

Pondering the hurdles for the Mexican economy while reading *Capital in the Twenty-First Century*

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Introduction

I do not intend to simply add one more to the many papers so far published on Piketty's *Capital in the Twenty-First Century*. There is no need to add further comment regarding the importance of Piketty's contribution to the actual economic debate. Krugman (2014) states "This is a book that will change both the way we think about society and the way we do economics". However, he also calls attention to the political factors that may render it a version of Palley's *Gattopardo* economics (Palley, 2014)¹: "Sometimes it seems as if a substantial part of our political class is actively working to restore Piketty's patrimonial capitalism. And if you look at the sources of political donations, many of which come from wealthy families, this possibility is a lot less outlandish than it might seem." Krugman considers *Capital* "a call to arms – a call, in particular, for wealth taxes, global if possible, to restrain the growing power of inherited wealth" (Krugman, 2014 op cit). Very well. But may we ask what the arms might be? The arguments from Smith, Marx, Keynes or those from the Washington Consensus? I am afraid Piketty's work is closer to the principles of the Consensus than it may appear at a first reading.

Rather than cover the same ground as other contributors, in this paper I will explore issues relevant to Piketty's *Capital* based on the Mexican case. Mexico is mentioned only once in *Capital*. In Mexico income concentration remains high despite economic reforms that responded to the debt crisis in the early 1980s, including entry into GATT and the implementation of NAFTA. After presenting some ideas about inequality and poverty in economics, and discussing some points of disagreement with Piketty, the paper will refer to topics he does not analyze or does not consider with sufficient detail. These include differential levels of development and the effects of trade liberalization in some Latin American economies on those differentials. This raises issues regarding path convergence both within and between countries, and also the impacts of education and technology. Mexico offers a relevant case to consider the significance of *Capital* because the country fully embraced neoliberal doctrine and did so at an intense pace. The policies implemented from 1985, induced many changes in the sectoral structure of GDP, in the allocation of labour by sectors, and its distribution between the formal and informal economy. These structural elements are not considered in Piketty's *Capital*, nor does he discuss the path of real wages, labour productivity and its intensity. Bringing these issues to the fore is not necessarily to critique Piketty but it is to add to the explanatory context in which his work might be assessed.

Looking back to the debate on inequality and poverty

At least since the end of the Second War World up to the end of the 1970s both inequality and poverty were considered a malady affecting developing countries, a temporary disorder

¹ I would like to add that Palley values Piketty's work, stressing: "The book has already had an enormous positive political impact" and suggesting that criticizing it would help to better understand his arguments (Pally, op cit 2014).

to overcome if adequate policies were implemented. That optimism about the market economy was fuelled by the works of several authors from different and sometimes conflicting perspectives (Arrow Solow, Kuznets, Rostow ...). Experts from other social sciences also contributed to the aim of confronting socialism and preventing newly independent states from leaning too far to the left. So inequality was relegated to a back corner and attention was given to extreme poverty, as a woe of underdevelopment. After the 2008 crisis, it was evident that inequality and poverty and informality were no longer distinctive characteristics of underdevelopment. Almost all multilateral organizations started to study the effects of increasing wealth and income concentration upon the stability of national economies, globalization and neoliberal doctrines. Works focused on wealth concentration and economic policies and analyzing the effects of wealth and income concentration on growth and poverty reduction through the trickle-down effect. One of the most negative effects of inequality, according to the International Monetary Fund, is political since a minority are able to control a disproportionately large share of resources and "... high inequality also has the potential to alter the political process, giving the rich a relatively greater voice than the less homogenous majority. This imbalance of power can produce policies and economic institutions that benefit a few at the expense of broader society. These policies can in turn further skew the income distribution and ossify the political system, leading to even graver political and economic consequences in the long run" (Ramcharan, 2010). The inverse relation between income concentration and growth has been analyzed by scholars and by practically all multilateral institutions. A general conclusion has been that far from being detrimental some inequality of income distribution benefits growth.² So, the topic was not first reintroduced by Piketty, neither did Piketty put it on the agenda of economic debate or link for the first time economic power to political power. As many others have suggested the importance given to *Capital in the Twenty-First Century* can be explained because it analyzes inequality from a neoclassical perspective, and where the proposed solutions are restricted to taxes on hyper salaries and inheritances, in the context of education, technology, trade liberalization and an open door to foreign investments, caveats notwithstanding. Although Piketty criticizes neoclassical economics, he also prescribes its principles as a way to breach the inequality trap (Piketty, 2014 p. 55). His prescriptions and those from the OCDE or FMI are pale compared with those proposed by F.D. Roosevelt (1910) in a speech commemorating the Civil War. Quoting Lincoln (1861) the president laid the foundations of the welfare state as the only way to reduce, or to manage, the conflicting interests between non-organized labour and ever-expanding concentrated capital:

"Labor is prior to, and independent of, capital. Capital is only the fruit of labor, and could never have existed if labor had not first existed. Labor is the superior of capital, and deserves much the higher consideration" (Lincoln, 1861).

While recognizing the rights to own property he affirms, with Lincoln: "Capital has its rights, which are as worthy of protection as any other rights. ... Property is the fruit of labor;" From here Roosevelt explains the need to reduce inequality if the USA wants to preserve the freedom gained with the Civil War. "One of the chief factors in progress is the destruction of special privilege," (Roosevelt, 1910). For the president, the elimination of all privileges was also to achieve practical equality of opportunity for all citizens. Roosevelt's practical equality or *square deal*, did not mean fair play under existing rules but a radical change of them. He

² Krugman has insisted on it in a large number of pieces in the NYT. Stiglitz and Galbraith FMI, (2012) OCDE (2011, 2013 and 2014A) ECLAC (2010). Private think-tanks also added to the debate for instance the New Economic Foundation (NEF).

proposed raising, even at a confiscatory level, taxes on income and undeserved gains and inheritance, since these led to greater inequality. And since he connected the concentration of wealth with politics, he proclaimed:

“Today this task (to guarantee *square equality*) means that our State and National governments should free themselves from the influence and from the sinister control of vested interests... today, large business interests frequently control and corrupt the men and methods of government for their own interests. We must expel these interest groups from politics” (Roosevelt, 1901).

How far behind the republican Lincoln and the democrat Roosevelt, we all are today.

In this context, Piketty adds argument to Arrow’s claim that if income and property are the basis of freedom, its concentration implies an unequal distribution of liberty, and the possibility of exercising it. This obliges one to consider redistribution as an economic as much as a social and political problem. This aim detracts from the neo-classical proposition that redistribution eliminates the incentive to produce. Even accepting that redistribution might slow down the rhythm of economic growth, the moral and ethical arguments in favour of redistribution should not be underestimated. The values of a society are central to the application and success of development and growth policies. What prevents finding a solution to the crisis are arguments against distribution provided, for example, by Lucas: “Of the tendencies that are harmful to sound economics, the most seductive, and in my opinion the most poisonous, is to focus on questions of distribution” (Lucas, 2004).

According to the OECD (2011), inequality has a negative effect on the trajectory of an economy. It unleashes social resentment and instability and encourages protectionism and populist anti-globalization sentiments. If the majority loses and a small group absorbs ever greater segments of the gains, the system loses legitimacy and the economic model loses support. So, equity stops being a social and political end and turns into an instrument to maintain the *status quo*, which seems to be Piketty’s position. Literature on the subject also recognizes the socio-political impact of inequality:

- (a) The economically powerful groups have greater access to the State (they capture it) they collect the gains and induce policies to perpetuate inequality and low income growth (Arrow, 2013; Barro, 1999; Bénabou, 1996).
- (b) Inequality fosters ‘clientelism’ thereby reducing the quality of democracy (World Bank quoted in Murillo, 2008).
- (c) It weakens democratic values by corroding trust and by restricting compensating social mobility (Arrow, 2013; Friedman, 2012).
- (d) It has led to the degradation of the environment (Sachs, 2003).
- (e) It disrupts the social order by allowing poverty to intensify, which then becomes the basis for social movements and for currents of economic and political migration. (Murillo, 2008; Sachs, 2003).

The conclusions drawn from all these contributions suggest that concentration of wealth and poverty is not just a humanitarian problem, but a geo-strategic one. What political and economic problems would derive from the awareness of the end of the American dream and of an egalitarian Europe is not yet clear; but the social stability of the post-World War II

welfare state is fading. The re-emergence of right wing populist parties is a focal point of concern.

Mass inequality, the welfare state and the developing countries

For many, concern with the stratification of poverty and inequality appears to be a relatively new subject in the history of economic thought and politics. It is a problem that fades out and returns according to economic cycles, political concerns and paradigms. Poverty and inequality emerged as a serious concern for the developed world at the time of Indian independence, and later, in the aftermath of the Second World War, with regard to manifest poverty in various countries in Africa and the Caribbean. As Galbraith (1974) notes issues of global stability and a context of confrontation with socialism made it necessary to combat poverty. In the sixties, the concern was expressed through the Rostow *Manifesto*, the proposals for *economic modernization*, the World Bank basic needs programs, Kennedy's Alliance for Progress etc. (Valcárcel, 2007). The purpose of ameliorating inequality between nations and reducing poverty within them was sometimes explicit, but mostly implicit. The concepts of economic and social equality gained worldwide currency, and did so following the consolidation of the welfare state in the developed countries. Industrialization, import substitution and urbanization were taken as essential factors for modernization with the Development State as the leading actor. To consolidate their independence and the nation building process newly independent countries sought to consolidate their national identity. This included tackling inequality in reality or rhetoric. However, countries of the periphery only implemented a devalued version of the welfare state, which not fully integrated into economic and social policies (Mkandawire, 2011). The exceptions in Latina America were Argentina and Uruguay, where a full set of entitlements were implemented.

At the end of the Seventies, strong forces pushed for partial abandonment of the welfare state, the advance of neoliberal ideas and the establishment of elements of supply-side economics, which then sets the main axis of the economy regarding the return on capital. So, the central task of economic management and economic theory was reduced to the containment at all costs of inflations. The non-accelerating inflation rate of unemployment (NAIRU) led to greater labour flexibility and focused on wages as costs, rather than labour as a factor in demand (Laliberté, 2011). The liberal export model aimed mainly at elevating productivity by liberalizing trade, as well as capital and labour markets, reducing taxes and public expenditures, while controlling inflation. It failed to prevent economic crises and did not raising the rate of economic growth. However, in general it did increase inequality and many developing countries sank in the Lost Decade. The relatively short growth spells Latin America has experienced during some years of the 21st Century have done little to restore the gains lost in terms of equality and well-being for the majority of the population (ECLAC 2012).

Liberalization and convergence in the real world

Piketty's analysis is entirely neoclassical. It assumes full employment of factors and remuneration to all factors according to their marginal productivity; although Piketty does also acknowledge that marginal productivity is a problematic concept. According to the argument, economies will tend to converge at a steady state growth rate, which equals the exogenous growth rates of the labour force and labour productivity at full employment. That is, convergence will occur, supposedly at a magic rate of 2%. Piketty suggests that convergence

both internal and external will occur thanks to the full working of the markets induced by liberalizing the economy. The steady state growth rate, diminishing returns to capital and convergence have all previously been disputed by Helpman (2004).

Even acknowledging that total and per capita GDP of some less developed countries (poor countries in Piketty's terminology) has tended to converge with developed ones, it is clear that the process has taken place in groups and in some instances seems to have lost pace or finished all together. International convergence took place at the cost of internal divergence, as in China. It is of little help to draw attention to the fact that inequality in this country is still lower than in the USA, inferring perhaps that it is a limit not to be surpassed (Piketty, 2014 p. 232). According to Piketty, GDP convergence ends when countries reach the technological frontier: "Similarly, once these countries had attained the global technological frontier, it is hardly surprising that they ceased to grow more rapidly than Britain and the United States or that growth rates in all of these wealthy countries more or less equalized" (2014, pp. 98-99). This assertion is contested by several authors, referred to in Helpman, although based on contrasting evidence (2004, chs 4 and 5). For OECD countries, several authors conclude that convergence has occurred since World War II. Similarly, within the European Union, convergence took place before the Treaty of Rome came into force in 1958 and decelerated thereafter (Ben-David, 1993; Olivera et al, 2003). Other authors suggest that convergence goes back to the end of the 19th century and came to a standstill in the 1950s. This finding extends also to countries not part of the EU nor of the European Free Trade Association EFTA (Quah, 1995; Slaughter, 1998; Rodríguez and Rodrik, 1998).

As indicated in table 1, Panels A and B, between 1945 and 1981, the eight largest Latin American economies grew at rates faster than the USA and never before experienced. In general terms, it could be said that convergence manifested only during the post-war period and came to a halt when liberal reforms were implemented. Piketty suggests:

"... historical experience suggests that the principal mechanism for convergence at the international as well as the domestic level is the diffusion of knowledge. In other words, the poor catch up with the rich to the extent that they achieve the same level of technological know-how, skill, and education, not by becoming the property of the wealthy. The diffusion of knowledge is not like manna from heaven: it is often hastened by international openness and trade (autarky does not encourage technological transfer)" (Piketty, digital version, p. 55).

But it is clear that from the early Eighties the liberalization of trade and the dismantling of industrial policies, had other and perhaps more important costs than the reduction in government receipts, including the costs of deindustrialization both of productive capacity and employment (Bertola y Ocampo, 2014; Thorp, 1999).

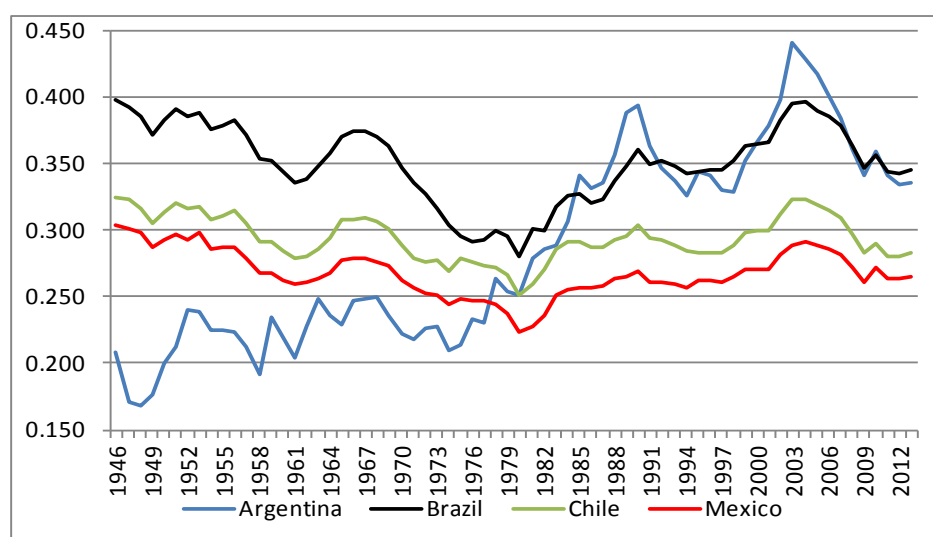
Table 1. Per capita GDP growth rates of selected Latin American Countries and the USA, 1900-2013.

Países	PANEL A				PANEL B			
	Annual Growth rate GDP/C				Annual rate as% of USA growth			
	1900-2013	1900-45	1945-82	1982-13	1900-2013	1900-45	1945-82	1982-13
Argentina	1.4	1.2	1.32	1.41	0.7	0.4	1.1	0.8
Brasil	2.2	1.7	3.35	1.05	1.1	0.6	2.9	0.6
Chile	2.0	1.5	1.36	2.99	1.0	0.6	1.2	1.7
Colombia	1.9	1.5	2.18	1.79	0.9	0.6	1.9	1.0
Mexico	1.7	1.1	2.98	0.58	0.8	0.4	2.5	0.3
Peru	2.0	2.5	2.15	0.82	1.0	0.9	1.8	0.5
Uruguay	1.7	1.6	1.36	1.67	0.8	0.6	1.2	1.0
Venezuela	2.7	4.6	2.21	0.41	1.3	1.8	1.9	0.2
8 L. América	1.7	1.7	1.92	1.29	0.9	0.7	1.6	0.7
EUA	2.0	2.6	1.17	1.76	1.0	1.0	1.0	1.0

Source: Own calculations based on Madisson 2001 and The Conference Board 2014.

Convergence linked to free trade or to liberalization policies has been disputed at length (Rodríguez and Rodrik, 1999; Quah, 1995; Slaughter, 1997 and 2001; Olivera Herrera, 2002; Rodríguez et al, 1999 and 2013; Puyana et al, 2004). The direct relation between free trade and convergence has not been fully established. It seems where economies first grow and then liberalize subsequent convergence is rather an exception than a norm – it is hard to achieve in the neoliberal economic model (Rodrik, 2013). This can be illustrated using Latin America. Consider figure 1, where convergence is measured as the standard deviation of the logarithm of per capita GDP.

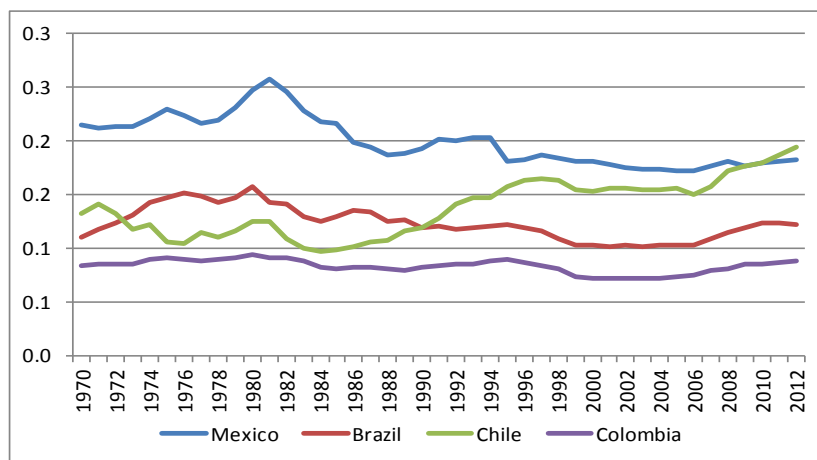
Figure 1. Per capita GDP convergence of selected Latin American countries and the USA, 1946-2013.



Source: As in table 1.

The situation is similar for income per head. From 1970 to 1981, Mexico's income per head was nearer as a % of USA income than subsequently. After 1981 divergence occurred – as it did in Brazil and, to a lesser extent, in Colombia. Chile is the exception.

Figure 2. Convergence between per capita income of some Latin America Countries and the USA, 1970-2012 (in percentages).



Source: Own elaboration bases on WB WDI 2014.

The *divergence* of per capita GDP and per capita income after the liberal reforms of the early eighties invite the question: have Latin American countries, for instance Mexico, reached a technological frontier and is convergence no longer possible?

Is it liberalization?

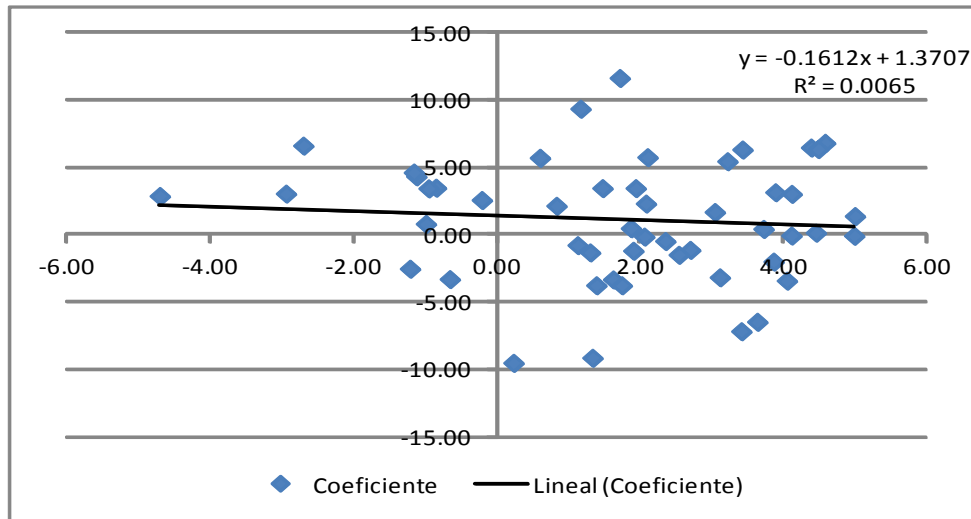
For all countries included in figures 1 and 2, convergence ended after liberal economic reforms and liberalization of trade and capital accounts were in place. None recovered the level reached in the Seventies. The principal sources of convergence for Latin American countries has been gross capital formation, the share of manufactures in GDP; liberalization of trade is negative for Mexico and positive for Chile and in both cases not significant. Convergence factors declined after reforms. The elimination of state intervention in markets, leaving untouched the concentration of assets, production, distribution and human capital, was itself a real manifestation of the political power of big capital. Education has not demonstrated any explanatory value (Puyana and Romero, 2004; Romero 2014). In general terms, the countries with the largest increases in the trade/GDP ratio, Mexico amongst others, were the ones with lower economic growth (Puyana, 2014)³. Fiscal policy, taxation and public expenditure brings to light the political muscle of big economic interests. The income distribution after taxes and fiscal expenditure is practically identical, with a reduction of the Gini index of only a small fraction of a percentage (OCDE, 2014 B). The structure of taxes, in which indirect taxes, especially VAT, are highly prominent demonstrates that income taxes and corporate taxes are relatively low, resulting in regressive taxation.

In Latin America, liberalization measured as the external coefficient of GDP (imports + exports/GDP), does not seem to be strongly related with faster GDP expansion (figure 3 below) and, therefore, neither with convergence. During 1980-2013, the total external coefficient of Mexican GDP expanded from 23 to 64%. In 2013 the exports coefficient was 32.4 and imports 31.7 of total GDP, resulting a deficit which has been constant since 1983.

³ The data and the results from a growth model calculated for Argentina, Brazil, Chile, Colombia and Mexico, covering 1960-2012 discussed in Puyana 2014 are available upon request.

We found that the labour productivity gap between Mexico (and other L.A. countries) and the USA has grown larger since the reforms. So at least in Mexico, but as well in other Latin American Countries, free trade and open borders have not meant that “...the less developed countries have leapt forward in productivity and increased their national incomes. The technological convergence process may be abetted by open borders for trade, but it is fundamentally a process of the diffusion and sharing of knowledge – the public good par excellence – rather than a market mechanism”, (Piketty, 2014, p. 21 digital version).

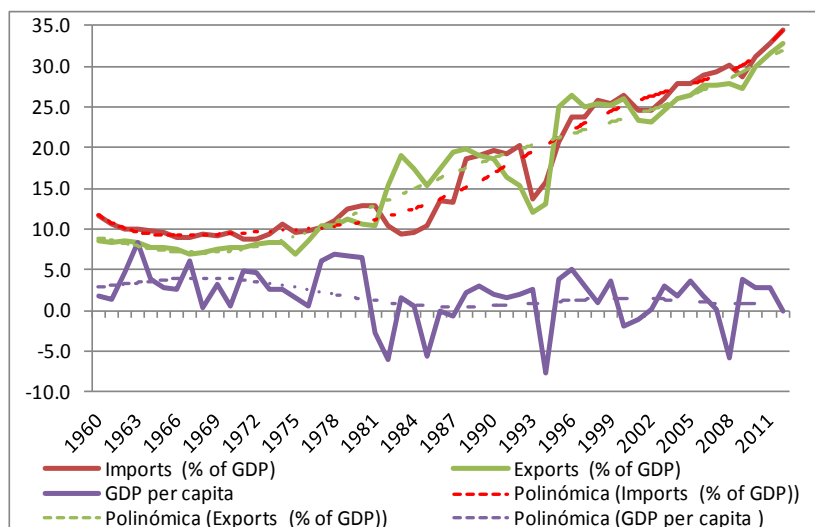
Figure 3. Latin America. External coefficient and GDP growth, 1960-2013.



Source: Own elaboration based on WB WDI 2014

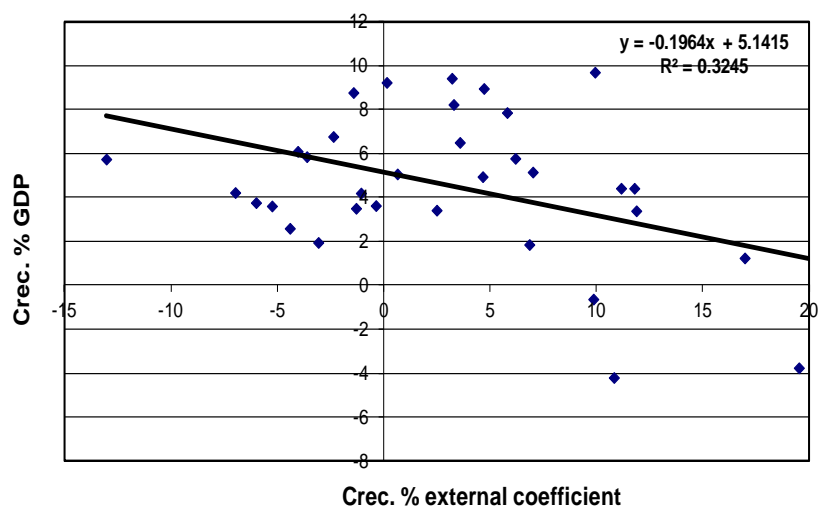
The Latin American data is approximately replicated for Mexico, where the relation is inverse, although not significant. This is also confirmed by the trajectory of imports and exports as a percentage of GDP and contrasting per capita GDP growth. External coefficients have little explanatory significance, but the relation is negative as figures 4 and 5 bear out.

Figure 4. Mexico, GDP, exports*, imports* growth rates 1960-2013.



Source: Own elaboration based on WB WDI 2014

Figure 5. Mexico. Relation between GDP/C- external coefficient, 1962-2012.



Source: Own elaboration based on WB WDI 2014.

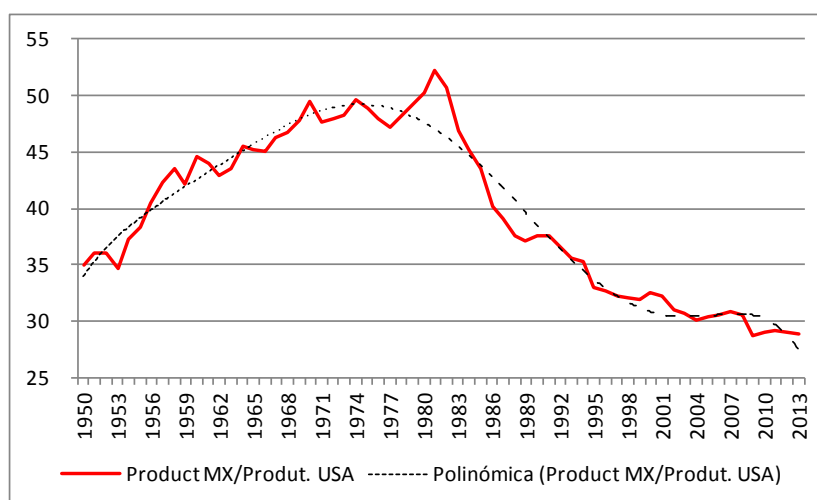
Mexico did expand its exports, mainly manufactured ones, which contributed 85% of total external sales. Total exports grew from 26 to 338 billion constant 2005 dollars that is at an annual average rate of 8.4%.

How does one explain the inverse relation between external coefficient and exports and GDP growth, given that the aim of liberalizing foreign trade and capital and labour markets was to increased productivity (by eliminating the distortions induced by industrialization policies changing the allocation of productive factors in accordance with comparative advantage and resource abundance)? First, an impact noticeable all over Latin America, México included, has been the fall in tradable sectors, manufactures and agriculture as sources of total GDP and employment (Puyana, 2014). In the period 1983-2013 Mexican manufactures contribution to GDP and employment fell from 25% to 15% and from 24 to 10% respectively. For agriculture the contraction started during the import substitution process and the reforms failed to provide a reversal. In 2013 the contribution of agriculture to GDP was 3% and to employment around 14%, suggesting low productivity and low income.

Second, the tradable sectors contribution to GDP and employment has been low and falling and total labour productivity has not increased substantially, vis-à-vis the USA and its major competitors in this market, where Mexico directs almost 80% of its total exports (see figure 6). In general, since around 1983, rather than as a result of increases in productivity (the main driver 1950-1982), the Mexican economy has grown more as a result of increases in employment, the rate of participation of the labour force and because of numbers of hours per worker⁴.

⁴ Mexicans worked in average 30% more hours a year than the USA. Intensification of labour is a way to confront declining real wages

Figure 6. Mexican labour productivity as % of USA productivity, 1950-2013.



Source: As in table 1.

Several reasons help account for this trajectory:

- persistent low productivity in the agriculture sector (accounting for 14% of total employment);
- the movement of labour from agriculture to informal trade and personal services and construction in urban areas (sectors employing contemporary surplus labour);
- the fall of total investment per worker after 1982: in 2010, total investment per worker was 2.5% lower than in 1982 (a record year for private national and public investment based on data going back to 1940).

The fall both in public and private investment per worker in the second period suggests there has been no crowding-out effect. Considering that during 1940-1982 total GDP expanded faster (6%) than total investments, it could be assumed that resources were efficiently used. Labour productivity fell in the post reform period as investment failed to manifest and grew at a lower pace than employment (see table 2). Given these conditions, it is not possible to conclude with Piketty (2014, p. 398) that liberalization induces technological convergence: “The overall conclusion of this study is that a market economy based on private property, if left to itself, contains powerful forces of convergence, associated in particular with the diffusion of knowledge and skills”.

Table 2. Total investments per worker. Total, public, private national and foreign, 1940-2010 (in thousand 2000 dollars).

	GDP	Employt	GDP/L	Total	Private	Private Nal.	FDI	Public Nal	Total Nal.
1940	325.6	5,858	55.57	3.22	1.64	1.37	0.27	1.58	2.95
1982	4,047.1	22,813	177.40	33.78	16.05	15.01	1.04	15.42	30.42
2010	7,453.7	47,138	158.13	33.83	23.19	20.38	2.81	9.29	29.68
Annual Average Rates of Growth in Percentages									
	GDP	Employt	GDP/L	Total	Private	Private Nal.	FDI	Public Nal	Total Nal.
1940-82	5.99	3.26	2.66	5.68	7.00	8.59	18.95	5.76	5.75
1983-2010	2.48	2.73	-0.12	1.58	4.06	5.49	8.54	0.65	2.75

Source: Own estimations based in Presidencia de la República, Informes presidenciales, several years. figures in brackets are negative rates.

A third factor explaining the lack of convergence between Mexico and the USA is the structure of exports. These are heavily concentrated in manufactured products inserted within global value chains and with little domestic value added, relatively low labour intensity per unit of product, and limited technological significance. Total exports in 2012 represented almost 34% of GDP, whilst exports of manufactures comprised 85% of total external sales, they accounted for only 3% of total GDP. Mexican manufactures for exports are linked to global value chains. The country is a cost reducing center and not a centre of innovation and development. Decisions regarding when, where and how quickly to decentralize and where to export to are a controlled matrix. In 2012 foreign owned companies accounted for around 66% of total Mexican exports of manufactures. With small demand for domestic labour and other inputs, manufactures do not generate employment and do not have important linkages with the rest of the economy. As Arndt suggests, based on fragmentation of the productive process, the most technological segments of production moved to developing countries during an import substitution process but moved again to the central matrixes; the more intensive processes are transferred to lower wage countries, as fragmentation has resulted in a de facto *death of distance* (Arndt et al, 2001) enabling, for example, companies to move from the Mexican-USA border area to China, even if their total production is exported to the North American Market..

Mexican foreign trade is an intra-industry trade but also a Ricardian-type trade, since Mexico imports high-tech manufactures and exports low-tech ones for low income markets in the USA. Rather than technological up-grading, Mexico is a consumer of technology not a technology producer, analogous to countries specialized in commodities, which according to Piketty (p. 55) are "... areas without much prospect of future development". Mexican has embraced a second generation import substitution model. The income elasticity of demand for imports is 4.5% making it impossible to have the needed high rates of GDP growth (around 6%) to accommodate in the formal sector the over one million entrants to the labour force. The current account deficit stands at around 1.5% of GDP. With lower growth, let's say 4%, exports should grow steadily at an impossible annual rate of 18 percent over a long period. For Mexico to maintain the actual current account, the long-term growth of the product cannot exceed 1.6%, a rate that creates negative effects upon employment and labour income, as we will see. Other Latin American countries, such as Argentina, Brazil, Colombia, Uruguay, Bolivia, all two-hundred-year-old republics and not the new ones (to which Piketty refers, p. 55), are specializing in exports of commodities, in a 21st Century version of old forms of specialization. We contend that this reversion is a logical and intended effect of liberal reforms and the liberalization of trade. The potential effects of *extractivismo* on income concentration internal and external inequality are not always positive, as many authors have concluded along the years. Latin America followed the Washington consensus by the book, ignoring List's 1885 warning regarding policies to implement development.

To conclude: impacts on the labour market

After reform, Mexican informal employment exploded to more than 61% of total employment, while rural migration fed the services and construction sectors (the major part of the annual increases of the PEA and of employment displaced from manufactures). In 2012, the service sector constituted 69% of total employment. The country has entered an open economy deindustrialization path. This is an effect of depressed aggregate demand and interaction with the international economy (Patnaik, 2003) rather than full employment. In developing

countries, even in the most dynamic emerging countries, full employment has not been and is not now the norm. Mexico and practically all Latin America fully liberalized their economies. The movement of goods and capital is totally free but labour is not and economic international migration is costly. This partial factor liberalization accelerated the mobility of capital and increased the capital/labour mobility ratio. In this context, capital is relatively more scarce, labour more abundant and the relative profitability of capital higher. From 1980 to 2012, the Mexican real minimum wage collapsed and medium wages stagnated. Table 3 presents the index of real minimum and medium wages during 1980-2013. The index of minimum wages in 2012 was 68.3% lower than in 1980. Argentina shows a similar trajectory for the indexes of real minimum and average wages, with the former falling from 100 in 1970, to 53 in 2012 and the latter to 99.

Table 3. Index of minimum and medium real wages, 1980-2013 (Year 2000 = 0)

	Minimum Real wage	Medium Real wages
1980	312	114
1990	145	89
2000	100	100
2010	97	113
2013	99	114

Source: own estimations based on Puyana and Romero (2009) and STSP ENOE several years.

What is really preoccupying is that in Mexico the fall in real wages took place despite improvements in education. In effect, the structure of the labour force by years of education changed radically during 1991-2010; the rates for annual growth of workers with high tertiary education was 6.7% while that of workers with only one year decreased by 1.2%.

Table 4 shows how the salary gap between the L0 to L3 groups and the L5s decreased because the wages for the most educated grew at a lower pace - and not because of any increases in wages for the less educated resulting from increased demand. Better educated workers are being employed in activities which require lower levels of education and training.

Table 4. Structure of Mexican labour force by years of education, 1991-2010.

	1991	1995	2000	2005	2010	G*
L0	3.4	3.6	3.1	2.4	2.2	-2.52%
L1	12.7	13.3	13.9	12.5	12.0	-0.31%
L2	5.5	6.7	8.7	10.8	11.1	3.95%
L3	4.0	4.6	5.6	5.9	6.3	2.47%
L4	2.7	3.2	4.8	8.7	8.9	6.95%
L5	0.1	0.2	0.3	0.5	0.5	7.48%
Total	28.5	31.6	36.3	40.8	41.0	2.04%

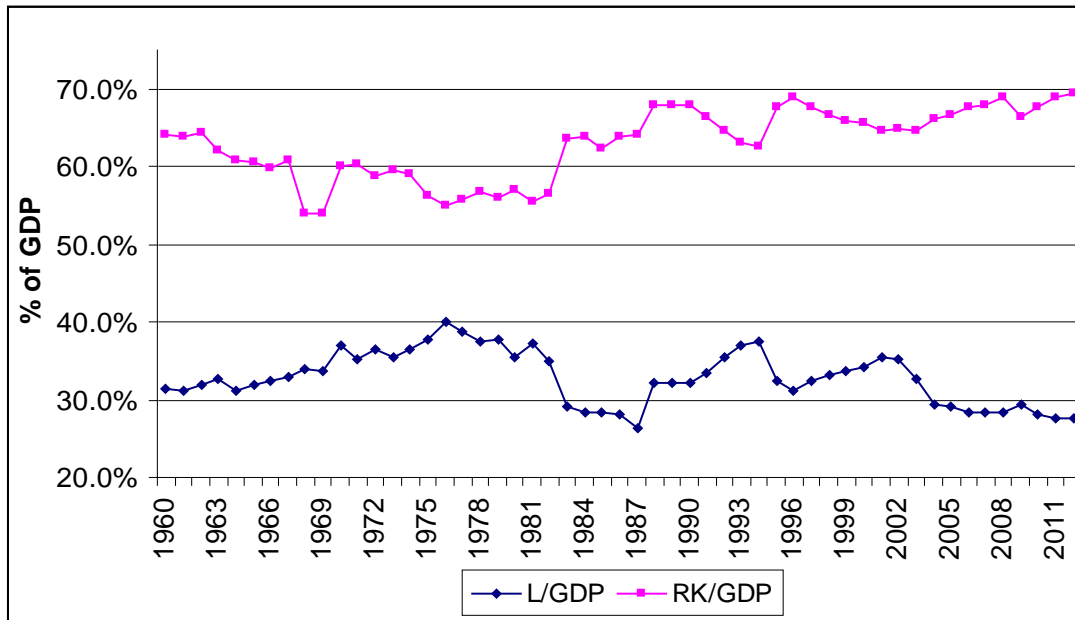
L0: no education; L1: between 1 and 6 years education (Primary); L2: between 7 and 9 years (Secondary) + Technological education; L3: between 10 and 12 years; L4: one or more years university; L5: one or more years of post-graduate education.

As a result of liberalization, fragmentation and the high concentration of production and distribution, salaries in the manufacturing sector have fallen while productivity shows only

small gains. This is due more to the reduction in employment than increases in productivity and in the volume of product. The effect of liberalization has been to reduce costs, mainly labour costs. The combination of liberalization of trade and the revaluation of the peso (and almost all Latin American currencies), has been to maintain stability, suppressing wages. One percent of revaluation of the Mexican peso reduces real wages and consumer prices by about 0.50%. Since 1980, the peso has been protractedly revalued by almost 20%. Between 1994-2003, labour productivity and real wages in manufactures grew at an annual rate of 1% and 0.5% respectively.

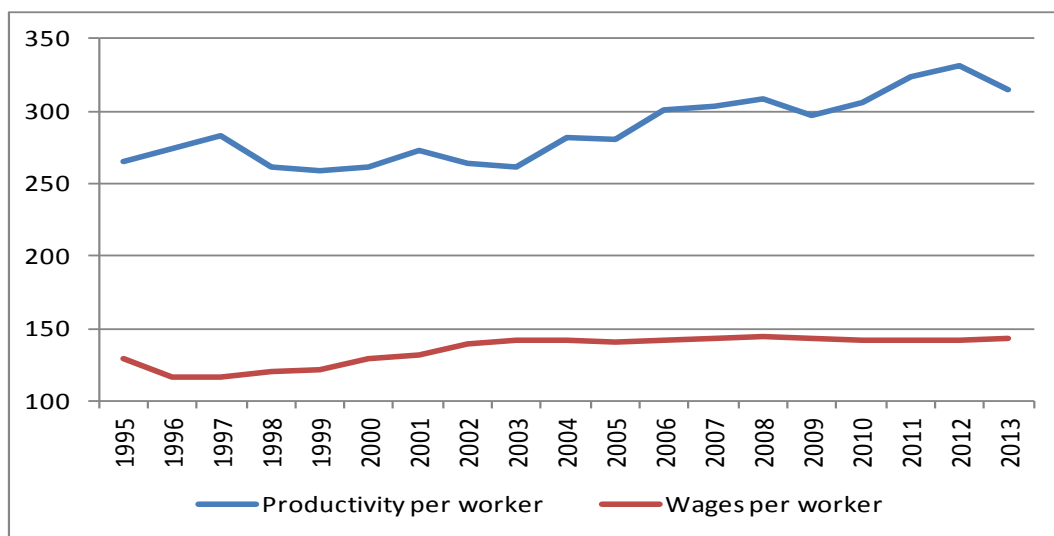
Based on the above exploration of the Mexican case we can now draw some conclusions regarding the evolution of Piketty's inequality $r > g$; which explains why capitalism tends to increase inequality by reducing the share of labour in the functional distribution of income (see figure 7). In the case of Mexico this is linked with the liberalization of trade, capital and labour markets, and the entire set of liberal reforms. We suggest that for developing countries similar to Mexico, free trade and liberal policies may *not* lead to internal and external convergence.

Figure 7. Share of labour and capital in national income, 1960-2012.



The production of manufactures presents a similar path: larger rates of growth of income (g) and lower rates in wages (r). In effect, for the period 1990-2012 the value of $r-g$ was -13.48 , signalling a mayor expansion of g . If comparing: for the period 1995-2013, we found gains in annual productivity, which contrast with declining real annual wages per worker, see figure 8.

Figure 8. Mexico: annual productivity per worker and real annual average wages per worker, 1995-2013 (in thousand pesos 2010).



Source: Secretaría de Trabajo y Previsión Social, Encuesta de empleo y salarios, varios años

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