



The Jus Semper Global Alliance



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 Asia and Oceania – 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-Index or at least keep their position. This allowed most countries in the region to improve their living wage equalisation position to improve.

- 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 (1,9%), a currency devaluation (-2,9%) and the customary drop of PPP cost of living (-3,6%), despite the 1,1% 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 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 (1,4%), a currency revaluation of 2,7% that produced a 4% increase of its hourly rate in US dollars despite a 2,8% increase of its PPP cost of living. South Korea has also been able to remain ahead of Japan’s Eq-Idx for the second year.
- In contrast with Japan and South Korea, Australia continued to decrease its Eq-Idx that began in 2014, with 4,4% drop of its hourly wage rate in local currency, a 3,1% revaluation of its currency and a consequential 1,9% increase in PPP cost of living produced a two-point loss in its Eq-Idx. By the same token, a strong drop of Singapore’s hourly wage rate in local currency (-4,4%) and a 1,5% increase of its PPP cost of living, produced a 1 point loss in its Eq-Idx position.
- India’s 6,1% increase of its hourly rate in local currency and a 3,2% currency revaluation, combined with the drop of the US hourly rate was enough to gain one point, despite a 3,6% increase of its PPP cost of living. Nonetheless, India has gained only three points since 1996.
- China increased 8,8% its hourly rate in local currency, which combined with a 1,7% currency devaluation and the consequential drop of its PPP cost of living by 2,2% and the drop of the US hourly rate, enabled it to gain 2 points from 2016. China has gained 14 points, equivalent to a 280% gain since 1996 (from 5 to a 19 Eq-Idx).
- In New Zealand, the combination of the US drop, an increase of the hourly rate in local currency of 1,5%, a currency revaluation of 2,1%, despite a PPP increase of 2,1%, produced a 2 point gain, for a total gain of 4 points since 1996.
- As for the Philippines, the combination of the drop of the US hourly wage rate, the increase of the hourly rate in local currency of 2,5%, with a currency devaluation of 5,8% and PPP decrease of 5,1%, produced a 1 point gain from 2016. The Philippines has gained barely two points since 1996 and continues to be the country with the greatest living-wage gap of the 41 economies included in all our living-wage gap reports.

	1996	2000	2002	2004	2006	2008	2010	2012	2014	2016	2017
(PPP conversion factor for private consumption)											
Benchmark	1. U.S. Hourly Production-line Rate										
	22,46	24,95	27,35	28,59	30,77	32,26	32,61	34,05	37,23	39,73	39,36
(Hourly compensation costs)											
Japan	PPP conversion factor (in country currency)										
	193,386	176,749	163,075	150,624	137,868	129,061	121,033	112,663	109,182	109,248	108,571
	Exchange rate										
	108,78	107,80	125,22	108,15	116,31	103,39	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\$ 1,19	US\$ 1,25	US\$ 1,38	US\$ 1,41	US\$ 1,03	US\$ 1,00	US\$ 0,97
	2. Equalised PPP nominal compensation US \$										
	US\$ 39,93	US\$ 40,91	US\$ 35,62	US\$ 39,82	US\$ 36,47	US\$ 40,27	US\$ 44,96	US\$ 48,08	US\$ 38,37	US\$ 39,90	US\$ 38,10
	3. Actual Real compensation US \$										
	US\$ 13,31	US\$ 15,27	US\$ 16,47	US\$ 18,14	US\$ 20,27	US\$ 22,01	US\$ 23,03	US\$ 24,96	US\$ 26,14	US\$ 26,35	US\$ 27,03
	4. Actual Nominal compensation US \$										
	US\$ 23,67	US\$ 25,03	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\$ 15,88	US\$ 14,17	US\$ 14,56	US\$ 12,44	US\$ 12,79	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
South Korea	PPP conversion factor (in country currency)										
	716,615	823,900	871,604	887,224	871,617	882,091	907,525	914,934	994,758	961,145	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 compensation 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 Real compensation US \$										
	US\$ 10,72	US\$ 13,21	US\$ 14,70	US\$ 16,30	US\$ 19,02	US\$ 20,99	US\$ 22,78	US\$ 25,17	US\$ 25,01	US\$ 27,74	US\$ 28,10
	4. Actual Nominal compensation 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 compensation 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 Real compensation US \$										
	US\$ 12,75	US\$ 16,32	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 compensation 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)										
Philippines*	PPP conversion factor (in U.S. dollars)										
	US\$ 0,50	US\$ 0,34	US\$ 0,30	US\$ 0,28	US\$ 0,33	US\$ 0,39	US\$ 0,41	US\$ 0,45	US\$ 0,44	US\$ 0,42	US\$ 0,39
	PPP conversion factor (in country currency)										
	12,949	11,035	15,371	15,065	15,777	17,437	19,277	19,657	19,535	19,777	19,083
	Exchange rate										
	26,1260										
	2. Equalised PPP nominal compensation US \$										
	US\$ 11,13	US\$ 8,46	US\$ 8,23	US\$ 8,09	US\$ 10,01	US\$ 12,68	US\$ 13,45	US\$ 15,36	US\$ 16,47	US\$ 16,52	US\$ 15,53
	3. Actual Real compensation US \$										
	US\$ 2,64	US\$ 2,92	US\$ 3,36	US\$ 3,82	US\$ 4,09	US\$ 4,43	US\$ 4,51	US\$ 4,61	US\$ 4,77	US\$ 4,96	US\$ 5,04
	4. Actual Nominal compensation US \$										
	US\$ 1,31	US\$ 0,99	US\$ 1,01	US\$ 1,08	US\$ 1,33	US\$ 1,74	US\$ 1,86	US\$ 2,08	US\$ 2,11	US\$ 2,06	US\$ 1,99
	Compensation Deficit in US \$ (2 minus 4)										
	US\$ 9,82	US\$ 7,47	US\$ 7,22	US\$ 7,01	US\$ 8,68	US\$ 10,94	US\$ 11,59	US\$ 13,28	US\$ 14,36	US\$ 14,46	US\$ 13,54
	Wage Equalisation index (4÷2 or 3÷1)										
	0,12	0,12	0,12	0,13	0,13	0,14	0,14	0,14	0,13	0,12	0,13
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)										
	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 compensation 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 Real compensation 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 compensation US \$										
	US\$ 19,58	US\$ 16,75	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\$ 3,27	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

	1996	2000	2002	2004	2006	2008	2010	2012	2014	2016	2017	
(PPP conversion factor for private consumption)												
Benchmark	1. U.S. Hourly Production-line Rate											
	(Hourly compensation costs)											
New Zealand	PPP conversion factor (in country currency)	1,480	1,508	1,558	1,565	1,587	1,570	1,594	1,586	1,601	1,621	1,605
	Exchange rate	1,4548	2,2011	2,1622	1,5087	1,5421	1,4227	1,3878	1,2343	1,2054	1,4365	1,4074
	PPP conversion factor (in U.S. dollars)	US\$ 1,02	US\$ 0,68	US\$ 0,72	US\$ 1,04	US\$ 1,03	US\$ 1,10	US\$ 1,15	US\$ 1,29	US\$ 1,33	US\$ 1,13	US\$ 1,14
	2. Equalised PPP nominal compensation US \$	US\$ 22,85	US\$ 17,09	US\$ 19,70	US\$ 29,65	US\$ 31,68	US\$ 35,61	US\$ 37,46		US\$ 49,44	US\$ 44,83	US\$ 44,89
	3. Actual Real compensation US \$	US\$ 11,90	US\$ 13,07	US\$ 13,51	US\$ 14,21	US\$ 15,28	US\$ 17,05	US\$ 17,75	US\$ 19,38	US\$ 20,28	US\$ 20,98	US\$ 21,50
	4. Actual Nominal compensation US \$	US\$ 12,11	US\$ 8,95	US\$ 9,73	US\$ 14,74	US\$ 15,73	US\$ 18,82	US\$ 20,39	US\$ 24,90	US\$ 26,93	US\$ 23,67	US\$ 24,52
	Compensation Deficit in US \$ (2 minus 4)	US\$ 10,74	US\$ 8,14	US\$ 9,97	US\$ 14,91	US\$ 15,95	US\$ 16,79	US\$ 17,07	US\$ 18,86	US\$ 22,51	US\$ 21,16	US\$ 20,37
	Wage Equalisation index (4÷2 or 3÷1)	0,53	0,52	0,49	0,50	0,50	0,53	0,54	0,57	0,54	0,53	0,55
India*	PPP conversion factor (in country currency)	—	9,764	10,118	10,379	10,725	11,574	14,191	16,038	18,347	20,106	20,177
	Exchange rate	—	44,9416	48,6103	45,3165	45,3070	43,5052	45,7258	53,4372	61,0295	67,1953	65,1216
	PPP conversion factor (in U.S. dollars)	—	US\$ 0,22	US\$ 0,21	US\$ 0,23	US\$ 0,24	US\$ 0,27	US\$ 0,31	US\$ 0,30	US\$ 0,30	US\$ 0,30	US\$ 0,31
	2. Equalised PPP nominal compensation US \$	—	US\$ 5,42	US\$ 5,69	US\$ 6,55	US\$ 7,28	US\$ 8,58	US\$ 10,12	US\$ 10,22	US\$ 11,19	US\$ 11,89	US\$ 12,20
	3. Actual Real compensation US \$	—	US\$ 3,22	US\$ 3,51	US\$ 3,71	US\$ 4,01	US\$ 4,74	US\$ 4,70	US\$ 5,30	US\$ 5,62	US\$ 5,28	US\$ 5,58
	4. Actual Nominal compensation US \$	NA	US\$ 0,70	US\$ 0,73	US\$ 0,85	US\$ 0,95	US\$ 1,26	US\$ 1,46	US\$ 1,59	US\$ 1,69	US\$ 1,58	US\$ 1,73
	Compensation Deficit in US \$ (2 minus 4)	—	US\$ 4,72	US\$ 4,96	US\$ 5,70	US\$ 6,33	US\$ 7,32	US\$ 8,66	US\$ 8,63	US\$ 9,50	US\$ 10,31	US\$ 10,47
	Wage Equalisation index (4÷2 or 3÷1)	—	0,13	0,13	0,13	0,13	0,15	0,14	0,16	0,15	0,13	0,14
China*	PPP conversion factor (in country currency)	—	—	3,545	3,545	3,436	3,572	3,612	3,716	3,769	3,847	3,827
	Exchange rate	—	—	8,2770	8,2768	7,9734	6,9487	6,7703	6,3123	6,1434	6,6445	6,7588
	PPP conversion factor (in U.S. dollars)	—	—	US\$ 0,43	US\$ 0,43	US\$ 0,43	US\$ 0,51	US\$ 0,53	US\$ 0,59	US\$ 0,61	US\$ 0,58	US\$ 0,57
	2. Equalised PPP nominal compensation US \$	—	—	US\$ 11,71	US\$ 12,24	US\$ 13,26	US\$ 16,58	US\$ 17,40	US\$ 20,05	US\$ 22,84	US\$ 23,00	US\$ 22,29
	3. Actual Real compensation US \$	—	—	US\$ 1,40	US\$ 1,75	US\$ 2,23	US\$ 3,09	US\$ 3,71	US\$ 5,20	US\$ 6,93	US\$ 6,94	US\$ 7,59
	4. Actual Nominal compensation US \$	NA	NA	US\$ 0,60	US\$ 0,75	US\$ 0,96	US\$ 1,59	US\$ 1,98	US\$ 3,06	US\$ 4,25	US\$ 4,02	US\$ 4,30
	Compensation Deficit in US \$ (2 minus 4)	—	—	US\$ 11,11	US\$ 11,49	US\$ 12,30	US\$ 14,99	US\$ 15,42	US\$ 16,99	US\$ 18,59	US\$ 18,98	US\$ 17,99
	Wage Equalisation index (4÷2 or 3÷1)	—	—	0,05	0,06	0,07	0,10	0,11	0,15	0,19	0,17	0,19

***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:)

- o The Jus Semper Global Alliance: Living Wage Gaps Analysis in the manufacturing sector using:
- o 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.