0,67	0,67	0,64	0,74	0,70	0,75	0,76	0,79	0,78
South Africa	PPP conversion factor (in country currency)	—	—	—	4,181	4,128	4,516	4,978	5,249	5,715	6,280	6,467
	Exchange rate	—	—	—	6,460	6,772	8,261	7,321	8,210	10,853	14,710	13,334
	PPP conversion factor (in U.S. dollars)	—	—	—	US$ 0,65	US$ 0,61	US$ 0,55	US$ 0,68	US$ 0,64	US$ 0,53	US$ 0,43	US$ 0,49
	2. Equalised PPP nominal wage rate US $	—	—	—	**US$ 18,50**	**US$ 18,76**	**US$ 17,64**	**US$ 22,17**	**US$ 21,77**	**US$ 19,61**	**US$ 16,96**	**US$ 19,09**
	3. Actual PPP Real wage rate US $	—	—	—	**US$ 6,01**	**US$ 6,97**	**US$ 8,36**	**US$ 10,16**	**US$ 11,31**	**US$ 12,80**	**US$ 14,01**	**US$ 13,85**
	4. Actual Nominal wage rate US $	NA	NA	NA	**US$ 1,89**	**US$ 4,25**	**US$ 4,57**	**US$ 6,91**	**US$ 7,23**	**US$ 6,74**	**US$ 5,98**	**US$ 6,72**
	Compensation Deficit in US $ (2 minus 4)	—	—	—	US$ 14,61	US$ 14,51	US$ 13,07	US$ 15,26	US$ 14,54	US$ 12,87	US$ 10,98	US$ 12,37
	Wage Equalisation index (4÷2 or 3÷1)	—	—	—	0,21	0,23	0,26	0,31	0,33	0,34	0,35	0,35
Australia	PPP conversion factor (in country currency)	1,375	1,384	1,423	1,444	1,498	1,531	1,554	1,546	1,530	1,556	1,538
	Exchange rate	1,278	1,725	1,841	1,360	1,328	1,192	1,090	0,966	1,109	1,345	1,305
	PPP conversion factor (in U.S. dollars)	US$ 1,08	US$ 0,80	US$ 0,77	US$ 1,06	US$ 1,13	US$ 1,28	US$ 1,43	US$ 1,60	US$ 1,38	US$ 1,16	US$ 1,18
	2. Equalised PPP nominal wage rate US $	**US$ 24,16**	**US$ 20,02**	**US$ 21,15**	**US$ 30,36**	**US$ 34,71**	**US$ 41,42**	**US$ 46,48**	**US$ 54,51**	**US$ 51,35**	**US$ 45,94**	**US$ 46,40**
	3. Actual PPP Real wage rate US $	**US$ 18,20**	**US$ 20,87**	**US$ 22,51**	**US$ 25,16**	**US$ 25,84**	**US$ 27,48**	**US$ 27,75**	**US$ 29,82**	**US$ 33,36**	**US$ 33,03**	**US$ 31,94**
	4. Actual Nominal wage rate US $	**US$ 19,58**	**US$ 14,75**	**US$ 17,41**	**US$ 26,72**	**US$ 29,15**	**US$ 35,28**	**US$ 39,55**	**US$ 47,74**	**US$ 46,01**	**US$ 38,19**	**US$ 37,65**
	Compensation Deficit in US $ (2 minus 4)	US$ 4,58	US$ 5,27	US$ 3,74	US$ 3,64	US$ 5,56	US$ 6,14	US$ 6,93	US$ 6,77	US$ 5,34	US$ 7,75	US$ 8,75
	Wage Equalisation index (4÷2 or 3÷1)	0,81	0,84	0,82	0,88	0,84	0,85	0,85	0,88	0,90	0,83	0,81

Table-T5: Living-Wage-Gap and Equalisation analysis (vis-à-vis the U.S.) for 14 Selected Economies – for all employed in the manufacturing sector– in PPP for private consumption terms 1996-2017 (based on the methodology of Jus Semper's "The Living Wages North and South Initiative (TLWNSI)", following the principle of "Equal pay for equal work of equal value" of UN and ILO's international conventions).

***Definitions:**

– PPPs stands for Purchasing-Power Parities, which reflect the currency units in a given currency that are required to buy the same goods and services that can be purchased in the base country with one currency unit. This analysis uses the U.S. and the U.S. dollar as the benchmark and assumes that the U.S. wage is a living wage.
– The hourly manufacturing wage rate is the "hourly compensation cost" as defined by the U.S. Department of Labour, Bureau of Labour Statistics: This includes (1) hourly direct pay and (2) employer social insurance expenditures and other labour taxes. Hourly direct pay includes all payments made directly to the worker, before payroll deductions of any kind, consisting of pay for time worked and other direct pay. Social insurance expenditures and other labour taxes refers to the value of social contributions incurred by employers in order to secure entitlement to social benefits for their employees.
– PPP conversion factor, (private consumption) in country currency express the number of country currency units required to buy the same goods and services a U.S. dollar can buy in the U.S.
– Exchange rate is nominal exchange rate.
– PPP conversion factor, private consumption in U.S. dollars expresses the U.S. dollar units required in a given country to buy the same goods and services a U.S. dollar can buy in the U.S. If the PPP is less than 1, a U.S. dollar can buy more in the country in question because the cost of living is lower, and viceversa.
– The PPP for private consumption, expressed in national currency, reflects the exchange rate in comparison with the market exchange rate, which does not reflect the ratio of prices.
– Equalised PPP nominal wage rate is the hourly U.S. dollar nominal rate required to equally compensate a worker in a country, in purchasing power terms, for equal work rendered, as the equivalent U.S. worker is compensated. This analysis assumes the U.S. wage to be a living-wage. A living wage is a human right in accordance with Article 23 of the UN Universal Declaration of Human Rights. ILO's Convention 100 of "equal pay for equal work", for men and women is hereby applied in a global context.
– Actual PPP Real wage rate is the hourly wage paid in a given country in purchasing power terms.
– Actual Nominal wage rate is the nominal hourly wage paid in a given country.
– Compensation deficit expresses the wage gap between the hourly nominal wage rate paid (4) and the equalised PPP hourly rate that should be paid for equal work (2).
– Compensation equalisation index expresses the ratio of actual nominal pay to equalised PPP hourly pay (4 between 2): or the ratio of actual real pay (3) to the hourly nominal pay benchmark (1) (3 between 1).
– *India and China data gathered by the BLS and TCB are not fully comparable to the rest of countries due to some inconsistencies in methodology. However, given that in both cases the BLS argues that this work does not substantially affect the hourly compensation estimates, rough comparisons can still be made. For further reference on the description of each country see TCB's Country Notes
– Note: Variations in previous years are due to revisions made by the sources, including the World Bank's new 2011 PPP benchmarks, which replaced the previous 2005 benchmarks.
– Since 2010 the international comparison of hourly compensation costs (hourly wage rates) between the U.S. and selected developed and "emerging" markets refers to all employed in the manufacturing sector and no longer will be available for production workers only. Production-line wage rates are on average 20% below wage rates for all employed in manufacturing, including production workers, for the 1996-2009 period, for all countries included in the assessment. For further reference see wage-gap assessment of trends and differences between production-line and all employed in manufacturing in compensation cost terms here:
<Wage Gap Analysis of PLW versus All employed 1996-2009>

Sources: The Jus Semper Global Alliance analysis using the sources below. (Sources with X indicate that some of their data is directly incorporated in the table:)

- The Jus Semper Global Alliance: Living Wage Gaps Analysis in the manufacturing sector using:
- The Living Wages North and South Initiative (TLWNSI) using "Equal Pay for Work of Equal Value" Methodology.

x Database of World Bank's World Development Indicators, 1975-2017.
x U.S. Bureau of Labor Statistics, August 2013 and The Conference Board (TCB), International Labor Comparisons Program - Manufacturing Hourly Compensation Costs, February 2018.
x The Conference Board (TCB) — International Comparisons of Manufacturing Productivity and Unit Labor Costs 2017, July 2018
– Purchasing Power Parities and Real Expenditures of World Economies. Summary of Results and Findings of the 2011 International Comparison Program. World Bank 2014.

Note regarding the new 2011 PPC round:

The International Comparison Program (ICP) released new data showing that the world economy produced goods and services worth over $90 trillion in 2011, and that almost half of the world's total output came from low and middle income countries.

Under the authority of the United Nations Statistical Commission, the 2011 round of ICP covered 199 economies - the most extensive effort to measure Purchasing Power Parities (PPPs) across countries ever. ICP 2011 estimates benefited from a number of methodological improvements over past efforts to calculate PPPs.

The ICP's principal outputs are PPPs for 2011 and estimates of PPP-based gross domestic product (GDP) and its major components in aggregate and per capita terms. When converting national economic measures (e.g. GDP), into a common currency, PPPs are a more direct measure of what money can buy than exchange rates.

Limitations in the use of the data
PPPs are statistical estimates. Like all statistics they are subject to sampling errors, measurement errors, and errors of classification. Therefore, they should be treated as approximations to true values. Because of the complexity of the process used to collect the data and calculate the PPPs, it is not possible to directly estimate their margins of error. Therefore, small differences in the estimated values between economies should not be considered significant.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