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OF LIVING WAGES

A Collaborative Research Project



**Table-T5: Living-Wage-Gap and Equalisation analysis (vis-à-vis the U.S.) for selected economies of the Americas – 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.**

**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 Eq-Idx. In the Americas, all four major economies reduced their equalisation gaps or remained at the same level.**

- 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.
- After the 2002 economic crisis, Argentina experienced a steady improvement of real wages. The Eq-Idx increased 93% between 2002 and 2012 to then drop 19% by 2016. In 2017, there was a slight recovery, just before the supply-side staunchly neoliberal economic policies of the new government began to dramatically reverse the gains in real wages and labour’s share of income delivered by the previous government. Contrary to its vow to reduce inflation, which averaged 25,6% in the previous government, the policies of Macri’s government averaged 37,2% in CPI inflation for the first three years and 2019 is hovering around 55%. The Argentine peso eroded with the dollar by only 10,9% in 2017 (P 16,6 x \$1), to then lose 41% in 2018 (P 28,1 x \$1) and then completely collapse in the first nine months of 2019 by 51,4% (P 57,9 x \$1). Consequently, a new economic crisis has exploded closely resembling the 2002 collapse, and all wages have dropped dramatically. In 2017, in local currency, the minimum wage managed to increase by 17,2% in nominal terms but inflation grew by 24,8%. In 2018 the minimum wage increased 12,9% but inflation reached 47,8%. In 2017, manufacturing hourly rates increased 29,1% in pesos and 15% in US dollars, whilst the US hourly rate dropped almost 1%, This allowed Argentina’s manufacturing hourly wage rates to increase its equalisation index by three points to a 50 Index. However, with inflation close to 48% and a devaluation of 41% in 2018, Argentina’s hourly rates and their equalisation index with comparative US rates are certain to drop dramatically in 2018, with CPI and exchange rate indicators looking even worse for 2019.
- 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 in local currency units, effectively dropping in real terms. However, the appreciation of Brazil’s Real 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.
- 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, but still the country continues having the widest living-wage gap in the Americas by far.

	1996	2000	2002	2004	2006	2008	2010	2012	2014	2016	2017
<b>Benchmark</b> (PPP conversion factor for private consumption)											
<b>1. U.S. Hourly Manufacturing Wage Rate*</b>	<b>22,46</b>	<b>24,95</b>	<b>27,35</b>	<b>28,59</b>	<b>30,77</b>	<b>32,26</b>	<b>32,61</b>	<b>34,05</b>	<b>37,23</b>	<b>39,73</b>	<b>39,36</b>
(Hourly compensation costs)											
<b>Canada</b>											
PPP conversion factor (country currency x \$1)	1,259	1,271	1,287	1,272	1,288	1,302	1,296	1,294	1,311	1,337	1,340
Exchange rate	1,3638	1,4855	1,5704	1,3017	1,1340	1,0660	1,030	0,9995	1,106	1,326	1,298
PPP conversion factor (in U.S. dollars)	US\$ 0,92	US\$ 0,86	US\$ 0,82	US\$ 0,98	US\$ 1,14	US\$ 1,22	US\$ 1,26	US\$ 1,29	US\$ 1,19	US\$ 1,01	US\$ 1,03
2. Equalised PPP nominal wage rate US \$	<b>US\$ 20,73</b>	<b>US\$ 21,35</b>	<b>US\$ 22,41</b>	<b>US\$ 27,94</b>	<b>US\$ 34,95</b>	<b>US\$ 39,40</b>	<b>US\$ 41,05</b>	<b>US\$ 44,09</b>	<b>US\$ 44,14</b>	<b>US\$ 40,06</b>	<b>US\$ 40,64</b>
3. Actual PPP Real wage rate US \$	<b>US\$ 20,19</b>	<b>US\$ 21,43</b>	<b>US\$ 22,04</b>	<b>US\$ 24,24</b>	<b>US\$ 25,16</b>	<b>US\$ 26,27</b>	<b>US\$ 27,21</b>	<b>US\$ 28,33</b>	<b>US\$ 29,08</b>	<b>US\$ 29,83</b>	<b>US\$ 32,57</b>
4. Actual Nominal wage rate US \$	<b>US\$ 18,63</b>	<b>US\$ 18,34</b>	<b>US\$ 18,06</b>	<b>US\$ 23,69</b>	<b>US\$ 28,58</b>	<b>US\$ 32,08</b>	<b>US\$ 34,25</b>	<b>US\$ 36,69</b>	<b>US\$ 34,47</b>	<b>US\$ 30,08</b>	<b>US\$ 33,63</b>
Compensation Deficit in US \$ (2 minus 4)	<b>US\$ 2,10</b>	<b>US\$ 3,01</b>	<b>US\$ 4,35</b>	<b>US\$ 4,25</b>	<b>US\$ 6,37</b>	<b>US\$ 7,32</b>	<b>US\$ 6,80</b>	<b>US\$ 7,40</b>	<b>US\$ 9,67</b>	<b>US\$ 9,98</b>	<b>US\$ 7,01</b>
Wage Equalisation index (4÷2 or 3÷1)	<b>0,90</b>	<b>0,86</b>	<b>0,81</b>	<b>0,85</b>	<b>0,82</b>	<b>0,81</b>	<b>0,83</b>	<b>0,83</b>	<b>0,78</b>	<b>0,75</b>	<b>0,83</b>
<b>Argentina</b>											
PPP conversion factor (country currency x \$1)	1,048	0,949	1,131	1,276	1,453	1,904	2,789	4,357	7,443	13,136	16,397
Exchange rate	0,9997	0,9995	3,0633	2,9233	3,0543	3,1442	3,8963	4,5369	8,0753	14,7582	16,5627
PPP conversion factor (in U.S. dollars)	US\$ 1,05	US\$ 0,95	US\$ 0,37	US\$ 0,44	US\$ 0,48	US\$ 0,61	US\$ 0,72	US\$ 0,96	US\$ 0,92	US\$ 0,89	US\$ 0,99
2. Equalised PPP nominal wage rate US \$	<b>US\$ 23,55</b>	<b>US\$ 23,68</b>	<b>US\$ 10,10</b>	<b>US\$ 12,47</b>	<b>US\$ 14,64</b>	<b>US\$ 19,54</b>	<b>US\$ 23,34</b>	<b>US\$ 32,70</b>	<b>US\$ 34,32</b>	<b>US\$ 35,36</b>	<b>US\$ 38,97</b>
3. Actual PPP Real wage rate US \$	<b>US\$ 7,09</b>	<b>US\$ 8,60</b>	<b>US\$ 8,15</b>	<b>US\$ 10,34</b>	<b>US\$ 13,94</b>	<b>US\$ 16,58</b>	<b>US\$ 17,84</b>	<b>US\$ 19,74</b>	<b>US\$ 19,18</b>	<b>US\$ 18,84</b>	<b>US\$ 19,48</b>
4. Actual Nominal wage rate US \$	<b>US\$ 7,43</b>	<b>US\$ 8,16</b>	<b>US\$ 3,01</b>	<b>US\$ 4,51</b>	<b>US\$ 6,63</b>	<b>US\$ 10,04</b>	<b>US\$ 12,77</b>	<b>US\$ 18,96</b>	<b>US\$ 17,68</b>	<b>US\$ 16,77</b>	<b>US\$ 19,29</b>
Compensation Deficit in US \$ (2 minus 4)	<b>US\$ 16,12</b>	<b>US\$ 15,52</b>	<b>US\$ 7,09</b>	<b>US\$ 7,96</b>	<b>US\$ 8,01</b>	<b>US\$ 9,50</b>	<b>US\$ 10,57</b>	<b>US\$ 13,74</b>	<b>US\$ 16,64</b>	<b>US\$ 18,59</b>	<b>US\$ 19,68</b>
Wage Equalisation index (4÷2 or 3÷1)	<b>0,32</b>	<b>0,34</b>	<b>0,30</b>	<b>0,36</b>	<b>0,45</b>	<b>0,51</b>	<b>0,55</b>	<b>0,58</b>	<b>0,52</b>	<b>0,47</b>	<b>0,50</b>
<b>Brazil</b>											
PPP conversion factor (country currency x \$1)	0,946	1,068	1,184	1,379	1,439	1,475	1,605	1,713	1,876	2,194	2,222
Exchange rate	1,0051	1,830	2,9213	2,9262	2,1738	1,8326	1,760	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 \$	<b>US\$ 21,15</b>	<b>US\$ 14,56</b>	<b>US\$ 11,09</b>	<b>US\$ 13,47</b>	<b>US\$ 20,36</b>	<b>US\$ 25,97</b>	<b>US\$ 29,73</b>	<b>US\$ 29,86</b>	<b>US\$ 29,68</b>	<b>US\$ 24,97</b>	<b>US\$ 27,41</b>
3. Actual PPP Real wage rate US \$	<b>US\$ 7,51</b>	<b>US\$ 7,44</b>	<b>US\$ 7,60</b>	<b>US\$ 8,11</b>	<b>US\$ 9,05</b>	<b>US\$ 10,49</b>	<b>US\$ 10,97</b>	<b>US\$ 12,25</b>	<b>US\$ 13,08</b>	<b>US\$ 13,10</b>	<b>US\$ 13,11</b>
4. Actual Nominal wage rate US \$	<b>US\$ 7,07</b>	<b>US\$ 4,34</b>	<b>US\$ 3,08</b>	<b>US\$ 3,82</b>	<b>US\$ 5,99</b>	<b>US\$ 8,44</b>	<b>US\$ 10,00</b>	<b>US\$ 10,74</b>	<b>US\$ 10,43</b>	<b>US\$ 8,23</b>	<b>US\$ 9,13</b>
Compensation Deficit in US \$ (2 minus 4)	<b>US\$ 14,08</b>	<b>US\$ 10,22</b>	<b>US\$ 8,01</b>	<b>US\$ 9,65</b>	<b>US\$ 14,37</b>	<b>US\$ 17,53</b>	<b>US\$ 19,73</b>	<b>US\$ 19,12</b>	<b>US\$ 19,25</b>	<b>US\$ 16,74</b>	<b>US\$ 18,28</b>
Wage Equalisation index (4÷2 or 3÷1)	<b>0,33</b>	<b>0,30</b>	<b>0,28</b>	<b>0,28</b>	<b>0,29</b>	<b>0,33</b>	<b>0,34</b>	<b>0,36</b>	<b>0,35</b>	<b>0,33</b>	<b>0,33</b>
<b>Mexico</b>											
PPP conversion factor (country currency x \$1)	4,046	6,664	7,238	7,758	7,741	8,158	8,895	9,221	9,354	9,682	10,172
Exchange rate	7,600	9,459	9,663	11,290	10,906	11,143	12,624	13,170	13,293	18,664	18,927
PPP conversion factor (in U.S. dollars)	US\$ 0,53	US\$ 0,70	US\$ 0,75	US\$ 0,69	US\$ 0,71	US\$ 0,73	US\$ 0,70	US\$ 0,70	US\$ 0,70	US\$ 0,52	US\$ 0,54
2. Equalised PPP nominal wage rate US \$	<b>US\$ 11,96</b>	<b>US\$ 17,58</b>	<b>US\$ 20,49</b>	<b>US\$ 19,65</b>	<b>US\$ 21,84</b>	<b>US\$ 23,62</b>	<b>US\$ 22,98</b>	<b>US\$ 23,84</b>	<b>US\$ 26,20</b>	<b>US\$ 20,61</b>	<b>US\$ 21,15</b>
3. Actual PPP Real wage rate US \$	<b>US\$ 4,32</b>	<b>US\$ 5,04</b>	<b>US\$ 5,65</b>	<b>US\$ 5,79</b>	<b>US\$ 6,26</b>	<b>US\$ 6,62</b>	<b>US\$ 6,41</b>	<b>US\$ 6,68</b>	<b>US\$ 7,09</b>	<b>US\$ 9,16</b>	<b>US\$ 9,21</b>
4. Actual Nominal wage rate US \$	<b>US\$ 2,30</b>	<b>US\$ 3,55</b>	<b>US\$ 4,23</b>	<b>US\$ 3,98</b>	<b>US\$ 4,44</b>	<b>US\$ 4,85</b>	<b>US\$ 4,52</b>	<b>US\$ 4,68</b>	<b>US\$ 4,99</b>	<b>US\$ 4,75</b>	<b>US\$ 4,95</b>
Compensation Deficit in US \$ (2 minus 4)	<b>US\$ 9,66</b>	<b>US\$ 14,03</b>	<b>US\$ 16,26</b>	<b>US\$ 15,67</b>	<b>US\$ 17,40</b>	<b>US\$ 18,77</b>	<b>US\$ 18,46</b>	<b>US\$ 19,16</b>	<b>US\$ 21,21</b>	<b>US\$ 15,86</b>	<b>US\$ 16,20</b>
Wage Equalisation index (4÷2 or 3÷1)	<b>0,19</b>	<b>0,20</b>	<b>0,21</b>	<b>0,20</b>	<b>0,20</b>	<b>0,21</b>	<b>0,20</b>	<b>0,20</b>	<b>0,19</b>	<b>0,23</b>	<b>0,23</b>

**\*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.