



The Jus Semper Global Alliance

*Living Wages North and South*

# Brazil's Wage Gap Charts

Wage gap charts for Brazil vis-à-vis developed and “emerging” selected economies, with available wage and PPP data (1996-2004)

Wage gap charts for Brazil vis-à-vis developed and “emerging” selected economies, with available wage and PPP data (1996-2004)

© 2006. The Jus Semper Global Alliance

Web portal: [www.jussemper.org/](http://www.jussemper.org/)

E-mail: [informa@jussemper.org](mailto:informa@jussemper.org)

# Table of Contents

• Argument for wage equalization – classic problem scenario	4
• Argument for wage equalization – the argument	5
• Argument for wage equalization – concept of living wage using PPPs	7
• Argument for wage equalization – classic example in 2004	8
• 2004 real wage gap with U.S. wages using PPPs	9
• Main features of the manufacturing wage situation in Brazil	10
• Manufacturing Hourly Wage Gap Comparisons Via PPP vis-a-vis U.S. Real Wage	11
• Gap Between Nominal Manufacturing Hourly Wage and PPPs Equalization to Real Wage with U.S.	12
• % Gap Between Nominal Manufacturing Hourly Wage and PPPs Equalization to Real Wage with U.S.	13
• Relationship between Cost of Living and Purchasing Power (PPPs) of Nominal Manufacturing Hourly Wage Based on Nominal Manufacturing Hourly Wage in the U.S.	14
• Wage comparison with Mexico	15
• Table T4 – Manufacturing workers' Wage Gap Analysis in Purchasing Power Parities (PPPs) Comparison Terms 1975-04	16
• Definitions and Sources	19

# The Argument for Wage Equalization Using Purchasing Power Parities (PPPs)

## ▪ Classic Problem Scenario

- With market liberalization, MNCs sell their products in both the host countries and in all other markets where they are active, including their home country, at the same or at a very similar sales price,
- They achieve maximum profitability when the manufacturing process in their developing countries' operations is at par in quality and production efficiency with the standards used in their home operations but their cost of labour is dramatically lower,
- The MNCs' markets and their manufacturing and marketing operations are *globalised* but their labour costs remain strategically very low in order to achieve maximum competitiveness and shareholder value at the expense of the South's workers,
- The resulting situation is one where MNCs get all the benefit. Sometimes the salaries that they pay are higher than the legal minimum wage in the host country. Yet, these wages still keep workers in dire poverty. A minimum wage does not make a living wage even in the most developed economies,
- What has occurred, with market globalisation, is the dramatic widening of the gap between wages in the North and in the South,
- While the standard of living of a worker in the North provides the basic means to make a living and afford a basic standard of comfort, a worker working for the same company, doing the exact same job with the same level of quality and efficiency, lives in a shanty town in a cardboard house with no sewage, water and direct electricity,
- In this way, the huge differential in labour costs is added to the profit margin, keeping the part that should have provided the worker with an equivalent standard of living to that enjoyed by the same workers in the North. This difference is the part that workers should have received in the first place, as their fair share of the income resulting from the economic activity.

# The Argument for Wage Equalization 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 that we all have 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 Equalization Using Purchasing Power Parities (PPPs)

## ■ The Argument

- The argument of an equivalent living wages is anchored on two 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.
  - 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 sustainability of the market system –with the global economy enjoying a sustained growth, the environment reversing its degradation and poverty rapidly diminishing– if there is no sustained generation of aggregate demand, in that period, through the gradual closing of the wage gap between North and South,
- 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 can be 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 Equalization 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 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. Dollar has in the United States; e.g.: if the PPP index in one country is 69, then \$0,69 dollars are required in that country to buy the same that \$1 dollar 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 dollar 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 is 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 equalized 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 equalization of wages, through small real-wage increases, needs to be reviewed annually.

## The Argument for Wage Equalization Using Purchasing Power Parities (PPPs)

### ▪ A Classic Example in 2004

- Equivalent manufacturing workers in Mexico and Brazil earn only 15% and 35%, respectively, of what they should be making in order to be compensated at par with U.S. counterparts in terms of purchasing power,
- U.S. Workers earn \$23,17/hour whilst Mexican and Brazilian workers earn only \$2,50/hour and \$3,03/hour, respectively,
- Since costs of living in PPPs terms in Mexico and Brazil are 70¢ and 38¢, respectively, for each \$1 U.S. Dollar, equivalent Mexican and Brazilian manufacturing workers should be earning instead \$16,32/hour and \$8,76/hour, respectively, in order to enjoy equal purchasing power compensation,
- The difference is the wage gap that employers perversely keep to increase profits,
- Canada, in contrast, is ahead (0,5%) of U.S. Counterparts, since nominal wage is above the equivalent wage needed to be at par, with a PPP of 92¢ per each \$1 U.S. Dollar.

**Nominal Wage, Real Wage and Wage Equalization for Manufacturing Workers by Using Purchase Power Parities (PPPs) Benchmark**

2004	Nominal Hourly	PPP	PPP	Equalized Nominal Hourly	Equalization
	Wage	2003	Real Wage	Wage	Index
United States	\$23,17	100	\$23,17	\$23,17	100
Canada	\$21,42 92%	92	\$23,28 100,5%	\$21,32 92%	100
Mexico	\$2,50 11%	70	\$3,55 15%	\$16,32 70%	15
Brazil	\$3,03 13%	38	\$8,02 35%	\$8,76 38%	35

Sources:

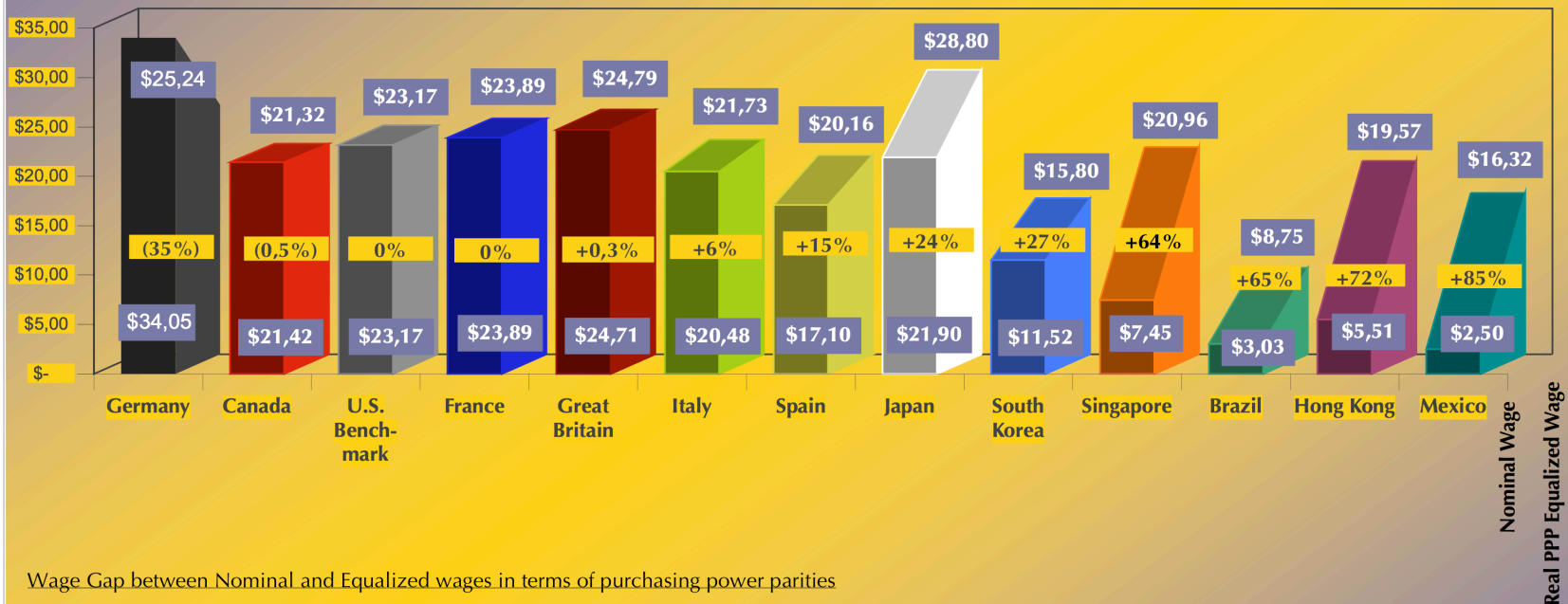
U.S. Department of Labour, Bureau of Labor Statistics, November 2005.

World Bank, World Development Indicators 2006, 1.1. Size of the Economy



- In 2004, Brazil's manufacturing real wages continued enduring one the largest wage gaps with the U.S. (65%), only less wide than in Hong Kong and Mexico.

## 2004 Real wage gap with U.S. wages using PPPs (Hourly manufacturing wages in U.S. Dollars)



Wage Gap between Nominal and Equalized wages in terms of purchasing power parities

- 1) If front edge is greater than back edge= Better purchasing power in U.S.
- 2) If back edge is greater than front edge= Better purchasing power than in U.S.
- 3) If both edges 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)

Sources:

– World Development Indicators database, The World Bank, 2006 – GNI per capita 2004 (Table 1.1: Size of the Economy) Atlas method and PPP

X International Comparisons of Hourly Compensation Costs for Production Workers in Manufacturing, November 2005

U.S. Department of Labour, Bureau of Labour Statistics

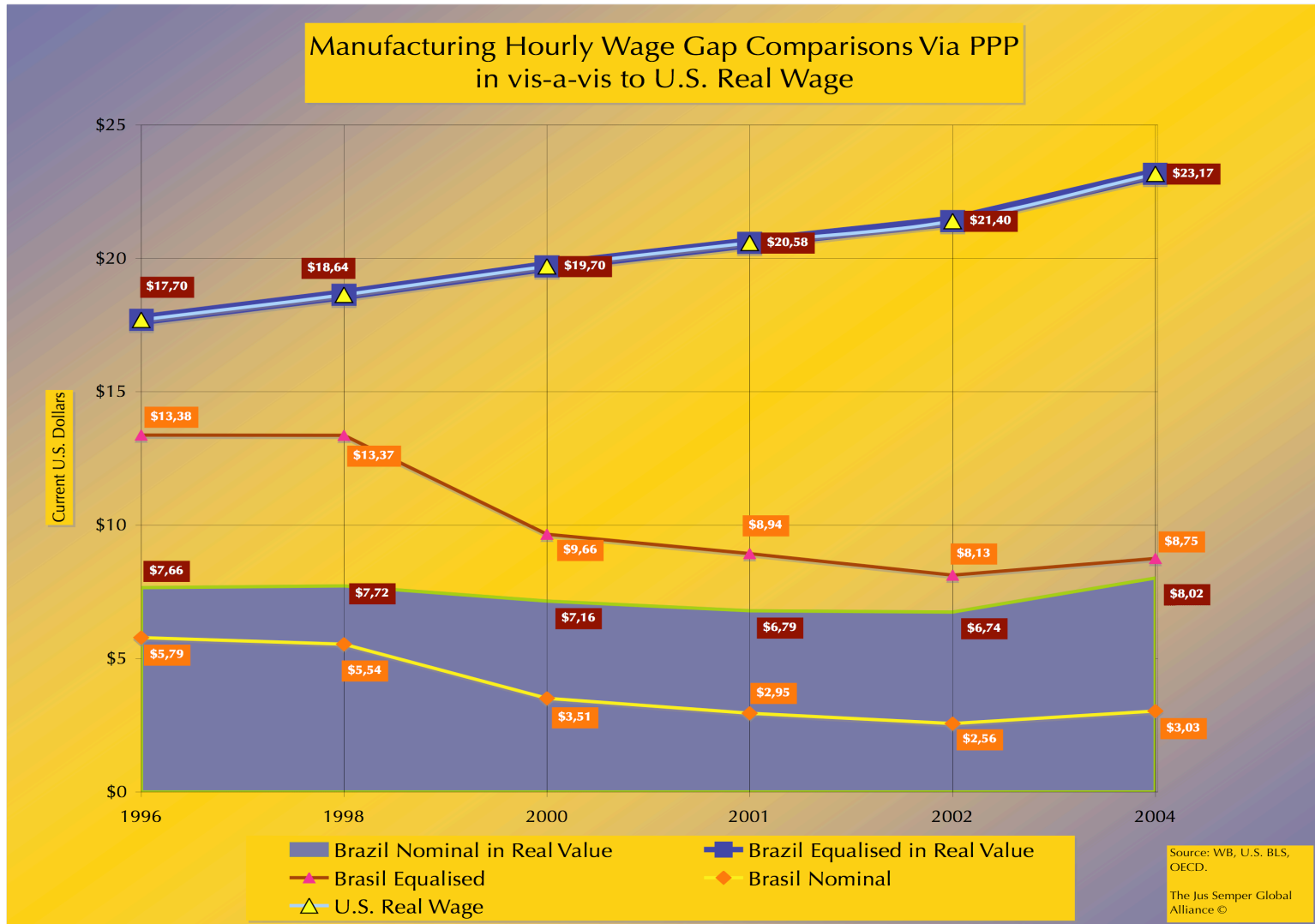
X PPPs for OECD Countries 1970-2002, OECD 2002.

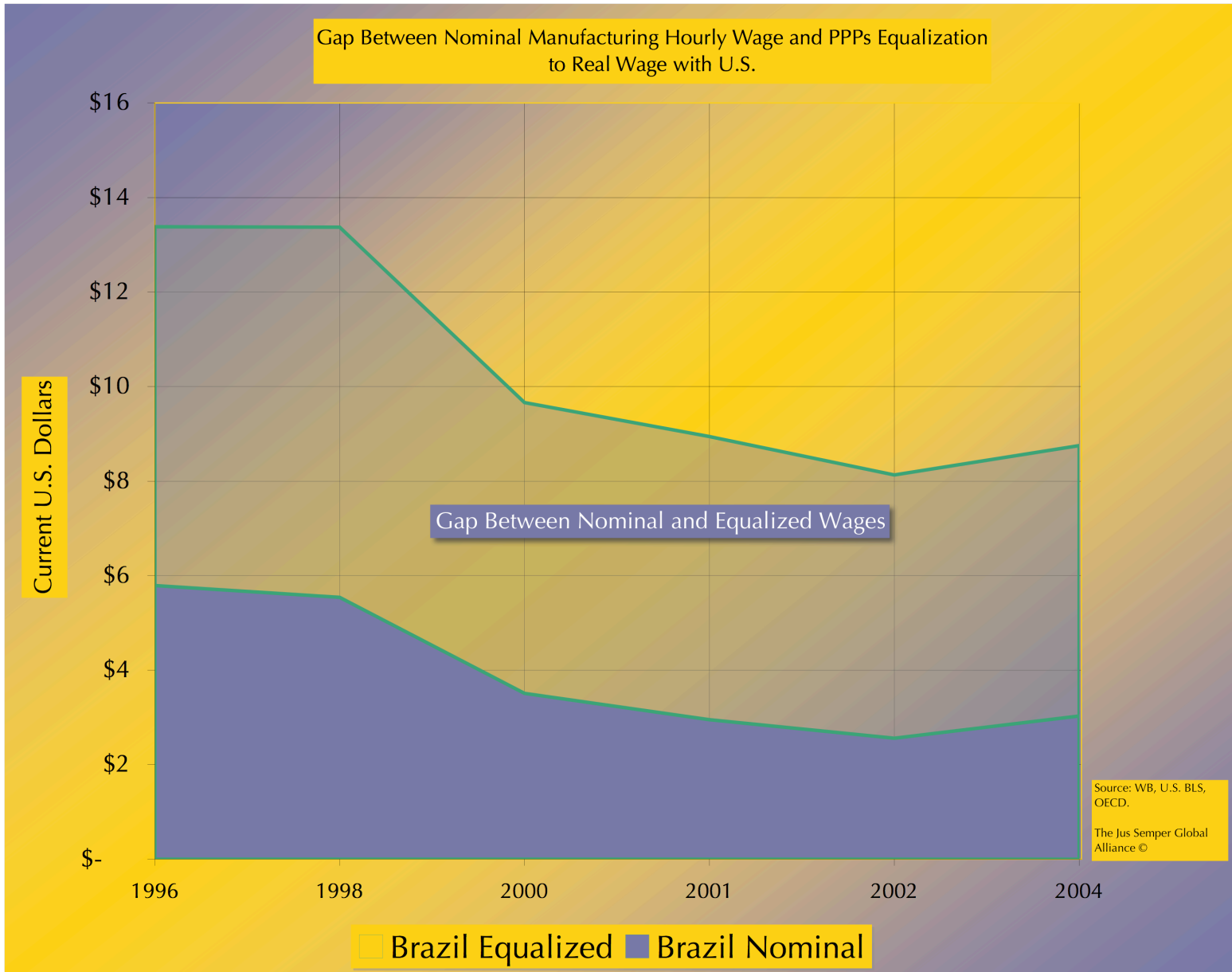
The Jus Semper Global Alliance © 2006

## Main features of the manufacturing wage situation in Brazil

- **The state of Brazil's manufacturing wages is clearly negative, albeit is showing some improvement in 2004 relative to 2002.**
  - Since 1996, (first year with manufacturing wage comparable data available) real wages lost 28% up to 2002 –relative to their PPP equalization with the U.S. Prices drop with the 1999 crisis but wages do it even more; thus, real wages collapse in the span of six years,
  - In this way, the gap between nominal and PPP equalized wage deepens, growing from 57% to 69%. That is, although PPP cost of living drops from 76¢ to 38¢ against \$1 dollar in the U.S., between 1996 and 2002, Brazilian PPP purchasing power drops from a 43 to a 31 index, for employers increase price levels over wage levels,
  - Nonetheless, in Brazil's case, wage equalization shows a 13% improvement in 2004 relative to 2002, moving from a 31 to a 35 index,
  - In contrast with Mexico, a country with similar development, Brazil's gap has not increased as dramatically (PPP equalization of 35 vs 15 in Mexico in 2004). Yet, the situation in Brazil, after more than two decades of supply-side economics, shows the same overwhelming features of pauperization of workers and their families in favour of employers, and we are yet to see if the small recovery in 2004 continues or if it retreats.

- Between 1996 and 2004, the hourly equalized manufacturing Brazilian wage –the wage required to receive an equivalent remuneration to that of their U.S. counterparts– decreased 35%, due to the drop of the Brazilian PPP cost of living, relative to the U.S. PPP cost of living, going from \$13,38 in 1996 to 8,75 U.S. dollars in 2004. Yet, given that the Brazilian hourly manufacturing wage decreased nominally 48%, from 5,79 in 1996 to 3,03 U.S. dollars in 2004, the equalization level of Brazil’s manufacturing wage dropped 19% from a 43 index in 1996 to only 35 in 2004.



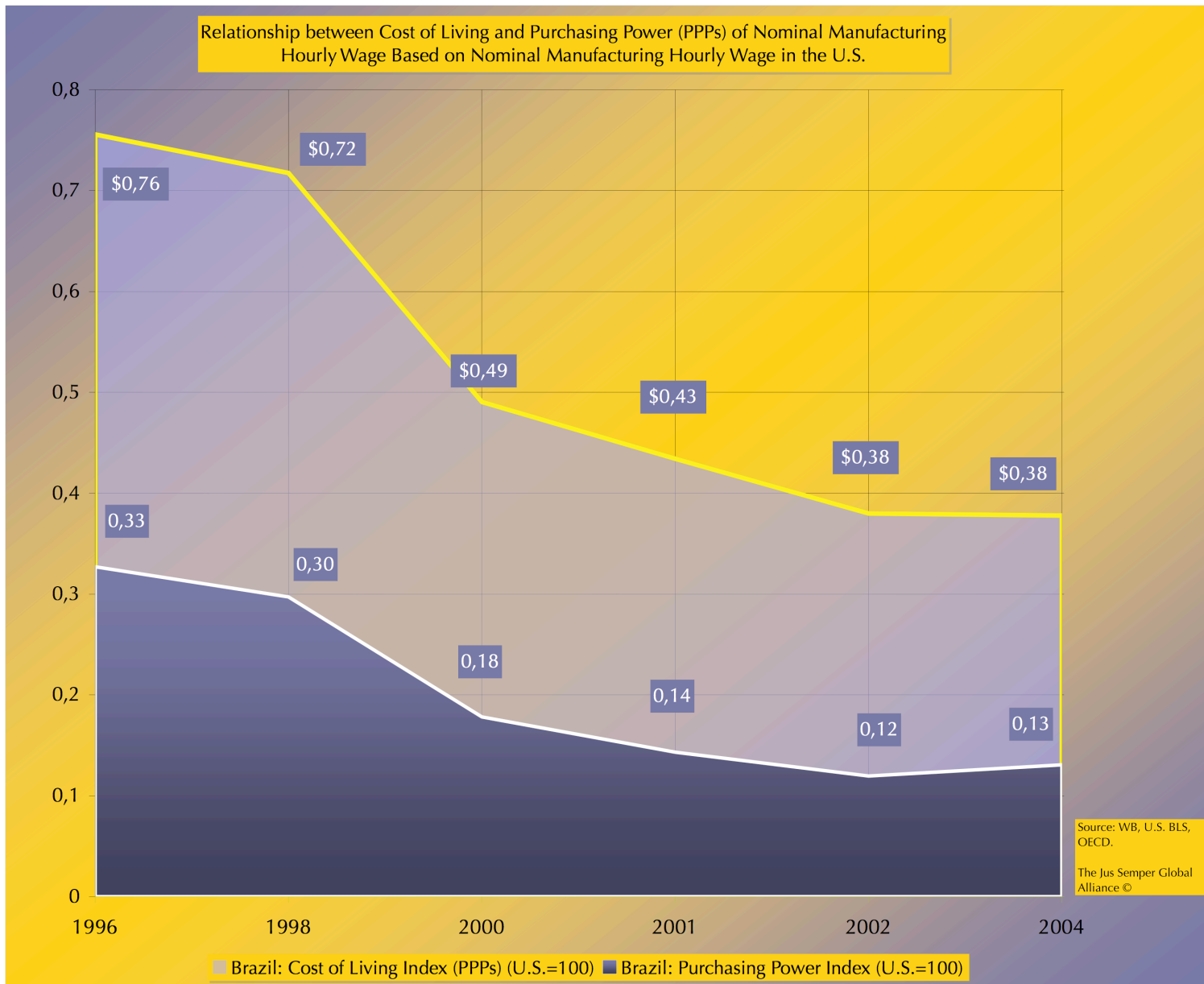


Gap Between Nominal Manufacturing Hourly Wage and PPPs Equalization to Real Wage with U.S.

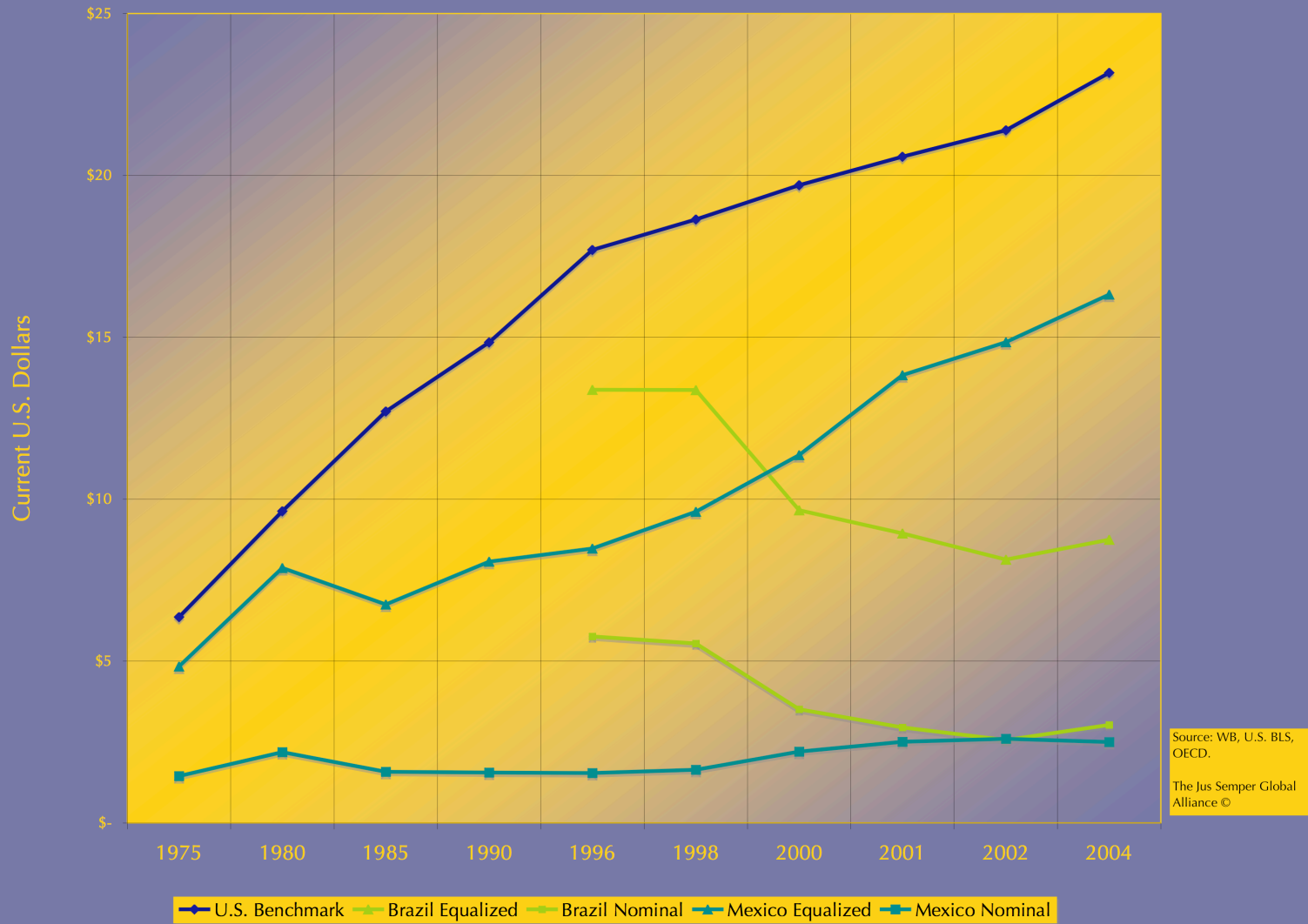


Source: WB, U.S. BLS, OECD.  
The Jus Semper Global Alliance ©

□ Brazil: Gap ■ Brazil: Equalize



## Nominal Manufacturing Hourly Wage and Equalization Via PPP with U.S. Equivalent



## The Jus Semper Global Alliance – Manufacturing workers' Wage Gap Analysis in Purchasing Power Parities (PPPs) Comparison Terms 1975-04

		1975	1980	1985	1990	1995	2000	2002	2004
<b>Benchmark</b>	<b>U.S. Hourly rate</b>	6,16	9,63	12,71	14,84	17,21	19,70	21,4	23,17
<b>Canada</b>	GDP PPPs in country currency*	1,222	1,206	1,256	1,3	1,212	1,156	1,215	1,198
	Exchange rate	1,017	1,169	1,366	1,167	1,373	1,486	1,57	1,302
	GDP PPPs in US Dollars	\$ 1,20	\$ 1,03	\$ 0,92	\$ 1,11	\$ 0,88	\$ 0,78	\$ 0,77	\$ 0,92
	2. Equalized PPP compensation US \$	\$ 7,40	\$ 9,93	\$ 11,69	\$ 16,53	\$ 15,19	\$ 15,32	\$ 16,56	\$ 21,32
	3. Actual Real compensation US \$	\$ 5,09	\$ 8,60	\$ 12,18	\$ 14,66	\$ 18,69	\$ 21,19	\$ 21,53	\$ 23,27
	4. Actual Nominal compensation US \$	\$ 6,11	\$ 8,87	\$ 11,20	\$ 16,33	\$ 16,50	\$ 16,48	\$ 16,66	\$ 21,42
	Compensation Deficit in US \$ (2÷4)	\$ 1,29	\$ 1,06	\$ 0,49	\$ 0,20	\$ (1,31)	\$ (1,16)	\$ (0,10)	\$ (0,10)
	Wage Equalization index (4÷2 or 3÷1)	0,83	0,89	0,96	0,99	1,09	1,08	1,01	1,00
<b>South Korea</b>	GDP PPPs in country currency*	238,9	411,6	465	538	629	582,5	731,9	780,8
	Exchange rate	484	607,4	870	707,8	771,3	1131	1250	1145
	GDP PPPs in US Dollars	\$ 0,49	\$ 0,68	\$ 0,53	\$ 0,76	\$ 0,82	\$ 0,52	\$ 0,59	\$ 0,68
	2. Equalized PPP compensation US \$	\$ 3,04	\$ 6,53	\$ 6,79	\$ 11,28	\$ 14,03	\$ 10,15	\$ 12,53	\$ 15,80
	3. Actual Real compensation US \$	\$ 0,65	\$ 1,40	\$ 2,30	\$ 4,87	\$ 8,93	\$ 16,00	\$ 14,98	\$ 16,89
	4. Actual Nominal compensation US \$	\$ 0,32	\$ 0,95	\$ 1,23	\$ 3,70	\$ 7,28	\$ 8,24	\$ 8,77	\$ 11,52
	Compensation Deficit in US \$ (2÷4)	\$ 2,72	\$ 5,58	\$ 5,56	\$ 7,58	\$ 6,75	\$ 1,91	\$ 3,76	\$ 4,28
	Wage Equalization index (4÷2 or 3÷1)	0,11	0,15	0,18	0,33	0,52	0,81	0,70	0,73
<b>Japan</b>	GDP PPPs in country currency*	286	243,9	213,6	195	172,9	141,8	155,5	134,5
	Exchange rate	296,7	225,7	238,5	145	94,0	107,8	125,2	108,2
	GDP PPPs in US Dollars	\$ 0,96	\$ 1,08	\$ 0,90	\$ 1,34	\$ 1,84	\$ 1,32	\$ 1,24	\$ 1,24
	2. Equalized PPP compensation US \$	\$ 5,94	\$ 10,41	\$ 11,38	\$ 19,96	\$ 31,67	\$ 25,91	\$ 26,58	\$ 28,80
	3. Actual Real compensation US \$	\$ 3,08	\$ 5,05	\$ 7,00	\$ 9,32	\$ 12,80	\$ 16,74	\$ 15,01	\$ 17,62
	4. Actual Nominal compensation US \$	\$ 2,97	\$ 5,46	\$ 6,27	\$ 12,54	\$ 23,55	\$ 22,02	\$ 18,65	\$ 21,90
	Compensation Deficit in US \$ (2÷4)	\$ 2,97	\$ 4,95	\$ 5,11	\$ 7,42	\$ 8,12	\$ 3,89	\$ 7,93	\$ 6,90
	Wage Equalization index (4÷2 or 3÷1)	0,50	0,52	0,55	0,63	0,74	0,85	0,70	0,76



## The Jus Semper Global Alliance – Manufacturing workers' Wage Gap Analysis in Purchasing Power Parities (PPPs) Comparison Terms 1975-04

		1975	1980	1985	1990	1995	2000	2002	2004
<b>Benchmark</b>	<b>U.S. Hourly rate</b>	6,16	9,63	12,71	14,84	17,21	19,70	21,4	23,17
<b>France</b>	GDP PPPs in country currency*	4,978	5,559	6,559	6,61	6,49	7,009	0,870	0,829
	Exchange rate	4,282	4,22	8,98	5,447	4,986	7,105	1,058	0,804
	GDP PPPs in US Dollars	\$ 1,16	\$ 1,32	\$ 0,73	\$ 1,21	\$ 1,30	\$ 0,99	\$ 0,82	\$ 1,03
	2. Equalized PPP compensation US \$	\$ 7,16	\$ 12,69	\$ 9,28	\$ 18,01	\$ 22,40	\$ 19,43	\$ 17,60	\$ 23,89
	3. Actual Real compensation US \$	\$ 3,87	\$ 6,76	\$ 10,24	\$ 12,66	\$ 14,80	\$ 15,77	\$ 20,81	\$ 23,17
	4. Actual Nominal compensation US \$	\$ 4,50	\$ 8,90	\$ 7,48	\$ 15,36	\$ 19,26	\$ 15,56	\$ 17,12	\$ 23,89
	Compensation Deficit in US \$ (2÷4)	\$ 2,66	\$ 3,79	\$ 1,80	\$ 2,65	\$ 3,14	\$ 3,87	\$ 0,48	\$ (0,00)
Wage Equalization index (4÷2 or 3÷1)	0,63	0,70	0,81	0,85	0,86	0,80	0,97	1,00	
<b>Germany</b>	GDP PPPs in country currency*	3,062	2,397	2,173	2,09	2,02	2,136	0,892	0,876
	Exchange rate	2,455	1,815	2,942	1,617	1,432	2,119	1,058	0,804
	GDP PPPs in US Dollars	\$ 1,25	\$ 1,32	\$ 0,74	\$ 1,29	\$ 1,41	\$ 1,01	\$ 0,84	\$ 1,09
	2. Equalized PPP compensation US \$	\$ 7,68	\$ 12,72	\$ 9,39	\$ 19,18	\$ 24,28	\$ 19,86	\$ 18,04	\$ 25,24
	3. Actual Real compensation US \$	\$ 5,02	\$ 9,21	\$ 12,81	\$ 16,80	\$ 22,27	\$ 23,52	\$ 30,03	\$ 31,25
	4. Actual Nominal compensation US \$	\$ 6,26	\$ 12,16	\$ 9,46	\$ 21,71	\$ 31,41	\$ 23,71	\$ 25,31	\$ 34,05
	Compensation Deficit in US \$ (2÷4)	\$ 1,42	\$ 0,56	\$ (0,07)	\$ (2,53)	\$ (7,13)	\$ (3,85)	\$ (7,27)	\$ (8,81)
Wage Equalization index (4÷2 or 3÷1)	0,81	0,96	1,01	1,13	1,29	1,19	1,40	1,35	
<b>Italy</b>	GDP PPPs in country currency*	539,5	783	1184	1421	1556	1801	0,771	0,754
	Exchange rate	652,4	855,1	1909	1198	1629	2097	1,058	0,804
	GDP PPPs in US Dollars	\$ 0,83	\$ 0,92	\$ 0,62	\$ 1,19	\$ 0,96	\$ 0,86	\$ 0,73	\$ 0,94
	2. Equalized PPP compensation US \$	\$ 5,09	\$ 8,82	\$ 7,88	\$ 17,60	\$ 16,44	\$ 16,92	\$ 15,60	\$ 21,73
	3. Actual Real compensation US \$	\$ 5,61	\$ 8,84	\$ 12,19	\$ 14,57	\$ 16,43	\$ 16,11	\$ 20,23	\$ 21,84
	4. Actual Nominal compensation US \$	\$ 4,64	\$ 8,09	\$ 7,56	\$ 17,28	\$ 15,69	\$ 13,84	\$ 14,75	\$ 20,48
	Compensation Deficit in US \$ (2÷4)	\$ 0,45	\$ 0,73	\$ 0,32	\$ 0,32	\$ 0,75	\$ 3,08	\$ 0,85	\$ 1,25
Wage Equalization index (4÷2 or 3÷1)	0,91	0,92	0,96	0,98	0,95	0,82	0,95	0,94	
<b>England</b>	GDP PPPs in country currency*	0,3802	0,4928	0,5327	0,602	0,656	0,684	0,639	0,584
	Exchange rate	0,4501	0,43	0,7708	0,5605	0,6335	0,6598	0,666	0,546
	GDP PPPs in US Dollars	\$ 0,84	\$ 1,15	\$ 0,69	\$ 1,07	\$ 1,04	\$ 1,04	\$ 0,96	\$ 1,07
	2. Equalized PPP compensation US \$	\$ 5,20	\$ 11,04	\$ 8,78	\$ 15,94	\$ 17,82	\$ 20,44	\$ 20,54	\$ 24,79
	3. Actual Real compensation US \$	\$ 3,97	\$ 6,56	\$ 9,00	\$ 11,74	\$ 13,32	\$ 16,13	\$ 19,02	\$ 23,09
	4. Actual Nominal compensation US \$	\$ 3,35	\$ 7,52	\$ 6,22	\$ 12,61	\$ 13,79	\$ 16,73	\$ 18,25	\$ 24,71
	Compensation Deficit in US \$ (2÷4)	\$ 1,85	\$ 3,52	\$ 2,56	\$ 3,33	\$ 4,03	\$ 3,71	\$ 2,29	\$ 0,08
Wage Equalization index (4÷2 or 3÷1)	0,64	0,68	0,71	0,79	0,77	0,82	0,89	1,00	
<b>Spain</b>	GDP PPPs in country currency*	44,83	70,54	91,83	109,50	122,08	141,091	0,727	0,699
	Exchange rate	57,39	71,64	170	102	124,6	180,2	1,058	0,804
	GDP PPPs in US Dollars	\$ 0,78	\$ 0,98	\$ 0,54	\$ 1,07	\$ 0,98	\$ 0,78	\$ 0,69	\$ 0,87
	2. Equalized PPP compensation US \$	\$ 4,81	\$ 9,48	\$ 6,87	\$ 15,93	\$ 16,86	\$ 15,42	\$ 14,71	\$ 20,16
	3. Actual Real compensation US \$	\$ 3,23	\$ 5,95	\$ 8,59	\$ 10,53	\$ 12,96	\$ 13,60	\$ 17,34	\$ 19,66
	4. Actual Nominal compensation US \$	\$ 2,52	\$ 5,86	\$ 4,64	\$ 11,30	\$ 12,70	\$ 10,65	\$ 11,92	\$ 17,10
	Compensation Deficit in US \$ (2÷4)	\$ 2,29	\$ 3,62	\$ 2,23	\$ 4,63	\$ 4,16	\$ 4,77	\$ 2,79	\$ 3,06
Wage Equalization index (4÷2 or 3÷1)	0,52	0,62	0,68	0,71	0,75	0,69	0,81	0,85	
<b>Mexico</b>	GDP PPPs in country currency*	9,80	18,80	136,4	1530	2,96	5,456	6,704	7,952
	Exchange rate	12,5	22,97	256,9	2813	6,42	9,46	9,66	11,29
	GDP PPPs in US Dollars	\$ 0,78	\$ 0,82	\$ 0,53	\$ 0,54	\$ 0,46	\$ 0,58	\$ 0,69	\$ 0,70
	2. Equalized PPP compensation US \$	\$ 4,83	\$ 7,88	\$ 6,75	\$ 8,07	\$ 7,94	\$ 11,36	\$ 14,85	\$ 16,32
	3. Actual Real compensation US \$	\$ 1,85	\$ 2,68	\$ 2,98	\$ 2,87	\$ 3,19	\$ 3,81	\$ 3,75	\$ 3,55
	4. Actual Nominal compensation US \$	\$ 1,45	\$ 2,19	\$ 1,58	\$ 1,56	\$ 1,47	\$ 2,20	\$ 2,60	\$ 2,50
	Compensation Deficit in US \$ (2÷4)	\$ 3,38	\$ 5,69	\$ 5,17	\$ 6,51	\$ 6,47	\$ 9,16	\$ 12,25	\$ 13,82
Wage Equalization index (4÷2 or 3÷1)	0,30	0,28	0,23	0,19	0,19	0,19	0,18	0,15	

## The Jus Semper Global Alliance – Manufacturing workers' Wage Gap Analysis in Purchasing Power Parities (PPPs) Comparison Terms 1975-04

		1996	1998	2000	2001	2002	2004
<b>Benchmark</b>	<b>U.S. Hourly rate</b>	17,70	18,64	19,70	20,58	21,4	23,17
<b>Brazil</b>	GDP PPPs in country currency*	0,7595	0,8329	0,897	1,022	1,110	1,106
	Exchange rate	1,005	1,161	1,83	2,353	2,921	2,926
	GDP PPPs in US Dollars	\$ 0,76	\$ 0,72	\$ 0,49	\$ 0,43	\$ 0,38	\$ 0,38
	2. Equalized PPP compensation US \$	\$ 13,38	\$ 13,37	\$ 9,66	\$ 8,94	\$ 8,13	\$ 8,75
	3. Actual Real compensation US \$	\$ 7,62	\$ 7,72	\$ 7,16	\$ 6,79	\$ 6,74	\$ 8,02
	4. Actual Nominal compensation US \$	\$ 5,76	\$ 5,54	\$ 3,51	\$ 2,95	\$ 2,56	\$ 3,03
	Compensation Deficit in US \$ (2÷4)	\$ 7,62	\$ 7,83	\$ 6,15	\$ 5,99	\$ 5,57	\$ 5,72
	Wage Equalization index (4÷2 or 3÷1)	0,43	0,41	0,36	0,33	0,31	0,35
		1996	1998	2000	2001	2002	2004
<b>Benchmark</b>	<b>U.S. Hourly rate</b>	17,70	18,64	19,70	20,58	21,4	23,17
<b>Hong Kong</b>	GDP PPPs in country currency*	7,75	8,82	7,89	7,73	7,01	6,58
	Exchange rate	7,735	7,75	7,79	7,80	7,80	7,79
	GDP PPPs in US Dollars	\$ 1,00	\$ 1,14	\$ 1,01	\$ 0,99	\$ 0,90	\$ 0,84
	2. Equalized PPP compensation US \$	\$ 17,73	\$ 21,21	\$ 19,95	\$ 20,39	\$ 19,22	\$ 19,57
	3. Actual Real compensation US \$	\$ 5,11	\$ 4,74	\$ 5,38	\$ 5,79	\$ 6,30	\$ 6,52
	4. Actual Nominal compensation US \$	\$ 5,12	\$ 5,40	\$ 5,45	\$ 5,74	\$ 5,66	\$ 5,51
	Compensation Deficit in US \$ (2÷4)	\$ 12,61	\$ 15,81	\$ 14,50	\$ 14,65	\$ 13,56	\$ 14,06
	Wage Equalization index (4÷2 or 3÷1)	0,29	0,25	0,27	0,28	0,29	0,28
<b>Singapore</b>	GDP PPPs in country currency*	1,71	2,00	1,71	1,69	1,56	1,53
	Exchange rate	1,41	1,67	1,73	1,79	1,79	1,69
	GDP PPPs in US Dollars	\$ 1,21	\$ 1,19	\$ 0,99	\$ 0,94	\$ 0,87	\$ 0,90
	2. Equalized PPP compensation US \$	\$ 21,41	\$ 22,25	\$ 19,57	\$ 19,36	\$ 17,94	\$ 20,96
	3. Actual Real compensation US \$	\$ 6,75	\$ 6,17	\$ 7,24	\$ 7,41	\$ 7,70	\$ 8,24
	4. Actual Nominal compensation US \$	\$ 8,17	\$ 7,37	\$ 7,19	\$ 6,97	\$ 6,71	\$ 7,45
	Compensation Deficit in US \$ (2÷4)	\$ 13,24	\$ 14,88	\$ 12,38	\$ 12,39	\$ 11,23	\$ 13,51
	Wage Equalization index (4÷2 or 3÷1)	0,38	0,33	0,37	0,36	0,37	0,36

**\*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.
- GDPs PPPs 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.
- GDP PPPs 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, expressed in national currency, reflects the exchange rate in comparison with the market exchange rate, which does not reflect the ratio of prices.
- Equal PPP compensation expresses the hourly U.S. dollar nominal rate required in a given country to equally compensate a local worker, in terms of purchasing power, for equal work rendered, as the equivalent U.S. workers is compensated, in accordance with Article 23 of the UN Universal Declaration of Human Rights of "equal pay for equal work".
- Actual Real Compensation is the hourly wage paid in a given country in purchasing power terms.
- Actual Nominal Compensation is the nominal hourly wage paid in a given country.
- Compensation deficit expresses the wage gap between the hourly nominal rate paid (4) and the equalized PPP hourly rate that should be paid for equal work (2).
- Compensation equalization index expresses the ratio of actual nominal pay to equivalent PPP hourly pay (4 between 2): or the ratio of actual real pay (3) to the hourly nominal pay benchmark (1) (3 between 1).

**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:)

- World Development Indicators 1998, 2000, 2002 and 2004, 2006, The World Bank, table 1.1
- World Development Indicators database, The World Bank, April 2006 – GNI per capita 2004, Atlas method and PPP
- X International Comparisons of Hourly Compensation Costs for Production Workers in Manufacturing, November 2005.  
U.S. Department of Labour, Bureau of Labour Statistics
- X Comparative Real Gross Domestic Product per Capita and per Employed Person, Fourteen Countries 1960-2004  
U.S. Department of Labour, Bureau of Labour Statistics, Office of Productivity and Technology.
- X PPPs for OECD Countries 1970-2002, OECD 2002 and GDP PPPs historical series 1970-1999.
- Purchasing Power parities – Measurement and Uses by Paul Schreyer and Francette Koechlin, OECD Statistical briefs, March 2002.