

## Income Distribution and the 2008-2012 Economic Crisis: The Latin American Experience

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**Abstract.** This paper analyses the financial and economic crises that had a differentiated impact in the Latin-American region, depending on the ability of some countries to keep up an aggregate demand -i.e., through redistribution devices like the degree of integration held within the foreign financial sector. Based on a sample of regional economies, and working over a period spanning from 2000 to 2013, we found that countries with a relatively better income distribution and domestic financial systems connected with credit programs supporting consumption and investment, had had a better economic performance than those countries with a strong linkage to the international financial system, given that the crisis was ignited at the banking system and accelerated by the same mechanism over-spreading negative shock effects on their capacity to offset them and, in doing so, try an economic recovery. Finally, the authors raise some hints to devise correct policy changes to deal in the still aftermath of the crises in Latin America from a post Keynesian perspective.

**Keywords.** Income distribution, Gini coefficient, Financial deepening, Market capitalization, Re-industrialization risks, Re-industrialization projects.

**JEL.** D12, O12, Q28, Q57.

### 1. Introduction

In a context of global financial crisis, such as the one occurred in 2008-2009, a strong integration into the global financial system is a source of infection for the economies of different countries.

Some of the factors that may mitigate the effects of this contagion are, on the one hand, the reduction of inequality that can boost growth by raising aggregate demand and, on the other hand, to have an internal system that offers financial services with affordable rates of interest in ways that strengthen aggregate credit through investment and consumption demand. By contrast, a financial system that allocates credit to disproportionately high interest rates generates a negative income redistribution and, eventually, will reduce aggregate demand.

### 2. Income Distribution in Latin America (2000-2013)

In a sample of Latin American economies (see Table 1), the reduction of income inequality is clear, measured through the Gini Index. The country with the biggest breakthrough in the fight against inequality was Bolivia, who drove down 13 points between 2000 and 2009, to continue with a further decline of 4 points in

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2011. Then come Ecuador and Brazil, with a reduction in inequality by 6 points during the period 2000 to 2009. However, Brazil continues to have greater inequality within the countries analyzed. For its part, Colombia slightly reduced its inequality only by one point, while Venezuela maintains the lowest values of the Gini index among the countries selected for the study sample. (See Table 1).

**Table 1.** GINI Index

Year/Country	Bolivia	Brazil	Chile	Colombia	Ecuador	Mexico	Venezuela
2000	0.64	n.a.	0.564	n.a.	0.559	0.542	0.468
2003	n.a.	0.621	0.552	0.548	n.a.	n.a.	n.a.
2006	n.a.	0.605	0.522	n.a.	0.527	0.506	0.447
2009	0.50	0.576	0.524	0.553	0.5	n.a.	0.416
2012	n.a.	0.567	n.a.	0.536	n.a.	0.492	0.405
2013	n.a.	0.553	0.509	0.536	0.477	n.a.	0.407

**Notes.** 1. n.a.= not available;  
Source: CEPAL

### 3. Financial System

#### 3.1. Integration into the global financial system (2000-2012)

Using the Market capitalization of listed companies (% of GDP)<sup>1</sup>, as a degree of integration indicator into the global financial system, it is observed that participation in the stock market has tended to grow in the national economies under scrutiny. Chile, for example, is the country with the largest capitalization during the period. Brazil is the second country with the largest market capitalization, although it had a significant reduction in 2012. Colombia's capitalization sevenfold from 2000 to 2012, increased from 9.6% to 70.8% of GDP, and Mexico is more than double that figure in that period; for 2012 it came up to 44.2%.

The more cautious countries, in terms of stock market capitalization, are Bolivia, Ecuador and Venezuela; Bolivia capitalization decreased 20.7% to 16.4% in 2000-2012, while Ecuador and Venezuela are the countries with the lowest level of capitalization, 7.0% and 6.6% respectively, for the past year. (See Table 2).

**Table 2.** Market capitalization of listed countries (% of GDP)

Year/Country	Bolivia	Brazil	Chile	Colombia	Ecuador	Mexico	Venezuela
2000	20.74	35.08	76.14	9.57	3.84	18.31	6.94
2003	15.86	42.46	110.86	15.06	6.64	17.18	4.57
2006	19.41	65.30	112.86	34.53	8.63	36.03	4.50
2009	16.10	72.05	121.56	57.01	6.79	38.04	2.69
2012	16.44	54.69	117.68	70.78	7.03	44.25	6.64

**Source:** World Bank

#### 3.2. National Financial Sector

Using bank credit as an indicator of a share of GDP, and Interest rate spread (IRS) for the behavior of the financial sector in each country, Chile is the country

<sup>1</sup> Market capitalization (also known as market value) is the share price times the number of shares outstanding. Listed domestic companies are the domestically incorporated companies listed on the country's stock exchanges at the end of the year. Listed companies does not include investment companies, mutual funds, or other collective investment vehicles.

with greater allocation of domestic credit as a percentage of GDP, while Brazil is the country with the greatest differential in interest rate charged to users of the banking system. Venezuela and Mexico are the countries with the lowest differential in the interest rate. (See Table 3).

The granting of domestic credit has increased from 2006 to 2012 in the sampled countries. Mexico, for example, has maintained a steady growth of bank credit granted, reaching 46.7 as a fraction of GDP in 2012. On the other hand, Bolivia has reduced the proportion of loans. Ecuador has the lowest proportion of loans with respect to its GDP for 2012.

**Table 3.** Interest rate spread and domestic credit (percentage of GDP)

Year	2000		2003		2006		2009		2012	
	IRS	Credit as % of GDP								
Bolivia	23.6	62.0	6.3	58.1	7.9	57.5	8.9	49.5	9.5	48.7
Brazil	39.6	71.9	45.1	74.0	36.9	86.6	35.4	93.1	28.7	110.8
Chile	5.6	78.1	3.4	83.5	2.9	78.7	5.2	105.7	4.3	112.6
Colombia	6.6	30.4	7.4	40.7	6.6	51.7	6.9	62.0	7.2	69.4
Ecuador	8.3	30.6	8.0	14.4	5.6	17.5	n.a.	17.4	n.a.	29.2
Mexico	8.7	29.0	3.9	32.6	4.2	34.3	5.1	43.1	3.6	46.7
Venezuela	8.9	14.9	8.0	10.6	5.2	18.4	3.5	25.9	1.9	48.3

Notes. 1. n.a.= not available; IRS= Interest rate spreads.

Source: World Bank

#### 4. Results obtained

Taking into consideration Table 1 and the overall macroeconomic performance shown in Table 4, by including Gini coefficient measured for the degree of inequality in income distribution,<sup>2</sup> which must be considered as an additional endogenous factor, income distribution is good for growth but subjected to the condition that the country in point has a robust banking system prone to fulfill sound intermediation financial functions.

The way that inequality reduction influences growth is through the enhancement of aggregate demand and, in doing so, it helps to isolate economies away from financial and economic crises. Obviously, in the domestic credit, as more loanable funds are canalized into the economy, the bigger economic growth is expected, whereas the lower the Interest rate spread, the greater its impact on growth will be.

The above results are shown in Table 4. The differences in growth experienced by the economies in the sample hinge on how well they manage income distribution to generate the right incentives among their economic agents, likewise, to induce the banking credit mostly into agricultural and industry activities, but also of the degree of financial integration they hold when the crash arose.

<sup>2</sup> Some authors like Dani Rodrik (1994) have been able to explain that much of the growth rate in per capita income –between 53 and 67 percent, as opposed to 48 percent for the World Bank estimated during the period 1960-1993-, including also a Gini coefficient, measure for the degree of inequality in land distribution as a proxy for wealth distribution.

**Table 4.** *Macroeconomic Performance 2008-2012*

Country	Reducing Inequality	Integration into the global financial system	Domestic Credit	Average GDP Growth Rate (2008-2013)
Bolivia	High	Very Low	High	5.13
Brazil	High	Average	High	3.11
Chile	Low	High	Average	3.89
Colombia	Low	Low	High	4.08
Ecuador	High	Low	Low	4.70
Mexico	Average	High	Average	1.82
Venezuela	High	Low	Low	1.96

Source: *World Bank*

## 5. Economic policy

According to the Gini coefficient, the more unequal countries -except Colombia-have tended to reduce inequality after the 2008 financial crisis. This has been confirmed by Ostry et al. (2014) in his work for the IMF, which also added that countries with lower levels of inequality have a faster and more durable growth at a given level of redistribution, and that this redistribution, in general, has had a positive impact on economic growth.

Meanwhile, OECD (2012) states that three quarters of the reduction of economic inequality in Latin America is through transfers, the rest from taxes to the families. After taxes and transfers, as measured by the Gini index, income inequality is reduced by about 25% at the end of the 2000s (OECD, 2012); the most unequal countries tend to better redistribute. There is talk of pensions, unemployment insurance, child benefits, personal income taxes tending to be progressive, but consumption taxes and to property are the main tax entrants to the states. Some reforms on taxes and transfers have reduced inequality and increased the GDP per capita.

Meanwhile, other authors like Benabou (2000), Saint-Paul & Vertier (1993) suggest that progressive taxes have to be channeled into public investment, social benefits (education, health), or for the removal of market imperfections, which will improve the income distribution, and not only that, be beneficial for social development and economic growth.

## 6. Conclusion

A better income distribution by mean of taxes and targeted economic support, besides being beneficial for growth, it implies an improvement in the population's quality of life. The economic policy of each government should have this objective within their targets. On the other hand, a domestic financial system that can provide large loans, coupled with low differential interest rates, is a necessary condition for growth and proper functioning of the economy.

### References

- Benabou, R., (2000). Unequal societies: Income distribution and the social contract, *American Economic Review*, 90(1), 96–129. doi. [10.1257/aer.90.1.96](https://doi.org/10.1257/aer.90.1.96)
- Ostry, J.D., Berg, A., & Tsangarides, G.G. (2014). Redistribution, inequality, and growth. *IMF Working Paper*, No. 14-2.
- OECD, (2012) Income inequality and growth: The role of taxes and transfers., *OECD Economics Department Policy Notes*, No. 9. January 2012.
- Rodrik, D. (1994). King Kong meets Godzilla: The World Bank and “The East-Asian Miracle”. in Albert Fishlow et al., *Miracle or Design?: Lessons from the East-Asian Experience*. Washington, D.C.: ODC.
- Saint-Paul, G., & T. Verdier, (1993). Education, democracy and growth. *Journal of Development Economics*, Vol. 42(2), pp. 399–407. doi. [10.1016/0304-3878\(93\)90027-K](https://doi.org/10.1016/0304-3878(93)90027-K)



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