**DIFFERENCE CEPAL AND IMF DATA – STYLIZED FACTS**

Brazil

**Period:** 1983Q1 – 2016Q1

*Gross Inflows*

**FDI:** We observe moderate differences for 1983q1 – 1986q4 between +US$15.9 Million and US$-120.8 Million and with an average difference of -26.6 Million, indicating that the IMF data reports higher numbers on average. Then in the period that follows from 1987q1 – 1998q4 the differences are very small [between +0.9 and -1.4] but there is one outlier occurring in 1996q1. From 1999q1 to 2009q4 we observe moderate to very big differences emerging [between +195.0 and – 5740.4] and from 2010q1 to 2016q1 the differences are zero. The average overall is -185.8 meaning that over the sample IMF data seems to be 185.8 Million higher than CEPAL data.

**Portfolio Investment:** From 1983q1 – 2016q1 we observe sporadically any differences between CEPAL and IMF data. 1988q4 = -673.2, 1994q2 = -5613, 1994q3 = -790, 1995q1 = -298 Million US$. 1995q3 = -212. The sporadic big differences are all negative numbers indicating again that IMF data is bigger than CEPAL data.

**Other Investment:** With other investment the difference is never zero during the sample 1983q1 – 2016q1 and always moderate to very big [15183.3 and -10034.7]. The nominal average is -349.1 and the absolute average is 1274.1. The negative nominal number indicates that IMF data is bigger than CEPAL data.

**Total Gross Inflows:** Due to the fact that other investment data from CEPAL and IMF always differ there is a substantial difference in the total gross inflow data of CEPAL and IMF.

*Gross Outflows*

**FDI:** We observe moderate differences for 1983q1 – 1998q4 and two outliers of +40.3 in 1990q1 and 1352.0 in 1996q1. Interestingly the difference between the gross outflow entry of FDI 1352.0 in 1996q1, is exactly the opposite value of the difference observed in the same quarter for gross inflows of FDI -1352.0. This means that CEPAL registers that in this period foreign investors sold 1352 of their foreign assets while the IMF does not register anything in this period. On its turn, the IMF seems to register the 1352 as the amount of domestic assets that foreign investors buy.

From 1999q1 to 2009q4 we observe moderate to very big differences emerging [between +5740.4 and -212.0] and we observe the same phenomenon happening that we observed in 1996Q1. The differences for gross outflows and gross inflows of FDI have exactly the opposite values. Hence, during this period CEPAL and IMF data treat a certain product exactly in an opposite way.

**Portfolio Investment:** The gross outflows of portfolio investment are basically the same throughout the whole sample period. Only in the quarters 1990q1 2006q3 2006q4 2016q1 there are substantial differences.

**Other Investment:** From 1983q1 – 1992q4 the differences are moderate to large ranging between 1722.7 and -418.3. Then during 1993q1 – 1998q4 the differences are zero. Finally, from 1999q1 to 2016q1 the differences are moderate to large again ranging from 6390.9 and -271.5 with an average of 529.5.

Chile

**Period:** CEPAL data starts from 1993Q1 – 2016Q1, IMF data from 1991Q1 – 2015q4.

*Gross Inflows*

**FDI:** From 1993q1 – 1995q4 CEPAL and IMF are the same. Then from 1996q1 – 2000q4 we see moderate to large differences between 4481.1 and -4143.8 with an average of -30.7 indicating that IMF data of inflows of FDI tends to be smaller than IMF data. From 2001q1 – 2002q4 differences are zero again. In the period 2003q1 – 2012q4 differences are modest to big again with an average difference of +109.5 implying that CEPAL data of inflows of portfolio investment tends to be larger than IMF data. Finally, from 2013q1 to 2015q4 the differences are zero.

**Portfolio Investment:** From 1993q1 – 1995q4 CEPAL and IMF are the same. Then from 1996q1 – 2000q4 we see moderate to large differences between 973.4 and -1009.1 with an average of +12.8 indicating that CEPAL data of inflows of portfolio investment tends to be larger than IMF data. From 2001q1 to 2015q4 the differences tend to be zero and the difference is on average -0.8. There are only differences noticed in 2007q1, 2007q2, 2007q4, 2012q1, 2012q2, 2012q3 and 2012q4.

**Other Investment:** From 1993q1 – 1995q4 CEPAL and IMF are the same. Then from 1996Q2 2014q4 moderate to big differences emerge between +2951.0 and -4930.1 and an average of -1006.4, implying that IMF data is bigger than CEPAL data. The last 4 quarters, 2015Q1 – 2015q4, we observe zero difference.

**Total Gross Inflows:** From 1993q1 – 1995q4 CEPAL and IMF are the same. From 1996q1 to 2014q4 the differences or moderate to big with an average difference of -954.1. The last 4 quarters, 2015Q1 – 2015q4, we observe zero difference.

*Gross Outflows*

**FDI:** Just as for gross inflows, from 1993q1 – 1995q4 CEPAL and IMF are the same. Then from 1996q1 – 2000q4 we see moderate to large differences between 807.8 and -897.6 with an average of -23.8 indicating that CEPAL data of outflows of FDI tends to be bigger (more negative) than IMF data. From 2001q1 – 2002q4 differences are zero again. In the period 2003q1 to 2008q4 differences are moderate to very large with an average difference of -169.4. From 2009q1 to 2015q4 differences are zero.

**Portfolio Investment:** Just as for gross inflows, from 1993q1 – 1995q4 CEPAL and IMF are the same. Then from 1996q1 – 2000q4 we see moderate to large differences between 3847.7and -2436.4 with an average of -62.2 indicating that CEPAL data of outflows of portfolio investment tends to be bigger (more negative) than IMF data. From 2001q1 – 2015q4 differences are zero again with only outliers in the four quarters of 2012.

**Other Investment:** Just as for gross inflows, from 1993q1 – 1995q4 CEPAL and IMF are the same. Then from 1996q1 – 2000q4 we see moderate to large differences between 1653.2 and -2003.3 with an average of -23.6 indicating that CEPAL data of outflows of other investment tends to be bigger (more negative) than IMF data. From 2001q1 – 2002q4 differences are zero again. In the period 2003q1 to 2015q4 differences are moderate to very large with an average difference of 1343.6 indicating that CEPAL data of gross outflows of other investment tend to be less negative (smaller outflows) than IMF data.

**Total Gross Inflows:** Just as for gross inflows, from 1993q1 – 1995q4 CEPAL and IMF are the same. Then from 1996q1 – 2000q4 we see moderate to large differences with an average of -109.9 indicating that CEPAL data of outflows of other investment tends to be bigger (more negative) than IMF data. From 2001q1 – 2002q4 differences are zero again. In the period 2003q1 to 2015q4 differences are moderate to very large with an average difference of 1259.0 indicating that CEPAL data of gross outflows of other investment tend to be less negative (smaller outflows) than IMF data.

Colombia

**Period:** CEPAL data starts from 1993Q1 – 2016Q1, IMF data from 1996Q1 – 2016q1.

IMF data does not start earlier than 1996Q1, therefore the comparison starts at 1996Q1.

*Gross Inflows*

**FDI:** From 1996q1 – 1999q4 we see moderate to large differences between 9730.3 and -192.1 with an average of 2605.2 indicating that CEPAL data of inflows of FDI tends to be larger than IMF data. From 2000q1 – 2004q3 differences are zero. In the period 2004q4 – 2009q4 differences are modest again with an average difference of -41.9 implying that CEPAL data of inflows of portfolio investment tends to be smaller than IMF data for this period. Finally, from 2010q1 to 2016q1 the differences are zero again.

**Portfolio Investment:** From 1996q1 – 2004q1 we see moderate to large differences between 2995.7 and -1162.4 with an average of +329.5 indicating that CEPAL data of inflows of portfolio investment tends to be larger than IMF data during this period. From 2004q2 to 2016q1 the differences are zero.

**Other Investment:** only in the period 2010q1 – 2011q3 the differences are zero and thereafter they are substantial, ranging from -1680.4 to +3307.0 with an average of +49.07 indicating that CEPAL data of inflows of other investment tends to be larger than IMF data during this period.

**Total Gross Inflows:** only in the period 2010q1 – 2011q3 the differences are zero and thereafter they are substantial, ranging from -1359.3 to +13594.9 with an average of +690.7 indicating that CEPAL data tends to be larger than IMF data during this period.

*Gross Outflows*

**FDI:** From 1996q1 – 1999q4 we see moderate to large differences between 428.3 and -4660.1 with an average of -569.0 indicating that CEPAL data of outflows of FDI tends to be larger than IMF data (note that outflows are denoted as a negative number here, so the more negative the larger the outflows). From 2000q1 – 2004q3 differences are zero. In the period 2004q4 – 2009q4 differences are modest again with an average difference of 70.2 implying that CEPAL data of outflows of FDI tend to be smaller than IMF data for this period. Finally, from 2010q1 to 2016q1 the differences are zero again.

**Portfolio Investment:** From 1996q1 – 2004q1 we see moderate to large differences between 1932.7 and -3408.1 with an average of -834.6 indicating that CEPAL data of outflows of portfolio investment tend to be larger than IMF data during this period. From 2004q2 to 2016q1 the differences are zero (except for 2009q2 and 2009q3 where a difference is observed of respectively +100 and +50.

**Other Investment:** during the whole period 1996q1 – 2016q1 the data differs, ranging between a difference of 1712.3 and -2427.9 and an average difference of 1.2 (on average the differences tend to cancel each other out. The absolute average for example is 234.1.

**Total Gross Inflows:** during the whole period 1996q1 – 2016q1 the data differs, ranging between a difference of 1380.5 and -5710.5 and an average difference of -259.3 implying that total outflows from the CEPAL database tend to be larger than from the IMF database.

Mexico

**Period:** CEPAL data starts from 1983Q1 – 2016Q1, IMF data from 1983Q1 – 2016q1.

*Gross Inflows*

**FDI:** For gross inflows in FDI the differences between CEPAL and IMF data is basically zero throughout the whole sample period. There are some small differences at times, but they appear more to be rounding differences. The range of the differences is -1.1 to +1.8, and an average difference of 0.0 over the whole period.

**Portfolio Investment:** From 1983q1 – 1997q4 we see small to moderate to differences between 365.0 and -2556.7 with an average of -37.9 indicating that CEPAL data of inflows of portfolio investment tends to be smaller than IMF data during this period. From 1998q1 to 2016q1 the differences are zero.

**Other Investment:** From 1983q1 – 1997q4 we see small to moderate to differences between 4371.0 and -853.7 with an average of 41.4 indicating that CEPAL data of inflows of other investment tends to be larger than IMF data during this period. From 1998q1 to 2016q1 the differences are zero.

**Total Gross Inflows:** From 1983q1 – 1997q4 we see small to moderate to differences between 1814.5 and -806.0 with an average of 3.5 indicating that CEPAL data of inflows of other investment tends to be slightly larger than IMF data during this period. From 1998q1 to 2016q1 the differences are zero.

*Gross Outflows*

**FDI:** CEPAL and IMF data are equal for the whole sample period.

**Portfolio Investment:** From 1983q1 – 1997q4 we see small to large differences between 7097.0 and -2200.8 with an average of 170.4. From 1998q1 to 2007q4 the differences are zero. However, from 2008q1 to 2016q1 we see small to large differences again between 7921.1 and -1450.5.

**Other Investment:** From 1983q1 – 1997q4 we see small to large differences between 3982.7 and -7097.2 with an average of -161.4. From 1998q1 to 2016q1 the differences are zero.

What is remarkable is that, from 1983q1 to1994q1, we can see that the value of the difference in portfolio investment is actually the opposite of the difference in other investment. Since the CEPAL entry is zero in the beginning for portfolio investment assets and not for IMF data, we can see that the IMF registers some sort of product as an portfolio outflow asset while CEPAL records it as another investment asset.

**Total Gross Outflows:** From 1983q1 – 1997q4 we saw that the differences in gross outflows of FDI are zero and the difference of gross outflows of portfolio and other investment tend to cancel each other out. Therefore, the differences are basically zero in the period 1983q1 – 1997q4. From 1995q1 – 1997q4 the differences are modest, ranging from 1781.9 to -1743.6 and an average of 45.5.

Peru

**Period:** CEPAL data starts from 1993Q1 – 2016Q1, IMF data from 1993Q1 – 2016q1.

*Gross Inflows*

**FDI:** For gross inflows of FDI the differences between CEPAL and IMF data is zero throughout the whole sample period.

**Portfolio Investment:** For gross inflows of portfolio investment the differences between CEPAL and IMF data is zero throughout the whole sample period. Remarkable is that only in 1997q1 a difference emerges of -4873.0.

**Other Investment:** From 1993q1 – 2016q1 we see small to large differences between 6117.0 and -1188.8 with an average of 18.8 indicating that CEPAL data of inflows of other investment tends to be larger than IMF data during this period.

**Total Gross Inflows:** Since other investment is the only type that deviates, the differences in total gross inflows are exactly the same as observed for other investment 🡺 From 1993q1 – 2016q1 we see small to large differences between 6117.0 and -1188.8 with an average of 18.8 indicating that CEPAL data of inflows for total gross inflows tends to be larger than IMF data during this period.

*Gross Outflows*

**FDI:** CEPAL and IMF data are equal for the whole sample period.

**Portfolio Investment:** CEPAL and IMF data are equal for the whole sample period.

**Other Investment:** CEPAL and IMF data are equal for the whole sample period.

**Total Gross Outflows:** CEPAL and IMF data are equal for the whole sample period.