



I O L W

INTERNATIONAL OBSERVATORY 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 1996-2018, 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 the UN and ILO’s international conventions.

2018 in the Americas exhibits a clear set back or a stagnation in living-wage equalisation for the four economies in this assessment, with a dramatic loss for Argentina, also a loss for Canada and no change for Brazil and Mexico in their equalisation indices (Eq-Idx) with comparable US hourly rates in manufacturing.

- Canada lost a very meaningful three points in its Eq-Idx drop as the direct result of a rare drop of its hourly rate in manufacturing in local currency, with minimal change in its PPP cost of living and exchange rate. This puts Canada at an 82 Eq-Idx, which is one of the lowest positions recorded since 1996.
- Argentina has experienced a gradual erosion of its Eq-Idx as the direct result of incontrollable high inflation rates since 2008. This erosion began to deepen with the Macri government. In 2017, there was a slight recovery, just before the supply-side staunchly neoliberal economic policies of the, at the time, new government began to dramatically reverse the gains in real wages and labour’s share of income delivered by the previous governments. Contrary to its vow to reduce inflation, which averaged 25,6% in the previous government, the policies of Macri’s government averaged 41,4% in CPI inflation during its four years (2016-2019) and the Argentine peso devalued by 81%. Hence, as expected, in 2018 Argentina’s equalisation index collapsed by dropping 8 points, equivalent to a loss of 16%, the worst performance by far among the 41 economies included in our reports. A new economic crisis exploded closely resembling the 2002 collapse, and all wages have dropped dramatically. In 2018 the minimum wage increased 12,9% but inflation reached 47,8%. In 2018, manufacturing hourly rates increased 26,1% in pesos, but the 41% devaluation produced a drop of 25,7% of its hourly rate in US dollars. Thus, despite a drop of 13% in its PPP cost of living, Argentina’s equalisation index recorded a very steep drop and in 2019 will drop even more, as inflation and devaluation rates became even worse, at 54% and 42% respectively. This will take Argentina back to conditions reminiscent of its previous crisis of 2002-2004.
- 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 keep its Eq-Idx stable in 2017 and 2018, 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. End of year inflation rates for 2015, 2016 and 2017, added up to 21%, but manufacturing hourly rates in local currency increased only 15,9% during the 2016-2018 period. As for exchange rates, Brazil’s real has managed to experience a minimal loss of only 4,5% during the same period. This has allowed Brazil’s manufacturing Eq-Idx to suffer a minimal erosion, from 32,2 to 31,6 for the same period, given that Brazil’s cost of living in PPP terms dropped 11,6% in 2018. However, Brazil’s Real lost 7,4% in 2019 and has lost 29,2% in 2020 up to the end of August. Thus the combination of Brazil’s increase in currency erosion and Bolsonaro’s reckless deepening of the anti-labour policies initiated by the Temer government, is bound to widen Brazil’s manufacturing hourly wage rates gap, in real terms, with comparable rates in the US in 2019 and 2020.
- After more than three decades of deliberate state policies to impose modern-slave-work wages, Mexico appears to be gradually reversing such policies. This has resulted in the increase of the minimum wage in real terms beginning in 2017 and 2018 with the previous government, a directive that has been reinforced in 2019 and 2020 with the present government. In 2016, Mexico’s Eq-Idx jumped to an unprecedented level of 24, an increase of 21,2% from 2015, as the result of the combination of a 15,1% currency devaluation, a low inflation (2,7%) and a nominal increase in pesos of 27,7%, which resulted in an increase of 8,4% in US dollars despite Mexico’s peso erosion. As for 2017 and 2018, the hourly rate has increased only 5,7% and 6,4% in nominal terms, somewhat above inflation rates of 2,8% and 6% respectively, resulting in a slight increase in its Eq-Idx from 23,6 in 2017 to 24,1 in 2018. It seems clear that, as expected, the government’s demand-side minimum wage policy is gradually pushing wages up in manufacturing and all sectors. 2019 should show this more clearly for the minimum wage increased 16,1%, inflation 3,6%, the peso only slid 0,1% and the US hourly rate in manufacturing increased only 0,8%, which should increase the manufacturing Eq-Idx at least one point.

	1996	2000	2004	2006	2008	2010	2012	2014	2016	2017	2018
(PPP conversion factor for private consumption)											
Benchmark	1. U.S. Hourly Manufacturing Wage Rate*										
	22,46	24,95	28,59	30,77	32,26	32,61	34,05	37,23	39,73	39,36	40,07
(Hourly compensation costs)											
Canada	PPP conversion factor (country currency x \$1)										
	1,263	1,270	1,273	1,287	1,302	1,295	1,284	1,311	1,300	1,297	1,300
	Exchange rate										
	1,3638	1,4855	1,3017	1,1340	1,0660	1,030	0,9995	1,106	1,326	1,298	1,296
	PPP conversion factor (in U.S. dollars)										
	US\$ 0,93	US\$ 0,85	US\$ 0,98	US\$ 1,14	US\$ 1,22	US\$ 1,26	US\$ 1,28	US\$ 1,19	US\$ 0,98	US\$ 1,00	US\$ 1,00
	2. Equalised PPP nominal wage rate US \$										
	US\$ 20,80	US\$ 21,33	US\$ 27,97	US\$ 34,93	US\$ 39,40	US\$ 41,01	US\$ 43,75	US\$ 44,14	US\$ 38,98	US\$ 39,34	US\$ 40,21
	3. Actual PPP Real wage rate US \$										
	US\$ 20,12	US\$ 21,45	US\$ 24,22	US\$ 25,18	US\$ 26,27	US\$ 27,23	US\$ 28,56	US\$ 29,08	US\$ 30,66	US\$ 33,64	US\$ 32,91
	4. Actual Nominal wage rate US \$										
	US\$ 18,63	US\$ 18,34	US\$ 23,69	US\$ 28,58	US\$ 32,08	US\$ 34,25	US\$ 36,69	US\$ 34,47	US\$ 30,08	US\$ 33,63	US\$ 33,02
	Compensation Deficit in US \$ (2 minus 4)										
	US\$ 2,17	US\$ 2,99	US\$ 4,28	US\$ 6,35	US\$ 7,32	US\$ 6,76	US\$ 7,06	US\$ 9,67	US\$ 8,90	US\$ 5,71	US\$ 7,19
	Wage Equalisation index (4÷2 or 3÷1)										
	0,90	0,86	0,85	0,82	0,81	0,84	0,84	0,78	0,77	0,85	0,82
Argentina	PPP conversion factor (country currency x \$1)										
	1,048	0,949	1,276	1,453	1,904	2,789	4,357	7,443	13,136	16,397	24,208
	Exchange rate										
	0,9997	0,9995	2,9233	3,0543	3,1442	3,8963	4,5369	8,0753	14,7582	16,5627	28,0950
	PPP conversion factor (in U.S. dollars)										
	US\$ 1,05	US\$ 0,95	US\$ 0,44	US\$ 0,48	US\$ 0,61	US\$ 0,72	US\$ 0,96	US\$ 0,92	US\$ 0,89	US\$ 0,99	US\$ 0,86
	2. Equalised PPP nominal wage rate US \$										
	US\$ 23,55	US\$ 23,68	US\$ 12,47	US\$ 14,64	US\$ 19,54	US\$ 23,34	US\$ 32,70	US\$ 34,32	US\$ 35,36	US\$ 38,97	US\$ 34,53
	3. Actual PPP Real wage rate US \$										
	US\$ 7,09	US\$ 8,60	US\$ 10,34	US\$ 13,94	US\$ 16,58	US\$ 17,84	US\$ 19,74	US\$ 19,18	US\$ 18,84	US\$ 19,48	US\$ 16,64
	4. Actual Nominal wage rate US \$										
	US\$ 7,43	US\$ 8,16	US\$ 4,51	US\$ 6,63	US\$ 10,04	US\$ 12,77	US\$ 18,96	US\$ 17,68	US\$ 16,77	US\$ 19,29	US\$ 14,34
	Compensation Deficit in US \$ (2 minus 4)										
	US\$ 16,12	US\$ 15,52	US\$ 7,96	US\$ 8,01	US\$ 9,50	US\$ 10,57	US\$ 13,74	US\$ 16,64	US\$ 18,59	US\$ 19,68	US\$ 20,19
	Wage Equalisation index (4÷2 or 3÷1)										
	0,32	0,34	0,36	0,45	0,51	0,55	0,58	0,52	0,47	0,50	0,42
Brazil	PPP conversion factor (country currency x \$1)										
	0,942	1,063	1,373	1,432	1,468	1,597	1,663	1,901	2,249	2,327	2,355
	Exchange rate										
	1,0051	1,830	2,9262	2,1738	1,8326	1,760	1,953	2,353	3,491	3,191	3,654
	PPP conversion factor (in U.S. dollars)										
	US\$ 0,94	US\$ 0,58	US\$ 0,47	US\$ 0,66	US\$ 0,80	US\$ 0,91	US\$ 0,85	US\$ 0,81	US\$ 0,64	US\$ 0,73	US\$ 0,64
	2. Equalised PPP nominal wage rate US \$										
	US\$ 21,05	US\$ 14,49	US\$ 13,41	US\$ 20,27	US\$ 25,85	US\$ 29,60	US\$ 28,99	US\$ 30,07	US\$ 25,59	US\$ 28,70	US\$ 25,83
	3. Actual PPP Real wage rate US \$										
	US\$ 7,54	US\$ 7,48	US\$ 8,14	US\$ 9,09	US\$ 10,53	US\$ 11,02	US\$ 12,62	US\$ 12,91	US\$ 12,78	US\$ 12,52	US\$ 12,66
	4. Actual Nominal wage rate US \$										
	US\$ 7,07	US\$ 4,34	US\$ 3,82	US\$ 5,99	US\$ 8,44	US\$ 10,00	US\$ 10,74	US\$ 10,43	US\$ 8,23	US\$ 9,13	US\$ 8,16
	Compensation Deficit in US \$ (2 minus 4)										
	US\$ 13,98	US\$ 10,15	US\$ 9,59	US\$ 14,28	US\$ 17,41	US\$ 19,60	US\$ 18,25	US\$ 19,64	US\$ 17,36	US\$ 19,57	US\$ 17,67
	Wage Equalisation index (4÷2 or 3÷1)										
	0,34	0,30	0,28	0,30	0,33	0,34	0,37	0,35	0,32	0,32	0,32
Mexico	PPP conversion factor (country currency x \$1)										
	4,202	6,750	7,470	7,744	8,159	8,720	9,223	9,354	9,460	10,094	10,319
	Exchange rate										
	7,600	9,459	11,290	10,906	11,143	12,624	13,170	13,293	18,664	18,927	19,244
	PPP conversion factor (in U.S. dollars)										
	US\$ 0,55	US\$ 0,71	US\$ 0,66	US\$ 0,71	US\$ 0,73	US\$ 0,69	US\$ 0,70	US\$ 0,70	US\$ 0,51	US\$ 0,53	US\$ 0,54
	2. Equalised PPP nominal wage rate US \$										
	US\$ 12,42	US\$ 17,80	US\$ 18,92	US\$ 21,85	US\$ 23,62	US\$ 22,53	US\$ 23,85	US\$ 26,20	US\$ 20,14	US\$ 20,99	US\$ 21,49
	3. Actual PPP Real wage rate US \$										
	US\$ 4,16	US\$ 4,97	US\$ 6,02	US\$ 6,25	US\$ 6,62	US\$ 6,54	US\$ 6,68	US\$ 7,09	US\$ 9,37	US\$ 9,28	US\$ 9,66
	4. Actual Nominal wage rate US \$										
	US\$ 2,30	US\$ 3,55	US\$ 3,98	US\$ 4,44	US\$ 4,85	US\$ 4,52	US\$ 4,68	US\$ 4,99	US\$ 4,75	US\$ 4,95	US\$ 5,18
	Compensation Deficit in US \$ (2 minus 4)										
	US\$ 10,12	US\$ 14,25	US\$ 14,94	US\$ 17,41	US\$ 18,77	US\$ 18,01	US\$ 19,17	US\$ 21,21	US\$ 15,39	US\$ 16,04	US\$ 16,31
	Wage Equalisation index (4÷2 or 3÷1)										
	0,19	0,20	0,21	0,20	0,21	0,20	0,20	0,19	0,24	0,24	0,24

***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, 1975-2019.
- x U.S. Bureau of Labor Statistics, August 2013 and The Conference Board (TCB), International Labor Comparisons Program - Manufacturing Hourly Compensation Costs 2016, April 2018.
- x For all Countries except those listed below: The Conference Board (TCB) — International Comparisons of Manufacturing Productivity and Unit Labor Costs 2018, December 2019.
 - For all countries: Purchasing Power Parities and the Size of World Economies. Results from the 2017 International Comparison Program. World Bank 2020.
- Direct government sources for:
 - Argentina: (1) Ministerio de Producción y Trabajo, Observatorio de Empleo y Dinámica Empresarial: Boletín de Remuneraciones de los Trabajadores Registrados — serie Anual 2018; (2) (INDEC): Índice de precios al consumidor con cobertura nacional. Resultados por región, Julio 2020;
 - Brazil (IBGE): Pesquisa Industrial Anual Empresa, Custos e Despesas, Ano 2018;
 - Mexico (INEGI): EMIM (Encuesta Mensual de la Industrial Manufacturera. Principales características, datos mensuales. 2007-2019. por Variable, Tipo dato, Código SCIAN (2007), Año y Mes, Mayo 2019;
 - New Zealand Government: Stats NZ: Labour cost index (salary and wage rates): June 2020 quarter;
 - Philippines: Philippines Statistics Authority: 2018 Compilation of Industry Statistics on Labor and Employment;
 - United States: Employer Costs for Employee Compensation — Historical Listing — National Compensation Survey — March 2004 – March 2020.