



I O L W

INTERNATIONAL OBSERVATORY
OF LIVING WAGES

Wage Gaps

Wage rates for all employed in manufacturing

2020 Report

Manufacturing wage gaps for Group of Seven (G7) large economies and other selected economies, including "emerging" economies with available wage and PPP data (1996-2018)

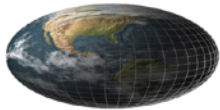
(see definitions and sources at the end of report)

Manufacturing wage gaps for Group of Seven (G7) large economies and other selected economies, including "emerging" economies with available wage and PPP data (1996-2018).

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The Jus Semper Global Alliance

A Collaborative Research Project



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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—with respect to North-South relations—as the direct result of unequal exchange structures deliberately imposed on the periphery to maximise returns through the use of global labour arbitrage in the global South. (See: Claudio Jedlicki: *Unequal Exchange*, The Jus Semper Global Alliance, September 2007 and Intan Suwandi: *Return to Production*, The Jus Semper Global Alliance, October 2020).
- 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 U.S. 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 U.S.; 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 U.S.; the cost of living is, thus, higher,
- To calculate a living wage, the real wage of a specific category of U.S. workers is used as the benchmark, and the PPPs of a country in question are then applied to the U.S. 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 U.S. 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 over three decades the purchasing power of real wages in the U.S., 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 2018

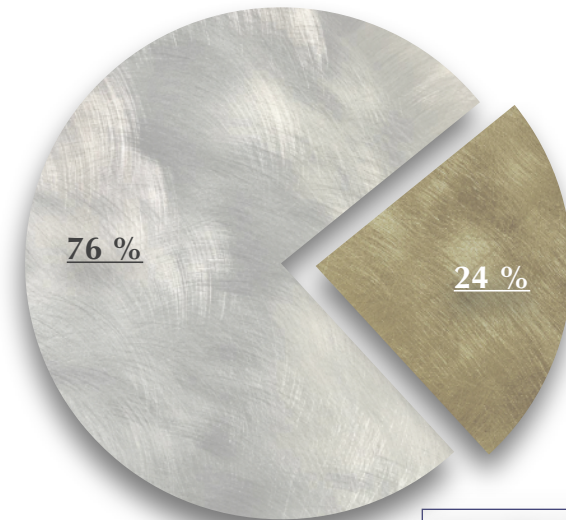
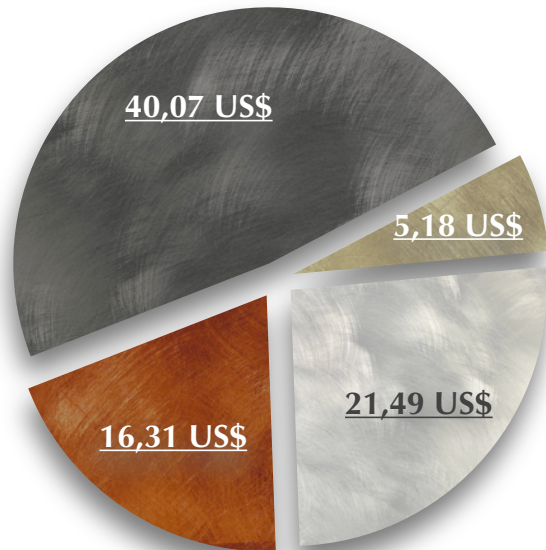
- Equivalent manufacturing workers in Mexico and Brazil earn only 24% and 32%, respectively, of what they should be making in order to be compensated at par with their US counterparts in terms of purchasing power,
- US Workers earn \$40,07/hour whilst Mexican and Brazilian workers earn only \$5,18/hour and \$8,16/hour, respectively,
- Since costs of living in PPP terms in Mexico and Brazil are \$0,54 and \$0,64, respectively, for each \$1 US dollar, equivalent Mexican and Brazilian manufacturing workers should be earning instead \$21,49/hour and \$25,83/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 (\$33,02) is 82% of the equivalent wage rate (\$40,21) needed to be at par, with a PPP of \$1,00 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
2018	<u>Wage Rate</u>	<u>2017</u>	<u>Real Wage Rate</u>	<u>Wage Rate</u>	<u>Index</u>
United States	40,07 US\$	100	40,07 US\$	40,07 US\$	100
Canada	33,02 US\$	100	32,91 US\$	40,21 US\$	82
	82 %		82 %	100 %	
Mexico	5,18 US\$	54	9,66 US\$	21,49 US\$	24
	13 %		24 %	54 %	
Brazil	8,16 US\$	64	12,66 US\$	25,83 US\$	32
	20 %		32 %	64 %	
Sources:					
International Observatory of Living Wages 2020.					
The Conference Board, International Labor Comparisons program, December 2019.					
Data base of World Bank's World Development Indicators, 1975-2019, (private consumption PPP indicator)					

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

■ A Classic Example in 2018

- 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 Mexico, 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 \$21,49 is what all employed in Mexico’s manufacturing sector should earn to be equally remunerated (in purchasing power terms) for performing an equivalent task (because Mexico’s PPP cost of living is 54% the cost in the U.S.). Yet, workers only earn \$5,18 instead of \$21,49, thus the employer deliberately retains \$16,31, which constitutes the greater part of the surplus value that legitimately belongs to Mexican workers, according to TLWNSI’s concept.
- In this way, the second pie chart shows how the employer retains inappropriately 76% of labour’s surplus value, or labour share of income, by only allocating to the worker 24% of what he/she is entitled to.



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

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

- Nominal wage rate earned
- Difference inappropriately retained by the employer

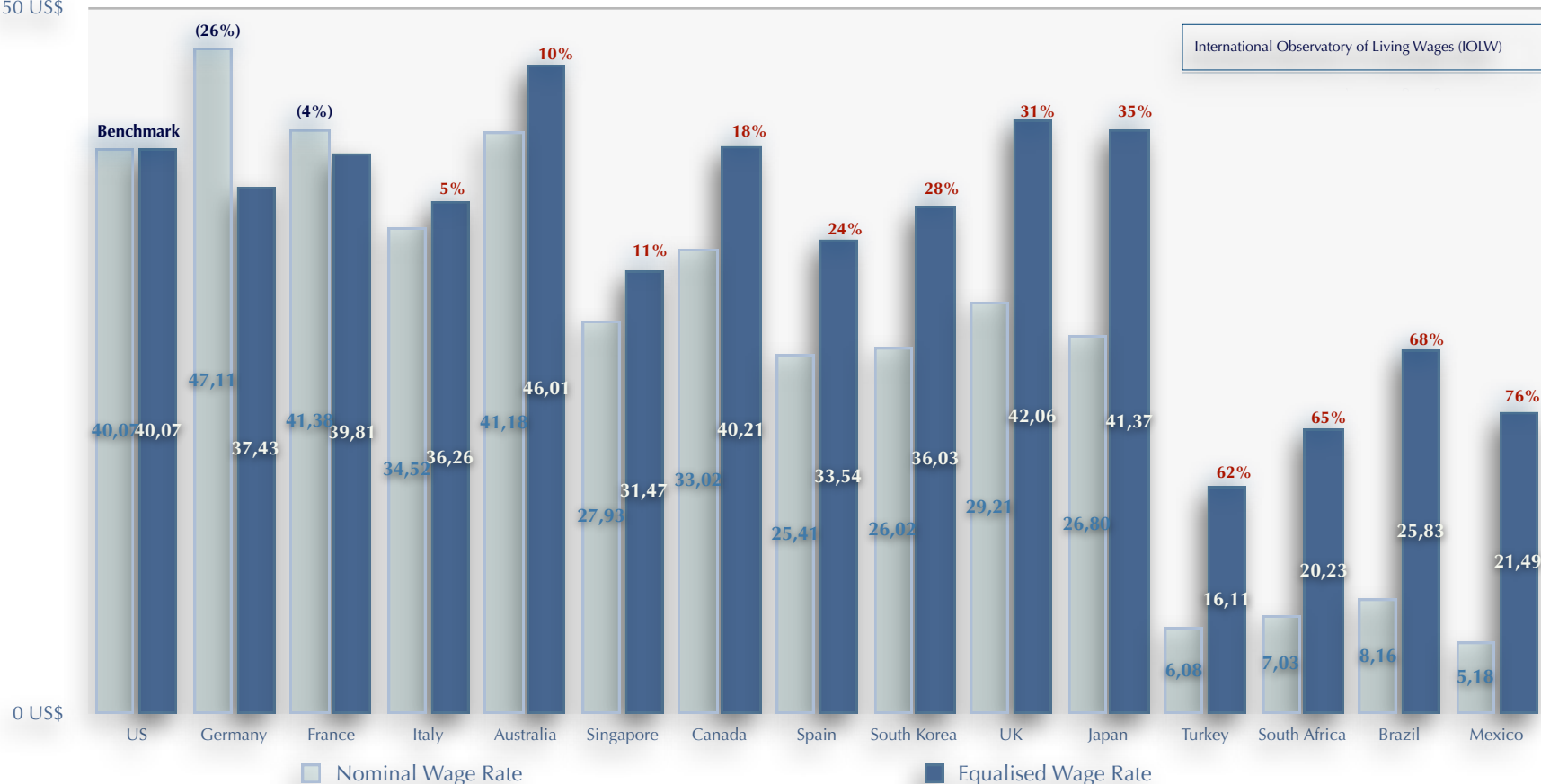
Living wage rate gap comparisons for selected economies:

- **Our 2018 assessment reports divergent outcomes among selected economies that were predominantly the result of a meaningful increase of hourly wages in local currency (or lack of it), exchange rates and changes in their PPP cost of living. Six economies improved their position, four lost ground and four did not change. France, Germany, Italy, South Korea, Singapore and Australia improved their equalisation index (Eq-Idx). Canada, The United Kingdom, Spain and Turkey lost ground compared to their 2017 position** (for the complete detail, see Table T5 [starting on page 27](#)).
- Among the six economies that improved their living-wage equalisation position, the main factors were the substantial increase of their hourly rates in local currency combined with a revaluation of their currency or a decrease in their cost of living in PPP terms for private consumption. In the case of the three euro-area countries (France, Germany and Italy), it was specifically the combination of the increase of their hourly wage rates with a 4,8% revaluation of the euro. This allowed France and Italy to increase their equalisation Eq-Idx two points (104 and 95 respectively) and Germany one point to 126. This combination served to offset their increase of their PPP cost of living, which averaged 4,3%, and increased their advantage over the 1,8% increase of the US hourly rates in real terms. A similar behaviour took place in the case of Singapore and South Korea, which averaged an increase of their hourly rates in local currency of 6,3%, revalued their currencies an average of 2,6% and increased their PPP cost of living by an average of only 1,6%. In this way, they clearly outperformed the 1,8% increase of the US hourly rate in manufacturing and thus increased their equalisation Eq-Idx by six and three points to 89 and 72 respectively in 2018. In fact, Singapore's 89 Eq-Idx is its best record since 1996. Australia, in contrast, devalued its currency, but it achieved the highest improvement of its equalisation Eq-Idx among all 41 economies in our reports by increasing it nine points to a 90 Eq-Idx, which is equal to its best position previously achieved in 2014. This was the result of a strong increase (6,6%) of its hourly rate in local currency and a 2,5% currency devaluation, which contributed to a drop of its PPP cost of living of 2,9%.
- Among the four economies losing ground, Canada was the worst, losing 3 points (82 Eq-Idx), followed by the United Kingdom (69 Eq-Idx) and Spain (72 Eq-Idx), each losing 2 points and Turkey losing one point (38 Eq-Idx). Canada's drop was 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. Spain lost two points also as a result of a 0,6% drop of its hourly rate in euros—the only country in the euro area recording a drop—and a meaningful increase of its PPP cost of living of 5,1%. The United Kingdom also lost two points due to an increase of only 0,6% of its hourly rate in local currency and a 4,2% increase of its PPP, despite a 3,7% revaluation of the pound. Lastly, Turkey also lost one point due to a very steep devaluation of the lira of 24,5%, despite a strong increase of its hourly rate in local currency of 13,2% and a strong drop of 14,2% of its PPP cost of living.
- Among the economies with no change in their Eq-Idx, Brazil managed to remain with an index of 32, the same since 2016, due to the strong devaluation of its currency by 12,7% and also a steep drop of its PPP cost of living of 11,6% and an increase of its hourly rate in local currency of 2,4%, which is slightly higher than the 1,8% increase of the US hourly rate. Mexico actually increased its Eq-Idx but not enough to gain one point, thus remaining at 24 points (in rounded numbers), which is the same as in 2016. Mexico increased its hourly rate in local currency by a meaningful 6,4% in 2018, but experienced a 1,7% currency devaluation and an increase of 0,5% in its PPP cost of living, actually moving from a 23,6 index to a 24,1 index. Although Mexico appears to be improving its index, it has gained only five points since 1996, which is barely meaningful relative to the 22-years period of assessment. Japan experienced no change in its Eq-Idx due to a PPP increase of 1,3%, little increase in local currency (0,9%) and a currency revaluation of 1,6%. Lastly, South Africa recorded no change in its Eq-Idx due to a PPP increase of 2,8%, which offset the increase in local currency (3,8%), and a minimal revaluation of only 0,8%. Although this allowed South Africa to remain at its highest recorded index since 1996, its improvement in equalisation has been of only five points since 2010.
- Beyond the context of this analysis, we must realise that capitalism of any kind is incompatible with the purpose of a truly democratic ethos, which is the procurement of the welfare of all ranks of society and the sustainability of the planet. Thus, under the current system this purpose will never take place and, therefore, there is no reason to regard improvements in manufacturing wage rates or minimum wages as positive signs of what we can expect in the coming years. Unless people realise that we need to force a new radical social contract that wholly replaces the capitalist system, we will expect more inequality, environmental depredation and the unsustainability of life on our planet. We are running out of time globally, because the capitalist system is completely unsustainable and we are already on the brink of being unable to secure the survival of all living things. There is an enormous amount of scientific research that provides incontestable proof to this reality, including stark changes in the climate and pandemics such as the present COVID-19 that we are enduring. Given this ominous situation, demand-side and other socially-oriented policies will lose any meaning as we reach a tipping point of no repentance and no return when future generations will no longer have a chance to live with dignity, as the planet increasingly reacts in ways that no longer provide the conditions indispensable for life as we know it. Unless we replace the current system, life in our planet will reach its demise as the result of the ecological rift produced by our anthropocentric era.

2018 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)

50 US\$



International Observatory of Living Wages (IOLW)

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

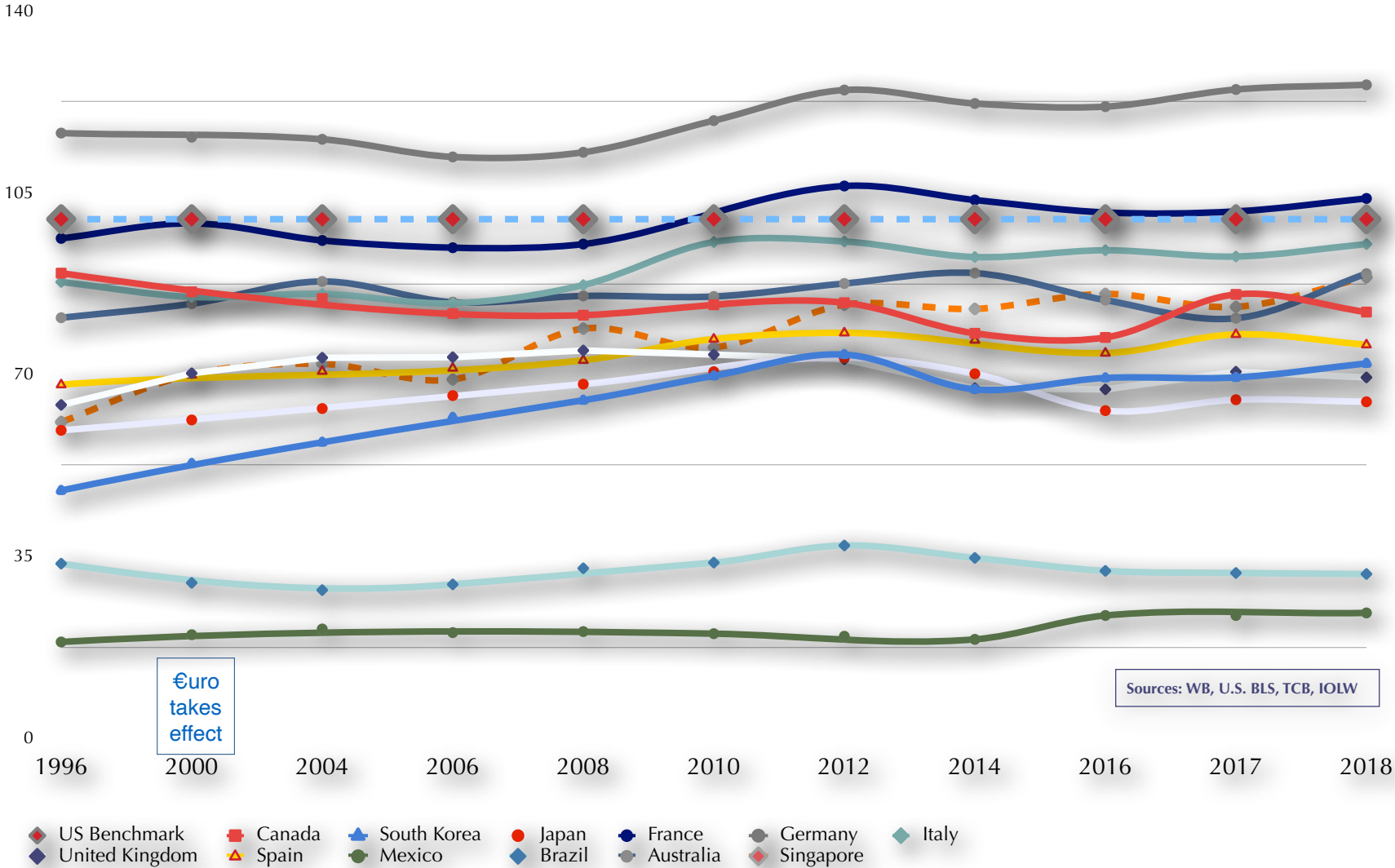
- 1) If lighter bar is greater than darker bar= Nominal wage rate is superior to rate required to be at par with U.S.
 - 2) If darker bar is greater than lighter bar= Nominal wage rate is less than wage required to be at par with U.S.
 - 3) If both bars are in equilibrium= Nominal wage is equivalent 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.
- × Database of World Bank's World Development Indicators, 1975-2019.
- × U.S. Bureau of Labor Statistics, August 2013 and The Conference Board (TCB), International Labor Comparisons Program - Manufacturing Hourly Compensation Costs, February 2018.
- × The Conference Board (TCB) — International Comparisons of Manufacturing Productivity and Unit Labor Costs 2018, December 2019
- Purchasing Power Parities and Real Expenditures of World Economies. Summary of Results and Findings of the 2011 International Comparison Program. World Bank 2014.

Equalisation Index with US Manufacturing Real Hourly Wage Rates via PPPs

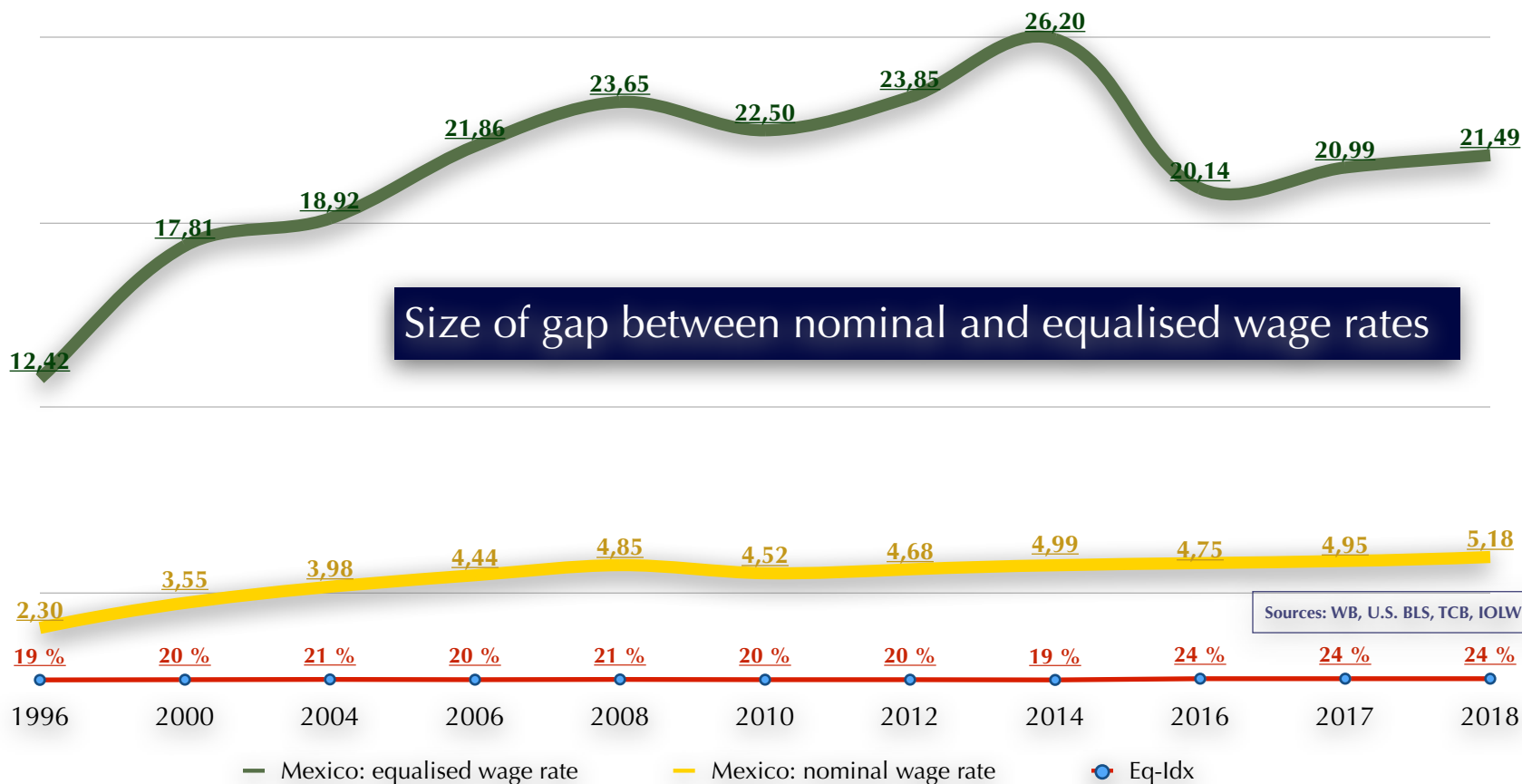
Of the twelve economies in this report with data since 1996, Germany continues to have the best position with an increasing equalisation advantage over the US in real PPP terms in its hourly wage rates, followed by France with a four-point advantage over US wage rates. All other countries continue to record wage gaps vis-à-vis equivalent manufacturing wage rates in the US. Six out of the twelve countries in this chart improved their position in 2018 vis-à-vis 2017 by increasing their advantage (Germany and France) or decreasing their wage gaps (Italy, Singapore, South Korea and Australia). Brazil and Mexico remained with the same gap since 2016. Only Canada, the United Kingdom, Spain and Turkey increased their gaps from the previous year. Mexico and Brazil continue reporting the greatest wage gaps.



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

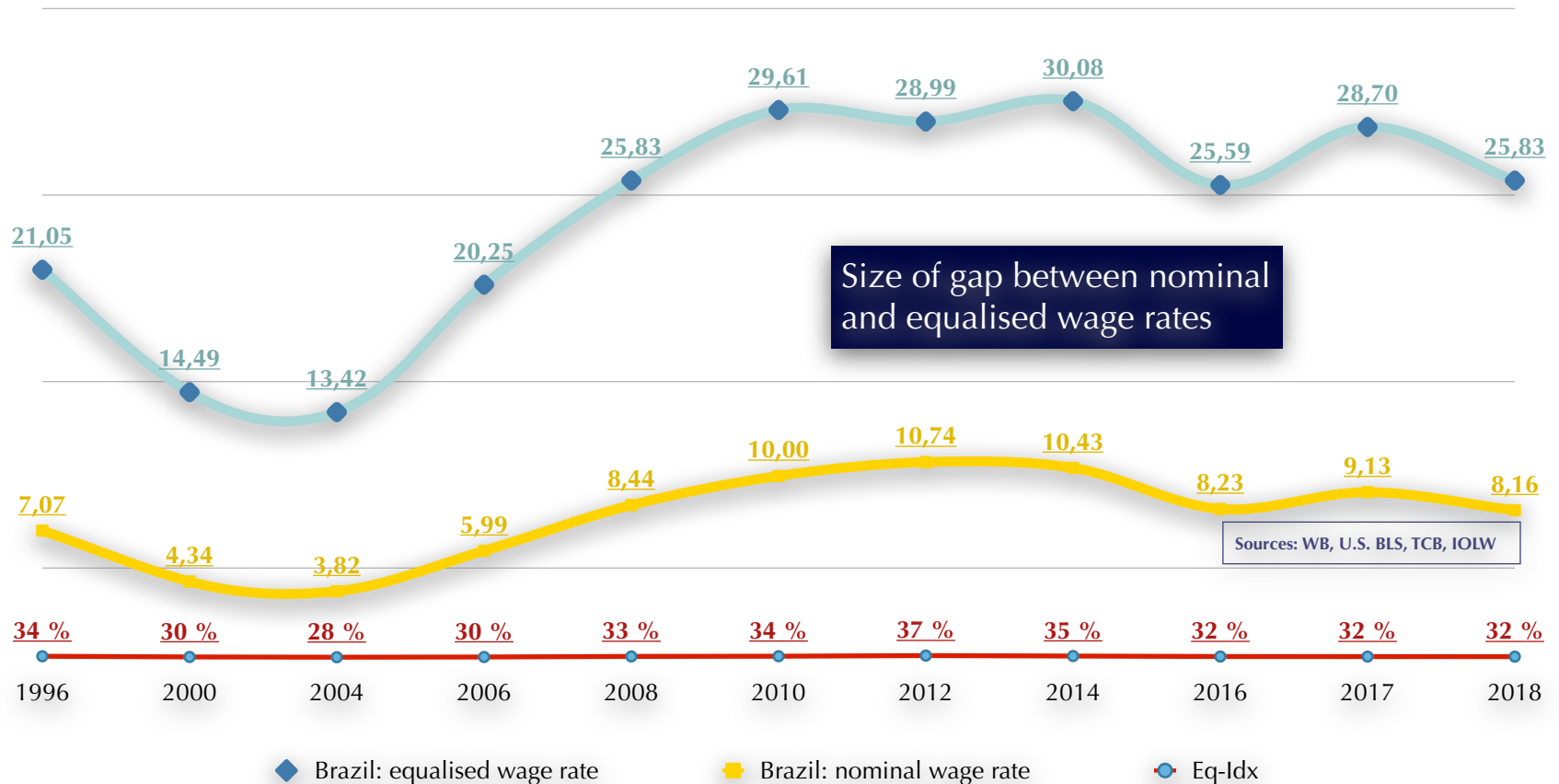
Hourly wage rate equalisation between hourly nominal and equalised wage rates in PPP terms for all employed in manufacturing with equivalent U.S. real wage rate (current dollars)

For the first time —after more than three decades— the Federal minimum wage has been consistently increased above inflation since 2017. 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. In 2019, Mexico’s new government increased the minimum wage by 16,2% and by even a higher nominal rate of 20,0% for 2020. The change of policy is beginning to have a direct positive impact on manufacturing wages in real terms and on its equalisation with comparative US wages. Hourly manufacturing wage rates increased nearly 28% in 2016, 5,7% in 2017 and 6,4% in 2018, clearly above inflation in all cases. This raised the Eq-Idx to 24 in 2016 . But it did not increase further in 2017 and 2018 due to some erosion of the peso against the dollar. If this trend is sustained for the next few years, equalisation may improve marginally, albeit the current pandemic has made it harder by triggering the further erosion of the peso against the dollar, which currently hovers around 11% till the end of August 2020 relative to 2019.



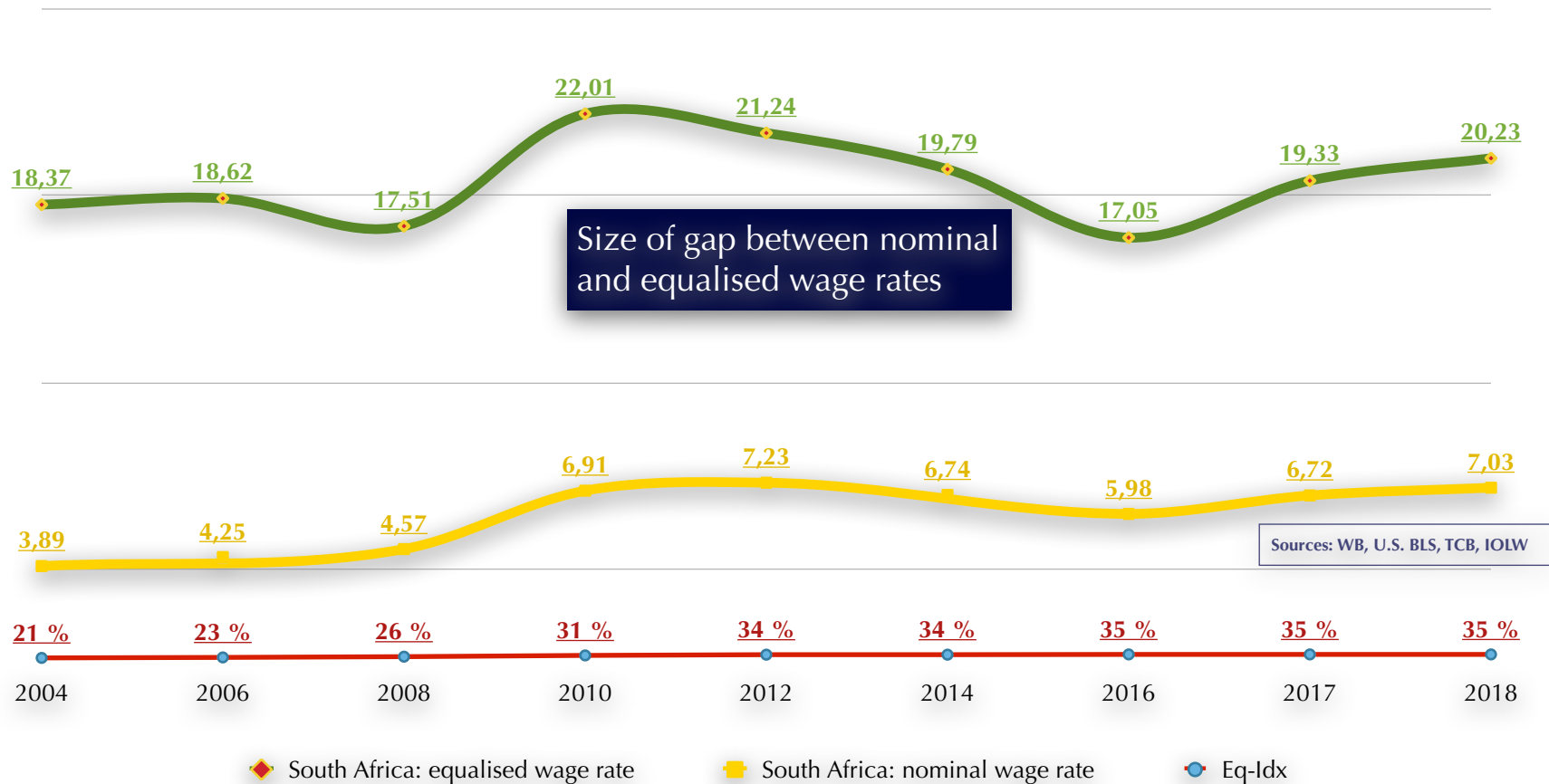
Hourly wage rate equalisation between hourly nominal and equalised wage rates in PPP terms for all employed in manufacturing with equivalent U.S. real wage rate (current dollars)

Brazil managed to remain with an index of 32 in 2018, the same since 2016, due to the strong devaluation of its currency by 12,7% and also a steep drop of its PPP cost of living of 11,6% and an increase of its hourly rate in local currency of 2,4%, which is slightly higher than the 1,8% increase of the US hourly rate. This is despite the neoliberal policies that put a freeze on public spending effectively ending compliance with the minimum wage appreciation law advanced by the preceding labour party governments. However, hourly rates and the Eq-Idx are likely to drop in 2019 and 2020, due to the deepening of anti-labour policies pursued by the current government and the further erosion of the real, which has been exacerbated with the pandemic, devaluing nearly 33% since 2018. After 22 years, Brazilian workers endure a greater compensation gap with a 32 index vis-à-vis their US counterparts—under the principle of equal pay for work of equal value—than the 34 index of 1996.



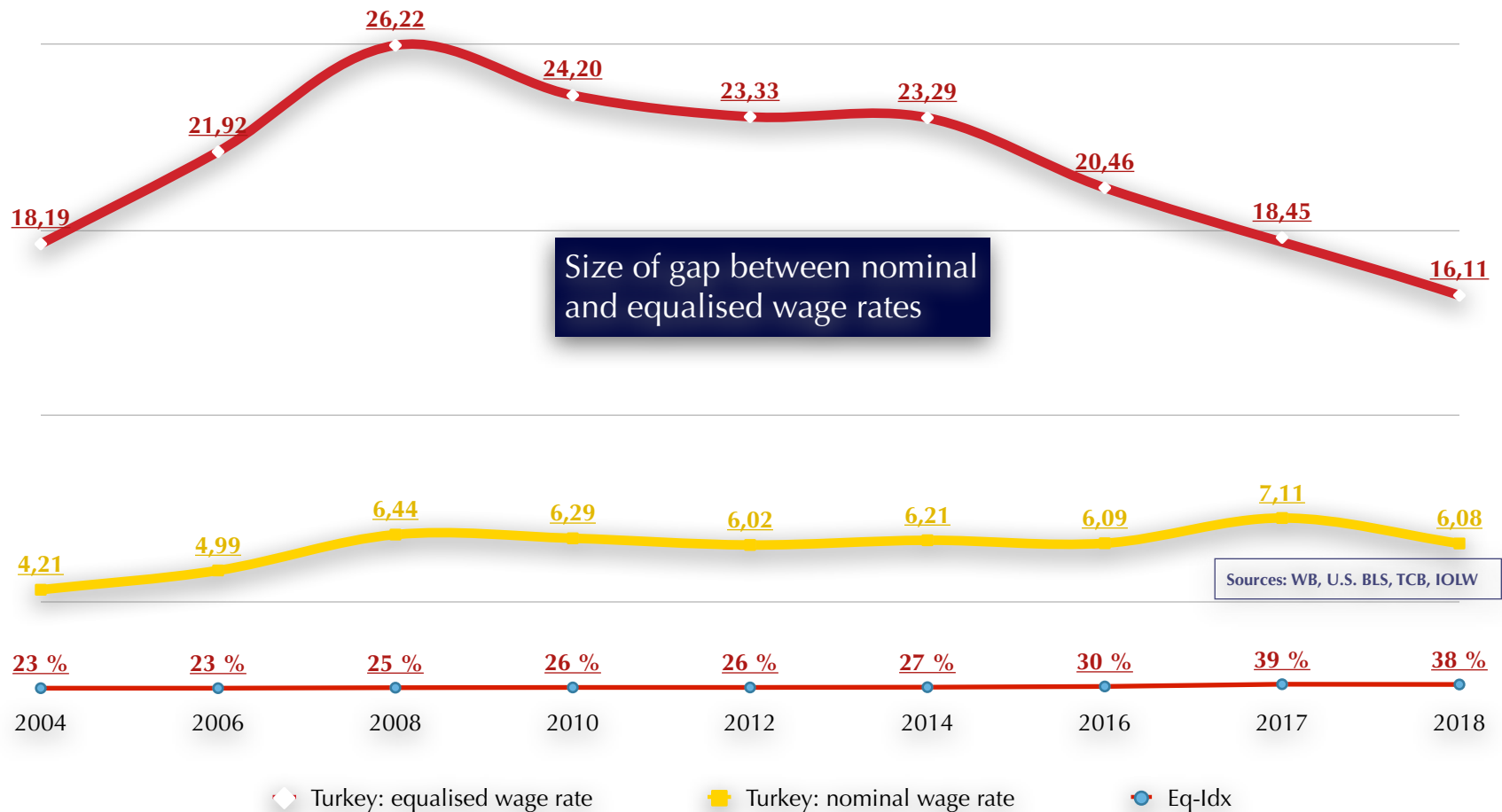
Hourly wage rate equalisation between hourly nominal and equalised wage rates in PPP terms for all employed in manufacturing with equivalent U.S. real wage rate (current dollars)

South Africa shows a steady increase of its Eq-Idx since 2004, the earliest year with available data. Yet limited growth of its hourly rate in local currency, little change of its exchange rate and strong inflation pushing its PPP for private consumption has offset the further increase of its Eq-Idx in 2017 and 2018. Nonetheless, South Africa has already gained 14 points since 2004, equivalent to an 18% reduction of its wage gap.



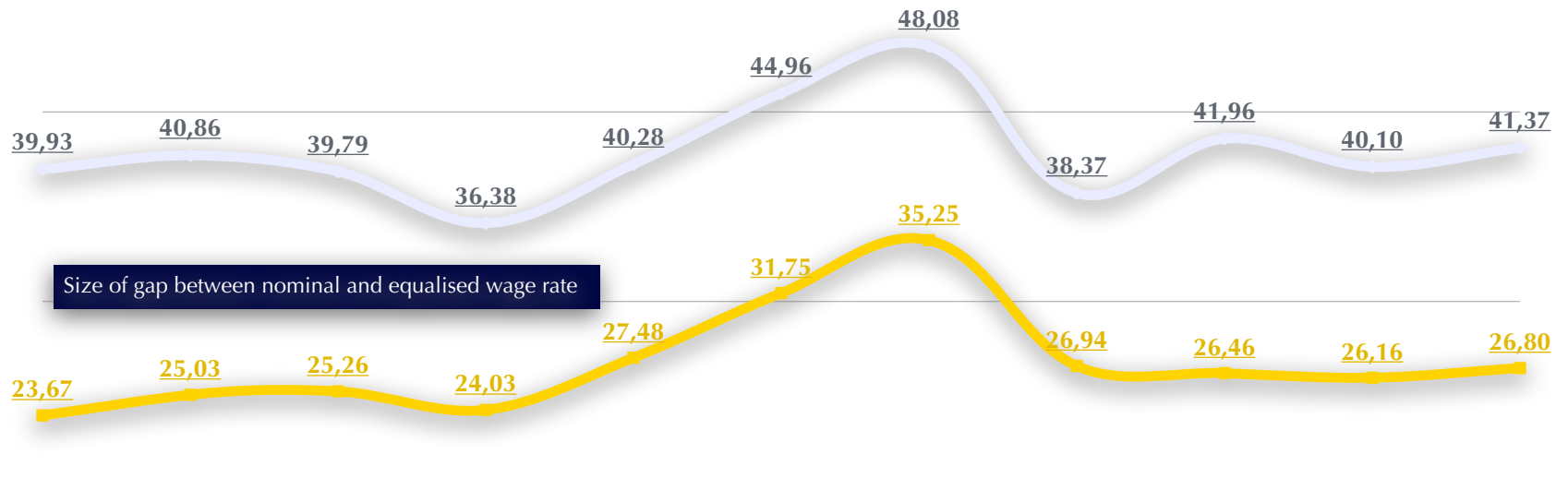
Hourly wage rate equalisation between hourly nominal and equalised wage rates in PPP terms for all employed in manufacturing with equivalent U.S. real wage rate (current dollars)

Turkey shows a steady increase of its Eq-Idx since 2004, the earliest year with available data. This trend increased its growth pace since 2014. 2017 data reported an extremely powerful and unusual increase for just one year (from a 30 to a 39 Eq-Idx). This is explained by the extremely strong growth of its hourly rate in local currency (41%); much stronger than the strong currency devaluation experienced (17%). This combination produced a 31% increase of Turkey's Eq-Idx in just one year, the highest of all economies included in our reports. However, despite the strong increase of 13,2% in local currency, a very steep devaluation of 24% in 2018 produced a one-point loss in its Eq-Idx, even though the erosion of the lira produced a drop of 14% of its PPP, not enough to at least keep its previous index.

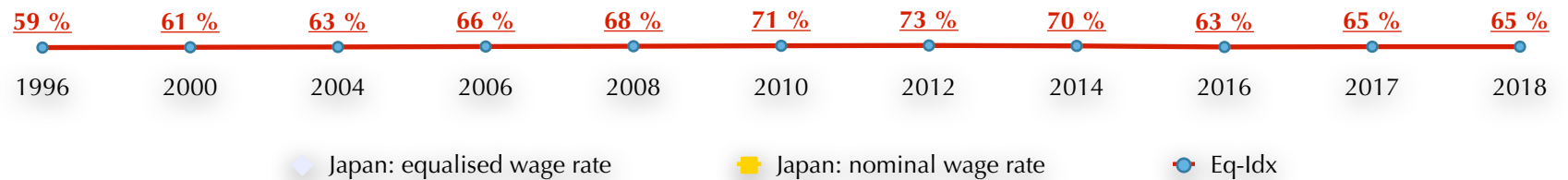


Hourly wage rate equalisation between hourly nominal and equalised wage rates in PPP terms for all employed in manufacturing with equivalent U.S. real wage rate (current dollars)

Japan reported no change in 2018. The combination of some increase of its PPP, little increase in local currency of less than 1% and a currency revaluation of 1,6% kept Japan's Eq-Idx at 65, which is substantially less than the 73 index recorded in 2012, its best position ever.



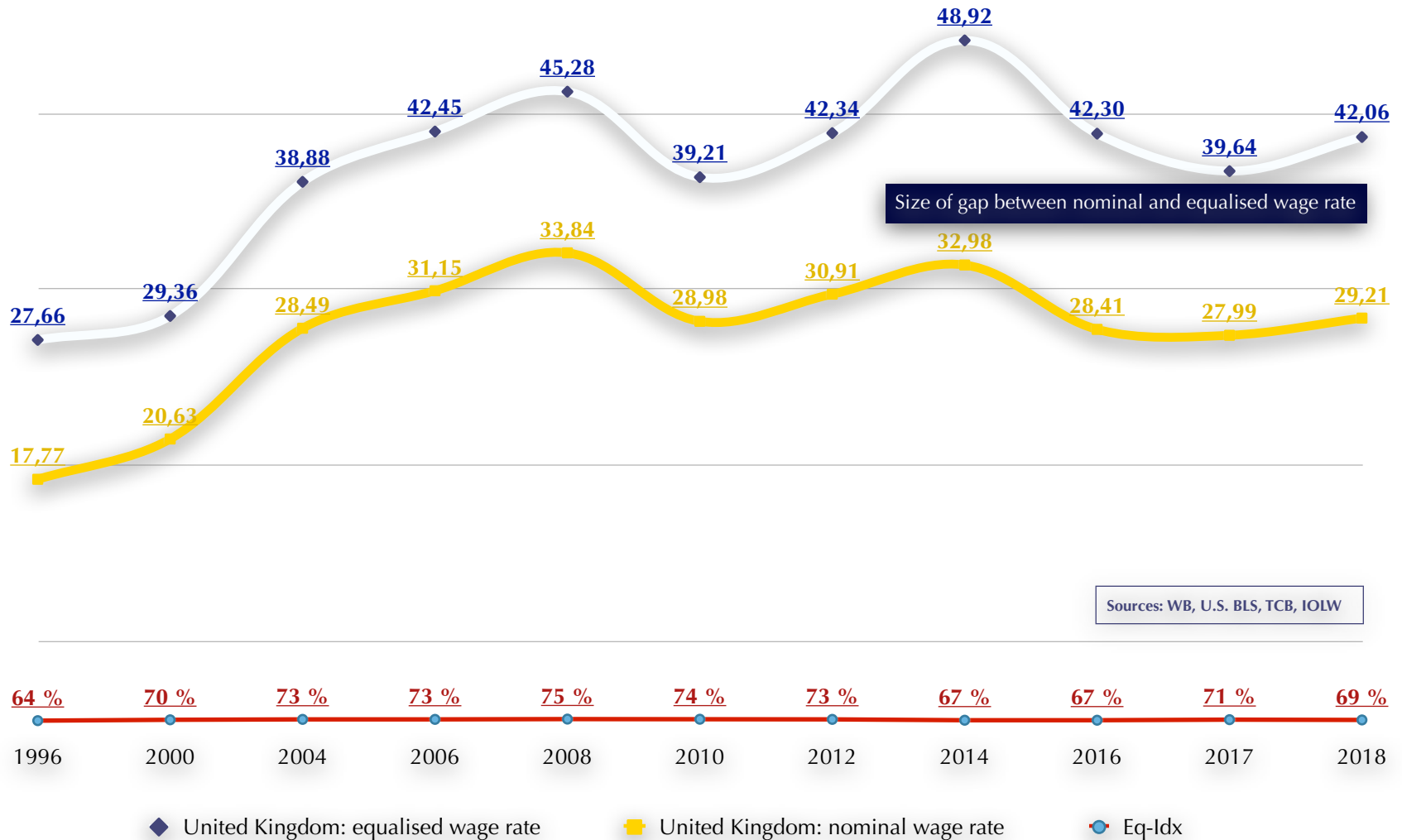
Sources: WB, U.S. BLS, TCB, IOLW



◆ Japan: equalised wage rate ■ Japan: nominal wage rate ● Eq-Idx

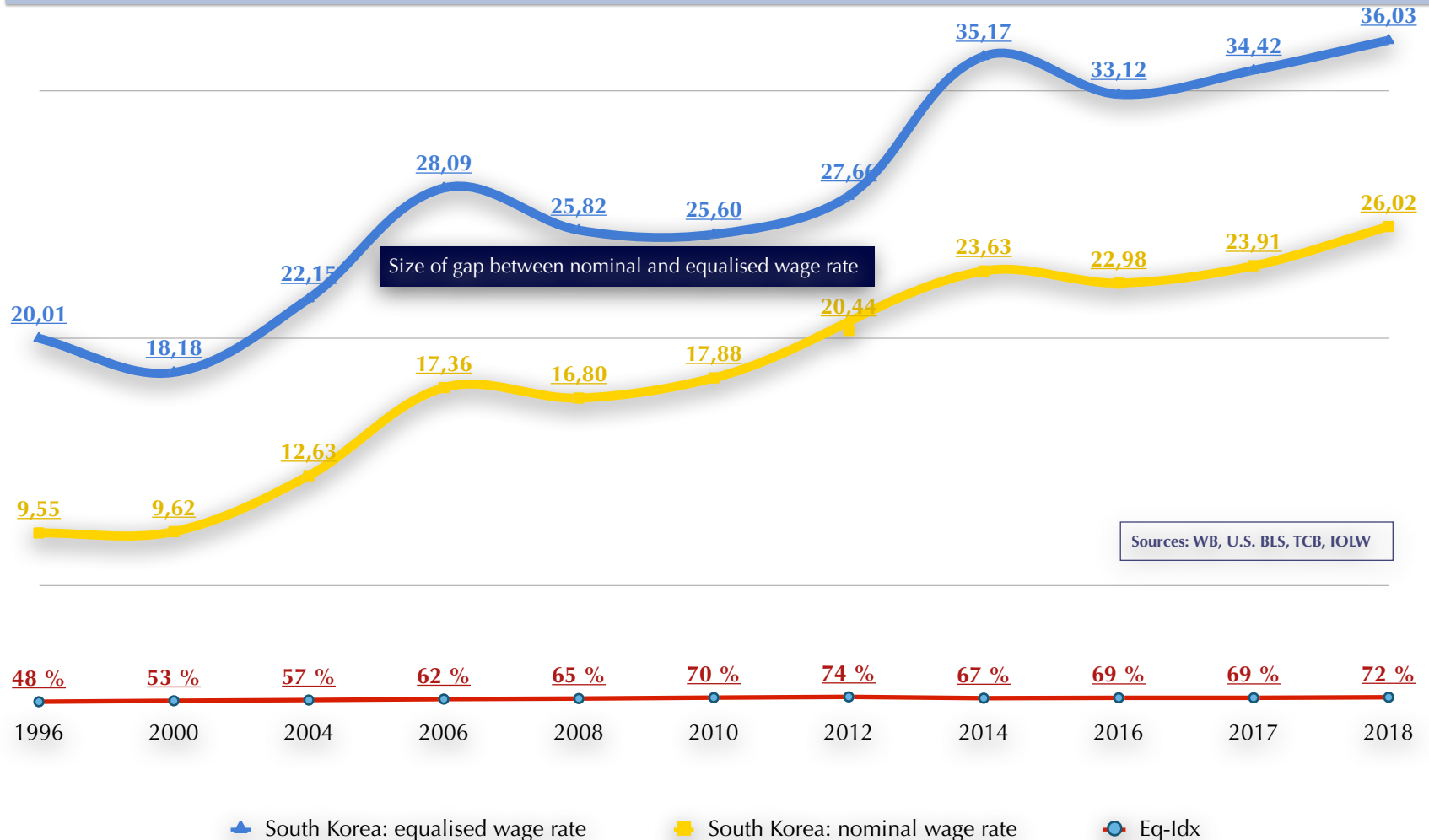
Hourly wage rate equalisation between hourly nominal and equalised wage rates in PPP terms for all employed in manufacturing with equivalent U.S. real wage rate (current dollars)

In 2018, the UK experienced a two-point loss of its Eq-Idx due to a negligible change of the wage rate in local currency and an increase in its PPP cost of living for private consumption, despite a pound revaluation of 3,7%. Since 2014, the UK's Eq-Idx appears to be stabilising at barely above two-thirds of its equalisation.



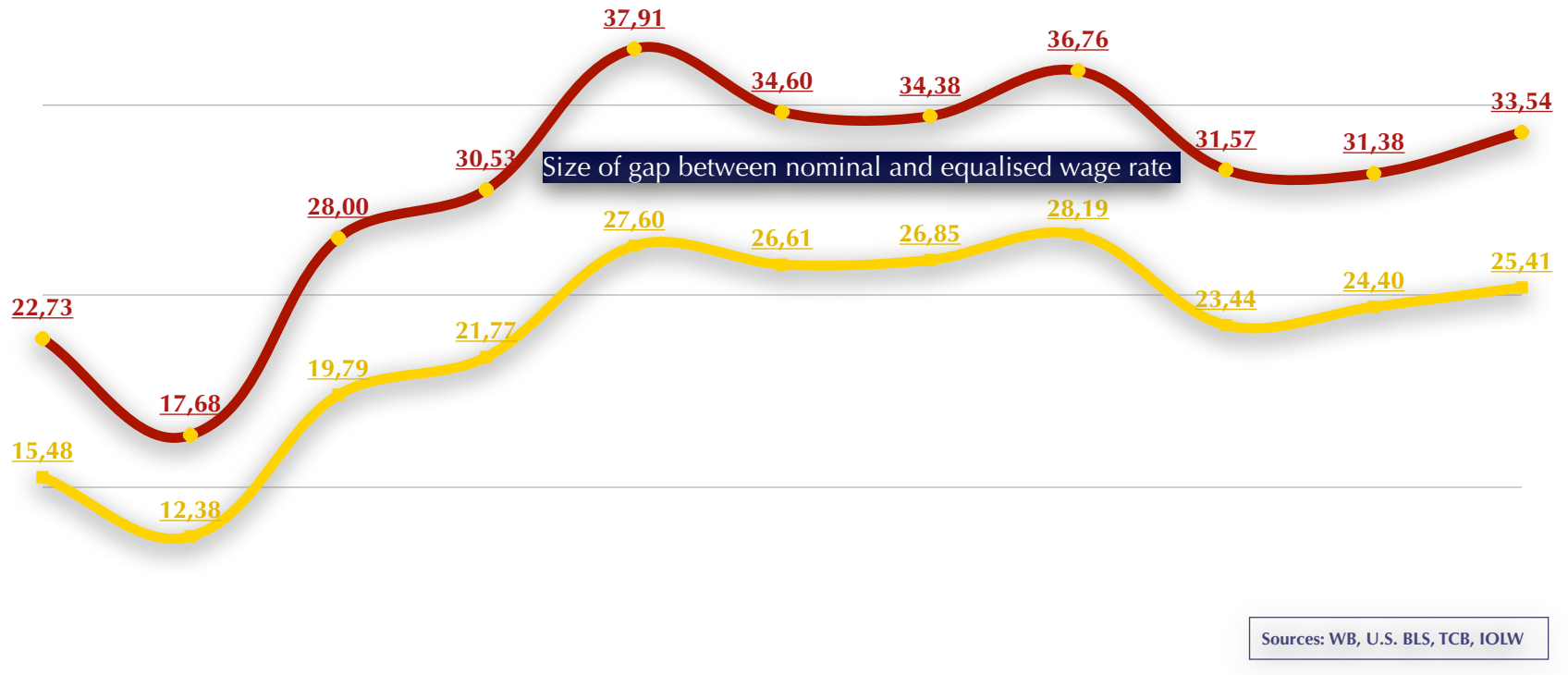
Hourly wage rate equalisation between hourly nominal and equalised wage rates in PPP terms for all employed in manufacturing with equivalent U.S. real wage rate (current dollars)

South Korea continues to improve its equalisation position in 2018, gaining three points as the result of the revaluation of its currency of 2,7%, a good increase of its hourly rate in local currency of 6%, which easily offset the 2,8% increase of its PPP. This puts South Korea two points below its highest index recorded in 2012. South Korea has also been able to remain ahead of Japan's Eq-Idx after being far behind in 1996. Overall, since 1996, South Korea has been, after Singapore, the best performer of all economies included in this report, by gaining 24 equalisation points, which is equivalent to a 46% reduction of its wage gap (from 52 to 28).



Hourly wage rate equalisation between hourly nominal and equalised wage rates in PPP terms for all employed in manufacturing with equivalent U.S. real wage rate (current dollars)

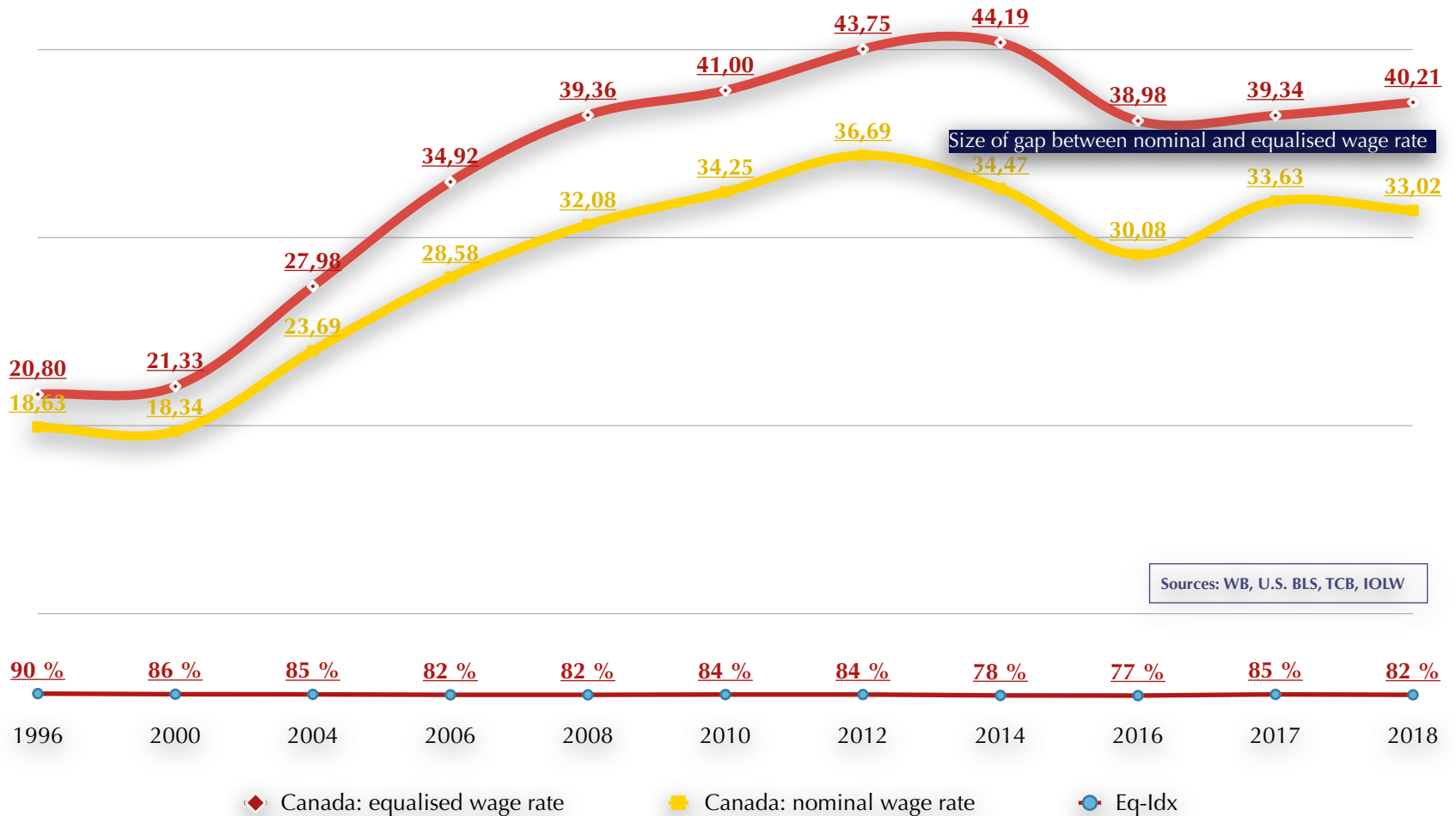
In 2018 Spain lost two points in its Eq-Idx due to a rare drop of its hourly wage rate in local currency and an increase in its PPP despite revaluation of the euro. Since its adoption of the euro in 2000, Spain has gained only six points, and it seems its Eq-Idx is stabilising at a mid-70s range.



◆ Spain: equalised wage rate ■ Spain: nominal wage rate ● Eq-Idx

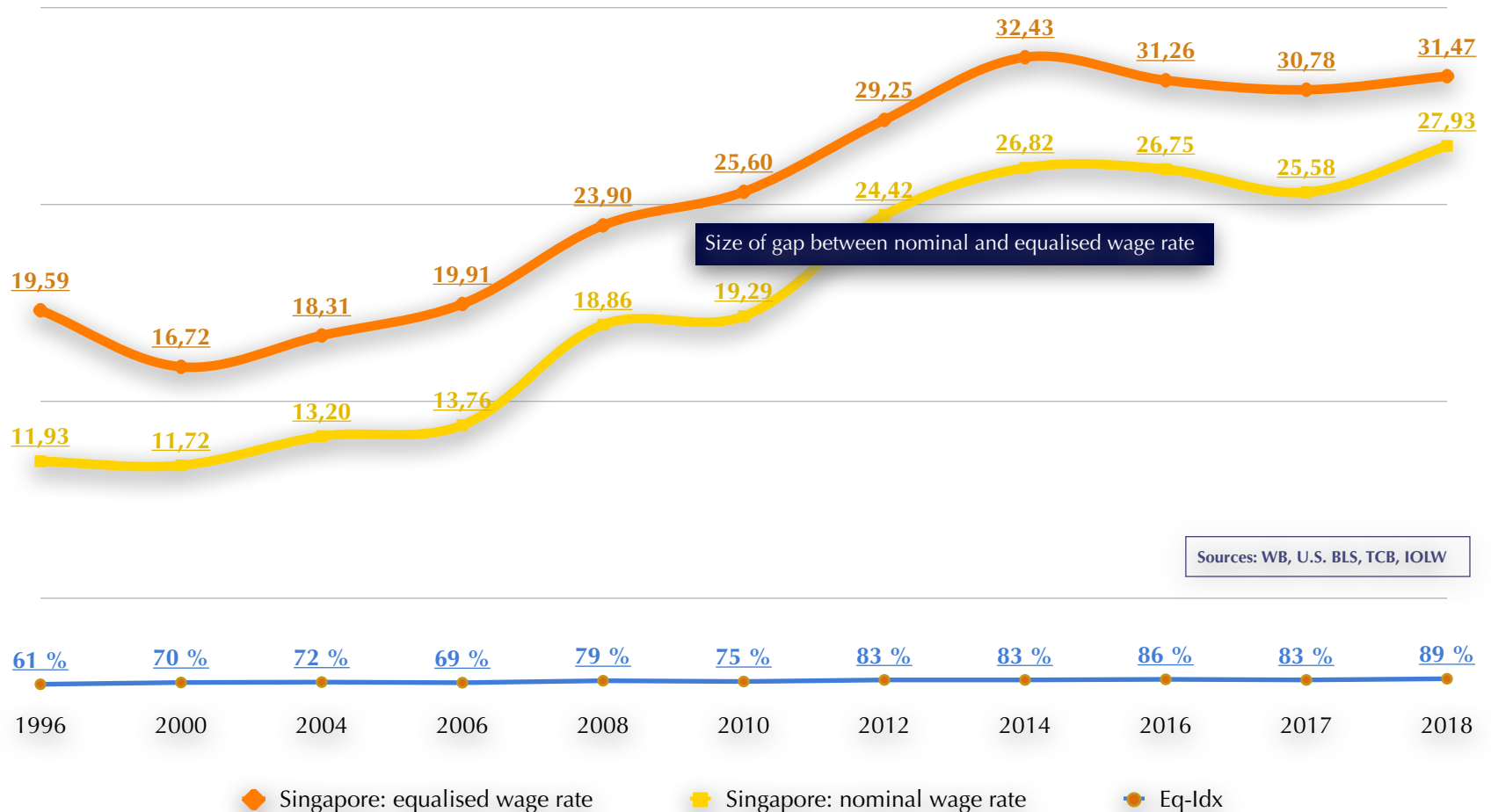
Hourly wage rate equalisation between hourly nominal and equalised wage rates in PPP terms for all employed in manufacturing with equivalent U.S. real wage rate (current dollars)

Canada lost three points in its Eq-Idx as the combined result of a drop of 2% of its hourly wage rate in local currency, with a negligible change of its PPP and exchange rate. Canada is one of the worst performers in this report by remaining eight points behind its 1996 position. As a result, Canada's wage-rate gap with US equivalent workers is now 80% greater than in 1996 (from a 10 to an 18 point increase).



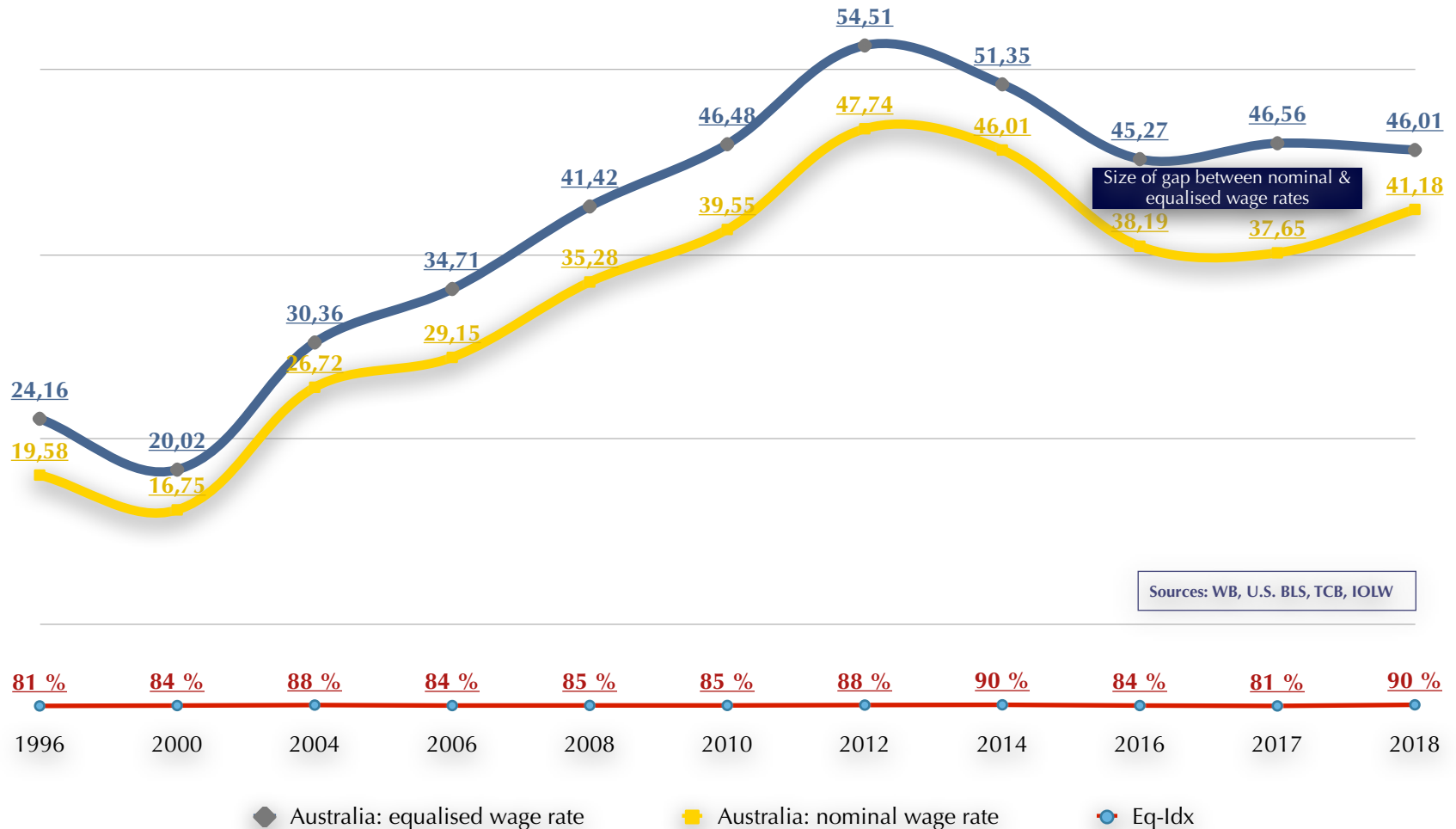
Hourly wage rate equalisation between hourly nominal and equalised wage rates in PPP terms for all employed in manufacturing with equivalent U.S. real wage rate (current dollars)

In 2018 Singapore experienced a very powerful six-point gain due to the increase of its hourly rate in local currency of 6,8%, a revaluation of 2,5% and a negligible change of its PPP cost of living, keeping inflation in check. This enabled Singapore to record its best Eq-Idx ever with the second best performance in this report, just behind Australia. This constitutes a rather powerful 28 point gain in equalisation since 1996, which corresponds to a reduction of 72% of its wage gap with equivalent US workers (from 39 to 11) and enables it to approach the indices of some of the stronger economies in Western Europe, such as Italy, Finland and Ireland and already clearly ahead of Spain.



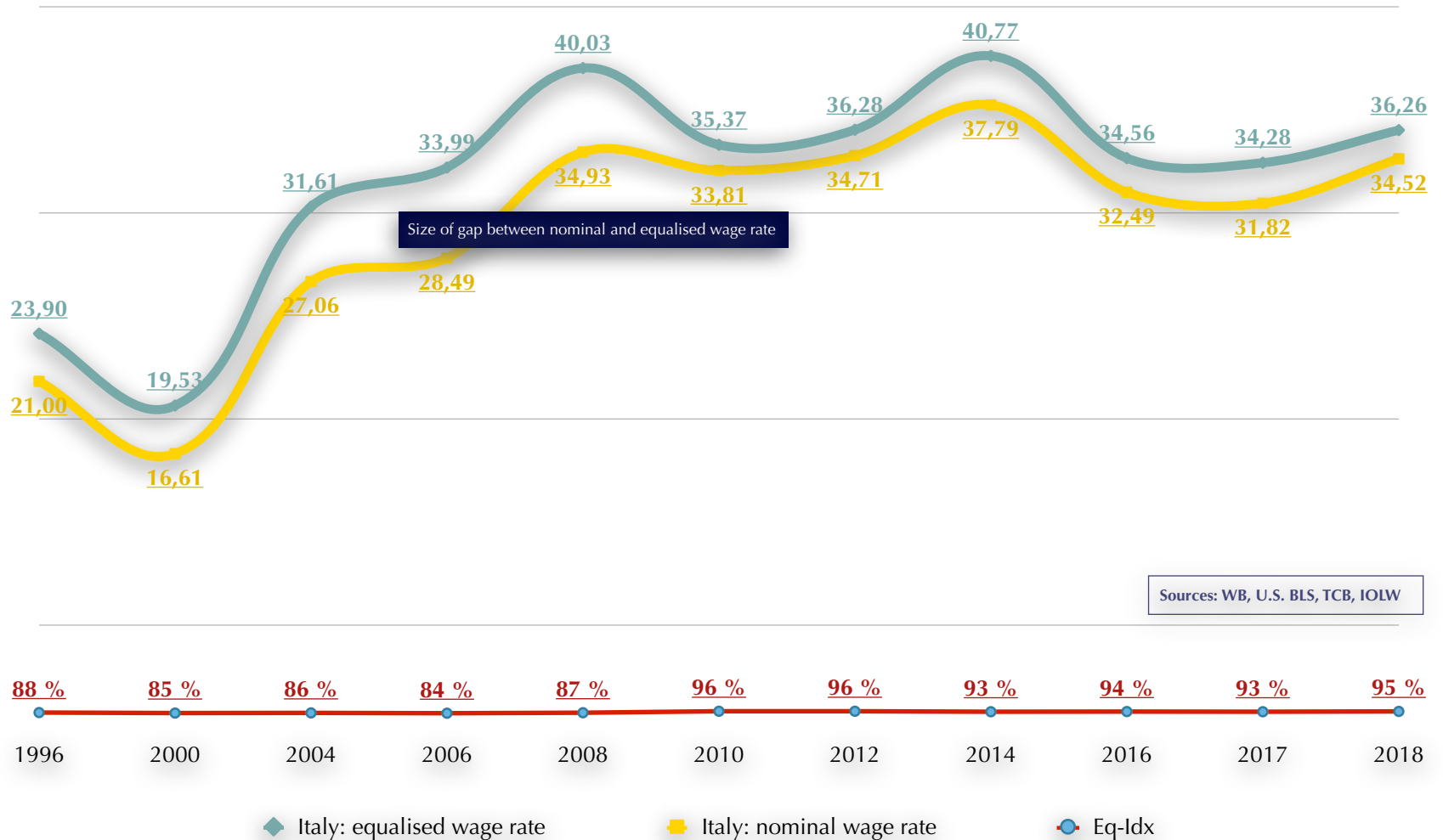
Hourly wage rate equalisation between hourly nominal and equalised wage rates in PPP terms for all employed in manufacturing with equivalent U.S. real wage rate (current dollars)

In 2018, Australia recorded its best performances ever by gaining nine points in its Eq-Idx. Despite the devaluation of its currency by 2,5%, Australia achieved the highest improvement of its Eq-Idx among all 41 economies in our reports by recording a 90 Eq-Idx, which is equal to its best position previously achieved in 2014. This was the result of a strong increase of 6,6% of its hourly wage rate in local currency and a currency devaluation, which contributed to the drop of its PPP cost of living by 2,9%.



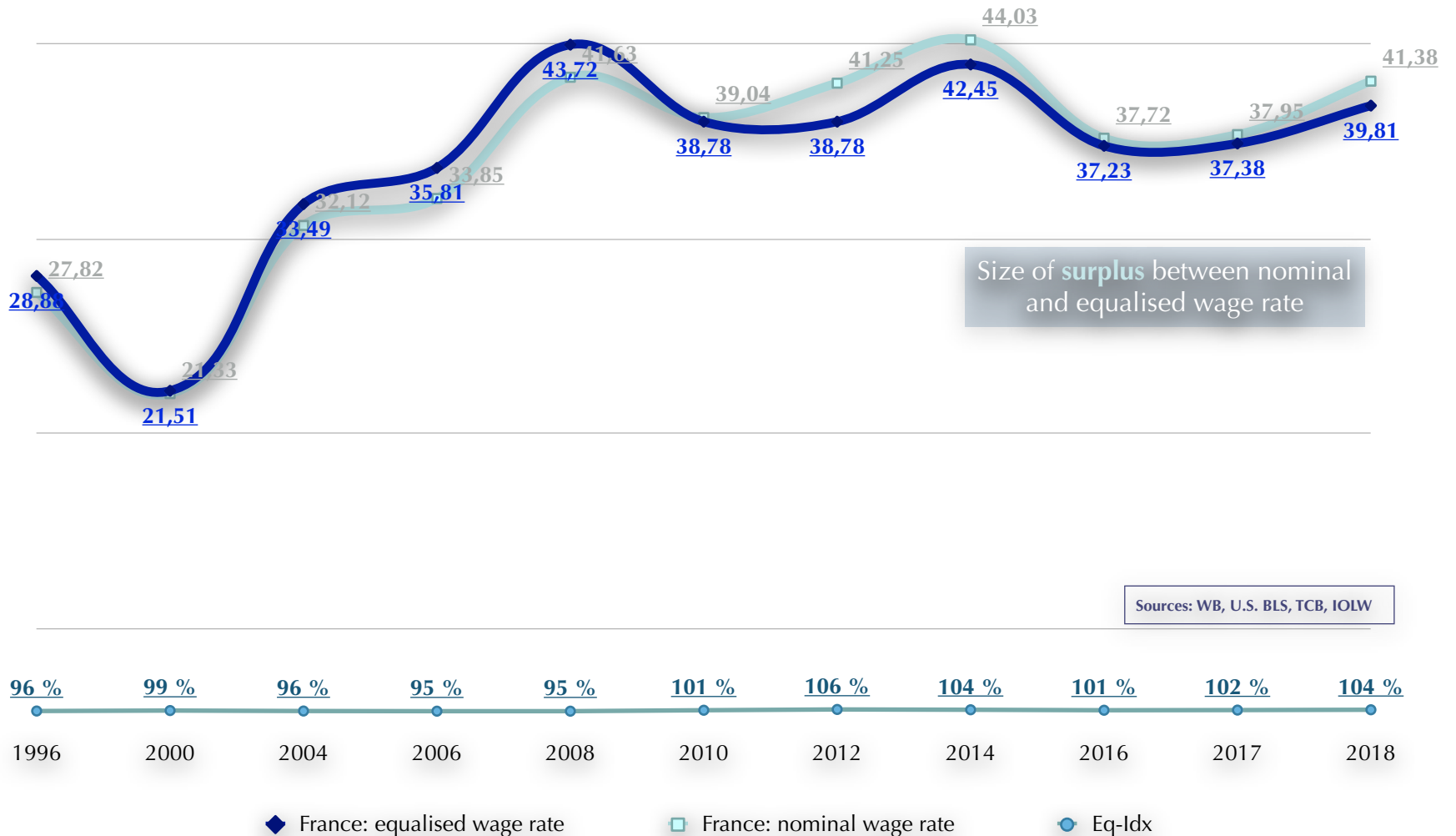
Hourly wage rate equalisation between hourly nominal and equalised wage rates in PPP terms for all employed in manufacturing with equivalent U.S. real wage rate (current dollars)

In 2018, Italy gained two points in its Eq-Idx as the result of the combination of the increase of its hourly wage rate of 3,5% in local currency and the 4,8% revaluation of the euro, which enabled it to easily offset the 1,8% increase of the US hourly wage rate in manufacturing.



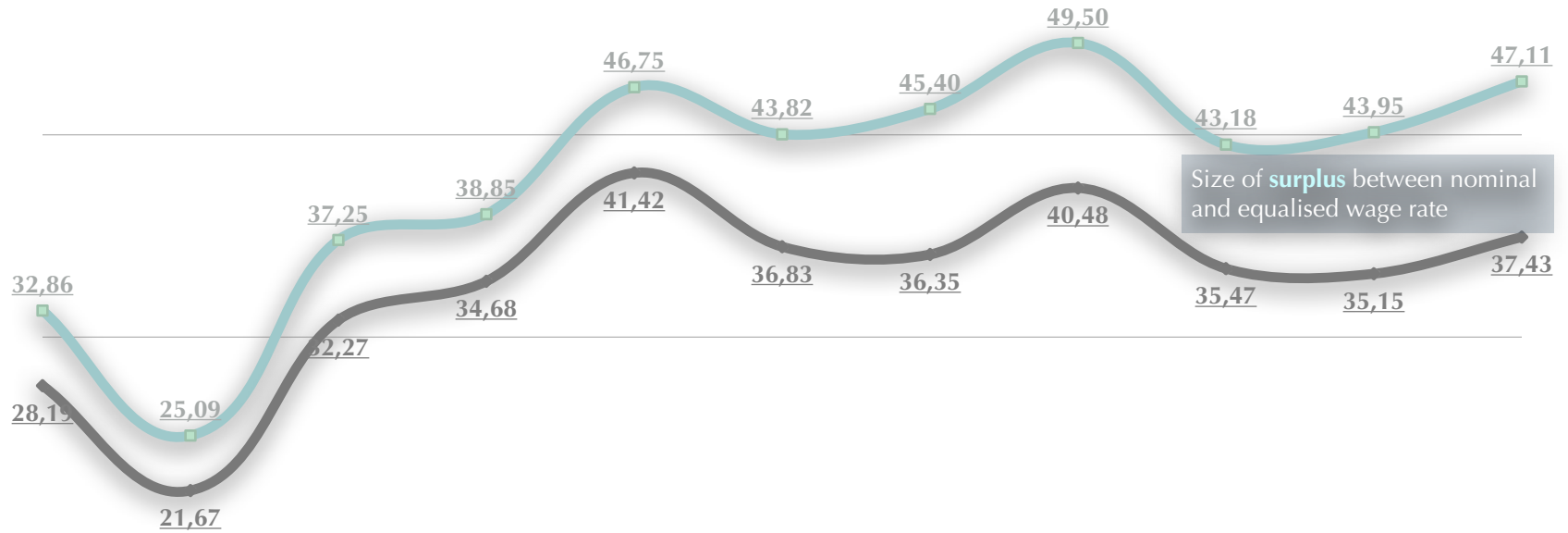
Hourly wage rate equalisation between hourly nominal and equalised wage rates in PPP terms for all employed in manufacturing with equivalent U.S. real wage rate (current dollars)

In 2018, as in the case of Italy, France gained two points in its Eq-Idx as the result of the combination of the increase of its hourly wage rate of 4,1% in local currency and the 4,9% revaluation of the euro, which enabled it to easily offset the 1,8% increase of the US hourly wage rate in manufacturing. France has been slightly ahead of the US hourly rate in PPP real terms since 2010, recording a four-point surplus, at 104, vis-à-vis the US hourly rate in 2018.



Hourly wage rate equalisation between hourly nominal and equalised wage rates in PPP terms for all employed in manufacturing with equivalent U.S. real wage rate (current dollars)

In 2018, as in the case of Italy and France, Germany gained one point in its Eq-Idx as the result of the combination of the increase of its hourly wage rate of 2,3% in local currency and the 4,8% revaluation of the euro, which enabled it to easily offset the 1,8% increase of the US hourly wage rate in manufacturing. Germany has consistently outperformed equivalent US hourly rates in manufacturing in real PPP terms, always with a very substantial surplus. Since the adoption of the euro in 2000, Germany has gained ten points, and it has increased and sustained a surplus of at least 20% over US rates since 2012.



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

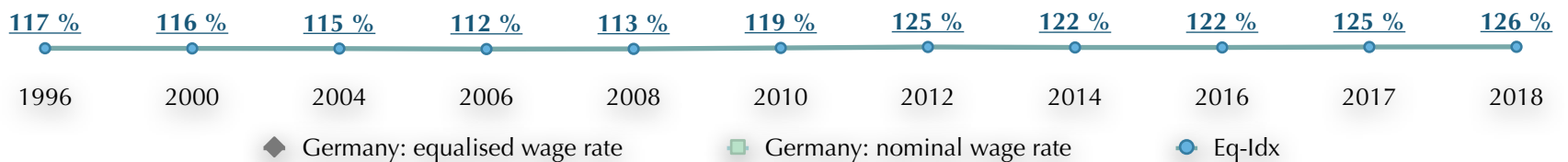


Table-T5: Living-Wage-Gap and Equalisation analysis (vis-à-vis the U.S.) for 14 Selected Economies – for all employed in the manufacturing sector– in PPP for private consumption terms 1996-2018 (based on Jus Semper’s methodology, following the principle of “Equal pay for equal work of equal value” of the UN and ILO’s international conventions).

	1996	2000	2004	2006	2008	2010	2012	2014	2016	2017	2018
Benchmark	(PPP conversion factor for private consumption)										
1. U.S. Hourly Manufacturing Wage Rate* (hourly compensation costs)	22,46	24,95	28,59	30,77	32,26	32,61	34,05	37,23	39,73	39,36	40,07
Canada	(PPP conversion factor for private consumption)										
PPP conversion factor (in country currency)	1,263	1,270	1,273	1,287	1,302	1,295	1,284	1,311	1,300	1,297	1,300
Exchange rate	1,3635	1,4854	1,3013	1,1343	1,0671	1,030	0,9994	1,105	1,326	1,298	1,298
PPP conversion factor (in U.S. dollars)	US\$ 0,93	US\$ 0,85	US\$ 0,98	US\$ 1,13	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\$ 27,98	US\$ 34,92	US\$ 39,36	US\$ 41,00	US\$ 43,75	US\$ 44,19	US\$ 38,98	US\$ 39,34	US\$ 40,14
3. Actual PPP Real wage rate US \$	US\$ 20,12	US\$ 21,45	US\$ 24,21	US\$ 25,18	US\$ 26,29	US\$ 27,24	US\$ 28,55	US\$ 29,04	US\$ 30,66	US\$ 33,64	US\$ 32,96
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\$ 4,29	US\$ 6,34	US\$ 7,28	US\$ 6,75	US\$ 7,06	US\$ 9,72	US\$ 8,90	US\$ 5,71	US\$ 7,12
Wage Equalisation index (4÷2 or 3÷1)	0,90	0,86	0,85	0,82	0,82	0,84	0,84	0,78	0,77	0,85	0,82
Brazil	(PPP conversion factor for private consumption)										
PPP conversion factor (in country currency)	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	1,829	2,925	2,175	1,834	1,759	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\$ 13,42	US\$ 20,25	US\$ 25,83	US\$ 29,61	US\$ 28,99	US\$ 30,08	US\$ 25,59	US\$ 28,70	US\$ 25,83
3. Actual PPP Real wage rate US \$	US\$ 7,54	US\$ 7,47	US\$ 8,14	US\$ 9,10	US\$ 10,54	US\$ 11,01	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\$ 9,60	US\$ 14,26	US\$ 17,39	US\$ 19,61	US\$ 18,25	US\$ 19,65	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 for private consumption)										
PPP conversion factor (in country currency)	4,202	6,750	7,470	7,744	8,159	8,720	9,223	9,354	9,460	10,094	10,319
Exchange rate	7,599	9,456	11,286	10,899	11,130	12,636	13,169	13,292	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\$ 17,81	US\$ 18,92	US\$ 21,86	US\$ 23,65	US\$ 22,50	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\$ 6,01	US\$ 6,25	US\$ 6,62	US\$ 6,55	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\$ 14,26	US\$ 14,94	US\$ 17,42	US\$ 18,80	US\$ 17,98	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
France	(PPP conversion factor for private consumption)										
PPP conversion factor (in country currency)	6,579	0,936	0,943	0,928	0,925	0,898	0,886	0,859	0,847	0,843	0,841
Exchange rate	5,1155	1,0854	0,8054	0,7971	0,6827	0,7550	0,7783	0,7537	0,9040	0,8874	0,8468
PPP conversion factor (in U.S. dollars)	US\$ 1,29	US\$ 0,86	US\$ 1,17	US\$ 1,16	US\$ 1,36	US\$ 1,19	US\$ 1,14	US\$ 1,14	US\$ 0,94	US\$ 0,95	US\$ 0,99
2. Equalised PPP nominal wage rate US \$	US\$ 28,88	US\$ 21,51	US\$ 33,49	US\$ 35,81	US\$ 43,72	US\$ 38,78	US\$ 38,78	US\$ 42,45	US\$ 37,23	US\$ 37,38	US\$ 39,81
3. Actual PPP Real wage rate US \$	US\$ 21,63	US\$ 24,74	US\$ 27,42	US\$ 29,08	US\$ 30,72	US\$ 32,83	US\$ 36,22	US\$ 38,61	US\$ 40,25	US\$ 39,96	US\$ 41,65
4. Actual Nominal wage rate US \$	US\$ 27,82	US\$ 21,33	US\$ 32,12	US\$ 33,85	US\$ 41,63	US\$ 39,04	US\$ 41,25	US\$ 44,03	US\$ 37,72	US\$ 37,95	US\$ 41,38
Compensation Deficit in US \$ (2 minus 4)	US\$ 1,06	US\$ 0,18	US\$ 1,37	US\$ 1,96	US\$ 2,09	US\$ (0,26)	US\$ (2,47)	US\$ (1,58)	US\$ (0,49)	US\$ (0,57)	US\$ (1,57)
Wage Equalisation index (4÷2 or 3÷1)	0,96	0,99	0,96	0,95	0,95	1,01	1,06	1,04	1,01	1,02	1,04
Germany	(PPP conversion factor for private consumption)										
PPP conversion factor (in country currency)	1,889	0,943	0,909	0,898	0,876	0,853	0,831	0,820	0,807	0,793	0,791
Exchange rate	1,5048	1,0854	0,8054	0,7971	0,6827	0,7550	0,7783	0,7537	0,9040	0,8874	0,8468
PPP conversion factor (in U.S. dollars)	US\$ 1,26	US\$ 0,87	US\$ 1,13	US\$ 1,13	US\$ 1,28	US\$ 1,13	US\$ 1,07	US\$ 1,09	US\$ 0,89	US\$ 0,89	US\$ 0,93
2. Equalised PPP nominal wage rate US \$	US\$ 28,19	US\$ 21,67	US\$ 32,27	US\$ 34,68	US\$ 41,42	US\$ 36,83	US\$ 36,35	US\$ 40,48	US\$ 35,47	US\$ 35,15	US\$ 37,43
3. Actual PPP Real wage rate US \$	US\$ 26,18	US\$ 28,88	US\$ 33,01	US\$ 34,47	US\$ 36,41	US\$ 38,80	US\$ 42,52	US\$ 45,52	US\$ 48,37	US\$ 49,21	US\$ 50,44
4. Actual Nominal wage rate US \$	US\$ 32,86	US\$ 25,09	US\$ 37,25	US\$ 38,85	US\$ 46,75	US\$ 43,82	US\$ 45,40	US\$ 49,50	US\$ 43,18	US\$ 43,95	US\$ 47,11
Compensation Deficit in US \$ (2 minus 4)	US\$ (4,67)	US\$ (3,42)	US\$ (4,98)	US\$ (4,17)	US\$ (5,33)	US\$ (6,99)	US\$ (9,05)	US\$ (9,02)	US\$ (7,71)	US\$ (8,80)	US\$ (9,68)
Wage Equalisation index (4÷2 or 3÷1)	1,17	1,16	1,15	1,12	1,13	1,19	1,25	1,22	1,22	1,25	1,26

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 1996-2018 (based on Jus Semper’s methodology, following the principle of “Equal pay for equal work of equal value” of the UN and ILO’s international conventions).

	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* (Hourly compensation costs)										
	22,46	24,95	28,59	30,77	32,26	32,61	34,05	37,23	39,73	39,36	40,07
Italy	PPP conversion factor (in country currency)										
	1641,957	0,850	0,890	0,881	0,847	0,819	0,829	0,825	0,786	0,773	0,766
	Exchange rate										
	1542,947	1,0854	0,8054	0,797	0,6827	0,7550	0,7783	0,7537	0,9040	0,8874	0,8468
	PPP conversion factor (in U.S. dollars)										
	US\$ 1,06	US\$ 0,78	US\$ 1,11	US\$ 1,10	US\$ 1,24	US\$ 1,08	US\$ 1,07	US\$ 1,10	US\$ 0,87	US\$ 0,87	US\$ 0,90
	2. Equalised PPP nominal wage rate US \$										
	US\$ 23,90	US\$ 19,53	US\$ 31,61	US\$ 33,99	US\$ 40,03	US\$ 35,37	US\$ 36,28	US\$ 40,77	US\$ 34,56	US\$ 34,28	US\$ 36,26
	3. Actual PPP Real wage rate US \$										
	US\$ 19,73	US\$ 21,22	US\$ 24,47	US\$ 25,79	US\$ 28,15	US\$ 31,17	US\$ 32,58	US\$ 34,51	US\$ 37,36	US\$ 36,53	US\$ 38,15
	4. Actual Nominal wage rate US \$										
	US\$ 21,00	US\$ 16,61	US\$ 27,06	US\$ 28,49	US\$ 34,93	US\$ 33,81	US\$ 34,71	US\$ 37,79	US\$ 32,49	US\$ 31,82	US\$ 34,52
	Compensation Deficit in US \$ (2 minus 4)										
	US\$ 2,90	US\$ 2,92	US\$ 4,55	US\$ 5,50	US\$ 5,10	US\$ 1,56	US\$ 1,57	US\$ 2,98	US\$ 2,07	US\$ 2,46	US\$ 1,74
	Wage Equalisation index (4÷2 or 3÷1)										
	0,88	0,85	0,86	0,84	0,87	0,96	0,96	0,93	0,94	0,93	0,95
United Kingdom	PPP conversion factor (in country currency)										
	0,789	0,778	0,743	0,750	0,763	0,778	0,787	0,799	0,789	0,783	0,787
	Exchange rate										
	0,6410	0,6609	0,5462	0,5435	0,5440	0,6472	0,6330	0,6077	0,7406	0,7770	0,7495
	PPP conversion factor (in U.S. dollars)										
	US\$ 1,23	US\$ 1,18	US\$ 1,36	US\$ 1,38	US\$ 1,40	US\$ 1,20	US\$ 1,24	US\$ 1,31	US\$ 1,06	US\$ 1,01	US\$ 1,05
	2. Equalised PPP nominal wage rate US \$										
	US\$ 27,66	US\$ 29,36	US\$ 38,88	US\$ 42,45	US\$ 45,28	US\$ 39,21	US\$ 42,34	US\$ 48,92	US\$ 42,30	US\$ 39,64	US\$ 42,06
	3. Actual PPP Real wage rate US \$										
	US\$ 14,43	US\$ 17,53	US\$ 20,95	US\$ 22,58	US\$ 24,11	US\$ 24,10	US\$ 24,86	US\$ 25,10	US\$ 26,68	US\$ 27,79	US\$ 27,83
	4. Actual Nominal wage rate US \$										
	US\$ 17,77	US\$ 20,63	US\$ 28,49	US\$ 31,15	US\$ 33,84	US\$ 28,98	US\$ 30,91	US\$ 32,98	US\$ 28,41	US\$ 27,99	US\$ 29,21
	Compensation Deficit in US \$ (2 minus 4)										
	US\$ 9,89	US\$ 8,73	US\$ 10,39	US\$ 11,30	US\$ 11,44	US\$ 10,23	US\$ 11,43	US\$ 15,94	US\$ 13,89	US\$ 11,65	US\$ 12,85
	Wage Equalisation index (4÷2 or 3÷1)										
	0,64	0,70	0,73	0,73	0,75	0,74	0,73	0,67	0,67	0,71	0,69
Spain	PPP conversion factor (in country currency)										
	128,188	0,769	0,789	0,791	0,802	0,801	0,786	0,744	0,718	0,707	0,709
	Exchange rate										
	126,66	1,0854	0,8054	0,7971	0,6827	0,7550	0,7783	0,7537	0,9040	0,8874	0,8468
	PPP conversion factor (in U.S. dollars)										
	US\$ 1,01	US\$ 0,71	US\$ 0,98	US\$ 0,99	US\$ 1,18	US\$ 1,06	US\$ 1,01	US\$ 0,99	US\$ 0,79	US\$ 0,80	US\$ 0,84
	2. Equalised PPP nominal wage rate US \$										
	US\$ 22,73	US\$ 17,68	US\$ 28,00	US\$ 30,53	US\$ 37,91	US\$ 34,60	US\$ 34,38	US\$ 36,76	US\$ 31,57	US\$ 31,38	US\$ 33,54
	3. Actual PPP Real wage rate US \$										
	US\$ 15,30	US\$ 17,48	US\$ 20,21	US\$ 21,94	US\$ 23,49	US\$ 25,08	US\$ 26,59	US\$ 28,55	US\$ 29,50	US\$ 30,61	US\$ 30,36
	4. Actual Nominal wage rate US \$										
	US\$ 15,48	US\$ 12,38	US\$ 19,79	US\$ 21,77	US\$ 27,60	US\$ 26,61	US\$ 26,85	US\$ 28,19	US\$ 23,44	US\$ 24,40	US\$ 25,41
	Compensation Deficit in US \$ (2 minus 4)										
	US\$ 7,25	US\$ 5,30	US\$ 8,21	US\$ 8,76	US\$ 10,31	US\$ 7,99	US\$ 7,53	US\$ 8,57	US\$ 8,13	US\$ 6,98	US\$ 8,13
	Wage Equalisation index (4÷2 or 3÷1)										
	0,68	0,70	0,71	0,71	0,73	0,77	0,78	0,77	0,74	0,78	0,76
Turkey	PPP conversion factor (in country currency)										
	—	—	0,907	1,018	1,058	1,115	1,230	1,369	1,555	1,710	1,941
	Exchange rate										
	—	—	1,426	1,428	1,302	1,503	1,796	2,1885	3,0201	3,6481	4,8284
	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\$ 0,47	US\$ 0,40
	2. Equalised PPP nominal wage rate US \$										
	—	—	US\$ 18,19	US\$ 21,92	US\$ 26,22	US\$ 24,20	US\$ 23,33	US\$ 23,29	US\$ 20,46	US\$ 18,45	US\$ 16,11
	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\$ 11,83	US\$ 15,17	US\$ 15,12
	4. Actual Nominal wage rate US \$										
	NA	NA	US\$ 4,21	US\$ 4,99	US\$ 6,44	US\$ 6,29	US\$ 6,02	US\$ 6,21	US\$ 6,09	US\$ 7,11	US\$ 6,08
	Compensation Deficit in US \$ (2 minus 4)										
	—	—	US\$ 13,98	US\$ 16,93	US\$ 19,78	US\$ 17,91	US\$ 17,31	US\$ 17,08	US\$ 14,37	US\$ 11,34	US\$ 10,03
	Wage Equalisation index (4÷2 or 3÷1)										
	—	—	0,23	0,23	0,25	0,26	0,26	0,27	0,30	0,39	0,38
Japan	PPP conversion factor (in country currency)										
	193,385	176,466	150,594	137,513	129,061	121,030	112,664	109,182	114,890	114,268	113,996
	Exchange rate										
	108,78	107,77	108,19	116,30	103,36	87,78	79,79	105,94	108,79	112,17	110,42
	PPP conversion factor (in U.S. dollars)										
	US\$ 1,78	US\$ 1,64	US\$ 1,39	US\$ 1,18	US\$ 1,25	US\$ 1,38	US\$ 1,41	US\$ 1,03	US\$ 1,06	US\$ 1,02	US\$ 1,03
	2. Equalised PPP nominal wage rate US \$										
	US\$ 39,93	US\$ 40,86	US\$ 39,79	US\$ 36,38	US\$ 40,28	US\$ 44,96	US\$ 48,08	US\$ 38,37	US\$ 41,96	US\$ 40,10	US\$ 41,37
	3. Actual PPP Real wage rate US \$										
	US\$ 13,31	US\$ 15,29	US\$ 18,15	US\$ 20,32	US\$ 22,01	US\$ 23,03	US\$ 24,96	US\$ 26,14	US\$ 25,06	US\$ 25,68	US\$ 25,96
	4. Actual Nominal wage rate US \$										
	US\$ 23,67	US\$ 25,03	US\$ 25,26	US\$ 24,03	US\$ 27,48	US\$ 31,75	US\$ 35,25	US\$ 26,94	US\$ 26,46	US\$ 26,16	US\$ 26,80
	Compensation Deficit in US \$ (2 minus 4)										
	US\$ 16,26	US\$ 15,83	US\$ 14,53	US\$ 12,35	US\$ 12,80	US\$ 13,21	US\$ 12,83	US\$ 11,43	US\$ 15,50	US\$ 13,94	US\$ 14,57
	Wage Equalisation index (4÷2 or 3÷1)										
	0,59	0,61	0,63	0,66	0,68	0,71	0,73	0,70	0,63	0,65	0,65

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 1996-2018 (based on Jus Semper’s methodology, following the principle of “Equal pay for equal work of equal value” of the UN and ILO’s international conventions).

		1996	2000	2004	2006	2008	2010	2012	2014	2016	2017	2018
Benchmark	(PPP conversion factor for private consumption)											
	1. U.S. Hourly Manufacturing Wage Rate* (Hourly compensation costs)	22,46	24,95	28,59	30,77	32,26	32,61	34,05	37,23	39,73	39,36	40,07
South Korea	PPP conversion factor (in country currency)	716,616	823,900	887,224	871,617	882,091	907,525	914,934	994,758	967,255	988,505	989,661
	Exchange rate	804,45	1130,96	1145,32	954,79	1102,05	1156,06	1126,47	1052,96	1160,43	1130,42	1100,50
	PPP conversion factor (in U.S. dollars)	US\$ 0,89	US\$ 0,73	US\$ 0,77	US\$ 0,91	US\$ 0,80	US\$ 0,79	US\$ 0,81	US\$ 0,94	US\$ 0,83	US\$ 0,87	US\$ 0,90
	2. Equalised PPP nominal wage rate US \$	US\$ 20,01	US\$ 18,18	US\$ 22,15	US\$ 28,09	US\$ 25,82	US\$ 25,60	US\$ 27,66	US\$ 35,17	US\$ 33,12	US\$ 34,42	US\$ 36,03
	3. Actual PPP Real wage rate US \$	US\$ 10,72	US\$ 13,21	US\$ 16,30	US\$ 19,02	US\$ 20,99	US\$ 22,78	US\$ 25,17	US\$ 25,01	US\$ 27,57	US\$ 27,34	US\$ 28,93
	4. Actual Nominal wage rate US \$	US\$ 9,55	US\$ 9,62	US\$ 12,63	US\$ 17,36	US\$ 16,80	US\$ 17,88	US\$ 20,44	US\$ 23,63	US\$ 22,98	US\$ 23,91	US\$ 26,02
	Compensation Deficit in US \$ (2 minus 4)	US\$ 10,46	US\$ 8,56	US\$ 9,52	US\$ 10,73	US\$ 9,02	US\$ 7,72	US\$ 7,22	US\$ 11,54	US\$ 10,14	US\$ 10,51	US\$ 10,01
Wage Equalisation index (4÷2 or 3÷1)	0,48	0,53	0,57	0,62	0,65	0,70	0,74	0,67	0,69	0,69	0,72	
Singapore	PPP conversion factor (in country currency)	1,230	1,155	1,082	1,028	1,048	1,071	1,073	1,104	1,087	1,080	1,059
	Exchange rate	1,4100	1,7240	1,6902	1,5889	1,4149	1,3635	1,2497	1,267	1,382	1,382	1,349
	PPP conversion factor (in U.S. dollars)	US\$ 0,87	US\$ 0,67	US\$ 0,64	US\$ 0,65	US\$ 0,74	US\$ 0,79	US\$ 0,86	US\$ 0,87	US\$ 0,79	US\$ 0,78	US\$ 0,79
	2. Equalised PPP nominal wage rate US \$	US\$ 19,59	US\$ 16,72	US\$ 18,31	US\$ 19,91	US\$ 23,90	US\$ 25,60	US\$ 29,25	US\$ 32,43	US\$ 31,26	US\$ 30,78	US\$ 31,47
	3. Actual PPP Real wage rate US \$	US\$ 13,68	US\$ 17,49	US\$ 20,61	US\$ 21,26	US\$ 25,46	US\$ 24,57	US\$ 28,43	US\$ 30,79	US\$ 34,00	US\$ 32,71	US\$ 35,56
	4. Actual Nominal wage rate US \$	US\$ 11,93	US\$ 11,72	US\$ 13,20	US\$ 13,76	US\$ 18,86	US\$ 19,29	US\$ 24,42	US\$ 26,82	US\$ 26,75	US\$ 25,58	US\$ 27,93
	Compensation Deficit in US \$ (2 minus 4)	US\$ 7,66	US\$ 5,00	US\$ 5,11	US\$ 6,15	US\$ 5,04	US\$ 6,31	US\$ 4,83	US\$ 5,61	US\$ 4,51	US\$ 5,20	US\$ 3,54
Wage Equalisation index (4÷2 or 3÷1)	0,61	0,70	0,72	0,69	0,79	0,75	0,83	0,83	0,86	0,83	0,89	
South Africa	PPP conversion factor (in country currency)	—	—	4,151	4,098	4,484	4,942	5,122	5,769	6,313	6,549	6,681
	Exchange rate	—	—	6,460	6,772	8,261	7,321	8,210	10,853	14,710	13,334	13,234
	PPP conversion factor (in U.S. dollars)	—	—	US\$ 0,64	US\$ 0,61	US\$ 0,54	US\$ 0,68	US\$ 0,62	US\$ 0,53	US\$ 0,43	US\$ 0,49	US\$ 0,50
	2. Equalised PPP nominal wage rate US \$	—	—	US\$ 18,37	US\$ 18,62	US\$ 17,51	US\$ 22,01	US\$ 21,24	US\$ 19,79	US\$ 17,05	US\$ 19,33	US\$ 20,23
	3. Actual PPP Real wage rate US \$	—	—	US\$ 6,05	US\$ 7,02	US\$ 8,42	US\$ 10,24	US\$ 11,59	US\$ 12,68	US\$ 13,93	US\$ 13,68	US\$ 13,92
	4. Actual Nominal wage rate US \$	NA	NA	US\$ 3,89	US\$ 4,25	US\$ 4,57	US\$ 6,91	US\$ 7,23	US\$ 6,74	US\$ 5,98	US\$ 6,72	US\$ 7,03
	Compensation Deficit in US \$ (2 minus 4)	—	—	US\$ 14,48	US\$ 14,37	US\$ 12,94	US\$ 15,10	US\$ 14,01	US\$ 13,05	US\$ 11,07	US\$ 12,61	US\$ 13,20
Wage Equalisation index (4÷2 or 3÷1)	—	—	0,21	0,23	0,26	0,31	0,34	0,34	0,35	0,35	0,35	
Australia	PPP conversion factor (in country currency)	1,375	1,384	1,444	1,498	1,531	1,554	1,546	1,530	1,533	1,543	1,537
	Exchange rate	1,278	1,725	1,360	1,328	1,192	1,090	0,966	1,109	1,345	1,305	1,338
	PPP conversion factor (in U.S. dollars)	US\$ 1,08	US\$ 0,80	US\$ 1,06	US\$ 1,13	US\$ 1,28	US\$ 1,43	US\$ 1,60	US\$ 1,38	US\$ 1,14	US\$ 1,18	US\$ 1,15
	2. Equalised PPP nominal wage rate US \$	US\$ 24,16	US\$ 20,02	US\$ 30,36	US\$ 34,71	US\$ 41,42	US\$ 46,48	US\$ 54,51	US\$ 51,35	US\$ 45,27	US\$ 46,56	US\$ 46,01
	3. Actual PPP Real wage rate US \$	US\$ 18,20	US\$ 20,87	US\$ 25,16	US\$ 25,84	US\$ 27,48	US\$ 27,75	US\$ 29,82	US\$ 33,36	US\$ 33,52	US\$ 31,83	US\$ 35,86
	4. Actual Nominal wage rate US \$	US\$ 19,58	US\$ 16,75	US\$ 26,72	US\$ 29,15	US\$ 35,28	US\$ 39,55	US\$ 47,74	US\$ 46,01	US\$ 38,19	US\$ 37,65	US\$ 41,18
	Compensation Deficit in US \$ (2 minus 4)	US\$ 4,58	US\$ 3,27	US\$ 3,64	US\$ 5,56	US\$ 6,14	US\$ 6,93	US\$ 6,77	US\$ 5,34	US\$ 7,08	US\$ 8,91	US\$ 4,83
Wage Equalisation index (4÷2 or 3÷1)	0,81	0,84	0,88	0,84	0,85	0,85	0,88	0,90	0,84	0,81	0,90	

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 1996-2018 (based on Jus Semper’s methodology, 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, 1975-2019.
- 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.

Note regarding the new 2017 PPC round:

The 2017 results presented in this report are based exclusively on the prices and national accounts expenditures provided by the economies participating in the 2017 cycle of the International Comparison Program (ICP). Purchasing power parities (PPPs) and real expenditures were compiled in accordance with the established ICP methods and procedures. The International Comparison Program (ICP) released economic indicators and results for the reference year 2017 in May 2020. PPPs, PLIs and estimates of PPP-based GDP and its major expenditure components in aggregate and per capita terms were published for the 176 economies that participated in the program. Revised results for the preceding reference year 2011 and preliminary estimates of annual PPPs for 2012-2016 were also released. ICP 2017 Report: [Purchasing Power Parities and the Size of World Economies: Results from the 2017 International Comparison Program](#)



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