## Table-T5 – Living-Wage-Gap and Equalisation analysis (vis-à-vis the U.S.) for all manufacturing workers in PPP terms 1996-2009 (Americas)

The equalisation indices of hourly compensation costs for all manufacturing sector workers (AMWs) (blue & white collar) in Canada, Mexico, Brazil and Argentina, recorded an erosion of real wages and, thus, a widening of their wage gaps vis-à-vis equivalent U.S. workers with respect to 2008.

In observing changes in 2009, always with respect to 2008, all countries in the Americas included in this assessment recorded currency devaluations against the U.S. dollar, averaging 11,9%, with Mexico recording the highest (17,5%) and Canada the lowest (6,6%). Argentina, Brazil and Mexico recorded nominal wage increases in domestic currency, whilst Canada's nominal wages dropped 4,2%. Moreover, PPP costs of living relatively increased in Brazil and Argentina whilst slightly decreased in Mexico. All these factors combined to cause a drop of real wages in U.S. dollars (total hourly compensation costs) for all four countries, averaging 7,6% –vis-à-vis a 4% increase in U.S. wages– and, accordingly, an average drop in their equalisation indices of 11,1%.

- Of the four countries in this assessment, Canada is the only country recording an actual drop in nominal wages domestically. Its PPP cost of living recorded little change, but its currency devaluation and the increase of U.S. wages provoked a drop of 9% in real wages in U.S. dollars and a significant drop of almost 13% in its equalisation index, its worst since data became available.
- Argentina's nominal wages increased by 20,2% in national currency and 14,8% in real PPP terms. Yet, a 15,2% currency devaluation and a 5,5% increase in its PPP cost of living triggered a small drop of real wages in dollar terms and a 7,1% decrease in its equalisation index with U.S. equivalent wages, always relative to 2008.
- In contrast, Brazil has been experiencing a sustained growth of its PPP cost of living since 2004, partially induced by a strong revaluation of the real. Consequently, although in 2009 its currency dropped in value against the dollar, its PPP continued to climb by 8,4% from the previous year. This caused a slight loss in real wages in reals and of 9,5% in U.S. dollars. As a result, its equalisation index dropped 13%.

• Mexico's strong devaluation of the peso against the dollar was enough to offset a 6,5% increase in nominal wages and a slight drop in its PPPs. Thus, its hourly manufacturing rate in U.S. dollars dropped more than 8% in real terms and, accordingly, its equalisation index dropped by almost 12%.

			1996	1998	2000	2002	2004	2005	2006	2007	2008	2009
Benchmark	U.S. Hourly Manufacturing Rate		22,11	23,12	24,63	27,01	28,94	29,74	29,98	31,51	32,23	33,53
Canada	GNI PPPs in country currency* Exchange rate GNI PPPs in US Dollars 2. Equalized PPP populates	\$	1,227 1,3638 0,90 \$	1,223 1,4836 0,82 \$	1,188 1,4855 0,80 \$	1,230 1,570 0,78 \$	1,156 1,3017 0,89 \$	1,167 1,2115 0,96 \$	1,147 1,1340 1,01 \$	1,143 1,0734 1,07 \$	1,204 1,066 1,13 \$	1,284 1,1412 1,13
	<ol> <li>Equalised PPP nominal compensation US \$</li> <li>Actual Real compensation US \$</li> <li>Actual Nominal compensation US \$</li> <li>Compensation Deficit in US \$ (2 minus 4)</li> <li>Wage Equalisation index (4÷2 or 3÷1)</li> </ol>	\$ \$ \$	19,90 \$ 21,13 \$ 19,01 \$ 0,89 \$ 0,96	19,06 \$         21,93 \$         18,08 \$         0,98 \$         0,95	19,70 \$ 23,36 \$ 18,68 \$ 1,02 \$ 0,95	21,16 \$ 23,47 \$ 18,39 \$ 2,77 \$ 0,87	25,71 \$ 27,18 \$ 24,14 \$ 1,57 \$ 0,94	28,64 \$ 27,84 \$ 26,81 \$ 1,83 \$ 0,94	30,33 \$ 28,88 \$ 29,21 \$ 1,12 \$ 0,96	33,56 \$ 29,97 \$ 31,92 \$ 1,64 \$ 0,95	36,40 \$ 28,95 \$ 32,70 \$ 3,70 \$ 0,90	37,73 26,30 29,60 8,13 0,78
Argentina	<ul> <li>GNI PPPs in country currency*</li> <li>Exchange rate</li> <li>GNI PPPs in US Dollars</li> <li>2. Equalised PPP nominal compensation US \$</li> <li>3. Actual Real compensation US \$</li> <li>4. Actual Nominal compensation US \$</li> <li>Compensation Deficit in US \$ (2 minus 4)</li> <li>Wage Equalisation index (4÷2 or 3÷1)</li> </ul>	\$ \$ \$ \$	0,950 0,997 0,95 \$ <b>21,07 \$</b> <b>7,68 \$</b> <b>7,32 \$</b> <b>13,75 \$</b>	0,872 0,995 0,88 \$ <b>20,26 \$</b> <b>8,98 \$</b> 7,87 \$ <b>12,39 \$</b> 0,39	0,837 0,995 0,84 \$ <b>20,71 \$</b> <b>9,57 \$</b> <b>8,05 \$</b> <b>12,66 \$</b> 0,39	1,688 3,063 0,55 \$ 14,89 \$ 5,41 \$ 2,98 \$ 11,91 \$ 0,20	1,148 2,9233 0,39 \$ 11,36 \$ 11,39 \$ 4,47 \$ 6,89 \$ 0,39	1,240 2,9037 0,43 \$ <b>12,71 \$</b> <b>12,78 \$</b> <b>5,46 \$</b> <b>7,25 \$</b> 0,43	1,345 3,0543 0,44 \$ 13,20 \$ 14,92 \$ 6,57 \$ 6,63 \$ 0,50	1,434 3,0956 0,46 \$ 14,60 \$ 17,20 \$ 7,97 \$ 6,63 \$ 0,55	1,603 3,1442 0,51 \$ 16,44 \$ 19,51 \$ 9,95 \$ 6,49 \$ 0,61	1,995 3,7101 0,54 <b>18,03</b> <b>18,86</b> <b>10,14</b> <b>7,89</b> 0,56

			1996	1998	2000	2002	2004	2005	2006	2007	2008	2009
Benchmark	U.S. Hourly Manufacturing Rate		22,11	23,12	24,63	27,01	28,94	29,74	29,98	31,51	32,23	33,53
Brazil	<ul> <li>GNI PPPs in country currency*</li> <li>Exchange rate</li> <li>GNI PPPs in US Dollars</li> <li>2. Equalised PPP nominal compensation US \$</li> <li>3. Actual Real compensation US \$</li> <li>4. Actual Nominal compensation US \$</li> <li>Compensation Deficit in US \$ (2 minus 4)</li> <li>Wage Equalisation index (4÷2 or 3÷1)</li> </ul>	\$ \$ \$ \$ \$	0,708 1,0051 0,70 \$ <b>15,58 \$</b> <b>10,20 \$</b> <b>7,19 \$</b> <b>8,39 \$</b> <b>0,46</b>	0,868 1,1605 0,75 \$ <b>17,30 \$</b> <b>9,08 \$</b> <b>6,79 \$</b> <b>10,51 \$</b> <b>0,39</b>	1,030 1,821 0,57 \$ <b>13,94 \$</b> 7,74 \$ 4,38 \$ <b>9,56 \$</b> 0,31	1,253 2,9213 0,43 \$ 11,59 \$ 7,23 \$ 3,10 \$ 8,49 \$ 0,27	1,237 2,9251 0,42 \$ <b>12,23 \$</b> 9,08 \$ 3,84 \$ 8,39 \$ 0,31	1,166 2,4344 0,48 \$ 14,24 \$ 10,55 \$ 5,05 \$ 9,19 \$ 0,35	1,185 2,1753 0,54 \$ 16,33 \$ 11,05 \$ 6,02 \$ 10,31 \$ 0,37	1,243 1,9471 0,64 \$ <b>20,12 \$</b> <b>11,20 \$</b> <b>7,15 \$</b> <b>12,97 \$</b> <b>0,36</b>	1,350 1,8338 0,74 \$ 23,73 \$ 11,52 \$ 8,48 \$ 15,25 \$ 0,36	1,595 1,9994 0,80 <b>26,75</b> <b>10,43</b> <b>8,32</b> <b>18,43</b> 0,31
Mexico	<ul> <li>GNI PPPs in country currency*</li> <li>Exchange rate</li> <li>GNI PPPs in US Dollars</li> <li>2. Equalised PPP nominal compensation US \$</li> <li>3. Actual Real compensation US \$</li> <li>4. Actual Nominal compensation US \$</li> <li>Compensation Deficit in US \$ (2 minus 4)</li> <li>Wage Equalisation index (4÷2 or 3÷1)</li> </ul>	\$ \$ \$ <b>\$</b>	3,999 7,600 0,53 \$ <b>11,64 \$</b> <b>5,49 \$</b> <b>2,89 \$</b> <b>8,75 \$</b> <b>0,25</b>	4,671 9,152 0,51 \$ <b>11,80 \$</b> 6,66 \$ 3,40 \$ 8,40 \$ 0,29	5,799 9,459 0,61 \$ <b>15,10 \$</b> 7,29 \$ 4,47 \$ <b>10,63 \$</b> 0,30	6,185 9,663 0,64 \$ 17,29 \$ 8,33 \$ 5,33 \$ 11,96 \$ 0,31	7,287 11,29 0,65 \$ <b>18,68 \$</b> 7,78 \$ 5,02 \$ <b>13,66 \$</b> 0,27	7,108 10,89 0,65 \$ <b>19,41 \$</b> <b>8,21 \$</b> 5,36 \$ <b>14,05 \$</b> 0,28	7,056 10,906 0,65 \$ 19,40 \$ 8,64 \$ 5,59 \$ 13,81 \$ 0,29	7,152 10,928 0,65 \$ <b>20,62 \$</b> <b>8,97 \$</b> <b>5,87 \$</b> <b>14,75 \$</b> <b>0,28</b>	7,408 11,143 0,66 \$ 21,43 \$ 9,21 \$ 6,12 \$ 15,31 \$ 0,29	8,609 13,498 0,64 <b>21,38</b> <b>8,44</b> 5,38 <b>16,00</b> 0,25

## **\*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 manfuacturing 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.

- GNI (Gross National Income) 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.

- GNI 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 GNI PPP, 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 compensation 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

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 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 equalised PPP hourly rate that should be paid for equal work (2).
- Compensation equalisation 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: Variations in previous years are due to revisions made by the sources, including the World Bank's new 2005 PPP benchmarks, which replaced the previous 1993 benchmarks.

According to the World Bank, the 2005 PPPs are the most comprehensive for developing countries since 1993, and reveal that the size of their economies were often overestimated.

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:)

- Database of World Bank's World Development Indicators, 1975-2010, (GNI & GNI PPP, Atlas method)

X Hourly Compensation Costs for Production Workers in Manufacturing (34 Country Tables), updated on March 2011. U.S. Dept. of Labour, Bureau of Labour Statistics.

- Global Purchasing Power Parities and Real Expenditures. 2005 International Comparison Program. World Bank 2008.

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.