

Working Paper N 114 | 2024

*When did Argentina lose its mojo? A short note
on economic divergence*



ie | BCRA

INVESTIGACIONES ECONÓMICAS

Economic Research Working Papers | 2024 | N 114

*When did Argentina lose its mojo? A short note
on economic divergence*

Sebastián Katz

Universidad de Buenos Aires, Banco Central de la República Argentina

Eduardo Levy Yeyati

Universidad Torcuato Di Tella

May 2024



ie | BCRA
INVESTIGACIONES ECONÓMICAS

Working Papers, N 114

When did Argentina lose its mojo? A short note on economic divergence

Sebastián Katz

Universidad de Buenos Aires, Banco Central de la República Argentina

Eduardo Levy Yeyati

Universidad Torcuato Di Tella

May 2024

ISSN 1850-3977

Electronic Edition

Reconquista 266, C1003ABF

Ciudad Autónoma de Buenos Aires, Argentina

Phone | 54 11 4348-3582

Email | investig@bcra.gob.ar

Website | www.bcra.gob.ar

The opinions expressed in this paper are the sole responsibility of its authors and do not necessarily represent the position of the Central Bank of Argentina. The Working Papers series is comprised of preliminary material intended to stimulate academic debate and receive comments.

This paper may not be referenced without authorization from the authors.

When did Argentina lose its mojo? A short note on economic divergence

Sebastián Katz, Universidad de Buenos Aires, Banco Central de la República Argentina

Eduardo Levy Yeyati, Universidad Torcuato Di Tella ¹

Abstract

Based on long series of per capita GDPs, we characterize the economic divergence of Argentina in the 20th century relative to a group of countries with comparable initial income per capita. We find the divergence to be considerably longer than usually conjectured, with two marked tranches in the first half of the century and in the post war period, the latter being associated with GDP underperformance despite the relative decline in population. We identify specific dates for the inflection points, discuss the context in each case, and propose a potential explanation of the divergence together with a description of the highly volatile plateau displayed since the 1990s.

¹ The authors acknowledge outstanding research assistance from Ariel Krysa.

1. Introduction

The title, a paraphrase of a famous Latin American novel,² is a recurrent question in a country that is both locally and globally recognized as an anomaly, a class in itself.³ The question has been addressed by a large number of academic works with the idea of elucidating the reasons for the peculiar course of a country a priori endowed with generous natural, human and contextual resources that nevertheless, from a casual glance, seems to exhibit a performance inferior to that of developed countries and its own neighbors for decades. Is this true in the data and, if so, since when and for how long?

This exploration is important for at least two reasons. First, to complement the historical record, usually influenced by descriptive anxiety and political polarization. Second, to re-evaluate the myth of Argentina's original wealth –which postulates a 19th century paradise lost at the beginning of the 20th century –and its deleterious influence on the way Argentineans think of its country's performance and potential: by placing this "lost paradise" in context (and, to some extent, qualifying it) we help counter the retrospective utopia that insinuates itself intensely in populist political discourses, which often point at some holy grail of development buried in some uncertain past.

Our empirical analysis contributes to this debate by identifying structural breaks in the evolution of Argentina's per capita GDP relative to a comparison group comprised of developed economies with similar per capita income at the beginning of the 20th century. We find that Argentina exhibited a long (and non-monotonic) absolute divergence throughout most of the 20th century, with a marked acceleration in the 50s and a slowdown in the 90s. In addition, we document a gradual convergence from above to the larger Latin American economies, and no convergence from the latter to the comparison group of developed countries. In line with these findings, we document that Argentina represents a rather unusual case of a slide down from the upper middle-income group to the middle-income group.

This narrative differs from the conventional view among historians and social scientists, which often place the inflection point in the mid-1970s –a period that coincides with the

² “When had Perú screwed up?” wonders one of the main characters in Mario Vargas Llosa's *Conversation in the Cathedral*.

³ Famously, Simón Kuznets, third Nobel Prize winner in Economics in 1971, once said that in the world economy he identified four types of countries: the developed, the undeveloped, Japan and Argentina, the latter as the archetype of the inexplicably failed case. It is likely that Kuznets, who visited Argentina in 1964 as a member of the group of experts from Harvard University that advised CONADE in the preparation of the National Development Plan 1965-1969, made this characterization during that visit (Fracchia and Sourrouille, 1986). We thank Javier Mezzina for this valuable historical reference.

breakdown of the import substitution model in the region and, specifically in the case of Argentina, with the sharp devaluation of June 1975 (labelled the “Rodrigazo” after the ephemeral economics minister that implemented it) that preceded a period of high real and nominal volatility, recurrent crises and economic stagnation. While the 70s is indeed characterized by macroeconomic underperformance both in relation to developed and Latin American economies, the divergence is considerably longer than usually conjectured. Moreover, the nature of this divergence changes in the 50s, where unlike in the first half of the century, relative per capita income falls despite of a decline in relative population growth.

What is the best way to date this process? Should we compare, in addition to countries with the same initial income level as in the figure, with neighboring countries to control for local factors? Are there multiple breaks, something to be expected if the view is extended, as in this paper, to a long window that covers more than one century?

In the following section, we address these methodological questions. In section 3, we present and discuss the main findings. In turn, section 4 provides a closer look at the latest period to highlight potential negative feedbacks of Argentina’s decades-long economic underperformance. Section 5 concludes.

2. Methodology

Much has been written about the discouraging long-term performance of the Argentine economy, taken in some now classic studies as the archetypal example of divergence, i.e., that of a country that evolved from "relative wealth to relative poverty" (Pritchett, 1997; De Long, 1988).

The collapse of world trade in times of the Great Depression questioned the foundations of Argentina’s agricultural exports model based on a rapid integration with the international flows of goods, capital and labor during the boom of the Atlantic economy of the first globalization (O’Rourke and Williamson, 1999). Its replacement, after the Second World War, by a forced industrialization based on import substitution and trade protection, strong state interventionism, and generalized fiscal subsidies to sectors focused on the domestic market would have resulted in an increasing loss of dynamism of the productive pattern (Cortes Conde, 1998; Lagos et al. 2011).

Some experts have highlighted the end of the Second World War as the turning point in this story: just as the agricultural export model showed the country's vulnerability to external shocks, the collapse of international flows in the interwar period led to a closed economy, further supported by the developmentalism of the 1960s, and against the boom in global

trade that defined the postwar period⁴. Several interpretations point out that, with the inclusion of urban actors and their social demands, the reduced dynamism of the postwar period was additionally burdened by the distributive tensions reflected in a recurrent dilemma between external equilibrium (linked to a depreciated exchange rate) and internal welfare (income growth at the cost of an overheating economy and an overvalued exchange rate) behind the so-called stop & go cycles (Mallon and Sourrouille, 1975). In this polarized context, subsidies to make up for the low profitability of capital and to pump up local purchasing power would have amplified the cycle by giving rise to an ostensible propensity to fiscal imbalance (Canitrot, 1987; Torre, 2010).

But most analysts point to the mid-seventies as the turning point. One event in particular, the so-called Rodrigazo, marked the implicit end of a scheme oriented to the domestic market with strong state participation that would lead to repeated (and failed) attempts at modernization, openness and structural reform to insert the country into the second phase of globalization. With agricultural proceeds that were insufficient to sustain an uncompetitive productive pattern, the openness model made up for the lack of foreign exchange with a recourse to external financing that was ultimately unsustainable (Gerchunoff et al, 2020), and replaced the stop-go cycles and the resulting current account crises with the wider financial cycles and sharp currency and debt crises of the post Bretton Woods period (Albrieu and Fanelli, 2008).⁵

Several papers provide an empirical account of the relative decline of the Argentine economy. Most of them are descriptive: visual inspection of income level series, comparative evolution of income relative to developed countries, or simple income rankings (the most imprecise measure, to be sure, given the continuous entry to, and exit from the sample). However, the absence of a well-established "divergence metric" to complement these studies makes a comparative analysis of this literature rather difficult.⁶ In what follows, we propose criteria to define such a metric.

How to look at the data? More specifically, what should be the benchmark and the time window to analysis Argentina's comparative performance? How should the series be filtered to exclude epiphenomena such as wars, or local or global crises? Should other variables besides GDP per capita be included in the comparison? Before taking at face value

⁴ Although it is debatable to what extent, in a period characterized by food protectionism in European countries, the option of complete openness would have been convenient for an economy like Argentina with a resource endowment not complementary to that of the United States, the dominant economy of the period.

⁵ As has been vastly documented, this pattern was also present in other developing economies; what is unique to Argentina is the frequency and, specially, the persistence of this financial roller coaster, which continues in the present.

⁶ On the convergence debate see, i.e., Baumol (1986), De Long (1988).

the dates suggested by ocular inspection in Figure 1, it is crucial to address at least the following three questions.

- ***What benchmark should we use to measure the divergence?***

Our reference sample is a group of countries that are comparable with Argentina along the key metric of economic performance: they all have a similar beginning-of-period per capita income. Naturally, there is a dilemma between the choice of the starting date and the coverage of this sample: the earlier we start, the broader the perspective, but at the expense of a smaller benchmark group (because of the smaller number of countries for which data are available as we move back in time). We chose year 1900 as our starting point (although in some cases, for completeness, we report data points corresponding to earlier periods) and include in the comparison sample countries with an initial per capita GDP within a 50% interval centered in Argentina's per capita income, namely, Austria, Australia, Belgium, Canada, Denmark, France, Germany, and The Netherlands.

In addition, we replicate the exercise for a representative group of Latin American countries (Brazil, Chile, Colombia, Mexico, Peru, and Uruguay) for two reasons. First, to illustrate the fate of economies with similar factor endowments and geographical location; second, to document the reverse phenomenon: Argentina's "convergence" (from above) to neighboring economies, which, as we will document, materializes through a relative decline of the former, rather than through an upward convergence of the latter, which do not exhibit any convergence to the benchmark developed economies.

Indeed, as we will show, both Argentina *and* the selected Latin American sample appear to have been caught in a "middle-income trap"⁷, albeit at different times and starting from different initial positions that somehow mask what could be regarded as a regional phenomenon (Levy Yeyati, 2021a), which is ultimately reflected in a slowdown of the divergence between Argentina and its neighbors in recent decades.

- ***One divergence or many?***

To what extent is what we see as "decline" a succession of accumulated trends and breakdowns? How much of the decline disappears once we filter out the pronounced cycles

⁷ The term was coined by Gill and Kharas (2007) to characterize those fast-growing second-generation East Asian tigers that rose up from the low-income group but slowed down before making it to the developed league. Chilean economist Alejandro Foxley (2012) added the institutional and social dimensions, defining the trap as the difficulty to sustain growth over 5% while perfecting democratic institutions and reducing inequality of income and access.

around external shocks such as wars or pandemics, terms of trade fluctuations or financial crises?

Popular narratives love simple, one-dimensional accounts, but reality tends to be more convoluted and less linear than the secular decline story typical assumes. This implies that we need to examine the possibility of more than one inflection point. On the other hand, if economic cycles are not filtered out, moments of ephemeral wealth or transient crisis may be confused with more permanent state variables and distort the results. Thus, we need to use properly filtered series and search for the possibility of more than one structural break.

- ***What is the relevant variable?***

Can we subsume the analysis of the country's performance in the evolution of GDP per capita? What do other variables associated with the economic and social performance (inflation rates, poverty, income distribution and living standards more generally) tell us about the eventual decline?

For simplicity and ease of comparison with the existing literature, our exploration focuses on the PPP-adjusted GDP per capita, although it includes, in the last section, a comparative analysis of related macroeconomic variables such as output volatility, inflation and the multilateral real exchange rate. Welfare and social indicators are not considered due to the scarcity of consistent long series.

3. Results

Figure 1 introduces the question and summarizes the narrative. The figure reports the evolution of Argentina per capita output relative to the average of the benchmark countries, and shows an initial peak followed by a gradual, secular decline that starts at the beginning of the 20th century, accelerated in the post-war period, and reaches a plateau in the 90s.

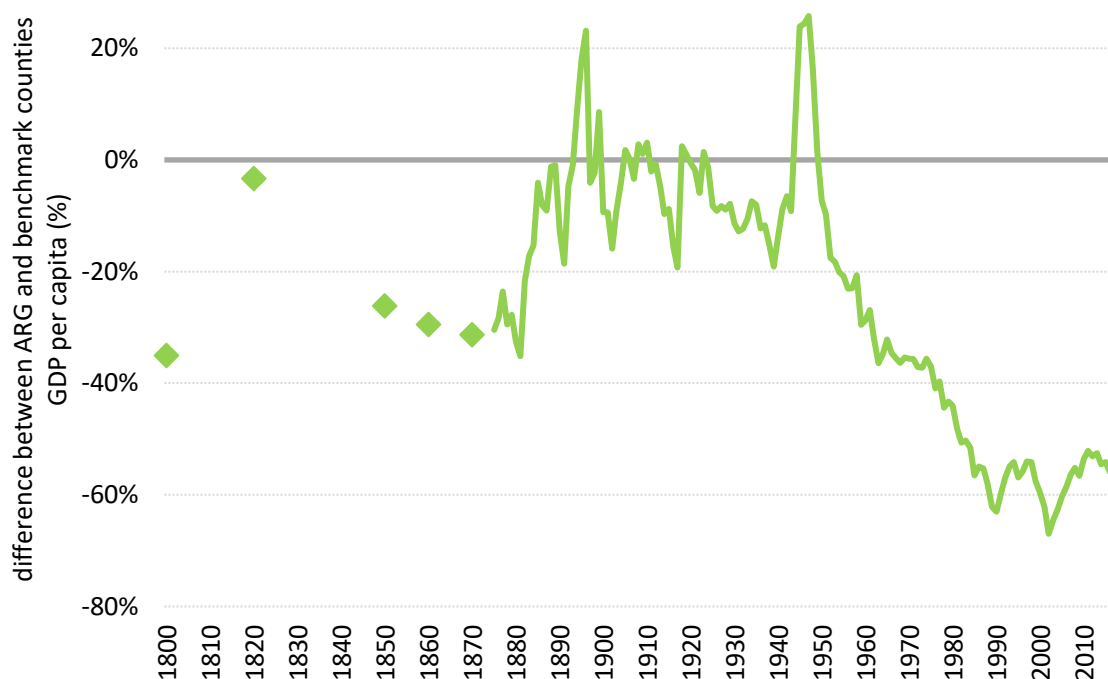
As such, the figure could be seen as the illustration of the story of a secular decline in three stages:

- After a brief but intense period at the end of the 19th century in which -courtesy of the rail's expansion- the fertile lands of the Pampas were rapidly incorporated into world trade, and international capital and labor was added from the rest of the world –a leap that is in line with the rich-country myth that nonetheless was not enough to reach the income level of Australia, let alone that of the U.S.–, Argentina gradually moved away from the comparison group until the mid-1940's.
- After a temporary surge during the Second World War due, to a large degree, to the huge output losses suffered by most in the control group because of the bellum conflict, it quickly resumed the downward divergence path in the post-war period before

stabilizing in the 1960s at about 40% below the average income of the benchmark countries.

- After a short-lived plateau –which corresponds to the "economic spring" of the sixties, as was characterized by the economic literature of the time (Gerchunoff and Llach, 1998)– the economy recovered in the 1970s its declining dynamics until the beginning of the 1990s when, in a context of marked aggregate volatility, this divergence plateaued at a level roughly 60% below that of comparable countries.

Figure 1. Evolution of the GDP gap (Argentina relative to comparable developed countries)



Source: Own elaboration based on Maddison Project Database (2020). **Note:** Comparable countries: Germany, Australia, Austria, Belgium, Canada, Denmark, France and the Netherlands. Results for 1800 are not directly comparable due to lack of data: 1800 includes only Germany and the Netherlands.

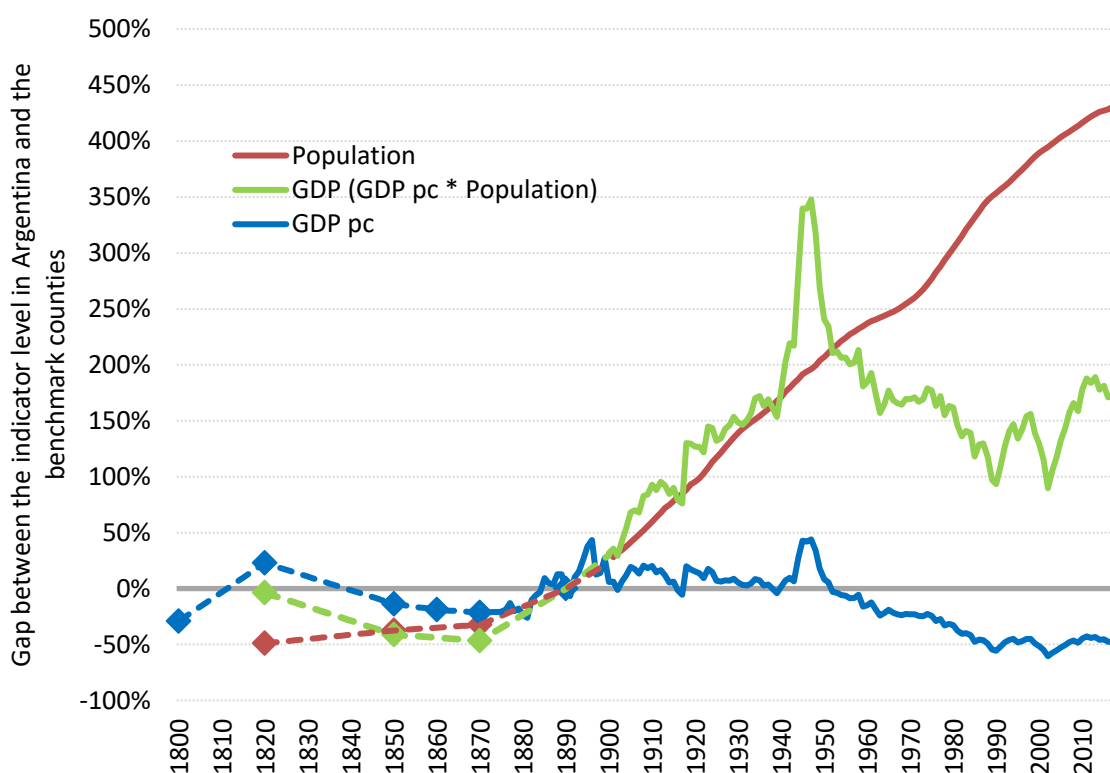
We can refine the series and the exercise to get a clearer picture of the long-term evolution described above. It is critical, in particular, to filter the series to identify its normal or trend level and prevent the comparison from being influenced by one-off events or pronounced cyclical developments. Figures 3 to 5 present the results using standard HP-filtered series starting in 1875.

At the first half of the 20th century, thanks to a proactive immigration policy, Argentina went from being a thinly populated producer of commodities to a denser country with a more sophisticated manufacturing base. It is natural then to wonder to what extent the evolution

of per capita income reflected demographic factors; in particular, whether the first wave of divergence was due to the country's population catch-up with the (mostly more mature and denser) economies in the benchmark group⁸.

Figure 2 seems to point in that direction: up to 1950, the decline coincides with a strong relative growth of both real GDP and population (indeed, with a stronger performance of the latter that explains the relative decline in per capita terms). By contrast, the accelerated economic divergence of the second half cannot be attributed mainly to demographic factors: not only was there a more subdued relative increase in population; unlike in the previous phase, there was also a marked relative decline in GDP.

Figure 2. Relative evolution of total GDP, population and per capita GDP (1890=100)

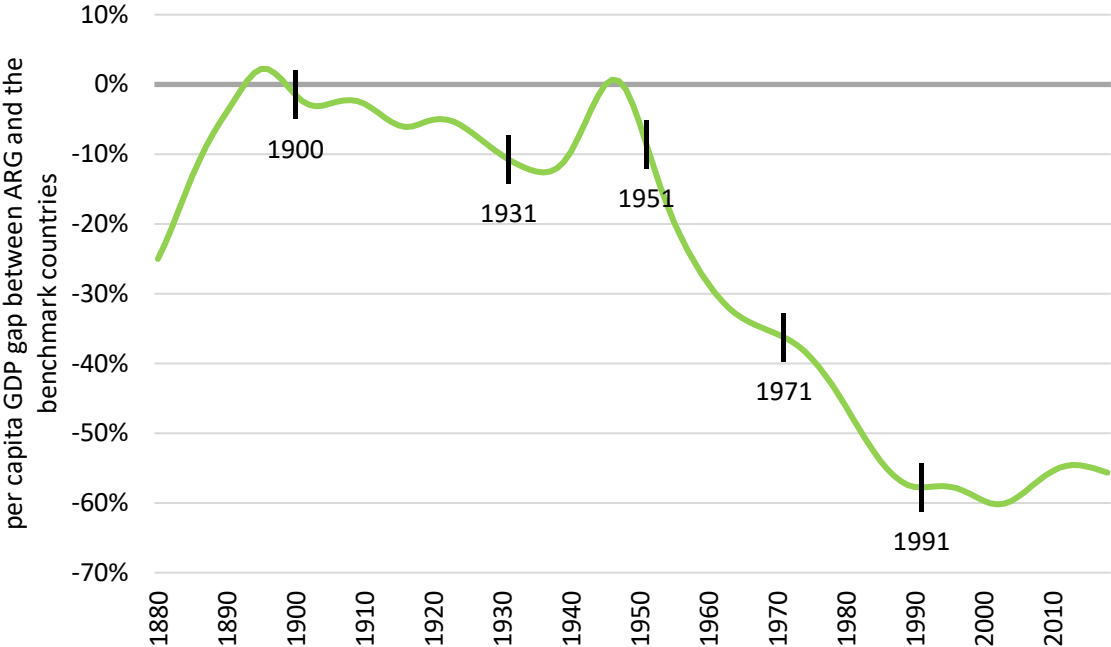


Source: Own elaboration based on Maddison Project Database (2020). **Note:** The original series by country are smoothed using an HP filter with a start date of 1875 and converted to 1890=100 base. Then, we calculate the gap relative to each of the benchmark countries, from which we obtain the average gap reported in the figure. The dashed lines indicate interpolated data.

⁸ Some authors have emphasized that the initial boom in income per capita in Argentina was perhaps a once and for all episode associated with the valorization of its finite and limited natural resources that was rapidly diluted after a wave of massive inward migration (Llach, 2020).

Figure 3, which replicates Figure 1 using the filtered series, presents the results of the Global L vs. None Multiple Breakpoint test to identify possible inflection points.⁹ The break points, indicated with vertical lines, are mostly consistent with the anecdotal story that emerges from ocular inspection of Figures 1 and 2: a mild divergence in 1890-1930, a brief recovery during the second war, an accelerated decline from 1950 onwards (with a brief a pause in the mid-1960s), ending in a “plateau” after 1990.

Figure 3. Per capita GDP relative to benchmark countries (HP-filtered trends)



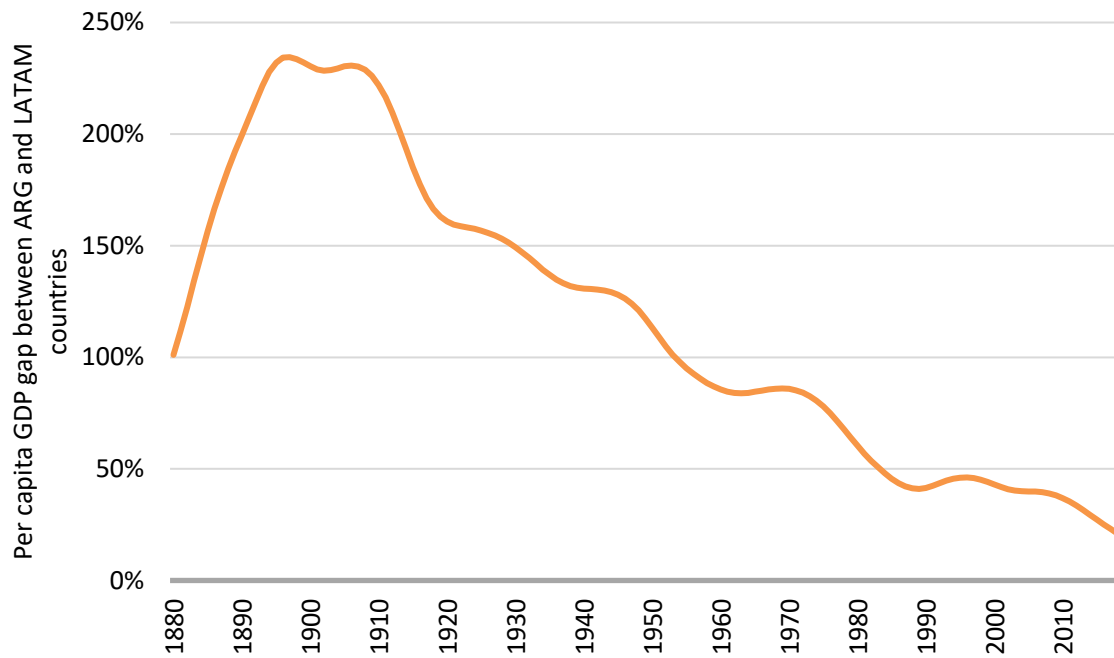
Source: Own elaboration based on Maddison Project Database (2020).

Figure 4, in turn, shows the same exercise for a representative group of Latin American countries (Brazil, Mexico, Chile, Colombia, Peru and Uruguay) to illustrate the relative underperformance with respect to the region. Unsurprisingly, the silhouette is similar to that in Figure 2, with a twist: what the figure shows is the convergence of the countries in the region to the Argentina’s income level but not necessarily because of the former’s convergence to development. For more than a century, Latin American countries have kept a remarkably stable distance with the developed benchmark group; it was Argentina that slowly slide away from the latter and closer to the former¹⁰.

⁹ We considered models that included a constant and a trend, and used the Bai-Perron tests of 1 to M globally determined breaks (sequential evaluation, trimming 0.15, max. breaks 5, significance level 0.05). See Bai (1997), and Bai and Perron (1998 and 2003).

¹⁰ Interestingly, Argentina’s underperformance relative to the region continued in the last decade.

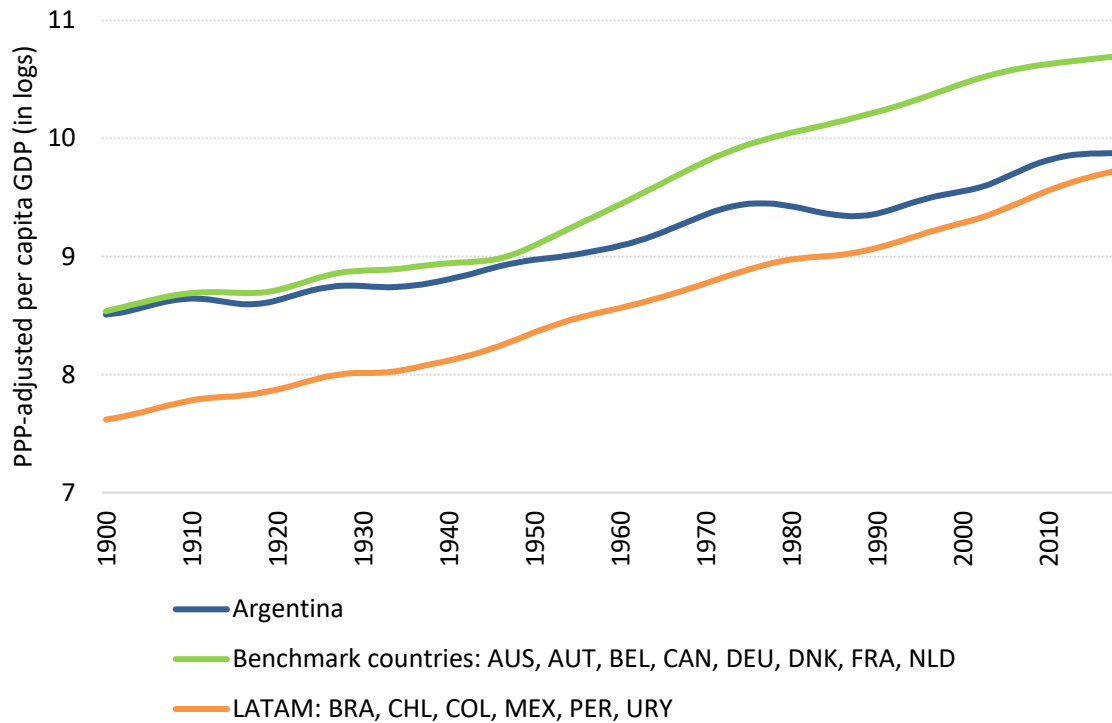
Figure 4. Per capita GDP relative to Latin American countries (HP-filtered trends)



Source: Own elaboration based on Maddison Project Database (2020). **Note:** The Mexico series incorporated in the LATAM average includes linear interpolations in the interval 1880-1900 to complete missing data.

Figure 5 illustrates both the divergence of Argentina with respect to the benchmark and the convergence “from above” to its neighbors. The GDP per capita series are presented in levels (in logs) for the sake of visual comparison. As noted, Latin American countries do not exhibit any visible convergence to the income levels of the most advanced economies in the benchmark: it is Argentina that lags behind, distancing itself from the advanced group towards its less developed peers.

Figure 5. Argentina's GDP vs. benchmark and Latin American countries (1900-2018)



Source: Own elaboration based on Maddison Project Database (2020). **Note:** The original series by country are smoothed using an HP filter with a start date of 1880, from which the average is subsequently taken by group.

Another way to illustrate Argentina's exceptionalism (in the sense of its convergence to a middle-income trap "from above") is to look at the income transition matrix, namely, the probability of moving between different stages of per capita income within a given time span.

What is the probability of moving from a high to a middle-income level? And, looking the complete sample, how many countries have followed Argentina's path? Following Arias and Wen (2015), we estimate the transition matrix between per capita income levels relative to the U.S., which we take as a reference of the income frontier. Unlike these authors, however, who focus on transitions over short (and moving) time windows (which implies that they have several observations for any given country), we compare the beginning-to-end transition within the entire period under study (1900 to 2018), which gives us one observation per country. We define four relative income brackets: low (less than 15% of the U.S. per capita income), lower middle (15% to 50%), upper middle (50% to 70%) and high (more than 70%), and assign countries to the transition matrix according to their "departure" and "arrival" positions.

The results are presented in Table 1. The diagonal (in yellow) represents countries that remained in the same group; green boxes represent “successful” transitions: convergence to a higher bracket in the income scale; red boxes (below the diagonal) of the matrix illustrate “unsuccessful” transitions (long-term divergence). As can be seen, there are only a handful of countries in the initial sample that fall in the red areas: Cuba, which moved from lower middle- to low-income, the UK and New Zealand, which moved from high- to upper middle-income, and Argentina, which moved from upper middle- to middle-income.

Table 1a. Transition matrix of income levels 1900-2018

1900-2018		Final level of income			
		< 15%	>15% y <50%	>50% y <70%	>70%
Initial level of income	< 15%	JAM	BRA, COL, ECU, IDN, PER, ROU		
	>15% y <50%	CUB	CHL, GRC, LKA, MEX, POL, PRT, URY, VEN, ZAF	ESP, ITA	FIN, NOR, SWE
	>50% y <70%		ARG		AUT, CAN, DEU, DNK, FRA, NLD
	>70%			GBR, NZL	AUS, BEL, CHE

Source: Own elaboration based on Maddison Project Database (2020).

Since the sample with available data in 1900 is rather small, we replicate the exercise taking 1950 as our alternative starting point, so that the number of observations for this exercise increases to 150 economies. With this modification, Argentina is now joined by Venezuela in the upper middle- to lower middle-income transition slot. The relative frequency of this case is quite low: the matrix starting in 1950 shows that a typical upper middle-income country transitioned to a high level of income in 75% of the cases, whereas a descent took place in only 25% of the cases.

Table 1b. Per capita GDP transition matrix, 1950-2018 (whole sample)

1950-2018 (full sample)		Final level of income				Total
		< 15%	>15% y <50%	>50% y <70%	>70%	
Initial level of income	< 15%	51	24	3	2	80
	>15% y <50%	7	28	8	9	52
	>50% y <70%	0	2	0	7	9
	>70%	0	0	2	7	9
Total		58	54	13	25	150

Source: Own elaboration based on Maddison Project Database (2020).

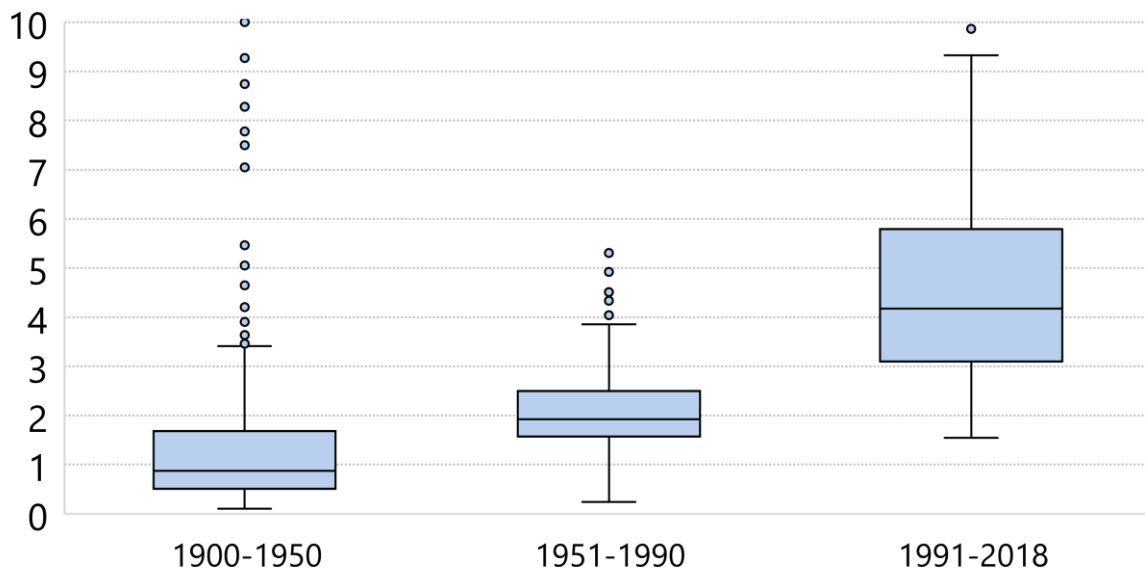
4. An unstable plateau

Argentina's peculiar divergence story includes a final chapter characterized by a slower relative decline, albeit with a marked increase in both real and nominal volatility.

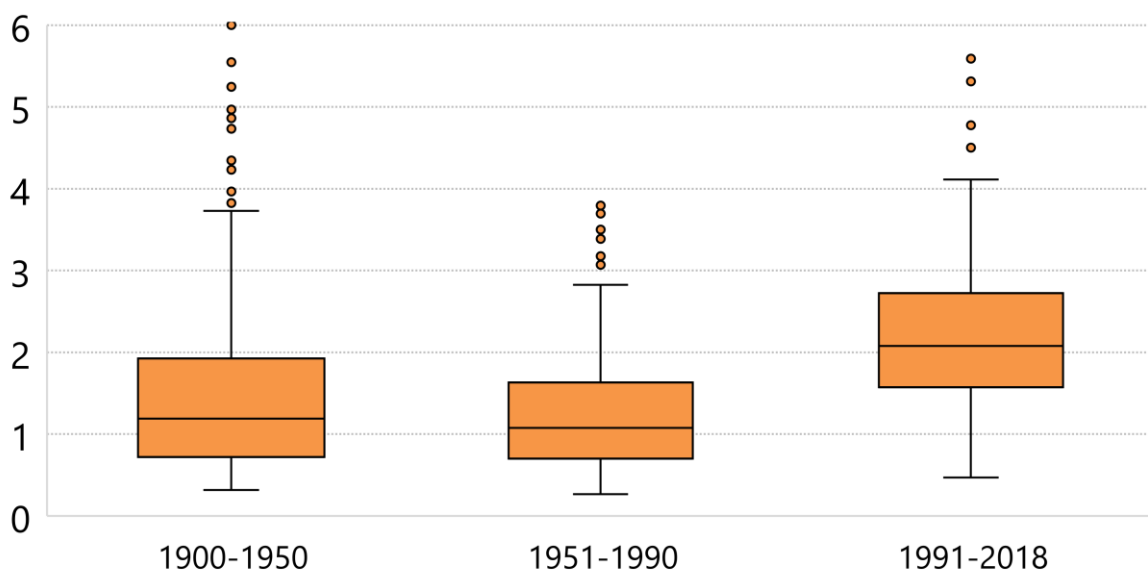
Figure 6 shows that the relative volatility of the real growth rate of Argentina compared with the reference countries almost doubled since 1990, when the divergence began to plateau¹¹. Interestingly, the same pattern is also apparent with respect to neighboring countries.

¹¹ We chose the time intervals in line with the three broad chapters identified in the structural break tests: a first period (1900-1950) associated with a slow decline from the artificial peak by the end of the 19th century; a second period (1951-1991) of accelerated divergence and, finally, the "plateau" (starting in 1991).

Figure 6. Volatility of the real growth rate of Argentina
Relative to benchmark countries



Relative to Latin American countries

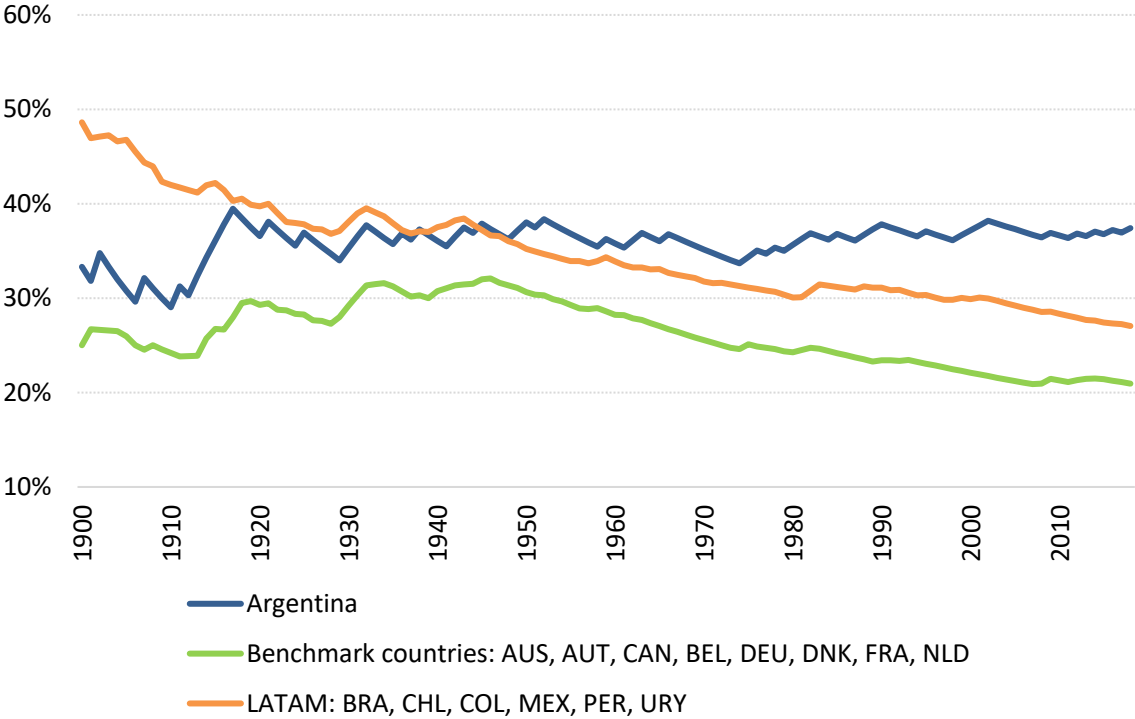


Source: Own elaboration based on Maddison Project Database (2020).

It is not surprising, then, that the Argentine economy spent a lot of time in recession. Since 1900, GDP per capita has contracted about 4 out of every 10 years, a curiously stable ratio, as we extend the window. This contrasts with the case of developed economies, which are much more stable (2 out of every 10 years) and with neighbors that, since the end of the

Second World War, displayed a declining frequency of recessions, which now stands, for the whole period of analysis, at less than 30% (Figure 7). Thus, the incidence of recessions is a metric in which Argentina has not yet ceased to diverge.

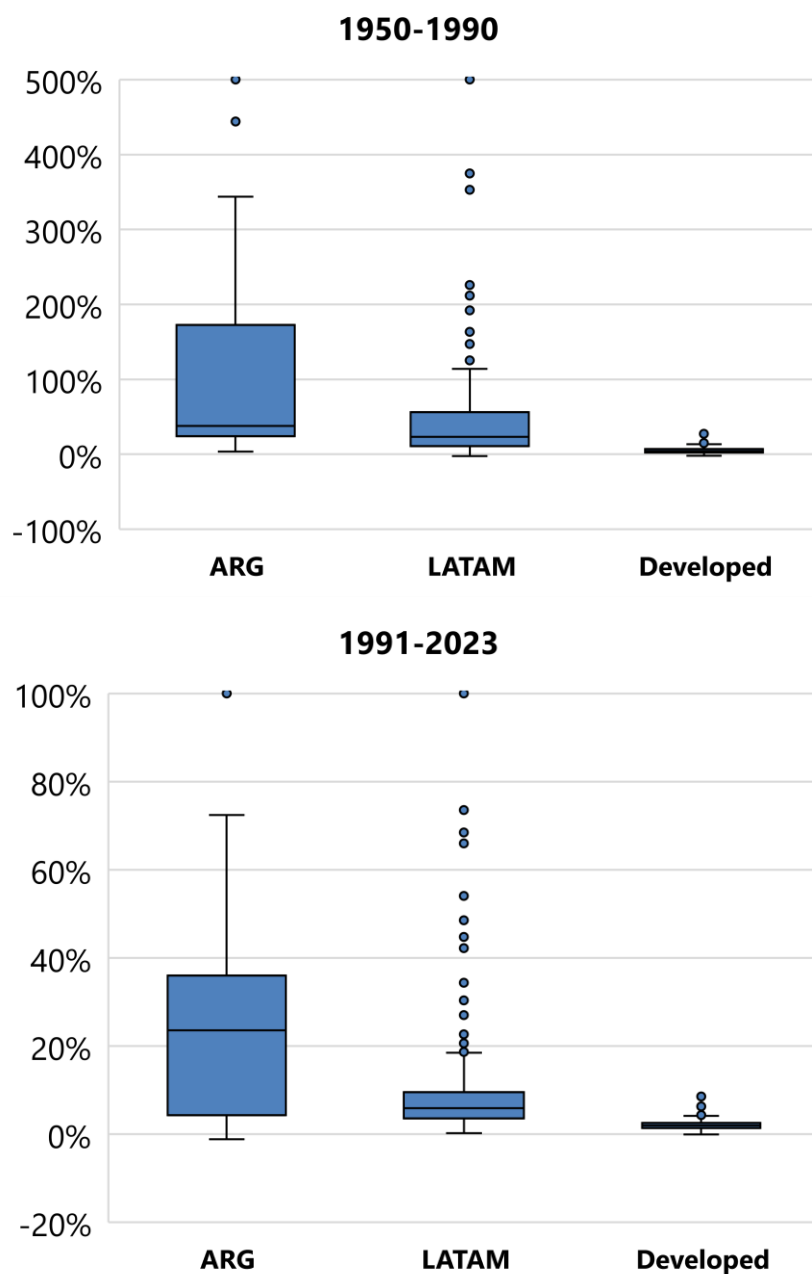
Figure 7. Proportion of years with falling GDP pc PPP (expanding window since 1880)



Source: Own elaboration based on Maddison Project Database (2020). **Note:** The corresponding value at T year represents the proportion of falling GDP pc PPP years within an expanding window that starts in 1880 and ends at year T.

This higher real volatility coincided with a visible increase in relative inflation levels: while Argentina had historically exhibited high inflation (and bouts of hyperinflation), particularly in the post-Bretton Woods period, this has also been the case for other Latin American economies, as indicated by the comparable median inflation rates. However, since the 90s, even in the absence of hyperinflation episodes, the median inflation rate was 20% higher than its neighbors', making contrast more visible: at a time when Latin American economies embraced nominal stability, Argentina is still swamped by chronic and volatile inflation (Figure 8).

Figure 8. Distribution of annual inflation rates

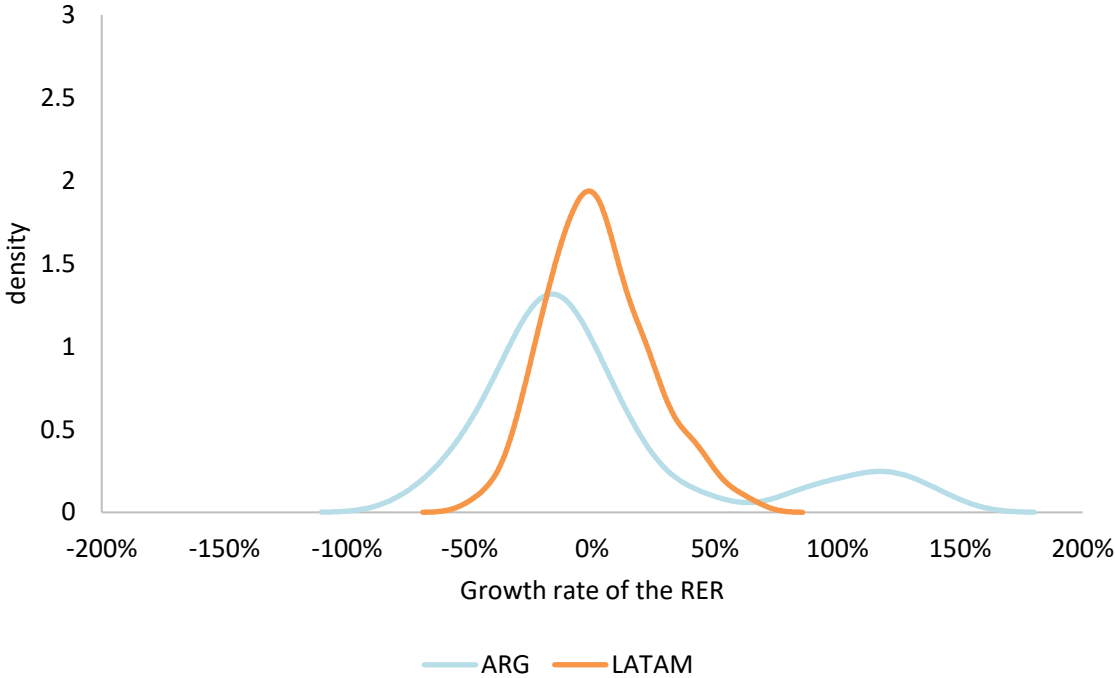


Source: Own elaboration based on Gerchunoff and Llach (1998), INDEC, Statistics Bureau of Buenos Aires City, Statistics Bureau of San Luis, IMF, Central Bank of Brazil, and Central Bank of Chile.

This tension between slow growth and chronic inflation has led the country to resort to the exchange rate anchor as a substitute for more conventional monetary and fiscal policies. This gave rise to unsustainable dynamics with short-lived dividends that ended in discrete exchange rate realignments. As a result, the real exchange rate has exhibited an unusual pattern of long periods of (gradual and ultimately unsustainable) overvaluation followed

by sharp corrections, often to the point of overshooting –presumably, a good starting point for the next exchange rate anchor experiment. Thus, an asymmetric, bi-modal distribution arises, whereby the real exchange rate is (most of the time) overvalued or (on occasions) sharply undervalued, but seldom stays close to the mean, as opposed to neighboring countries where the distribution is closer to normal and with virtually no fat tails (Figure 9).

Figure 9. 5-year variation of the official USD multilateral real exchange rate, kernel density plot (1991-2023 period)



Source: Own elaboration based on IMF, BCRA and Central Bank Reserve of Peru. **Note:** Kernel density with gaussian smoothing; bandwidths selected through the Silverman’s (1986) rule of thumb.

The combination of stagnation, inflation and a permanently misaligned exchange rates, together with the negative feedback between them, goes a long way to characterize the trap holding back Argentina’s economy in the past few decades. For example, the fact that the exchange rate is expected to be either overvalued or in the middle of a disruptive correction discourages the development of exporters and erodes the chances of a more diversified, export-driven growth that may alleviate the dependence on international foreign exchange that played a key role in the run up to most emerging markets crises in the past (Levy Yeyati, 2021b; Frenkel and Ross, 2006; Dvoskin and Katz, 2021). In a kind of vicious circle, the country’s crises severely affect the credibility the policies, contributing to the shortening of agents' horizons and restricting the authorities' margin to deal with external shocks, thereby reducing access to international credit markets and feeding back into the country’s crisis propensity.

Finally, and more to our point, years of frustrating stagnation increase the government's incentives to go for a quick rebound even at the expense of a misaligned exchange rate or the recurrence of fiscal and external deficits. In other words, the longer the divergence, the more sub-optimally proactive the polity response, and the more frustrating (and volatile) the final result.

5. Final remarks

The contribution of this paper is simple: to characterize Argentina's economic divergence using an objective approach to the data. This analysis, always preliminary given the nature of the data and the complexity of the underlying drivers, is an essential first step to revisit the many conjectures woven in the large literature devoted to understanding Argentina's economic malaise.

A priori, our findings are consistent with at least two different narratives, albeit with similar connotations (start dates in parentheses):

- Secular divergence (1900): Our preferred narrative would interpret the data as telling us that, taking the peak of the late 19th century as the initial stage, Argentina's relative decline has been a secular phenomenon with some circumstantial incidents (the second war, the brief pause in the 60s) converging "from above" to a middle-income trap where it remained in the past three decades –at the expense of high real, nominal and political volatility. This, perhaps the most innovative, is our favorite.
- Post-war decoupling (1950): If we dismiss the initial peak as an epiphenomenon resulting from a spasmodic development process, we could characterize the evolution as an oscillation around a stable ratio, which in the second post-war is replaced by a declining trend that stabilizes only when the country enters its middle-income trap. In other word, although the decline precedes the postwar period, the acceleration after the 1950s suggests that the same factors, internal and external, that determine the comparative evolution in this period may have varied in relation to those of the first half of the century.

In both cases, the evidence challenges some explanations of the phenomenon common in the literature. In particular, it questions the idea that the decline began –or worsened strongly– in the 1970s, when the country's domestic market-driven productive pattern became unsustainable, both fiscally and externally, deepening a chronic foreign exchange shortage (Gerchunoff, 2021). While this decline is visible in the data, it is hard to argue that de divergence started at such a late date.

Other conjectures coexist better with the evidence presented here. For example, the so-called "distributive bid" hypothesis, according to which the post-war decoupling would

coincide with demands for equity resulting from the internal migration (from rural areas to large cities, and from provinces to the capital) and social integration, including through rapid unionization, during the process of forced industrialization; this egalitarian drive would be the basis of support for Peronism and, later on, for the populist bias and political aversion to fiscal balance of most subsequent democratic governments (Hora, 2024; Torre, 2010). To what extent the domestic market-driven, import-substitution model, at odds with the globalization wave in the Bretton Woods period, was a product of this local bid and not the reverse (uncompetitive domestic products demanded unsustainable high spending levels) certainly deserves a more rigorous empirical analysis that exceed the purpose of our paper.

Similarly, the secular divergence is consistent with the view, less popular today, that Argentina was the victim of a moderate variety of the curse of natural resources; specifically, the result of the very high productivity –and concentrated– agricultural sector that made it the ideal target of a populist cross-subsidy to labor intensive activities and public spending, regularly interrupted by “oligarchic” military coups, which led to start-stop cycles that inhibited the process of capital accumulation.

It is not realistic to aspire to explaining 100 years of divergence with a single argument: more likely, what we identify in the data is the result of structural dynamics (for example, the dependence on primary exports that explains the deterioration of the terms of trade in the 1960s) combined with fortuitous circumstances (Argentina's position in the Second World War) or external shocks (wars, or exposure to the financial cycle of the 1970s that led economies of the region to debt crisis in the 80s). Notably, other countries that went through similar obstacles (for instance, Australia and New Zealand) found a way to overcome them with bold politics and policies that contrast with the short-termism typical of Argentine populism.

Which brings us to the second contribution of this work: the political consequences of Argentina's unusual route at different moments in time. We already mentioned the hypothesis, stressed by many of the cited literature, that social demands behind the chronic fiscal imbalance may have reflected in part the memory of a rich (at the beginning of the century) and egalitarian (in the postwar) society in the context of a thriving and vocal democracy. To what extent does the protracted economic deterioration feed the governments' spending anxiety or the populist exchange rate policies that lead to recurring fiscal and balance of payments crises?

In the same way, one cannot help but think that the stagnation, in relative terms, of per capita product several steps below that of the starting point plays a role in the country's inability to build long-lasting stabilizations and a long-term development agenda to grow

out of the middle-income trap. Tax distortions that fuel a dual labor market and a growing share of low-productivity jobs, as well as diminished expectations that favor transfers and subsidies over investment in public services and infrastructure, or tolerate inflation as the cost of growth result not only in a fragmented society prone to polarization, but also in a worse economic performance –and back to the beginning.

As a by-product of this debate, there remains the question about the social aspects of Argentina's unique path: to what extent does a society that reaches middle income levels from above differ from Latin American societies that did the same from below? Are the barriers that inhibit a cooperative solution necessary to redirect growth in Argentina greater, or more resilient, than in its neighbors? How much does this local peculiarity affect the intertemporal discount rates and the attitudes towards risk of agents and policy makers? Can a country, like Sisyphus, lift the stone to the top of the mountain after having seen it fall? All important questions that we expect to tackle in future research.

References

Albrieu, R. and J.M. Fanelli (2008). Stop-and-go o go-and-fail? Sobre aceleraciones, crisis e instituciones en la Argentina. *Desarrollo Económico*, 48 (190/191), pp. 235-268.

Arias, M. A. and Y. Wen (2015): Trapped Few Developing Countries Can Climb the Economic Ladder or Stay There. *The Regional Economist*, 23(4), Federal Reserve of Dallas.

Bai, J. (1997). "Estimating Multiple Breaks One at a Time", *Econometric Theory*, 13, 315–352.

Bai, J. and P. Perron (1998). "Estimating and Testing Linear Models with Multiple Structural Changes", *Econometrica*, 66, 47–78.

Bai, J. and P. Perron (2003). "Computation and Analysis of Multiple Structural Change Models", *Journal of Applied Econometrics*, 6, 72–78.

Baumol, W. (1986) Productivity Growth, Convergence, and Welfare. *American Economic Review*, 76, pp. 1072-85.

Bolt, J. and J. Luiten van Zanden (2020) Maddison style estimates of the evolution of the world economy. A new 2020 update. *Maddison-Project Working Paper WP-15*.

Canitrot, A. (1987) Sobre la crisis del viejo modelo de Desarrollo (Appendix VI). In J. C. Torre (Ed.), *Diario de una temporada en el quinto piso, episodios de política económica en los años de Alfonsín*. Buenos Aires: Edhasa.

Cortes Conde, R. (1998) *Progreso y declinación de la economía argentina*. Buenos Aires: Fondo de Cultura Económica.

De Long, J. B. (1988). Productivity Growth, Convergence, and Welfare: Comment. *American Economic Review*, 78(5), pp. 1138- 1154.

Dvoskin, A. and S. Katz (2021) El tipo de cambio como amortiguador y amplificador de shocks: Un análisis de los canales de transmisión y la caja de herramientas de política en economías pequeñas y abiertas. *Central Bank of Argentina Economic Research Working Paper*, 97.

Foxley, A. (2012). *La Trampa del Ingreso Medio. El desafío de esta década para América Latina*. Santiago de Chile: CIEPLAN.

Fracchia, A. and J. V. Sourrouille (1986) Simon Kuznets: 1901-1985. *Desarrollo Económico*, 25(100), pp. 683-684.

Frenkel, R. and J. Ross (2006) Unemployment and the real exchange rate in Latin America. *World development*, 34(4), pp.631-646.

Gerchunoff, P., M. Rapetti and G. de León (2020) La paradoja populista. *Desarrollo Económico*, 59(229) pp. 299 – 328.

Gerchunoff, P. (2022) El nudo argentino: Una nueva justicia social para un nuevo patrón de crecimiento. *Le Monde Diplomatique*. Retrieved from: <https://www.eldiplo.org/notas-web/el-nudo-argentino/>

Gerchunoff, P. and L. Llach (1998) *El ciclo de la ilusión y el desencanto: Un siglo de políticas económicas argentinas*. Buenos Aires: Ariel.

Gill, I., and H. Kharas (2007). *An East Asia Renaissance: Ideas for Economic Growth*. Washington, D.C.: World Bank.

Hora, R. (2024) *La declinación argentina y sus raíces históricas*, mimeo.

International Monetary Fund (2023) International Financial Statistics Database.

Lagos, M., J. J. Llach, E. Fracchia, and F. Marull (2011) *Claves del retraso y del progreso de la Argentina*. Buenos Aires: Temas.

Llach, L. (2020) Rica, pero no tan moderna: Argentina antes de la Depresión. *Desarrollo Económico*, 60(231), pp. 153-179.

Maddison Project Database (2020).

Levy Yeyati, E. (2021a) *Dinosaurios y marmotas: en busca del desarrollo perdido*. Buenos Aires: Capital Intelectual.

Levy Yeyati, E. (2021b) Dolarización y desdolarización financiera en el nuevo milenio. *Documento de trabajo del Fondo Latinoamericano de Reservas (FLAR)*.

Mallon, R. D. and J. Sourrouille (1975) *La política económica en una sociedad conflictiva: el caso argentino*. Buenos Aires: Amorrourtu.

O'Rourke, K. and J. G. Williamson (1999) *Globalization and History: The Evolution of a Nineteenth Century Atlantic Economy*. Cambridge, MA: The MIT Press.

Pritchett, L. (1997) Divergence, Big Time. *Journal of Economic Perspectives*, 11(3), pp. 3-17.

Silverman, B. W. (1986) *Density Estimation for Statistics and Data Analysis*. London: Chapman & Hall/CRC.

Torre, J. C. (2010) Conflicto e impulso igualitarista. Entrevista en Margenes, Número 1.
Retrieved from: <https://margenes.unsam.edu.ar/urgentes/conflictos-del-impulso-igualitarista-argentino/>