Chile's outburst of discontent: how the fear-of-the-new transformed a "miracle" into an aborted attempt at catching-up

José Gabriel Palma
University of Cambridge
and USACH

We are all prisoners here of our own device.
"Hotel California"

No un-thought thought allowed![1]
(With apologies to) **Olafur Eliasson**

1.- Introduction

The aim of this post is to analyse the economic background to the sudden outburst of discontent in Chile last October. This social unrest, especially its intensity, took everybody so much by surprise that the day before its start Chile's president triumphantly declared to the Financial Times that the country was an oasis of stability.[2]

Although the roots of such an event are obviously highly complex and surely overdetermined, in the analysis that follows —based on a recent paper (Palma, 2019a)— I challenge the widespread belief (especially outside Chile) that at least in Chile the Latin American neo-liberal economic model has been a success.

Although numbers and theory can only come to life symbiotically, I shall discuss first the former (in an historical perspective).

2.- On "aborted attempts at catching-up".

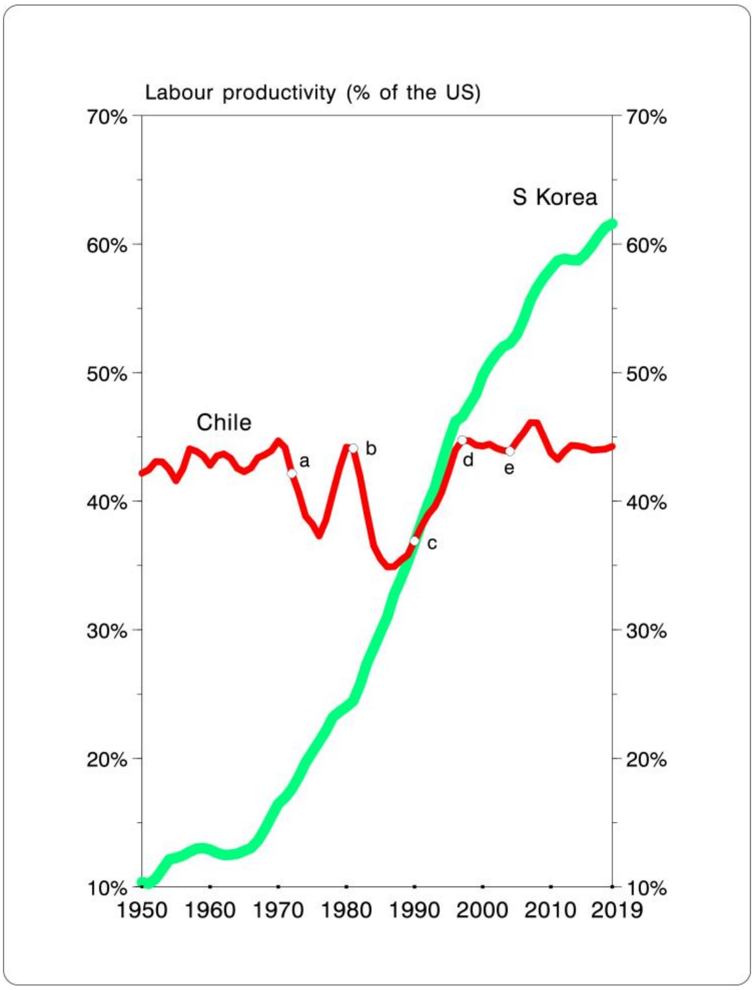
2.1.- Chile's productivity gap vis-à-vis the technological frontier

Arguably, the most revealing indicator of long-term performance for a middle-income country is whether it is closing the productivity gap. Figure 1 shows the relative productivity of the average Chilean and South Korean worker vis-à-vis that of the United States (used here as a proxy for the technological frontier).

1 The apparent *de facto* motto of the "new-left" since the return to democracy.

2 https://www.ft.com/content/980ec442-ee91-11e9-ad1e-4367d8281195.

FIGURE 1
Chile and South Korea: productivity gaps and "catching up", 1950-2019



● **a**=1972 (the year before the Coup d'état); **b**=1982 crisis; **c**=return to democracy; **d**=end of the 1986-1998 cycle; and **e**=beginning of the "super-cycle" of commodity prices. **S Korea**=South Korea. 3-year moving averages.

● Source: GGDC (2019; US$2018, PPP).

What a contrast! And this contrast is even sharper for other Latin American countries, such as Argentina, Brazil and Mexico, which have not even recovered their 1982 relative position vis-à-vis the US (the time of the Latin American financial crisis) ─i.e., instead of going forward, they have been going backwards in this respect![3]

In the case of Chile, while its two development strategies since WWII (ISI and the post-1973 neoliberal one, which I shall call the "dual-extractive" model, or DE ─see below) proved equally incapable of closing the productivity gap with the production frontier, in South Korea (and several other emerging Asian economies) export-led industrialisation thrived. In fact, Chile's relative productivity today ─about 45% of the US's in PPP dollars─ is *exactly the same* as it was over half a century ago. And in non-PPP terms, the picture is the same, with Chile hovering around 30%. This indicates a country caught in a true

[3] Palma (2019a).

"middle-income trap" —as if in relative productivities there was a 'glass ceiling' for middle-income countries which only emerging Asia knows how to break.

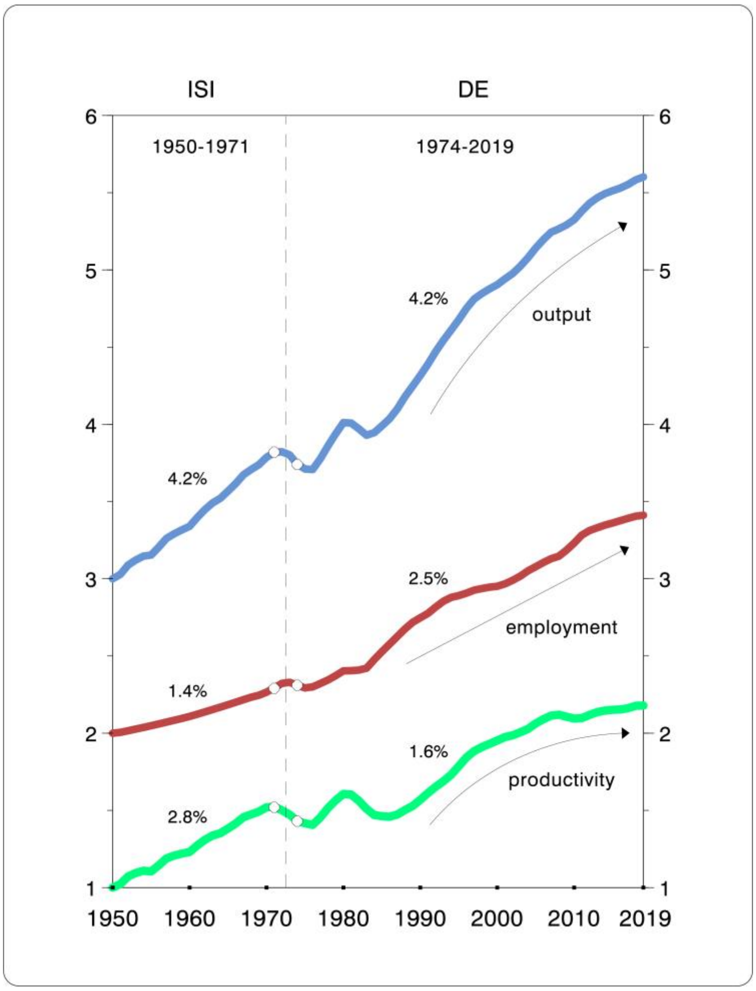
Figure 1 also shows the two post-1990 cycles —the 1990-98 dynamic one ("c" to "d"), and the post-1998 lacklustre one. And it shows the wasted opportunities of the so-called "super-cycle" of commodity prices and the unprecedented access to cheap finance (foreign and domestic), which left no permanent "catching-up" trace.

2.2.- A lost opportunity for sustainable productivity growth

Figure 2 shows a (conveniently) oft-forgotten stylised fact: Chile's long-term GDP-growth has been identical (4.2% p.a.) in its ISI and DE development strategies, despite their hugely different natures.

FIGURE 2

Chile: output, employment and productivity, 1950-2019



● Each series is an index number (in log-scale), with base **1** in 1950 for productivity, **2** for employment, and **3** for GDP. **DE**=the post-1973 "dual-extractive" model; **ISI**=import substituting (or state-led) industrialisation; **Productivity**=output per worker. 3-year moving averages.

● Source: GGDC (2019; US$2018, PPP).

It seems that the undercurrents that really matter for the GDP-growth performance of the Chilean economy are more complex than just policy prescriptions. However, this similarity hides a mayor difference: during ISI productivity grew twice as fast as employment (2.8% and 1.4%), but during the neoliberal "DE" period the opposite is the case (2.5% vs. 1.6%).

In Chile the neoliberal model did not start well, ending its first decade in a monumental collapse, the 1982 debt crisis ―which brought the direct rule of the Chicago Boys to its ignominious end.[4]

As the private sector's debt-led consumption boom created an excess expenditure that approached nearly 20% of GDP on a quarterly basis, the 1982 crash became Chile's worst ever self-made crisis ―with its GDP crashing by more than 20% between its pre-crisis peak and the third quarter of 1983 (a fall much greater than that of Argentina after its 2001 crisis, or post-Berlin Wall Russia). However, after the change of the economic guard at the palace and in the capitalist élite (replacing those who'd gone bust due to astronomical debts), the economy began a rapid recovery in 1986, which accelerated with the return to democracy in 1990 and continued until almost the end of that decade. Then, the two main growth-drivers of this post-1986 dynamic cycle ―the extraction of natural resources and the recovery from the 1982 downturn― began to lose their momentum. But it seems that when things are going well, some policy-makers rediscover Newton's first law of motion ―i.e., with some wishful thinking, they assume that as long as the macro-balances are all right, an economy would tend to continue in its state of uniform motion simply because it is in motion already.

In the case of exports, as purely extractive activities had become by then internationally competitive, their demanding "catching-up" period, with its rapid productivity growth requirements, was basically over. But producers just tried to continue increasing their purely extractive activities, while trying to sustain already achieved levels of competitiveness.

Instead, what was needed to sustain the 1990s productivity momentum was to start diversifying the extractive sector into more knowledge-intensive activities. This meant moving exports forward into higher value-added "downstream" and "upstream" activities. However, in a world so full of distortions and market failures ―i.e., when they can be manipulated so easily by large players (domestic and foreign)― markets are unlikely to be able to guide resource allocation effectively in a dynamic sense. So, what was required was a bit of Asian-style government "disciplining" of the capitalist élite in order to force the "upgrade" ―but this does not come naturally in Latin America, where "disciplining" normally goes the other way round.

So, when the original "dual-extractive" ("DE") development strategy had lost its productivity momentum the economy was destined for a new pedestrian cycle; one that could still deliver similarly high levels of employment generation (of about 2.3% p.a.), but little productivity growth ―which collapsed by no less than three quarters vis-à-vis the previous cycle. Not even stimuli of the commodity-price "super-cycle" magnitude, or from the easy access to cheap domestic and foreign finance, were able to inject some productivity dynamism into this increasingly lethargic economy.[5]

In fact, as mentioned above, those favourable global conditions ended up as wasted opportunities for the real economy in the sense that they left no permanent productivity "catching-up" trace. But for some these opportunities were surely not wasted as during the super cycle-cum-easy finance period Chile, as the rest of Latin America, increased its relative number of millionaires, centimillionaires and billionaires faster than any other region, with Chile at or near the top (according to the category of millionaire).[6]

4 See Palma (2019a).

5 GGDC (2019); WDI (2019).

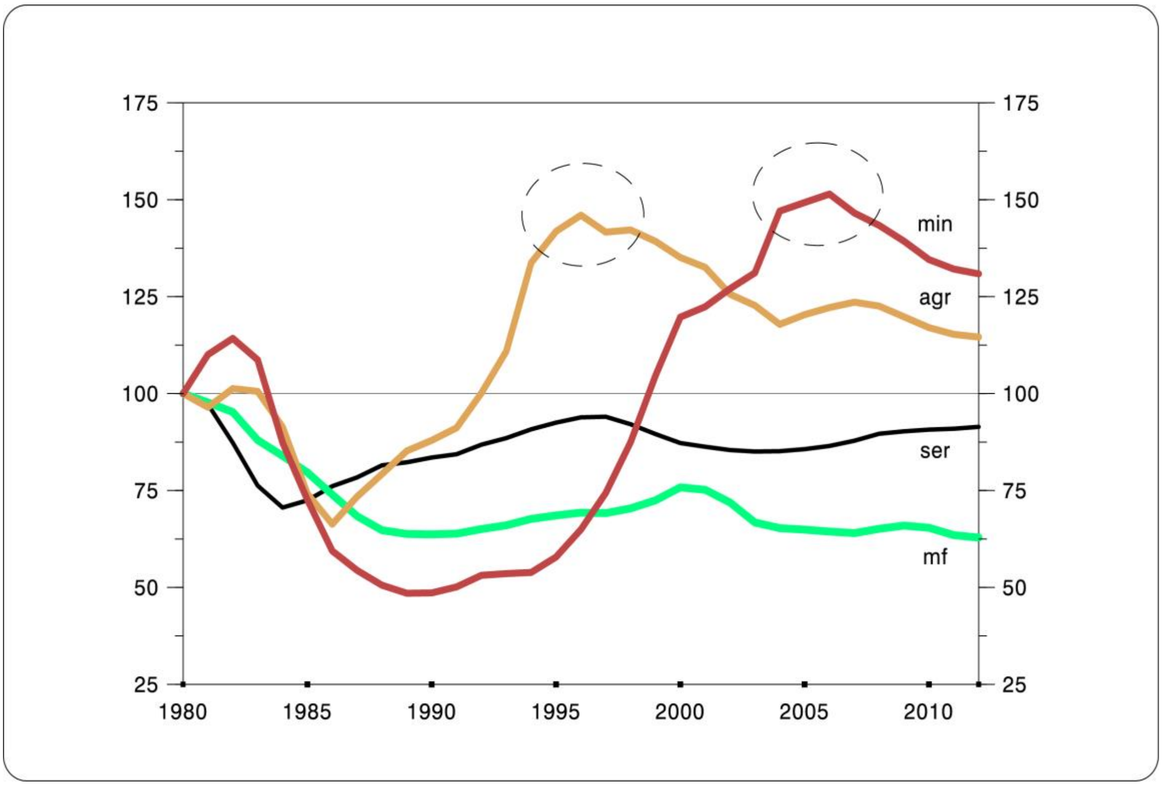
6 Wealth Development Report (2014).

2.3.- The limits of a "purely-extractive" model as an engine of sustainable productivity growth

Figure 3 shows the two facets of a purely extractive export sector. From the mid-1980s recovery onwards, it was agriculture (i.e., forestry, fish-farming, fruit and vegetables – as well as wine) that led the productivity "catching-up". Mining did so only from the mid-1990s.

FIGURE 3

Chile: productivity gaps with the United States, 1980-2012



● **agr**=agriculture; **mf**=manufacturing; **min**=mining; and **ser**=services. Each line is an index number (1980=100) of the ratio of labour productivities between Chile and the US (each in real terms and domestic currencies). An increase implies that Chile is "catching up", and a decline that it is falling behind. 3-year moving averages.

● Source: GGDC (2018; data available until 2012).

The key question here, of course, is why each productivity "catching-up" plateaued –and then even began to reverse. As mentioned above, part of the answer is relatively straightforward: when these activities had reached international levels of competitiveness, their demanding "catching-up" period, with their rapid productivity growth requirements, was basically over. From then onwards, these extractive sectors just aimed at increasing output while staying competitive –often at a cost of reducing environmental standards and other quality-related costs.[7] Instead, what was necessary to sustain the productivity

[7] The salmon-farming industry, for example, doubled its output over the last decade, but on the cheap –i.e., using 1,400 times more antibiotics than Norway (https://www.bloomberg.com/news/articles/2019-08-01/bain-capital-s-patagonia-fishery-rigs-data-and-sparks-a-crisis). And one producer that claimed to buck this trend was doctoring its data (Ibid.). The problem is little fear of prosecution –if convicted, instead of going to prison one may just be sent back to university… A judge recently sent corporate executives convicted of a major tax fraud on a course in corporate ethics –on condition they got a passing grade!

growth drive was to switch towards higher value-added activities within the industry, while fostering all the associated industries. However, this was clearly not the priority of the corporations (foreign or domestic) involved in extractive activities —and for reasons that had little to do with "comparative advantages" (i.e., relative production efficiencies), and a lot with trade distortions, such as China incentivising imports of commodities as unrefined as possible.[8] And governments were not prepared to do anything about it —even if it was just to stop the unnecessary pollution created by transporting more bulky products.[9]

What is remarkable here is the contrast between how successive centre-left governments were quite happy to "interfere" in the market to help the early development of purely extractive activities (such as fish farming and forestry), with shamelessly "vertical" policies, and how they suddenly became "orthodox free-marketeers" when it came the time to start adding manufacturing value to commodities, or to regulate the huge environmental damage of extractive activities (e.g., forestry), or to control their quality (e.g., fish farming). Little they know that in the current globalised world and technological paradigm the only "comparative advantage" that matters is the one so well summarised by the Governor of the Bank of Korea: "…we did everything we wanted but whatever we did, we did it well."[10]

Figure 3 also shows the (related issue of the) poor performance of manufacturing, the sector that fell further behind (even more vis-à-vis emerging Asia; see below) —something common to all Latin America (even NAFTA's Mexico). It seems that the new left has never been able to unshackle itself from their ISI pro-manufacturing-at-any-cost ghosts of the past!

However, in Chile "aborted attempts at catching-ups" are not new. During ISI, manufacturing also reached a "catching-up plateau" in the mid-1960s, and got stuck there due to the government's incapacity to rationalise subsidies (e.g., through making them performance related), its failure to reform state enterprises, to start opening up the economy and so on.[11] The perpetual "neophobia" of the Latin American oligarchies —i.e., their fear of a break from routine— prevailed. And this fear-of-the-new led to a similar type of policy-rigidity during the current cycle, as it has now become the trademark of the "new-left" ideology.

2.4.- Manufacturing: The "Non-creative Destruction" of a Former Engine of Growth

Perhaps nothing reveals the "reverse-gear" attitude of neo-liberal reforms in Latin America better than what happened in manufacturing. This is best summarised by the President of Brazil's Central Bank: when asked about the purpose of Cardoso's neo-liberal reforms, he replied: "to undo forty years of stupidity". (Veja 15/11/96). In Chile, an identical "reverse-gear" attitude is found earlier in the not very original reverse-gear-style neo-liberal discourse of the Chicago Boys', calling for the complete reversal of ISI —i.e., all policies should be multiply by

8 China is the only country that wants Chilean walnuts in their shell, Argentinean soya as beans, heavy-oil unrefined, and so on.

9 Over a thousand cargo ships sail each year from Chile with copper concentrates; but as concentrates only have about 30% of the mineral, the equivalent of more than 700 of those ships sail with just slag. In fact, by volume, this slag is Chile's largest export product! And this bizarre pollution is Chile's most easily avoidable contribution to climate change (for a recent study, see Sturla-Zerene et al., 2020). All it would take to stop this would be a higher royalty for the exports of concentrates than for refined copper, forcing their smelting in Chile.

10 Quoted in Wade (1992). See also Chang (2002).

11 See Palma (2019a).

minus-1.[12] What was "virtue" suddenly became "vice", and "vice" became "virtue."

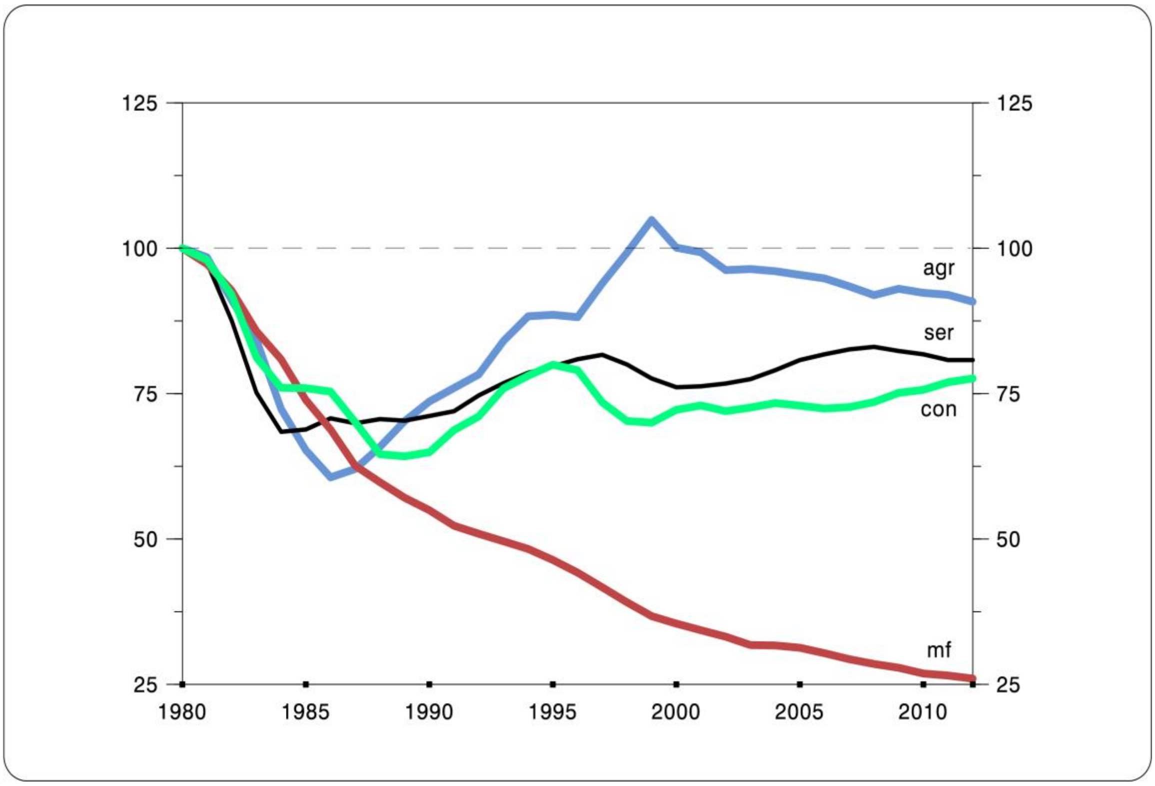
Hardly likely that the most appropriate development strategy, and related economic policies, could have followed from such simplistic guiding principles; after all, only unimaginative ideologies need to demonise everything that has happened before in order to romanticise its propositions! This unsophisticated ideological discourse neatly reflects the rigidity with which the reforms were implemented in the region, and their poor outcome —in terms of productivity growth, for example, the average for Latin America (even excluding Venezuela) collapsed from 2.8% p.a. between 1950 and 1980, to just 0.2% between then and 2018.

And this "undo forty years of stupidity" development strategy hit manufacturing particularly badly; for example, Brazil's manufacturing growth-rate decelerated faster than in any other country in the world —from 8.2% (1950-80, when output increased ten-fold), to less than 1% since.[13] How different from emerging Asia, where early reforms were implemented not to mechanically reverse but *to strengthen* existing ambitious industrialisation strategies, and to help them adapt to the new technological paradigm and world order. In Latin America, instead, the not very original reverse-gear-style neo-liberal discourse resembled a compass whose magnetic North had simply switched to the South Pole —leading to a "non-creative destruction" of the ISI manufacturing. Meanwhile, emerging Asia couldn't believe its luck, as this opened innumerable productive opportunities for them.

As in Brazil, the consequences in Chile of this rigid ideology are nowhere more obvious than in what happened to manufacturing (Figure 4).

FIGURE 4

Chile: productivity gaps with South Korea, 1980, 2012



12 CEP (1992).

13 Palma (2019c).

● As Figure 3. Mining is not included as there is little of it in South Korea. 3-year moving averages.

● Source: GGDC (2018).

Figure 4 helps unravel the puzzle shown in Figure 1: Chile and South Korea's contrasting catching-ups. However, other than in manufacturing their relative sectoral performances have not been as strikingly different; but in manufacturing, as South Korea's productivity growth trebles Chile's, in their relative performance Chile falls as in a roller-coaster. This neglect of manufacturing, especially in terms of productivity growth, is the key retarding factor in Chile's "catching-up". In fact, while in South Korea more than two-thirds of its overall (faster) growth was due to increase in productivity, in Chile it was the other way round, with about two-thirds due to employment. The new "DE" development strategy had no manufacturing agenda —mostly due to its reluctance to industrialise commodities. Hence my labelling in 2005 of what happened to manufacturing as "premature de-industrialisation": one that obstructed its transition towards a more mature and self-sustained stage in a Kaldorian sense —i.e., able to trigger processes of cumulative causation, characterized by their positive feedback 'loops' into the system, capable of self-perpetuating growth.[14]

2.5 R&D, investment and economic diversification

The ECI, elaborated at the MIT Media Lab, contains information about the diversity of a country's exports and their sophistication.[15] This index measures the *knowledge intensity* of an economy by measuring that of its exports. This index shows how Chile's purely extractive export sector is limited even by unimpressive Latin American standards.[16]

The paradox of Chile's better regional performance post-1982 is that it took place despite exporting less sophisticated products (given its GDP pc). Perhaps this can have a double-edged effect on growth, which may well be associated with Chile's two cycles since the mid-1980s. The relative simplicity of its exports may well have helped its post-1986 recovery, but their lack of knowledge intensity became a drag for *sustained* productivity growth.

At the same time, this is associated with the embarrassing levels of R&D: just 0.36% of GDP —and only about one-third of that is done by the private sector![17] In South Korea and Israel the figure is 4.3%, and about 80% of that is done by the private sector; that is, while their private sector spends more than 3% of GDP in R&D, in highly unequal Chile it is just 0.1%![18]

Basically, and contrary to what our hegemonic economic ideology preaches, expenditure on R&D does not follow "opportunities", but "necessities". That is, given such unambitious development strategy, Chile's actual *requirements* of R&D may well be not that far from its current bizarre levels of

[14] See, in particular, Kaldor (1967). For "premature de-industrialisation", see Palma (2005), and (2008). For an equivalent concept, developed a decade later, see Rodrik (2015).

[15] See ECI (2019).

[16] See Palma (2019a).

[17] OECD (2019).

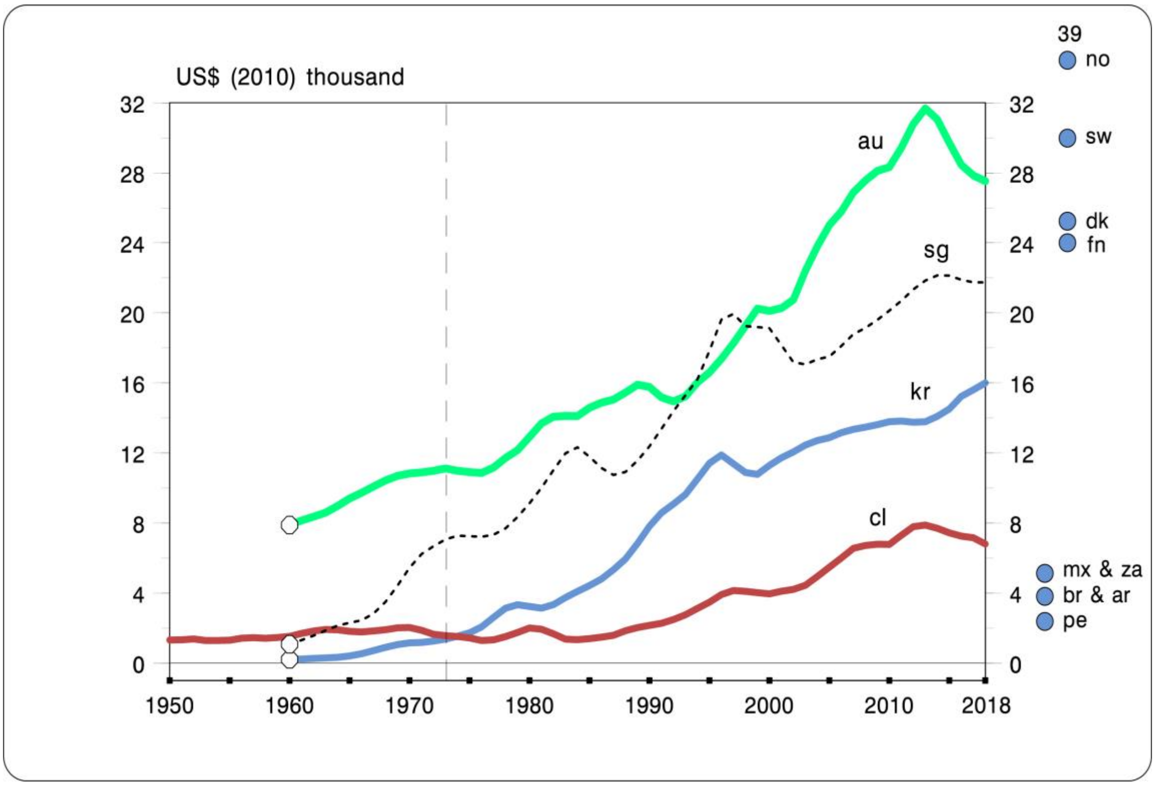
[18] And as the poverty of the current neo-liberal ideology seems to know no bounds, all that the current government can think of in relation to R&D is to give more tax "incentives" to the private sector (See https://www.df.cl/noticias/economia-y-politica/pais/fontaine-en-innovacion-estamos-revisando-el-incentivo-tributario-a-i-d-a-las-empresas/2019-09-12/190843.html?utm_source=email&utm_medium=email&utm_campaign=Titulares_13092019&utm_content=Link_Nota&utm_mc=e7f7c38ea7ecaecdef811445f9116dab).

R&D. And this, of course, leads to a vicious circle, since the only way to learn how to innovate is by innovating…

Figure 5 shows investment when its is measured "per worker" (as opposed to as share of GDP).

FIGURE 5

Chile, Australia, Korea and Singapore: investment pr worker, 1950-2018



● Acronyms as above.

● Source: WDI (2019), and GGDC (2019).

This statistic helps us understand the reluctance of Chile's oligarchy to get involved in the processing of commodities. The industrialisation of commodities may not be the most sophisticated form of manufacturing, but as Figure 5 indicates it seems to be one of the most capital-intensive. And as all the rents of natural resources are captured at the extractive side of the business, and since markets for industrialised commodities tend to be more competitive than for other manufacturing activities (their output is more homogenous), there are few rents to be captured there as well. So, other than operating profits, rents associated to innovation seem to be the only ones on offer ―not Chile's *forte*.

As Figure 5 indicates, after the beginning of economic reforms investment *per worker* remained relatively stagnant for a whole decade, to collapse after the 1982 crisis. Then, with the recovery from this crisis (following the dishonourable discharge of the hard-core of the Chicago-Boys, and the change of guard in the capitalist élite) by 1989 this statistic had returned to the level already achieved in 1970. But by then, the dynamism of the extractive cycle was at full speed and during the next decade investment per worker doubled. Then, after a 5-year pause, it gathered pace again with the so-called "super-cycle" of commodity prices, but then it began to decline towards the end of this period. In all, Chile ended up in 2018 investing about US$7,000 per worker, a level that puts it ahead of the region.

However, Figure 5 also shows how far this level still is from that of the more advanced countries that had embarked on resource-based activities —and their manufacturing—, such as Australia and the Nordic countries (see the top right-hand side of the figure). These countries have increased their investment per worker to a level between three-and-a-half to five times higher than Chile —levels that are even higher than those of advanced emerging Asian countries, such as South Korea, Taiwan or Singapore, which concentrated their industrialisation on knowledge-intensive and "knowledge-spillover"-intensive products.

In Figure 5 the poor investment performance of Latin America becomes evident, with the current level of investment per worker in Brazil, Mexico and Argentina even below that of 1980 (as it has been *throughout* the neo-liberal period). Perhaps Chile's better GDP performance since the mid-1980s should not come as surprise —except that its post-1998 GDP-growth-convergence with the rest of the region indicates some eventual "diminishing returns" on investment as Chile got stuck in its purely extractive cycle.

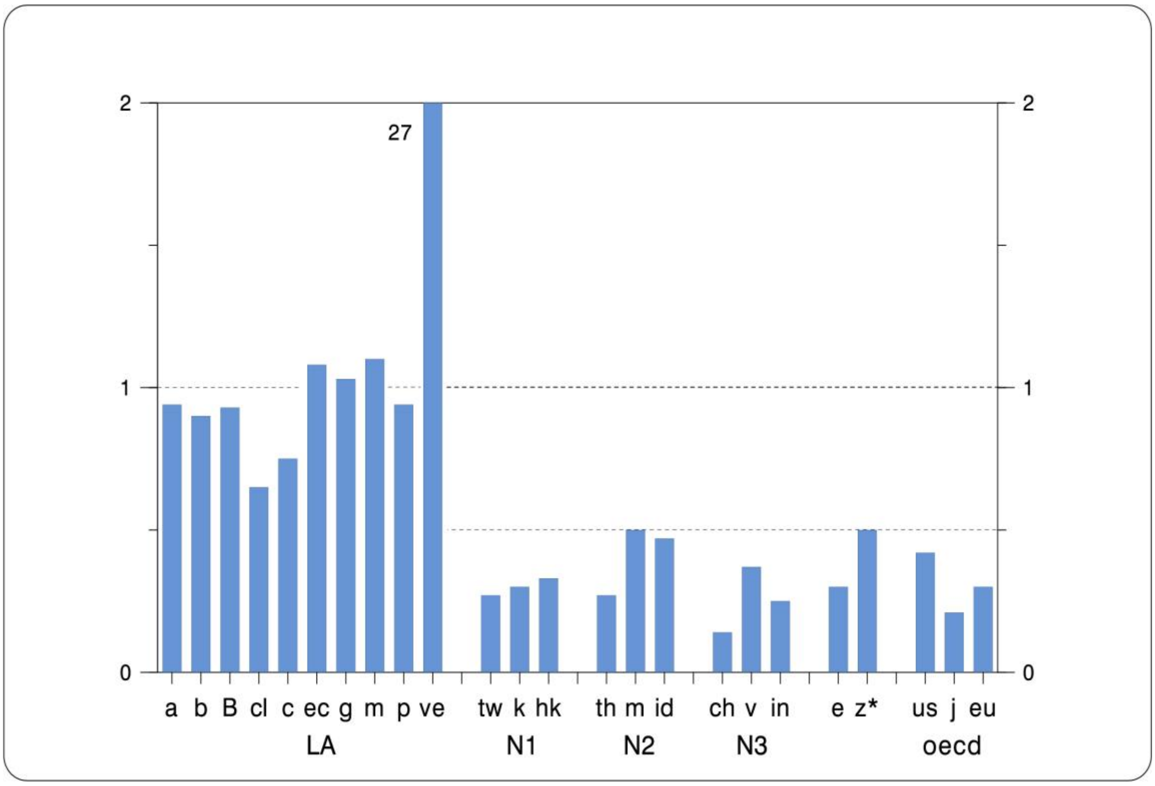
And while Latin America's average investment per worker remained stagnant since 1980, South Korea's increased by a factor of 5 —and India's by 8, and China's by more than 20 times (and according to some sources by nearly 30) —perhaps one can have too much of a good thing!

2.6. - The growth of employment — and the uncomfortable role of inequality

As suggested, one of the key characteristics of Latin American economies since 1980 is their remarkable capacity to generate employment —Figure 6 shows this "per unit of GDP growth" (what could be loosely called their "gross employment elasticity").

FIGURE 6

Latin America, Asia and OECD: gross employment elasticities, 1980-2018



● Gross employment elasticity=ratio of employment to GDP growth. In this figure some acronyms are different due to space constraints on the horizontal axis. **a**=Argentina; **b**=Bolivia; **B**=Brazil; **c**=Colombia; **ec**=Ecuador; **e**=Eastern Europe and Central Asia (harmonic mean of 26 countries); **eu**=European Union (harmonic mean of 15 Western European members); **g**=Guatemala; **h**=Hong-Kong;, **j**=Japan; **k**=South Korea; **m**=México; **p**=Peru; **t**=Thailand; **ve**=Venezuela; and **v**=Vietnam. Otherwise, as above.

● Sources: GGDC (2019).

While in the rest of the world countries struggle to attain a "gross" employment elasticity of 0.5, the Latin American average (even excluding Venezuela, whose index skyrocketed to 27) is close to 1. In general, this results from the huge capacity of services and construction to generate employment ─sectors that in Chile generates a rate of employment growth three times faster than population growth.[19]

The key issue here seems to be an "inverted-U"-type relationship between inequality and employment growth across middle-income countries.[20] In employment creation there seems to be a rather perverse "optimal" level of inequality in middle-income countries. And Latin America seems to be right on that spot ─one in which high inequality provides the necessary supply of cheap labour, and middle levels of income the high demand for cheap services and construction by middle and high-income groups.

In high GDP-growth and lower-inequality emerging Asia, instead, average employment growth is only about half that of Latin America ─although, obviously, this is so for more reasons than lower inequality. In fact, according to McKinsey (2019b) while in emerging Asia employment growth between 2000 and 2015 was responsible for just 14% of (a rather fast rate of) GDP growth, in Latin America it accounted for 78% of its (fairly mediocre) growth ─with productivity growth generating the other 86% in emerging Asia and just 22% in Latin America.

The problem with this Latin American capacity to create a lot of (low-productivity, and low productivity growth potential) employment, is what happened in Chile at the turn of the millennium: What do you do when you begin to run out of cheap labour? As services and construction were creating employment three times faster than population growth, it was only a matter of time before these sectors began to encounter an increasing scarcity of its main input: cheap labour. And when this happened at the start of the new millennium, the labour market began to change from the old-fashion institution in which low-wage workers must compete desperately for employers, into a new one in which employers have to start competing for cheap labour! And producers as well as higher-income households (with their high demand for cheap services) were not used to this ─and they didn't like it at all!

In this new (and more civilised) labour market, there was not only an inevitable ─and "market-led"─ upward pressure on wages and for improved working conditions, but it also created Marshallian "necessities" (or compulsions) for increased productivity and investment. So, some of the well-established foundations of Latin-style economics and politics began finally to be shaken by the market! And, predictably, it was a "new-left" government that panicked and began to take action to reverse these progressive transformations in the labour market (see below).

Michael Kalecki (1943) had warned us about capitalism struggling politically with a sustained period of full employment ─i.e., with no "reserve army" of unemployed as its safety net. This is even truer in unequal middle-income countries, as full-employment could trigger transformations with which rigid institutions and "neophobic" rent-seeking oligarchies would struggle to cope.

19 On employment, see INE (2019); on cheap labour, Durán and Kremerman (2018).

20 Palma (2019a).

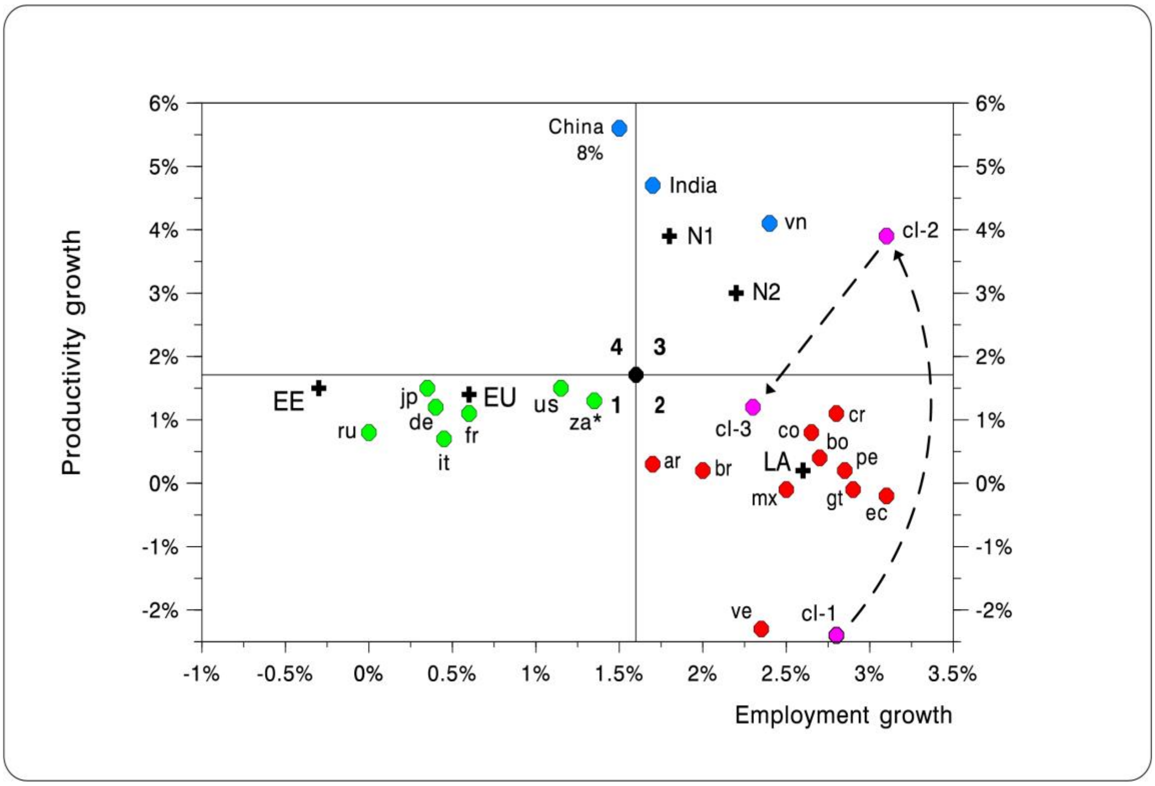
Capitalism could then resemble an overheating power plant whose usual "escape valves" have been disconnected…

2.7.- Chile's (and Latin America's) neo-liberal development strategy from the perspective of the world economy

Figure 7 organises countries according to productivity and employment growth.

FIGURE 7

Chile, a middle-distance runner: from 2 to 3, and then back again to 2, 1980-2018



• For Chile, **cl1**=1980-1986; **ch2**=1986-1998; and **ch3**=1998-2018; otherwise, acronyms as above.

• Source: GGDC (2019).

From this perspective, the global average (black circle in the figure) identifies four quadrants. In "1" we find those countries whose productivity and employment growth since 1980 are below average —and almost all of them are so-called developed (geriatric?) countries. In turn, quadrant "2" is populated entirely by Latin America, countries able to generate employment well above the world average, but little or no productivity growth. In fact, on average a Latin American worker produces today almost the same output as he or she did in 1980 — just 8% more in all during these four decades![21] It is difficult to imagine a more unsuccessful development strategy than the post-1980s neo-liberal one, especially in the rigid and corrupt way it was implemented in Latin America. One of my hypotheses is that it never really got over its "original sin": the way in which it was brought about by its "Magnificent Seven", the visionary leaders who selflessly pioneered them: Pinochet, Salinas, Menem, Fujimori, Collor, Pérez and Bucaram — what a collection! Perhaps what characterises neo-liberal Chile is the

[21] GGDC (2019).

contrast between its dark-ages brutal beginnings and its more civilised period post-return to democracy in 1990 ─although surely the gap between the degree of "self-satisfaction" of its élite and reality became the greatest in the region. It took an outburst of social unrest as huge as the one that started last October to bring this élite finally down to earth…

In terms of Figure 7, although Chile's employment growth is similar to the region's, its post-1986 productivity growth is higher ─but the average for the whole period still below the global mean. In turn, emerging Asian countries monopolise quadrant "3", with China at its edge in employment creation, including those from its first wave of industrialisation (N1: South Korea, Taiwan and Singapore), its second (N2: Indonesia, Malaysia and Thailand), and its third (China, India and Vietnam). In fact, these are the only countries in the world able to generate simultaneously high levels of productivity *and* employment growth ─walking and chewing gum at the same time.

Finally, Figure 7 also shows what I like to call "the Latin American syndrome": whenever a country ─like Chile between 1986 and 1998 ─ does eventually manage to move from quadrant "2" to "3", this turns out to be a temporary state of affairs. That's the real difference between Latin America and emerging Asia: although both may be perfectible capable of achieving high rates of productivity growth, only emerging Asia knows how *to sustain* them long-term. That's the difference between middle-distance runners and marathon ones!

This is the key message of Figure 7: Latin America seems to be cursed with a particularly strong "gravitational pull" towards quadrant "2". Every time a country manages to shift gear and move from quadrant "2" to "3", sooner rather than later it returns home to "2". Whereas, when an emerging Asian country moves to "3", it remains there. In Latin America, as in Chile between 1986 and 1998, countries are able to speed up, but before long, they run out of oxygen and have to slow down again productivity-wise.

Emerging Asia's capacity to "upgrade" when a development strategy has run its course has a lot to do with that stamina. For example, South Korea opened up its ISI early and impose tough performance related conditionalities to subsidies and rents to transform it in an export-oriented industrialisation; Taiwan "governed the markets" for this; and China quickly turned the tables on the European Union and the US.[22] An essential component of this is the capacity to confront "sell-by dates" properly. Trying artificially to extend the "shelf-life" of a development strategy ─as Chile did with ISI in the 1960s, and as it is trying to do again now since the late 1990s with its "DE" model is a recipe for returning home to quadrant "2".

Also, as new income distribution theory teaches us, low levels of inequality are only sustainable when they are anchored in productive structures ─such as those of Korea and Taiwan─, while those that rely increasingly on taxes and transfers, as in Europe (East and West), are increasingly like a boat taking on water.[23]

Foucault's (1979) understanding of the relationship between power and knowledge, in particular the role of the economic "discipline" in democracy ─as a form of "disciplinary" power via the production of particular kinds of knowledge─, could be of great help in this area. From his standpoint, what we really need in Latin America is a more critical perspective within economics on the range of our options for participation.

[22] On Korea, see Chang (1993); on Taiwan, Wade (2003); on China and the OECD, Münchau (2018).

[23] Palma (2019b).

Saint Augustine argued that our free will has been weakened but not destroyed by original sin. Perhaps in Latin America it had a more devastating effect.

3.- Some theoretical foundations of Chile's "middle-income trap"

By the turn of the millennium the productivity drives that had propel the economy since the mid-1980s had fizzled out, and they were in desperate need of a full "upgrade." The same can be said of the neo-liberal ideology at its foundations, as most of its "absolute certainties" were falling apart.

By this "upgrade" I mean one capable of generating *new* engines of productivity growth (e.g., the industrialisation of commodities, a "green new deal", or the spread of the new technological paradigm into the whole economy), characterized by their positive feedback loops into the system, and capable of generating a "cumulative causation-type momentum" of change, which could become self-perpetuating ─in the Veblen/Myrdal or the Smith/Young/Kaldor perspective.

However, neither its highly distorted "markets" nor centre-left or right-wing governments have had much of a clue as to how to bring this about ─let alone the nerve to do it. So, when the two key growth-drivers of the 1986-1998 dynamic began to lose their momentum, little was done about it. It seems that when things are going well, some policy-makers rediscover Newton's first law of motion ─i.e., with some wishful thinking, they assume that as long as the macro-balances are all right, an economy would tend to continue in its state of uniform motion simply because it is in motion already.

Instead, what was needed to sustain the 1990s momentum was to start diversifying the extractive sector into more knowledge-intensive activities. So, what was required was a bit of Asian-style government "disciplining" of the capitalist élite ─and this does not come naturally in Latin America, where "disciplining" normally goes the other way round.

Another engine of productivity growth could have been a local version of a "green new deal". Chile is full of potential for renewable energies, and its agriculture could be transformed into a profitable organic industry. As a recent Bloomberg (2019) report emphasises, "Turns out it's not just easy being green — it's also profitable". But for this it is necessary to rationalise the use of scarce resources, such as water for irrigation ─one of the many resources looted at the time of the Chicago-Boys by the courtiers of the military regime, including top government officials.[24] And a third front could have been helping the spread of the new technological paradigm to the four corners of the economy.[25]

However, on exports corporations were only interested on extraction, and successive governments lacked the imagination and will to do anything about it. On the second and third, although there were some improvements in environmental regulation, and some belated movement towards renewable energies (although by 2020 thermal energy still provides 60% of the country's electricity, with two-thirds of that using coal), neither governments nor the private sector ever understood the real potentials of a new green drive or of technological upgrading as new drivers of productivity growth. In fact, expenditure on R&D still remains at ludicrous levels ─as mentioned above, Korea's private sector invests 50 times more *per worker* than Chile. In fact, the knowledge-intensity of Chilean exports ended up poor even by Latin American

[24] On this ransacking of the Chilean State during the early years of the neo-liberal reforms, see Mönckeberg (2015); Gárate (2012); and https://ciperchile.cl/2013/09/12/%c2%bfcuanto-habra-que-esperar-para-que-los-chicago-boys-asociados-respondan-por-el-botin-que-algunos-se-llevaron/

[25] See Pérez (2002), and (2015).

standards! As "catching-up" is also about closing the gap in knowledge, the contrasting fortunes of Chile and South Korea in Figure 1 should not come as a surprise.

In sum, when the original development strategy had lost its thrust the economy was destined for a new pedestrian cycle; one that could still deliver similarly high employment growth, but productivity growth collapsed by three-fourth. Not even stimuli of the commodity-price "super-cycle" magnitude, or from the easy access to cheap domestic and foreign finance, were able to inject some dynamism into this lethargic economy.[26]

What comes to mind here is the (often conveniently forgotten) key neo-classical theorem of policy-making, that of the "second-best" of Lipsey and Lancaster (1957): even from the perspective of neo-classical economics, all that is necessary for having to rethink *the whole* neo-classical policy package, built on the assumption of an imaginary world free of distortions and market failures, are a few missing "Paretian" optimal conditions. And as we operate in a world that is littered with distortions and market failures, an efficient "second-best" policy-package may well look *radically different* from the one instinctively preferred by neo-classical economists.

In other words, even from a proper neo-classical point of view, *pragmatism* is what should rule in policymaking. But in the "Washington Consensus" fundamentalism trumped efficiency: if there is a problem, fix it by applying the corresponding "first-best" policy. And as Lipsey (2007) emphasised (when reflecting on his theorem fifty years later), this type of policy prescription is "…welfare-improving only in the imaginary one-distortion world".

What causes dismay in fundamentalists is that the most efficient "second-best" policy package is bound to look starkly different from ideological preferences. Ideal governments do not exist either, of course, but this is hardly a reason to stick with supposedly "first-best" policies preached by intransigent theorists who want to illuminate the real world by inventing false ones. If imaginative piecemeal "second-best" policy advising is an art, neo-liberal first-best ones are a soap opera.

In fact, when (long ago) I was a student of the Chicago Boys, not only was the Lipsey and Lancaster neo-classical theorem *never* mentioned (as the whole ideological policy-apparatus would have collapsed), but the very way in which they taught us the neo-classical "first-best" policy package reminded me of that old-fashioned "ontological argument" for the existence of God: "that of which nothing greater can be thought".

The core problem of neo-liberal policy-making is that its ideology has transformed "means" (i.e., mere economic policies) into "ends". Never mind that the resulting policy package is likely to be utterly inefficient *on its own terms*. But in an ideology built on "purity of beliefs" pragmatism is heresy. Here the English Puritans come to mind, as they sought to purify the Church of England of Roman Catholic practices in the 16th and 17th centuries. In the same mindset, early neo-liberals sought to purify economics and policymaking from Keynesianism and Lipsey and Lancaster-style neo-classical economics (and also from structuralism) —doctrines that had immersed themselves too much in the complexities of the real world. Neo-liberals (including those in the early Washington Consensus) were convinced that if one gives too much emphasis to earthly matters, confusion threatens, and moral certainty is lost. As the primal split between good and bad was disappearing from economics, the discipline had

26 Cheap and abundant domestic finance was provided mainly by the privatised pension system; while delivering meagre pensions (in 2018, half of all retirees within this system received a pension equivalent to less than one-fifth of a minimum wage), it provides massive amounts of finance to the private sector. Why workers have to subsidise this through their pension contributions is a different matter.

to be saved by enshrining the notion of one by segregating it from the other. Their call to arms: no more "second bests"! Also, manufacturing, the illegitimate offspring of state intervention and protectionism, had to be particularly mistrusted.

And in Chile, as the neo-liberal ideology is still overflowing with "absolute certainties" (no matter how obvious it may be that they are passé), the economy sinks ever deeper in the quicksand of inertia. Furthermore, if change comes, it is to reinforce the "rent-seeking guarantees for the few, capitalism for the rest" type of status-quo. For example, a new policy-straightjacket was about to be added (until the social unrest of last October stopped its imminent approval by the Senate) in the form of the Transpacific Treaty, or TPP-11, which would not only had deny any future government the policy-space required to move in a "second-best" direction, but also —together with strengthening the current inefficient system of intellectual property rights[27]— would have given big corporations (domestic and foreign) a *de facto* veto over changes in policy.[28]

Basically, what the TPP-11 shows (yet again) is that big corporations (and their multiple allies, including most new-left converts) haven't got a clue anymore as to what capitalism is really about. I would argue that this phenomenon ended up being the trademark of the metamorphosis of the neo-liberal ideology: from early puritanical beliefs, to a crude recipe for market-manipulation.

And the TPP-11 was about to be approved in Parliament thanks to the support of sections of the "new-left", for which belief now is a matter of adherence to new dogmas and not arising from inner convictions; action is not prompted by desire but by obedience.

There are other beliefs, of course; and as long as they do not relate to purely economic matters, they are allowed to be more than just silent assumptions embedded in the imagery of daydreams or instinctual action. For example, the new left has fought effectively against social conservatism in issues such as legalising divorce, legalising abortion in specific circumstances, and gay rights —despite massive opposition from all the usual suspects. But in their economic agenda, they got stuck in the key neo-liberal dogma: for capitalism to work, one has to keep the rich and large corporations sweet (as opposed to "on their toes", with effective market compulsions).[29] Meanwhile, emerging Asia smiles as this opens innumerable productive opportunities for them.

A related theoretical point here comes from Douglas North's concept of "limited access order".[30] Neo-liberal reforms have consolidated a scenario in which élites (domestic and foreign) divide up the control of rents and block the access of others. And those rents are huge; according to one study, between 2005 and 2014 alone, the equivalent of US$120 billions (in US$2016; the equivalent to almost half Chile's GDP) were appropriated —*just in terms of rents*, or as the study's authors call them, "gratuitous rents"— by the top 10 private copper corporations.[31] To give an idea, at today's prices this is equivalent to more than the whole cost of the Marshall Plan to rebuild Europe after the Second World War.

Another highly relevant theoretical point is provided by Hirschman (1982). The fact that Chile got stuck in its "DE" model when it had become

27 See Stiglitz (2007); and Palma (2019b).

28 See, for example, https://www.elmostrador.cl/destacado/2019/06/03/jose-gabriel-palma-la-ganancia-comercial-de-chile-en-el-tpp-11-es-irrelevante-es-mucho-mas-lo-que-perdemos/; http://www.elmercurio.com/Inversiones/Noticias/Columnas/2019/06/04/El-TPP11-garantias-para-mi-capitalismo-para-los-demas.aspx; and https://www.elmostrador.cl/destacado/2019/10/30/el-tpp-11-en-los-tiempos-del-colera/.

29 On "market compulsions", see Wood (2002).

30 North et al., 2007.

31 See Zerene et al. (2018).

counterproductive is not uncommon, as people do tend to stick with policies well after their shelf-life. This also happened in its previous ISI-development strategy. Hirschman's syndrome ―the reluctance to confront the "best before" phenomenon― is particularly true when policies had been able to deliver dynamic growth at some point in the past (as in Chile 1986-98), as memories of past glories tend to stick for much longer than those of downturns.

One of the by-products of the Hirschman syndrome is the "rebound effect": how sticking with a development strategy well after it has become counterproductive leads to such frustration and disappointment that is not uncommon to experience a "bounce-back". I have extended this Hirschmanian analysis to explain why inequality moves "in waves".[32] What has happened in Chile since mid-October fits this pattern well, as the social agenda emerging from the unrest falls into this "bounce-back" syndrome.

One of the many lessons from the resource-intensive emerging Asian countries is that in order to force the "upgrade", some discouraging of exports of unprocessed commodity is essential.[33] In copper this could be done by a royalty that is much higher for the exports of copper concentrates, and then decreases proportionally to the degree of domestic refining. The same in the forestry industry: higher for woodchips, and lower for MDF and other higher value-added products of the industry.

This discouraging of the exports of unprocessed commodities would be similar to having opened ISI gradually to international competition in the 1960s. And those who oppose this "upgrade" now do so for the same reasons than they did during ISI: in order to continue with easier forms of rent-seeking accumulation. If for the South Korean capitalist élite its comparative advantage was doing what they wanted, but doing it well, for the Chilean one it is how to use widely different institutions and development strategies effectively to achieve their fairly immutable rent-seeking goals.[34]

Unless some actions to force the "upgrade" is taken, Chile ―and the rest of Latin America― seems condemned to be stuck in their new role in the world economy as "double-periphery". To its traditional periphery status vis-à-vis industrialised countries, it has now added a new one vis-à-vis emerging Asia. And everything seems to indicate that for a "double-periphery", the middle-income trap ―or "glass ceiling"― gets ever more difficult to break.

And the Chilean economy eventually got to a crossroads: it either had to force the "upgrade" in both components of its dual economy, or it had to engineer ways of providing more oxygen to its fairly exhausted development strategy ―one that was already gasping for air. Perhaps not surprisingly, so far it has chosen the latter: in the same way that it tried to give a momentum to its extractive sectors by expanding the horizontal diversification of its resource economy to neighbouring countries, it also tried to do the same with that other component of its dual economy ―the one that was running out of cheap labour― by following an *active* policy of mass immigration of unskilled labour.

On the horizontal diversification abroad, and according to balance of payment statistics, the assets of the "international investment position" of the financial and non-financial private sector (not counting pension funds) reached US$383 billion in 2018 ―about 30% larger than that year's GDP. And a great deal of it was financed by acquiring foreign debt, leaving Chile as the country with

[32] See Palma (2019b).

[33] For example, in the 1970s, Malaysia banned the exports of unprocessed timber; and in 2014, Indonesia did the same with a range of commodities.

[34] For an analysis (using simple game-theory language) of the changing strategies followed by the Chilean élite to accomplish this in terms of inequality, see Palma (2011, Appendix 1).

the largest corporate debt as a share of GDP *in the whole emerging world* ―and with very little to show for it at home.[35]

However, on the positive side, this has at least helped the Chilean oligarchy to become a bit more democratic, as easy access to *mobile* assets has provided them with an expedient "exit strategy". That is, they no longer have to be so geographically tied to their "fixed" investments.[36]

And on the need to replenish the labour market with low-wage workers, as shortages of cheap labour led to a deliberate policy of labour market manipulation by bringing in more than one and a half million people between the Lagos administration and the time of writing this paper. This is an injection of more than 10% to Chile's labour force.[37]

Here it is important to emphasise that this influx of immigrants was generated by a Chilean "pull", not by an external "push" ―i.e., it started with *deliberate* changes in immigration policy, not with political disturbances in neighbouring countries. This only happened at a much later stage with the economic collapse of Venezuela. And a large percentage of immigrants came legally, by plane into Santiago's main airport (the only requirement was to have a tourist visa), in a way that ended up being a paradise for human trafficking gangs, who organised the logistics, the transport, and then profited from the horrific conditions in which many of these immigrants ended up living in Chile.

Also, did anyone pushing for the new immigration policy worry about the lack of spare capacity in housing, health service, education, transport, and all those basic services desperately needed by immigrants?

This huge process of immigration may have had many highly positive impacts on Chilean society in terms of a much-needed cultural diversity, and many immigrants did have difficult life stories, but as far as the "DE" economy model is concerned it was a matter of *policy*, and not of a newly discovered feeling of human solidarity ―as the official discourse may have wanted us to believe *ex-post*. Had this been the case, what about starting by eliminating poverty at home? Or by not sabotaging the only hope of those living on the edge of an increased wage? In fact, in the last quarter of 2018 the *median* net wage (400 thousand pesos) was not high enough even to bring a family of four above the poverty line (423 thousand pesos) ―and this in a country that likes to think of itself *ad portas* of becoming a developed country (a good example of wishful thinking becoming delusional).[38] In fact, another study (using a different source) reports that 60% of workers with a full-time job earned less than that.[39]

And if they wanted to cool the labour market, what about helping repatriate those thousand of Chileans, and their families, who had to leave the country as political refugees during the dictatorship ―and now would like to come back home with their extended families, but haven't the means to do so? (Does anyone still remember, or care, about their existence?).

Although immigration is unquestionably a very positive development from many points of view, what has happened in Chile shows that one can have too much of a good thing, and at the wrong time, and for the wrong reasons. And thanks to horizontal diversification abroad and the policy of mass immigration of cheap labour, the traditional (and already exhausted) dual-extractive economic model has artificially extended its "sell-by date" by a considerable amount of time. In turn, far-right parties also got a new lease of life with rising xenophobia.

35 The Economist (2018).

36 Boix (2003); Palma (2011).

37 Rojas and Vicuña (2019).

38 And (not surprisingly) this median hides a huge gender gap.

39 Durán and Kremerman (2019).

The Scandinavian and higher middle-income emerging Asian models are mainly about being less tolerant with low-end businesses that require low-end labour. The Chilean policy of "pulling" a wave of immigrant cheap labour to give oxygen to the low-productivity sectors that refuse to modernise aims at exactly the opposite. And as Churchill emphasised, what such low wages really do is to subsidise inefficient producers.[40]

And now, with such abundance of cheap labour and horizontal diversification abroad, the contrast between South Korea and Chile can continue unaltered: if in the former one finds among the top 0.01% entrepreneurs producing some of the best cars in the world, in Chile some get there (top 0.01%) by filling the tank of those cars with petrol.[41] And in Chile to get to the 0.01% means earning a share of national income about six times larger than in South Korea ―even though in the latter country this group includes some of the most successful entrepreneurs in the history of capitalism.

Instead, some trade and industrial policies mixed with some Asian-style capital controls and shortages of cheap labour might have given domestic capital little option but to invest locally in more productivity-enhancing activities. What the neo-liberal paradigm seems unable to grasp is that it is one thing to create market *opportunities*, quite another to ensure that there are sufficient market *compulsions* to guarantee that these opportunities are taken up.

The irony is that when Chile got nearer a unique position in which market forces (for once) began to threaten to transform its labour market into a more efficient (and civilised) one ―one with more parity of bargaining―, as well as *forcing* a faster pace of productivity growth ―including creating *the necessity* for a much faster absorption of robotics and artificial intelligence―, there came a "progressive" government, full of born-again "neo-phobics", happy to stop such audacity *by sheer labour-market manipulation*. From a Foucauldian perspective, it was all about putting life back in order.[42]

Conclusion

Latin America is a region whose critical social imagination has stalled since the 1982 debt crisis and the fall of the Berlin Wall. Although this has happened in most of the world, in Latin America both the process of re-legitimisation of capital, and the downswing of critical thinking have been particularly pronounced as neo-liberalism —with its highly sophisticated technologies of power and its remarkably unsophisticated economic policies— has conquered the region, including most of its progressive intelligentsia, just as completely (and just as fiercely) as the Holy Inquisition conquered Spain.[43]

In neo-liberal Latin America arrogance still trumps knowledge and reason. As its *status-quo* is full of absolute certainties, there are few, if any, far more creative "uncomfortable uncertainties" in sight.[44] And these rigidities are proven to be a major obstacle for progress because, as Darwin's worldview teaches us, the species that survive are those most responsive to a changing environment. However, as evolution inevitably generates uncertainty among dominant agents, the pre-Darwinian rigidities built at the core of the model aim at avoiding that.

Perhaps this is what differentiates us most from emerging Asia, where tensions in their development strategies are usually unravelled by "moving forward". In Latin America, instead, as a great deal of energy is wasted trying

40 https://api.parliament.uk/historic-hansard/commons/1909/apr/28/trade-boards-bill.

41 Palma (2019b).

42 Foucault (1994).

43 Palma (2014).

44 The Governor of Argentina's Salta province famously said: "I am a man of few but fixed ideas".

“to stop time”, there is not much left for progress. Such mediocre social imagination corrodes not only our economy, but also our democracy.

Following this perspective, I would argue that the illiterate of the 21st century are not those who cannot read and write, nor those who cannot learn, but those who cannot unlearn and relearn in order to be responsive to change.

And as Walter Benjamin remarked, behind every rise of fascism lies the failure of a major political project: in Latin America (but not only there), it is the failure of the so-called ‘Third Way’. Its very dullness seems to have caused such a failure of the collective social imagination that otherwise unthinkable options have now become possible –as in Brazil. One way to understand the sudden social explosion in Chile in October last year is as a desperate attempt to avoid following this decadent path.

It is often acknowledged that the only historical legitimacy of capitalism —that is, the legitimacy of small élites to appropriate such a large proportion of the social product— rests on those élites’ capacity to use it productively, and to develop the productive forces along the way. And it can only do this by reinvesting most of that huge share. Keynes (1919), for example, explains the contrast at the end of the 19th Century between the ‘emerging’ economies of the time, Germany and the US vs. ‘mature’ Britain during the (investment-intensive) Third Technological Revolution, or third great surge of industrialization[45] –that of the ‘Age of Steel, Electricity and Heavy Engineering’:

> The new rich of the nineteenth century …preferred the power which investment gave them to the pleasures of immediate consumption.… Herein lay, in fact, the main justification of the capitalist system. If the rich had spent their new wealth on their own enjoyments, the world would long ago have found such a régime intolerable.

Intolerable indeed! At least this is the main message from Chile’s social unrest as there is little danger of finding these enlightened attributes in the newly rich anymore. In fact, this “discreet charm” of Latin American-style bourgeoisies has now spread throughout the Western World. We are all now indeed converging, but we are doing so towards features typical of Latin-style middle-income countries, such as mobile élites creaming off the rewards of economic growth, and “magic realist” politics that lack self-respect if not originality. Given this “reverse catching-up” of advanced countries, perhaps we should be saying to them: “Welcome to the Third World!”

Apparently Latin American élites today would settle for nothing less than a political class that lets them have complete freedom to manipulate markets and to free-ride on public goods paid by others, and to have Stepford Wives-style bureaucracies. So, life is now not as easy as a high middle-income status might suggest, as one has not only a family but also an oligarchy and a faceless bureaucracy to support.

According to Ortega y Gasset (1918), the main obstacle to Latin America’s progress has always been the overabundance of “self-satisfied individuals”, who show “...a narcissistic tendency to use reality as a mirror for self-contemplation”. And this self-satisfaction was a major barrier for change as it limits “…critical analysis and progress”, as “...human history is the product of discontent”. This is precisely the main proposition of this analysis: a “self-satisfied” Chilean capitalist élite, interacting with a similarly natured political class (including now many in the “new-left”) and a tamed bureaucracy –all of them informed by a narcissistic ideologies full of “absolute certainties”–, ended up intrinsically averse to any break from routine. That is, they ended up prisoners of “neo-phobia”, and as a result, having managed to get an emerging economy growing in the 1990s, when the dynamism of the

[45] For a comprehensive analysis of this period, see Pérez (2002).

extractive cycle was over the economy began to sink slowly into the quicksand of inertia ―which is exactly what a "middle-income trap" is all about.

This "inertia-style trap" is the opposite of what is needed for the passage from middle to high-income status, as this passage is all about having the "upgrade flexibilities" in entrepreneurship and policy which are necessary to diversify the economy towards more knowledge-intense activities (characterised by higher potentials for sustainable productivity growth).

From the perspective of its development *potential* (and borrowing from psychoanalysis), perhaps what most characterises Chile (and Latin America) in this respect ―especially its main actors (both private and public)― seems to be an addiction to an impoverished life. Perhaps this is what people in Chile have been really revolting against. In the middle of the unrest last year one street graffiti spelled it out: "Hasta que valga la pena vivir" (until life becomes worth living).

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