

**The Jus Semper Global Alliance – Manufacturing workers' Wage Gap Analysis in Purchasing Power Parities (PPPs) Comparison Terms 1975-05**

**International comparisons of hourly compensation costs for manufacturing workers between the US and selected developed and "emerging" markets, barring South Korea, Brazil and Hong Kong, show clear declines in real wages (Canada, Europe, Japan and Singapore) and no improvement in Mexico.**

**2005 has signalled a change in trends since 2000 in selected European economies, with consistent drops in real wages and in their corresponding purchasing-power parities (PPPs), using comparable wages in the U.S. as the benchmark. Canada, Japan and Singapore also experienced similar declines whilst Mexico retained the worst real wages of all economies in this assessment. During 2005, a clear contention of real wages was the tone, particularly in the G7 countries. Only South Korea, Hong Kong and Brazil reduced their equalisation wage gaps and increased their real wages. In contrast, Mexico retained the dubious honour of having the worst real-wage gap with the U.S., dramatically below Hong Kong, the next worst gap.**

- The Euro area countries included in the analysis (France, Germany, Italy and Spain, plus the UK), experienced marked declines in real wages versus the U.S. in 2005, averaging a drop of 10,4% in the real value of their country currencies compared to the U.S. Accordingly, their wage equalisation indices –or wage gaps– with comparable manufacturing jobs in the U.S. deteriorated an average of 9,9%. The U.K. experienced the lowest decline (7,3%) whilst Spain had the greatest decline (11%). As a result, whilst in 2004 Germany, France, and the U.K. had positive hourly wage equalisation indices vis-à-vis the U.S., in 2005 only Germany maintains a positive index of 117 (17% more purchasing power than in the U.S. for its hourly wage); yet substantially below its previous 131 index. France and the U.K., which in 2004 had slightly positive indices, now have wage-equalisation gaps of 8 and 6% respectively. Italy and Spain increased their wages gaps with the U.S. to 15 and 23% respectively.
- In Asia, South Korea and Hong Kong increased their real wages 4,9 and 5,7% respectively, whereas Japan, and Singapore's hourly wages slightly lost value by 1,5 and 0,8% respectively. The major highlight is, however, that South Korea, for the first time in thirty years, has surpassed Japan and has now a smaller wage gap and greater real wages than Japan, relative to comparable U.S. wages. Thus, whilst Japan's real-wage gap with the U.S. increased to 26%, South Korea's wage gap decreased to 21%. As for Hong Kong and Singapore, they continue having very large wage gaps of 70 and 65% respectively.
- In the Americas, Brazil continues to recover ground lost since 2003, with real wages, vis-à-vis comparable wages in the U.S., improving 5% in 2005. Accordingly, the wage equalisation index improved nearly 10%, from a 37 to a 40 index (60% wage gap). Mexico, in great contrast, shows no sign of improvement and remains flat with a huge wage gap of 85 percent or a 15 equalisation index. It is expected that this will worsen even further in the future, given that the nominal minimum wage in 2008 was increased by 4%, which is below real inflation and a 35% increase in the cost of the basic-goods basket during 2007. Canada lost 2,3% in real-wage value and, in PPP terms, it is now nearly at par with equivalent wages in the U.S.

		1975	1980	1985	1990	1995	2000	2004	2005
<b>Benchmark</b>	<b>U.S. Hourly rate</b>	6,16	9,63	12,71	14,81	17,17	19,65	22,82	23,65
<b>Canada</b>	GDP PPPs in country currency*	1,222	1,206	1,256	1,3	1,212	1,156	1,1983	1,2259
	Exchange rate	1,017	1,169	1,366	1,167	1,373	1,486	1,302	1,212
	GDP PPPs in US Dollars	\$ 1,20	\$ 1,03	\$ 0,92	\$ 1,11	\$ 0,88	\$ 0,78	\$ 0,92	\$ 1,01
	2. Equalized PPP compensation US \$	\$ 7,40	\$ 9,93	\$ 11,69	\$ 16,50	\$ 15,16	\$ 15,28	\$ 21,00	\$ 23,92
	3. Actual Real compensation US \$	\$ 5,09	\$ 8,60	\$ 12,18	\$ 14,66	\$ 18,69	\$ 21,19	\$ 23,65	\$ 23,55
	4. Actual Nominal compensation US \$	\$ 6,11	\$ 8,87	\$ 11,20	\$ 16,33	\$ 16,50	\$ 16,48	\$ 21,77	\$ 23,82
	Compensation Deficit in US \$ (2÷4)	\$ 1,29	\$ 1,06	\$ 0,49	\$ 0,17	\$ (1,34)	\$ (1,20)	\$ (0,77)	\$ 0,10
	Wage Equalisation index (4÷2 or 3÷1)	0,83	0,89	0,96	0,99	1,09	1,08	1,04	1,00
<b>South Korea</b>	GDP PPPs in country currency*	238,9	411,6	465	538	629	582,5	780,8	742,3
	Exchange rate	484	607,4	870	707,8	771,3	1131	1145	1024
	GDP PPPs in US Dollars	\$ 0,49	\$ 0,68	\$ 0,53	\$ 0,76	\$ 0,82	\$ 0,52	\$ 0,68	\$ 0,72
	2. Equalized PPP compensation US \$	\$ 3,04	\$ 6,53	\$ 6,79	\$ 11,26	\$ 14,00	\$ 10,12	\$ 15,56	\$ 17,14
	3. Actual Real compensation US \$	\$ 0,65	\$ 1,40	\$ 2,30	\$ 4,87	\$ 8,93	\$ 15,98	\$ 16,32	\$ 18,70
	4. Actual Nominal compensation US \$	\$ 0,32	\$ 0,95	\$ 1,23	\$ 3,70	\$ 7,28	\$ 8,23	\$ 11,13	\$ 13,56
	Compensation Deficit in US \$ (2÷4)	\$ 2,72	\$ 5,58	\$ 5,56	\$ 7,56	\$ 6,72	\$ 1,89	\$ 4,43	\$ 3,58
	Wage Equalisation index (4÷2 or 3÷1)	0,11	0,15	0,18	0,33	0,52	0,81	0,72	0,79
<b>Japan</b>	GDP PPPs in country currency*	286	243,9	213,6	195	172,9	141,8	134,5	136,5
	Exchange rate	296,7	225,7	238,5	145	94,0	107,8	108,2	110,1
	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	\$ 19,92	\$ 31,60	\$ 25,85	\$ 28,36	\$ 29,33
	3. Actual Real compensation US \$	\$ 3,08	\$ 5,05	\$ 7,00	\$ 9,36	\$ 12,75	\$ 16,67	\$ 17,57	\$ 17,55
	4. Actual Nominal compensation US \$	\$ 2,97	\$ 5,46	\$ 6,27	\$ 12,59	\$ 23,47	\$ 21,93	\$ 21,84	\$ 21,76
	Compensation Deficit in US \$ (2÷4)	\$ 2,97	\$ 4,95	\$ 5,11	\$ 7,33	\$ 8,13	\$ 3,92	\$ 6,52	\$ 7,57
	Wage Equalisation index (4÷2 or 3÷1)	0,50	0,52	0,55	0,63	0,74	0,85	0,77	0,74

		1975	1980	1985	1990	1995	2000	2004	2005
<b>Benchmark</b>	<b>U.S. Hourly rate</b>	6,16	9,63	12,71	14,81	17,17	19,65	22,82	23,65
<b>France</b>	GDP PPPs in country currency*	4,978	5,559	6,559	6,61	6,49	1,068	0,829	0,910
	Exchange rate	4,282	4,22	8,98	5,447	4,986	1,083	0,804	0,8033
	GDP PPPs in US Dollars	\$ 1,16	\$ 1,32	\$ 0,73	\$ 1,21	\$ 1,30	\$ 0,99	\$ 1,03	\$ 1,13
	2. Equalized PPP compensation US \$	\$ 7,16	\$ 12,69	\$ 9,28	\$ 17,97	\$ 22,35	\$ 19,38	\$ 23,52	\$ 26,79
	3. Actual Real compensation US \$	\$ 3,87	\$ 6,76	\$ 10,24	\$ 12,66	\$ 14,80	\$ 15,67	\$ 23,17	\$ 21,74
	4. Actual Nominal compensation US \$	\$ 4,50	\$ 8,90	\$ 7,48	\$ 15,36	\$ 19,26	\$ 15,46	\$ 23,89	\$ 24,63
	Compensation Deficit in US \$ (2÷4)	\$ 2,66	\$ 3,79	\$ 1,80	\$ 2,61	\$ 3,09	\$ 3,92	\$ (0,37)	\$ 2,16
	Wage Equalisation index (4÷2 or 3÷1)	0,63	0,70	0,81	0,85	0,86	0,80	1,02	0,92
<b>Germany</b>	GDP PPPs in country currency*	3,062	2,397	2,173	2,09	2,02	1,092	0,876	0,959
	Exchange rate	2,455	1,815	2,942	1,617	1,432	1,083	0,804	0,8033
	GDP PPPs in US Dollars	\$ 1,25	\$ 1,32	\$ 0,74	\$ 1,29	\$ 1,41	\$ 1,01	\$ 1,09	\$ 1,19
	2. Equalized PPP compensation US \$	\$ 7,68	\$ 12,72	\$ 9,39	\$ 19,14	\$ 24,22	\$ 19,81	\$ 24,86	\$ 28,23
	3. Actual Real compensation US \$	\$ 5,02	\$ 9,21	\$ 12,81	\$ 16,80	\$ 21,34	\$ 22,49	\$ 29,83	\$ 27,64
	4. Actual Nominal compensation US \$	\$ 6,26	\$ 12,16	\$ 9,46	\$ 21,71	\$ 30,10	\$ 22,67	\$ 32,50	\$ 33,00
	Compensation Deficit in US \$ (2÷4)	\$ 1,42	\$ 0,56	\$ (0,07)	\$ (2,57)	\$ (5,88)	\$ (2,86)	\$ (7,64)	\$ (4,77)
	Wage Equalisation index (4÷2 or 3÷1)	0,81	0,96	1,01	1,13	1,24	1,14	1,31	1,17
<b>Italy</b>	GDP PPPs in country currency*	539,5	783	1184	1421	1556	1	0,754	0,843
	Exchange rate	652,4	855,1	1909	1198	1629	1,083	0,804	0,8033
	GDP PPPs in US Dollars	\$ 0,83	\$ 0,92	\$ 0,62	\$ 1,19	\$ 0,96	\$ 0,86	\$ 0,94	\$ 1,05
	2. Equalized PPP compensation US \$	\$ 5,09	\$ 8,82	\$ 7,88	\$ 17,57	\$ 16,40	\$ 16,88	\$ 21,40	\$ 24,81
	3. Actual Real compensation US \$	\$ 5,61	\$ 8,84	\$ 12,19	\$ 14,57	\$ 16,43	\$ 16,11	\$ 21,84	\$ 20,07
	4. Actual Nominal compensation US \$	\$ 4,64	\$ 8,09	\$ 7,56	\$ 17,28	\$ 15,69	\$ 13,84	\$ 20,48	\$ 21,05
	Compensation Deficit in US \$ (2÷4)	\$ 0,45	\$ 0,73	\$ 0,32	\$ 0,29	\$ 0,71	\$ 3,04	\$ 0,92	\$ 3,76
	Wage Equalisation index (4÷2 or 3÷1)	0,91	0,92	0,96	0,98	0,96	0,82	0,96	0,85
<b>England</b>	GDP PPPs in country currency*	0,3802	0,4928	0,5327	0,602	0,656	0,684	0,584	0,634
	Exchange rate	0,4501	0,43	0,7708	0,5605	0,6335	0,6598	0,546	0,549
	GDP PPPs in US Dollars	\$ 0,84	\$ 1,15	\$ 0,69	\$ 1,07	\$ 1,04	\$ 1,04	\$ 1,07	\$ 1,1545
	2. Equalized PPP compensation US \$	\$ 5,20	\$ 11,04	\$ 8,78	\$ 15,91	\$ 17,78	\$ 20,38	\$ 24,42	\$ 27,30
	3. Actual Real compensation US \$	\$ 3,97	\$ 6,56	\$ 9,00	\$ 11,74	\$ 13,32	\$ 16,23	\$ 23,14	\$ 22,23
	4. Actual Nominal compensation US \$	\$ 3,35	\$ 7,52	\$ 6,22	\$ 12,61	\$ 13,79	\$ 16,84	\$ 24,76	\$ 25,66
	Compensation Deficit in US \$ (2÷4)	\$ 1,85	\$ 3,52	\$ 2,56	\$ 3,30	\$ 3,99	\$ 3,54	\$ (0,34)	\$ 1,64
	Wage Equalisation index (4÷2 or 3÷1)	0,64	0,68	0,71	0,79	0,78	0,83	1,01	0,94
<b>Spain</b>	GDP PPPs in country currency*	44,83	70,54	91,83	109,50	122,08	0,848	0,699	0,786
	Exchange rate	57,39	71,64	170	102	124,6	1,083	0,804	0,8033
	GDP PPPs in US Dollars	\$ 0,78	\$ 0,98	\$ 0,54	\$ 1,07	\$ 0,98	\$ 0,78	\$ 0,87	\$ 0,98
	2. Equalized PPP compensation US \$	\$ 4,81	\$ 9,48	\$ 6,87	\$ 15,90	\$ 16,82	\$ 15,39	\$ 19,85	\$ 23,13
	3. Actual Real compensation US \$	\$ 3,23	\$ 5,95	\$ 8,59	\$ 10,53	\$ 12,96	\$ 13,60	\$ 19,70	\$ 18,18
	4. Actual Nominal compensation US \$	\$ 2,52	\$ 5,86	\$ 4,64	\$ 11,30	\$ 12,70	\$ 10,65	\$ 17,14	\$ 17,78
	Compensation Deficit in US \$ (2÷4)	\$ 2,29	\$ 3,62	\$ 2,23	\$ 4,60	\$ 4,12	\$ 4,74	\$ 2,71	\$ 5,35
	Wage Equalisation index (4÷2 or 3÷1)	0,52	0,62	0,68	0,71	0,75	0,69	0,86	0,77
<b>Mexico</b>	GDP PPPs in country currency*	9,80	18,80	136,4	1530	2,96	5,456	7,952	7,937
	Exchange rate	12,5	22,97	256,9	2813	6,419	9,459	11,29	10,89
	GDP PPPs in US Dollars	\$ 0,78	\$ 0,82	\$ 0,53	\$ 0,54	\$ 0,46	\$ 0,58	\$ 0,70	\$ 0,73
	2. Equalized PPP compensation US \$	\$ 4,83	\$ 7,88	\$ 6,75	\$ 8,06	\$ 7,92	\$ 11,33	\$ 16,07	\$ 17,24
	3. Actual Real compensation US \$	\$ 1,86	\$ 2,69	\$ 2,99	\$ 2,89	\$ 3,69	\$ 3,59	\$ 3,46	\$ 3,61
	4. Actual Nominal compensation US \$	\$ 1,46	\$ 2,20	\$ 1,59	\$ 1,57	\$ 1,70	\$ 2,07	\$ 2,44	\$ 2,63
	Compensation Deficit in US \$ (2÷4)	\$ 3,37	\$ 5,68	\$ 5,16	\$ 6,49	\$ 6,22	\$ 9,26	\$ 13,63	\$ 14,61
	Wage Equalisation index (4÷2 or 3÷1)	0,30	0,28	0,24	0,19	0,21	0,18	0,15	0,15

		1996	1998	2000	2001	2002	2003	2004	2005
<b>Benchmark</b>	<b>U.S. Hourly rate</b>	17,74	18,52	19,65	20,52	21,33	22,20	22,82	23,65
<b>Brazil</b>	GDP PPPs in country currency*	0,697	0,832	0,897	1,022	1,110	1,114	1,106	1,050
	Exchange rate	1,005	1,161	1,83	2,353	2,921	3,075	2,926	2,435
	GDP PPPs in US Dollars	\$ 0,69	\$ 0,72	\$ 0,49	\$ 0,43	\$ 0,38	\$ 0,36	\$ 0,38	\$ 0,43
	2. Equalized PPP compensation US \$	\$ 12,31	\$ 13,27	\$ 9,64	\$ 8,91	\$ 8,10	\$ 8,04	\$ 8,62	\$ 10,20
	3. Actual Real compensation US \$	\$ 8,30	\$ 7,66	\$ 7,14	\$ 6,84	\$ 6,77	\$ 7,57	\$ 8,34	\$ 9,48
	4. Actual Nominal compensation US \$	\$ 5,76	\$ 5,49	\$ 3,50	\$ 2,97	\$ 2,57	\$ 2,74	\$ 3,15	\$ 4,09
	Compensation Deficit in US \$ (2÷4)	\$ 6,55	\$ 7,78	\$ 6,14	\$ 5,94	\$ 5,53	\$ 5,30	\$ 5,47	\$ 6,11
	Wage Equalisation index (4÷2 or 3÷1)	0,47	0,41	0,36	0,33	0,32	0,34	0,37	0,40

		1996	1998	2000	2001	2002	2003	2004	2005
<b>Benchmark</b>	<b>U.S. Hourly rate</b>	17,74	18,52	19,65	20,52	21,33	22,20	22,82	23,65
<b>Hong Kong</b>	GDP PPPs in country currency*	7,74	8,83	7,89	7,73	7,01	7,02	6,58	6,21
	Exchange rate	7,735	7,75	7,79	7,80	7,80	7,79	7,79	7,78
	GDP PPPs in US Dollars	\$ 1,00	\$ 1,14	\$ 1,01	\$ 0,99	\$ 0,90	\$ 0,90	\$ 0,84	\$ 0,80
	2. Equalized PPP compensation US \$	\$ 17,76	\$ 21,10	\$ 19,90	\$ 20,34	\$ 19,16	\$ 20,02	\$ 19,28	\$ 18,87
	3. Actual Real compensation US \$	\$ 5,11	\$ 4,74	\$ 5,38	\$ 5,79	\$ 6,30	\$ 6,14	\$ 6,52	\$ 7,08
	4. Actual Nominal compensation US \$	\$ 5,12	\$ 5,40	\$ 5,45	\$ 5,74	\$ 5,66	\$ 5,54	\$ 5,51	\$ 5,65
	Compensation Deficit in US \$ (2÷4)	\$ 12,64	\$ 15,70	\$ 14,45	\$ 14,60	\$ 13,50	\$ 14,48	\$ 13,77	\$ 13,22
	Wage Equalisation index (4÷2 or 3÷1)	0,29	0,26	0,27	0,28	0,30	0,28	0,29	0,30

<b>Singapore</b>	GDP PPPs in country currency*	1,601	1,99	1,71	1,69	1,56	1,53	1,53	1,54
	Exchange rate	1,41	1,67	1,73	1,79	1,79	1,74	1,69	1,66
	GDP PPPs in US Dollars	\$ 1,14	\$ 1,19	\$ 0,99	\$ 0,94	\$ 0,87	\$ 0,88	\$ 0,90	\$ 0,93
	2. Equalized PPP compensation US \$	\$ 20,14	\$ 22,09	\$ 19,52	\$ 19,31	\$ 17,89	\$ 19,49	\$ 20,64	\$ 21,90
	3. Actual Real compensation US \$	\$ 7,19	\$ 6,17	\$ 7,23	\$ 7,41	\$ 7,70	\$ 8,18	\$ 8,16	\$ 8,27
	4. Actual Nominal compensation US \$	\$ 8,16	\$ 7,36	\$ 7,18	\$ 6,97	\$ 6,71	\$ 7,18	\$ 7,38	\$ 7,66
	Compensation Deficit in US \$ (2÷4)	\$ 11,98	\$ 14,73	\$ 12,34	\$ 12,34	\$ 11,18	\$ 12,31	\$ 13,26	\$ 14,24
	Wage Equalisation index (4÷2 or 3÷1)	0,41	0,33	0,37	0,36	0,38	0,37	0,36	0,35

#### \*Definitions:

- PPPs stands for Purchasing Power Parities, which reflect the currency units in a giving 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 and ILO's Convention 100 of "equal pay for equal work", applied in a global context.
- 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).
- Note: Slight variations in data in years previously reported are due to adjustments made in the data reported by the U.S. Bureau of Labour Statistics after our reports were issued.

#### 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, 2007 The World Bank, table 1.1
- World Development Indicators database, The World Bank, April 2007 – GNI per capita 2005, Atlas method and PPP
- X International Comparisons of Hourly Compensation Costs for Production Workers in Manufacturing, November 2006. U.S. Department of Labour, Bureau of Labour Statistics
- X Comparative Real Gross Domestic Product per Capita and per Employed Person, Fourteen Countries 1960-2005 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.