

# The return of “vulnerability” and Raul Prebisch’s early thinking on the “Argentine business cycle”

Arturo O’Connell\*

There is something paradoxical about the rise and fall –maybe we could speak about a renewed rise– of Raul Prebisch’s thinking on what in the early years of his intellectual life would have been called primary producer economies. In parallel with what had happened with development economics at large, by the early 1960s or so his thinking was being progressively dismissed both in public and academic discourse.<sup>1</sup>

In their more generous forms, the criticisms levelled against Prebisch’s theories described them as plainly out of date. From such a point of view they might have been all right as an interpretation of events in the pathological 1930s Depression years or the immediate post-Second World War period, dominated by scarcities and controls. But in the fast-growing world economy of the 1960s, with a progressive opening-up to international transactions, what was thought –in an exaggerated way– to represent Prebisch’s teachings on import substitution and State interventionism was supposed to be no longer applicable.

Protagonists of those criticisms were basically the advocates of liberalization of what were by then called

the developing economies. Import barriers had to come down, foreign exchange controls eliminated, and countries should stake all their fortunes on a fast expansion of exports that would supposedly result from the increased efficiency achieved through those measures. Their success, which was perhaps not only based on their capacity for intellectual argument, has been phenomenal. The following decades have witnessed the adoption, first gradual and reluctant in most cases but turning into a stampede in the last decade, of precisely those policies. And what have been the consequences of all those reforms? An extraordinary degree of instability, with repeated crises hitting what are now termed “emerging economies”, highly vulnerable to international economic shocks.

Those questioning Prebisch’s ideas, after having been successful in reinstating a world economy quite similar to that of the early twentieth century or the late 1920s, have ended up doing him the greatest possible intellectual favour. Prebisch’s thinking on the difficulties of a “peripheral” open economy under financial globalization has now become highly topical.

In this paper, therefore, an attempt will be made to show that Latin American economic problems mirror the circumstances of the late 1920s, to say nothing of the following depression decade. And, thus, all of a sudden Prebisch’s thinking regains its relevance for the present day. It is, in fact, to an early Prebisch that reference will be made in this article: the Prebisch of the late 1920s and early 1930s. At that time he was

---

\* Centro de Estudios Avanzados, Universidad de Buenos Aires, and Universidad de Bologna at Buenos Aires: (oconnell@mail.retina.ar). A preliminary version of this paper was presented at the seminar “Development theory at the dawn of the twenty-first century”, held at ECLAC, Santiago, Chile, on 28-29 August 2001 (see ECLAC, 2001).

<sup>1</sup> See, for example, Paul Krugman’s comments in his article entitled “The fall and rise of development economics” (Krugman, 1994).

more worried with what could be termed short-run macroeconomic problems than with what were later to be called development issues, to which his ECLA years were devoted.

This paper is organized in the following way. First, the progressively more unstable character of the world economy in the last quarter of a century and its impact on our region will be surveyed. Second, some parallels will be drawn with the Argentine economy in the period between the wars. Third, the early development of Prebisch's thinking in the late 1920s, as related to the study of that economy, will be examined. And, fourth, his first reactions to the Depression years will be studied.

What will emerge from this analysis is an awareness of how clear and true even to present-day realities were Prebisch's views about the problems of an early "emerging market" economy, even though there may not be unanimous agreement on his specific economic policy proposals.

### 1. The instability of the world economy and the renewed vulnerability of the Latin American economies

Beginning in 1975 –and as acknowledged for instance in several of the last issues of the IMF's *World Economic Outlook*– the world economy has undergone several slumps. According to that publication, up to recently there were four of these, although a fifth one in the mid-1990s can also be detected.<sup>2</sup> And right now –in 2001– another one which we could easily rate as a sixth slump is taking place (figure 1).

The frequency of crises seems to be increasing, since there have been six crises in about 25 years, but four of them have taken place in the last 10 years, three in the last five years, and two in the last three. Such a casual perusal of the frequency of crises is confirmed in, for instance, a recent study by Bordo, Eichengreen and others (forthcoming). In their examination of 120 years of financial history, crisis frequency after 1973 turns out to have been double that of either the Classical Gold Standard Period or the post-Bretton Woods one. Interestingly enough for the argument we are trying to develop in this paper, such frequency has been similar to that of the period between the wars. Furthermore,

<sup>2</sup> See, for example, IMF (1999, pp.2-5). In the graph on world industrial production –figure 1.2. on page 5– of that same report, a clear fifth slowdown may be detected in 1995, and not only in Latin America.

FIGURE 1

**World: Real gross domestic product**  
(Percentage annual rate of change)

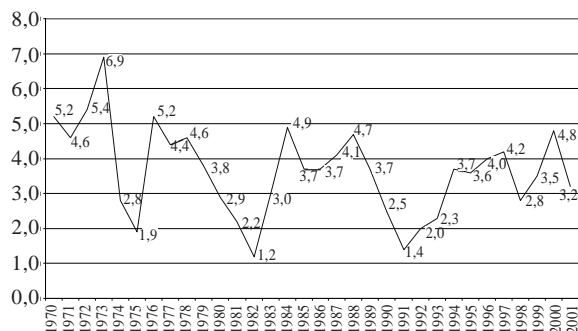
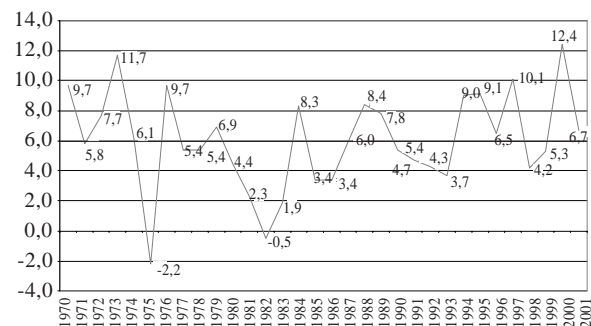


FIGURE 2

**World: Volume of goods and services trade**  
(Percentage annual rate of growth)



the last 25 years show a higher frequency of twin crises (currency cum banking); these crises are known and have been shown to be particularly severe and have resulted in high output losses.

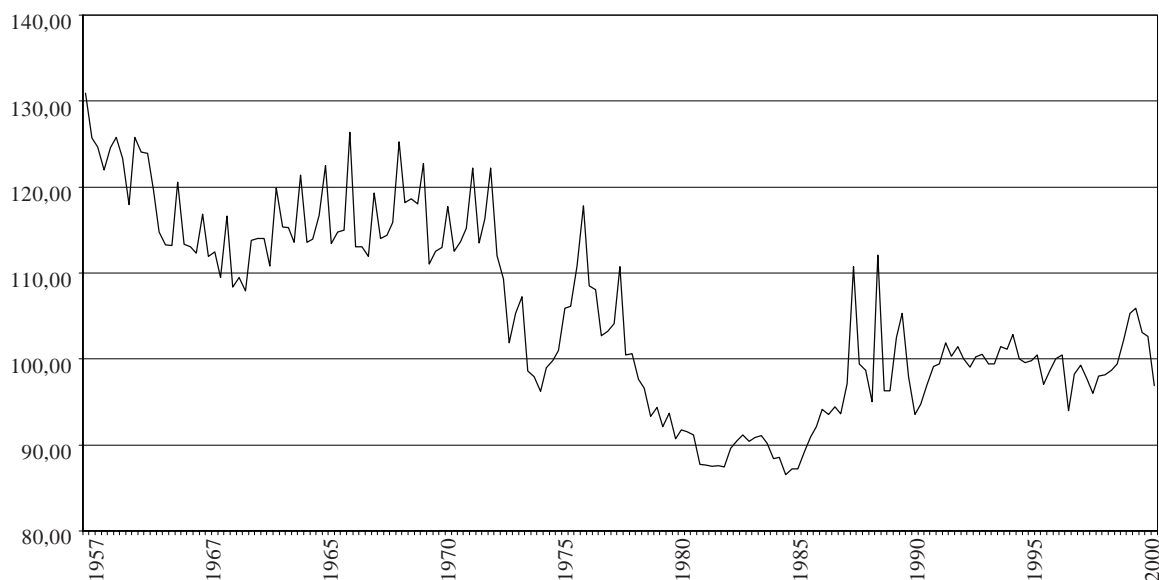
And, of course, as further background on the instability in the world economy, we have also had the extreme volatility of interest rates and exchange rates among the major currencies, which some authors make responsible for the behaviour of commodity prices: a matter to which we will refer below.

Besides frequent slowdowns in economic activity amplified by strong variations in international trade volume (figure 2) and volatility of interest and exchange rates, this last quarter of a century has shown extraordinary variability in two other aspects of great significance for developing countries, i.e., commodity prices and capital flows.

As for real commodity prices, on the one hand, recent studies have vindicated at least the facts of the Prebisch-Singer hypothesis, i.e., that there is a long-run trend –over a 140-year span– towards a decline in

FIGURE 3

**Terms of trade: Non-oil developing countries 1957-2000**  
(1995=100)



these prices (at the rate of 1.3% per year). Moreover, there is a break around 1917 after which the decline accelerates to 2.3% per year and in the 1990s to 6.9% per year.<sup>3</sup> Not only there is such a declining trend, but also volatility has significantly increased in the later period, with larger swings in prices and cycles of higher frequency.<sup>4</sup>

It is also useful to remind ourselves that by the beginning of the year 2000, real commodity prices were fully 40% below their level at the beginning of the 1970s. The result of this on the terms of trade of developing countries could not be more obvious, as may be gathered from figure 3, on non-oil developing countries.

A very similar story could be told with regard to capital flows. Since the beginning of the 1970s, two distinct boom and bust cycles may be detected. The first one was the well-known cycle relating to bank loans in the 1970s, which led to the “sudden stop” of the early 1980s and to debt crises spanning the whole decade. The second was the more recent boom of the early 1990s, which was followed by the collapse which began with the Asian crisis of 1997.

<sup>3</sup> See Cashin and McDermott, 2001.

<sup>4</sup> “...rapid, unexpected and often large movements in commodity prices are an important feature of the behavior of commodity prices.” (Cashin and McDermott, 2001, p. 25).

Quarterly figures for the last several years, when superimposed on those long cycles, make it easy to detect an extreme variability in the behaviour of private capital flows. Most specifically, bank lending –and also bond issues, although less so– displays extreme volatility moderated by a more stable performance of foreign direct investment. In fact, as may be seen from figure 4, net non-equity capital flows have not only been much more unstable but indeed in the last few years have been nil or even negative.

Summing up, as should be well known –although not always thoroughly recollected– the world economy has shown an extraordinary degree of instability in the post-Bretton Woods era and most specifically in the last decade.

Latin America, of course, by “opening-up” both to trade and financial relations with the world economy, could hardly avoid being subject to that instability. Growth rates of GDP and of international trade volume played their part, as well as the behaviour of interest rates, real commodity prices and capital flows.

Net transfers of resources, which on the whole were positive in the 1990s (compared with the negative figures of the 1980s) ended up the century by being negative again, after having likewise shown a slump in the mid-1990s (figure 5).

As it is well known, exports increased at a faster rate than in previous decades, but imports increased

FIGURE 4  
**Net non-equity private capital flows to emerging markets**  
*(In US\$ billion)*

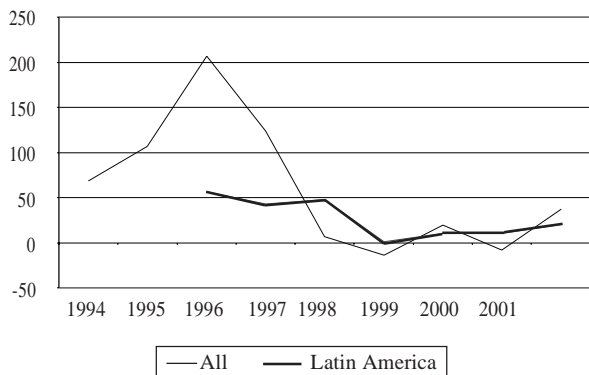


FIGURE 6  
**Latin America and the Caribbean: Balance of trade**  
*(In US\$ million)*

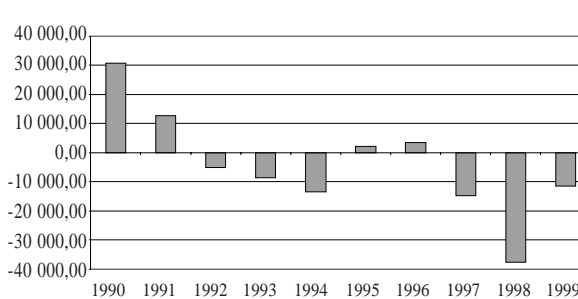


FIGURE 5  
**Latin America and the Caribbean: Net transfer of resources, 1980-2000**  
*(As a percentage of GDP and exports)*

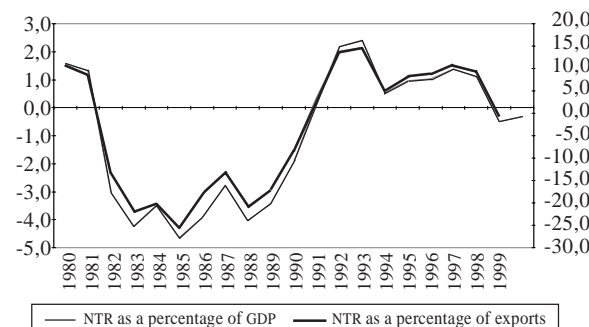


FIGURE 7  
**Latin America and the Caribbean: Current account balance as a percentage of GNP**  
*(Percentages)*

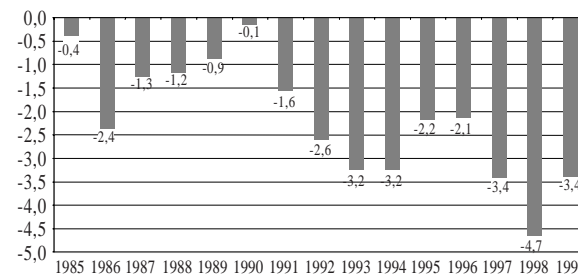
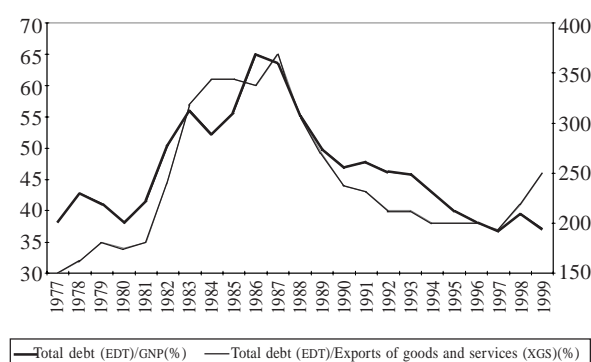


FIGURE 8  
**Latin America and the Caribbean: External debt ratios**  
*(In percentages)*



even faster. The result was the emergence of sizeable trade deficits, only moderated or turned positive under recessionary conditions (figure 6).

Coupled with a negative balance on real and financial services, current accounts became increasingly negative, even in terms of a larger GDP (figure 7).

Furthermore, by the end of the decade external debt ratios –with respect to exports and to GDP– had started to climb again and were standing at levels similar to those that had prevailed at the beginning of the 1980s crisis. It was of course precisely the renewed accumulation of foreign indebtedness that led to the expansion in outflows on account of financial services.

And although short-term debt –as a percentage of foreign exchange reserves– was low and falling towards the end of the 1990s, financing requirements –short-term debt plus service on long-term debt coming due within a year– were building up as a consequence of the sheer growth of the external debt (figure 9).

Rapidly growing imports plus large external financing requirements (figure 10) have made the region extremely vulnerable to the vagaries of the world economy. Country-risk spreads reveal the volatile evolution over time of the creditworthiness ratings of

FIGURE 9  
Latin America and the Caribbean: Short-term debt as a percentage of foreign exchange reserves, 1971-1999

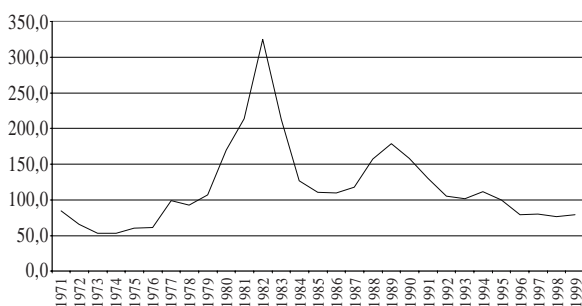


FIGURE 10  
Latin America and the Caribbean: Financing requirements (As a percentage of GDP)

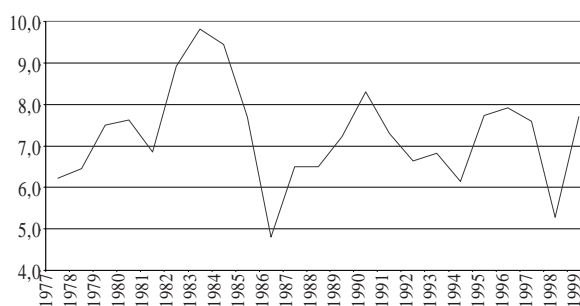
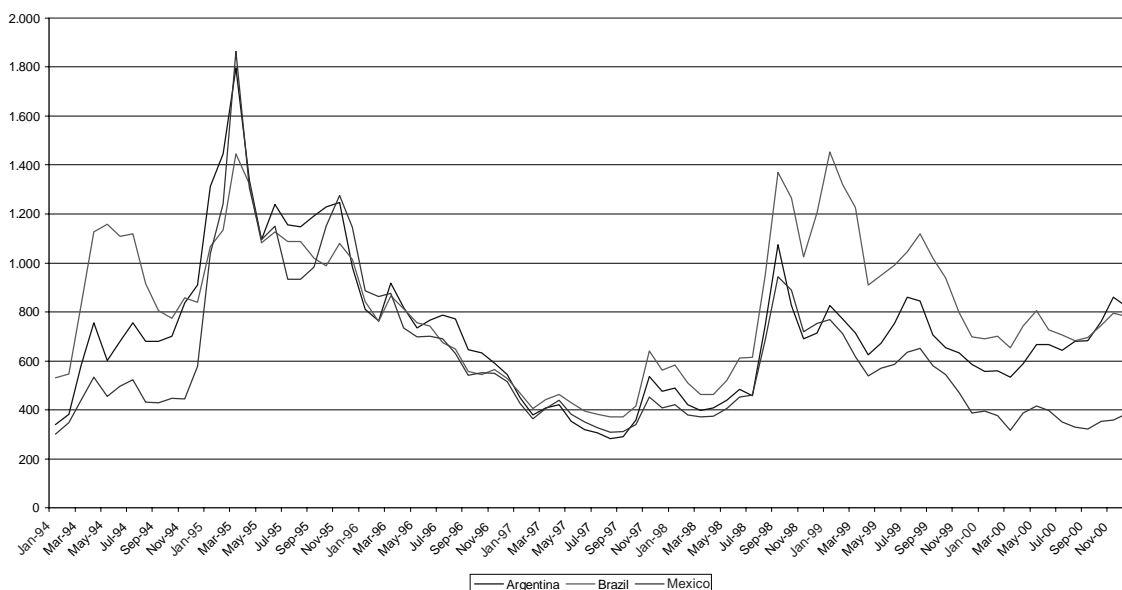


FIGURE 11  
Argentina, Brazil and Mexico: Country-risk ratios, 1994-2000



the countries in the region in the eyes of the international financial markets, and the resultant instability of their access to resources.

No wonder, therefore, that under those various pressures crises have repeatedly visited the region and a number of countries –including all the major ones– have been placed at risk of a collapse in their exchange rate pegs and/or their debt service (figure 11).

Not surprisingly, vulnerability to an unstable international economy and most specifically to volatile financial flows has resulted in high “real instability” for Latin American economies, even if the much-praised price stability has basically been achieved. But what also must be recalled is that the last decade’s average

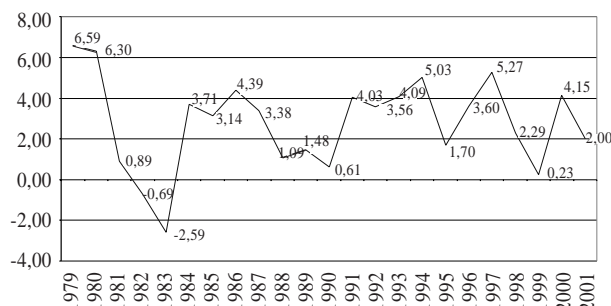
rate of growth on the whole was only marginally greater than that of the “lost decade” of the 1980s (3.0% compared with 2.1% per annum).<sup>5</sup> Thus, if the 1980s was the “lost decade”, then the 1990s may well be baptised the “roller-coaster decade” (figure 12).

**2. The Argentine economy in the late 1920s**

Parallels with the Argentine economy in the late 1920s –the period when Raúl Prebisch started developing his ideas about the “peripheral economy”– are many. We have already noted that in terms of frequency of crises

<sup>5</sup> See IMF, 2001.

FIGURE 12  
**Latin American and the Caribbean: Real GDP growth rates, 1979-2001**  
*(In percentage per year)*



as well as of the behaviour of commodity prices, the period between the wars was that –out of all the periods in the last 120-odd years– which was most similar to the post-Bretton Woods era and most specifically to the last decade.

Let us take a look at the Argentine economy of those years. Crises and fluctuations did not first visit the country only after 1929. The idyllic version of an exclusively prosperous 1920s is far from the facts. A clear pattern of economic fluctuations had previously emerged, to the point of being christened by Prebisch and his team as the “ciclo económico argentino” (“Argentine business cycle”). Unlike, for instance, the U.S. business cycle that was being analysed by Mitchell and the NBER in those same years, that of Argentina, Prebisch and his team posited, was dominated by the instability of exports and capital inflows rather than by that of domestic investment.<sup>6</sup>

The reasons for export instability were several. First, exports were overwhelmingly agricultural exports. In the period from 1923 to 1927, on average, 96% of exports originated in the agricultural sector.<sup>7</sup>

<sup>6</sup> For an examination of the Argentine economy of those years, see *Revista Económica* (there is an English version published as *Economic Review*) of the Banco de la Nación Argentina (BNA, various issues), which was continued for a brief period after 1935 –as a new series– by the newly created Central Bank of Argentina. An Economic Research Department, which published that review, had been organized at the Bank under the direction of Raúl Prebisch. For a survey of its studies see the first section –“The Argentine Business Cycle”– of O’Connell, 1984.

<sup>7</sup> Fifty-five per cent were agricultural products and 41% produce from stockbreeding activity. See Dirección Nacional de Estadística y Censos (DNEC, 1921, 1922, 1923, 1924, 1926, 1927, 1928, 1929).

Moreover just four products (wheat, maize, linseed and beef) made up two-thirds of the total.<sup>8</sup>

Some studies published at that time or immediately afterwards would show a chronic trend, beginning by the end of the 19<sup>th</sup> century, for instance, for wheat prices to decline in real terms.<sup>9</sup> Additionally, Argentina was far from being a marginal supplier in some of these markets so that, as conditions of over-supply worsened after the First World War, her exports were bound to encounter barriers.<sup>10</sup>

As mentioned above, recent studies of long-run trends have confirmed that a declining trend in real primary product prices was taking place. No wonder, therefore, that when he observed the late 1920s situation, Prebisch started placing emphasis on the “trend towards a deterioration of the terms of trade between primary products and manufactured products”.

Going back to fluctuations, however, a second characteristic of Argentine exports to which Prebisch’s attention was drawn and was confirmed again later was

<sup>8</sup> Wheat made up 22% of total exports, maize 19%, linseed 12% and beef 11%. Those exports had another very special characteristic distinguishing them from those of other primary producers, such as for instance Brazil, which exported coffee: i.e., those Argentine exports –being temperate-zone agricultural products– entered into competition with the domestic output of the more advanced Western European and North American countries.

<sup>9</sup> Mandelbaum (1953) shows that wheat prices had been falling –in real terms– since the early 1880s. For V. P. Timoshenko (1933), the prices of fifteen important agricultural products were already falling by the mid-1920s, not to speak to what happened later in the early years of the Depression. In Argentina, wheat prices fell from an average of 15.13 pesos per quintal (100 kg) in the 1920/1924 period to 10.50 pesos in 1927/1928 and 9.68 in 1928/1929, well before the Wall Street crisis.

<sup>10</sup> Argentina was the second world exporter of wheat –22% of the total– and the leading exporter of maize, with more than two-thirds of the total. Its shares of world exports of beef (61%) and linseed (80%) was also very high. See Taylor and Taylor (1943) for the shares of Argentine exports in world markets. By the 1920s, agriculture in the industrialized countries had become a sector in crisis, where protectionism and measures of direct support to domestic producers were becoming rampant. In fact the First World War had thrown the whole world agricultural sector out of balance. As output fell in continental Europe due to the ravages of trench warfare, the overseas producers had experienced a boom in output. The return to normal of European agriculture by the mid-1920s –under a panoply of support measures– produced a situation of chronic oversupply, however. For an account of the mounting tide of protectionism, whose roots lay in the late nineteenth century, see O’Connell, 1986 (this volume, by the way, was dedicated to “Raúl Prebisch - Elder Statesman of the Emerging Nations”, Prebisch having attended the seminar at St. Antony’s College, Oxford, at which most of the contributions for that volume were first presented).

their extraordinary price volatility, further compounded in those years by an instability in volumes (figure 13) due to weather factors and a cobweb-type cattle cycle. As domestic consumption showed a steady trend, volatility in output translated into volatility of exports.<sup>11</sup>

In spite of some inverse relation between export prices and export volumes—to be expected of a country which was not a price-taker for quite a few products—export values also showed a high degree of instability. In fact, in the period from 1917 to 1929 this was much higher than in any other period of Argentine economic history and well above that experienced by developing countries in the Bretton Woods era.<sup>12</sup>

Had import prices fluctuated in the same direction and magnitude as export prices, the volatility would have been neutral for the country as a whole, although it would have had significant income redistribution consequences. But that was far from being the case. Thus, the terms of trade experienced wide swings before 1930 and only recovered the level prior to the First World War by 1946-1950.<sup>13</sup>

Not only did the terms of trade experience strong fluctuations but also, on average, over the 1920s they were at the same level as over the 1930s and in both cases 27% below that of 1913. Once again, a picture of the 1920s prior to the October 1929 Wall Street crash emerges which is anything but idyllic.

Imports, on the other hand, were quite a high share of GDP, almost 25% in 1925-1929. In this same period imports supplied 13% of consumption, while those of machinery and equipment represented 35% of domestic investment.<sup>14</sup>

Furthermore, as analysed by Prebisch's team, imports also displayed a high income-elasticity and a ratchet effect, as there was some inertia in their adaptation to lower levels of national income.

<sup>11</sup> For an analysis of export volume instability, see BNA (1930) and also BCRA (1937a and 1937b). For an instability index following MacBean see Diéguez (1972). Prices were normally less unstable than volumes, but in the period from 1917 to 1929 the instability of prices was slightly higher than that of volumes (12.5% versus 12.2% respectively).

<sup>12</sup> The instability index –à la MacBean– for export values in the 1917-1929 period was 16.8%, while that estimated by MacBean for developing countries in the 1948-1958 period was only 9.06% (Diéguez, 1972).

<sup>13</sup> For a terms of trade index see Ministerio de Finanzas de la Nación/BCRA, 1952.

<sup>14</sup> The years of the First World War had shown how essential imports were for the performance of the economy, when a dearth of supplies –plus, admittedly, a crisis of the building sector due to financial difficulties– resulted in the worst slump of the whole century.

FIGURE 13

**Argentina: Exports-volume and prices, 1919-1939**  
(1913 = 100)

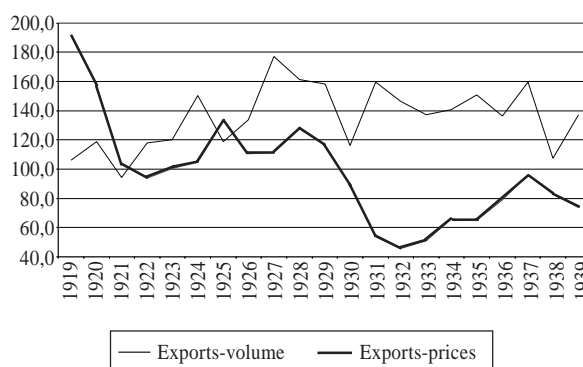
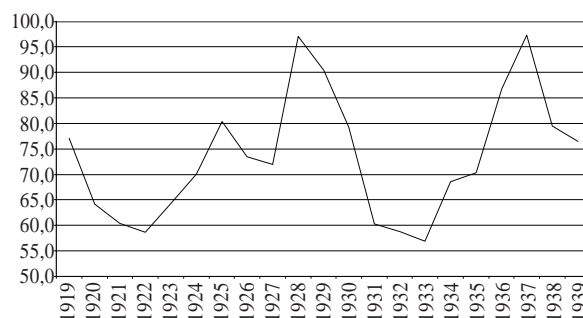


FIGURE 14

**Argentina: Terms of trade, 1919-1939**  
(1913 = 100)



Consequently, when an export downturn –or a drop in capital inflows– hit the country, leading first to a scarcity of foreign exchange and second to a drop in GDP, the preservation for a time of high levels of imports resulted in further pressure on the availability of foreign exchange. In fact, wide swings in trade balances were experienced as may be visualized in figure 15.<sup>15</sup>

The second element of instability identified by Prebisch was that originating in capital inflows. Gross capital inflows amounted to the equivalent of 10% of exports, making them a significant supplier of foreign exchange. Contrary to what is habitually asserted as

<sup>15</sup> For figures on the share of imports in GDP, consumption and investment, see ECLAC, 1958, tables 24 and 25. In the 1996-1998 period, when Argentina was recovering from the “tequila” crisis, the import elasticity of the country was between 3 and 4. That is very similar to the levels of most present-day “emerging market economies”, consequently putting their external position in danger.

FIGURE 15

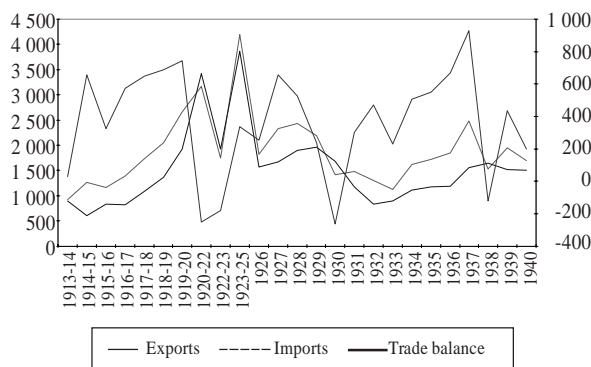
**Argentina: Exports, imports and balance of trade, 1913-1940***(In million pesos m/n)*

FIGURE 16

**Argentina: Gross capital inflows, 1919-1939***(In million pesos m/n)*

being different in that world compared with the present-day one, on average in the 1920s fully 53% of those inflows went to the private sector and only the remainder to the public debt.<sup>16</sup>

Capital inflows to the private sector were largely made up of foreign direct investment, which however, as it is today, was to a significant extent financed by debt issues. In stock terms, foreign direct investment (FDI) accounted for 32% of the estimated total capital invested in Argentina, and gross inflows were 10% of fixed capital formation.<sup>17</sup>

Capital inflows were notoriously unstable, however, as may be gathered from figure 16, concerning the period between the wars, which shows that this instability was already clearly present in the 1920s.

The instability of exports and capital inflows was transmitted to the economy through various mechanisms.

On the income side, exports in the period 1925-1929 represented 24% of GDP and more than two-thirds of the final demand for “Pampa” produce. Agriculture, for its part, accounted for between 25% and 30% of

GDP at 1950 prices, which were admittedly extremely low for these sectors, so that its true weight was surely much larger.<sup>18</sup> The upturns and downturns of exports, therefore, were bound to have a strong impact on GDP. As to capital inflows, both private and public sector expenditure levels had to accommodate themselves to their availability, as they were an important source of finance.

Shocks were also transmitted via the fiscal and monetary systems. Three-fourths of government current revenue came from customs duties and other taxes on foreign trade. Therefore, to a great extent, they oscillated with what we have seen were highly volatile exports and imports. The availability of resources for government expenditure was also determined by the capacity to acquire further indebtedness. But, as may be gathered from figure 17, showing strong variations in the stock of public debt, such capacity underwent significant instability.

It is in relation to the monetary mechanism, however, that the parallels with present-day preoccupations are more striking. The monetary system of Argentina in those years was called a “sporadic gold standard” by Mr. Hueyo, a Minister of Finance in the early 1930s.<sup>19</sup> In fact, Argentina had adopted a Currency

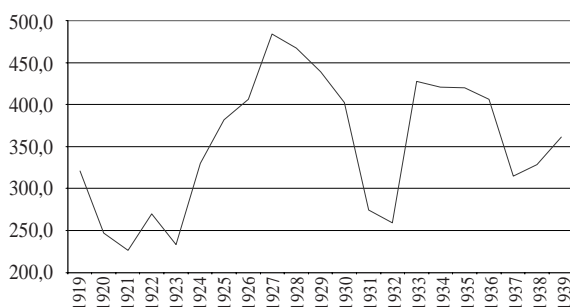
<sup>16</sup> See Ministerio de Finanzas de la Nación/BCRA, 1952.

<sup>17</sup> For these figures see ECLAC, 1958. Fully 60% of FDI originated in the United Kingdom; in turn, in 1929 Argentina accounted for 27% of all the UK’s FDI and 42% of that in “foreign countries”, i.e., in countries other than those of what was still the British Empire (see United Nations, 1949, table 7). For the United States, Argentina was much less important as a recipient of FDI—only 8% of the total—and ranked behind other countries in Latin America (see United Nations, 1949, table 6). However, many United States firms started to establish themselves in the Argentine market, manufacturing motor vehicles, electrical home appliances, cosmetics, and other things (see Phelps, 1936, and Whyte, 1945).

<sup>18</sup> See ECLAC, 1958.

<sup>19</sup> Mr. Hueyo’s pronouncements on the Argentine monetary system may be found in Ministerio de Hacienda y Obras y Servicios Públicos, Secretaría de Hacienda, 1932. Hueyo—following orthodox teaching and as Mr. Hoover did in the United States—tried in 1932-1933 to stabilize the economy through the reduction of fiscal deficits: a feat he almost succeeded in, but with less than favourable consequences for economic recovery.

FIGURE 17

**Argentina: Foreign public debt**  
(In US\$ million)

Board system early in the twentieth century but had abandoned “convertibility” –to use modern Argentine parlance– at the beginning of the First World War, only resuming the operation of the Currency Board in August 1927.<sup>20</sup>

As with many other cases of premature resumption of the Gold Standard in the 1920s, the experiment failed by late 1929 and the country only returned to a Currency Board system in early 1991, this time on a U.S. dollar standard.

Of course, under the Currency Board system credit and money supply had to accommodate to the vagaries of the trade balance and of net capital inflows. The Central Bank was only created in 1935, so that some of the functions of “lender of last resort” were fulfilled by the Banco de la Nación Argentina, echoes of which may be detected under the “tequila” crisis and under today’s –what we should call it?– “tango” crisis.<sup>21</sup>

Instability of exports and capital inflows, therefore, not only directly hit the balance of payments position

but was also transmitted to the rest of the economy through the workings of income and monetary links.

The experience of the 1920s had shown, in fact, that a cycle based on the instability of exports and capital inflows, amplified by income and fiscal/monetary mechanisms, had become clearly established.

A slump in incomes of various sections of the population –remember again the significance of price deflation– had inaugurated the decade. The sharp reduction in agricultural prices after the end of the war had a special impact on Argentina, which was dependent on those products. After deflation had run its course, there was a recovery which was followed, in the 1922 to 1924 period, with good harvests and the beginnings of large capital inflows originating in the United States. A bad harvest in the 1924-1925 season, however, caused a new decline in economic activity (accentuated by renewed deflation), which extended into 1926.<sup>22</sup>

Beginning in that latter year, a new phase of expansion set in, but this time prices showed a slight downward trend. Due to a rise in exports and capital inflows, the peso started appreciating, leading to the reinstatement of the Currency Board system –a return to the Gold Standard– in August 1927. Government borrowing abroad expanded even faster, and gold entered the country, resulting in a big increase in reserves. This expansion found support in the policy of the U.S. Federal Reserve, which had cut interest rates by that time, resulting in an outflow of capital from the United States.<sup>23</sup>

During that expansive period, currency and deposits increased. Lending, however, did not expand at an equivalent rate as banks tried to rebuild reserves and cancel old credits: a hangover from the previous downturn. The Banco de la Nación Argentina –which in the absence of a Central Bank proper was half-playing that role and had extended credit to other banks during the previous period of stress– started recovering those loans.<sup>24</sup>

<sup>20</sup> The opening of the Currency Board, in 1927, pitted the politically powerful agricultural exporters against foreign investors. Exporters asked for a return to “convertibility” because the peso was appreciating too much, even beyond parity, while foreign investors were happy to see their earnings in pesos translated into larger amounts of pounds sterling and other foreign currencies.

<sup>21</sup> In 1932, an “Empréstito Patriótico” was launched –like those in 1995 and now in 2001– but for lack of demand it ended up being purchased by the Banco de la Nación Argentina (a publicly-owned bank created after the crisis of 1890), using for the first time a Rediscount Law that had been passed back in 1914 to counter the crisis unleashed by the war in Europe. Mr. Hueyo asked for the advice of the Bank of England in setting up a Central Bank. As “money doctor” the Bank of England sent down a high-ranking official, Sir Otto Niemeyer, who was extremely critical of the Gold Standard. See his opinions in *Revista económica* (BNA, 1934).

<sup>22</sup> See BNA (1929c) for an account of the early and mid-1920s cycles.

<sup>23</sup> For an analysis of the impact –not only on Argentina but on the world economy– of Federal Reserve Policy in the late 1920s, see BNA, 1929a. In August 1927, the Fed had lowered interest rates to 3 ½ % from 4% and engaged in an active “open market” policy of credit expansion. But beginning in early 1928 that policy was reversed because of increasing concern about the “irrational exuberance” of Wall Street; bonds were sold, and after successive increases interest rates stood at 5% by July 1928. Argentina’s international reserves increased from US\$ 466.5 million in January 1927 to a peak of US\$ 680.1 million in July 1928

<sup>24</sup> From the high point of June 1927, interest rates fell from an average of 6.75% to 5.75% by July 1928. See BNA, 1929b.

The 1928-1929 period is extremely interesting for our attempt at drawing parallels with the most recent decade and the present-day situation. As might be gathered from the previous figures, exports increased less and imports kept growing at a faster pace than in the previous expansion. On top of this, capital inflows started declining and some funds left the country as the tightening up by the Fed, plus the Wall Street boom, attracted them towards New York. Beginning in the second half of 1928 –way before the Wall Street crash– gold started leaving the country, mainly as a consequence of its boom rather than of the later crash. By the end of 1929 –when the Currency Board was closed down again– all the gold –or even slightly more– which had entered Argentina after the return to the Gold Standard had been lost.<sup>25</sup> Bank reserves started declining after September 1928, reaching a point lower than that prior to the 1927-1928 boom. Once again the Banco de la Nación Argentina was playing a compensatory role by lending to the government and other banks.<sup>26</sup>

A drastic fall in export prices was the reason for lagging exports, which added to the crisis unleashed by the financial movements. Wheat harvests in the main producing countries in 1928/29 were much larger than in previous years and led to further accumulation of already heavy unsold stocks. Between May 1928 and May 1929 –again well before the Wall Street crash– wheat prices in Argentina fell 30%. Although not all agricultural prices fell so heavily, the general index dropped 7% between 1928 and 1929. Land prices fell in sympathy with these movements.<sup>27</sup>

The stage was set for a significant slump in economic activity, even before the Wall Street crash of October 1929 signalled the beginning of the Depression that would dominate the following decade.

### 3. The early development of Prebisch's thinking about the "Argentine business cycle"

Surveying that experience, Prebisch coined the expression "Argentine business cycle" to describe it.

<sup>25</sup> See BNA, 1929d. Between September 1928 and December 17, 1929 –when the Currency Board was closed down– gold outflows amounted to 187.6 million gold pesos (roughly equivalent to pre-1933 dollars), which was slightly more than the 179.4 million that had entered Argentina since the opening of the Currency Board back in August 1927.

<sup>26</sup> Thus, in spite of the outflows to New York, bank lending increased 15% between September 1928 and December 1929 (BNA, 1929d).

<sup>27</sup> For the behaviour of land prices see Sociedad Rural Argentina, 1979.

Economic policy and the conduct of private as well as public affairs, he insisted, had better take it for granted that a new downturn would always be just around the corner, even during what could look like the most solid of booms. This seems a very prescient outlook compared with that of the advocates of the "new economy" and of the endless indebtedness of the emerging market countries.<sup>28</sup>

Leaving aside the impact of weather on the volume of produce available for export, the other factors determining that cycle –prices and demand for agricultural goods and capital inflows– were intimately connected with international economic behaviour. In the case of Argentina, which did not have a domestic machinery-producing sector, the "accelerator" mechanism that Prebisch considered to be behind the cyclical behaviour of advanced countries was not applicable. In his opinion, therefore, all the instability originated abroad.

Furthermore, when analysing the instability of capital inflows, Prebisch came to a very up-to-date conclusion widely accepted nowadays: i.e., that capital flows are negatively connected with activity levels in what he was later to label the "monetary centres". As New York was almost the only such centre in the 1920s, capital inflows would be threatened when, as happened in 1928-1929, a boom in the United States economy and in the stock markets –accompanied by an attempt by the Federal Reserve to stop the "irrational exuberance"– would determine a capital drain from Argentina. The cycle in Argentina, therefore, tended to be the reverse of the United States one: something reinforced by the fact that sales to that country represented only a tiny fraction of total exports.<sup>29</sup>

In his view, the contrast between the high instability of exports and capital inflows and some rigid elements of the economic structure made Argentina extremely "vulnerable" to that instability.

<sup>28</sup> In a later pronouncement, Prebisch said: "Even though there may be no idea of how, in what form, or at what particular moment the cyclic reaction will take place after boom periods, the fact that we know of its inevitability is sufficient to justify the timely adoption of measures to moderate the size of the fluctuation or reduce its economic and social consequences". See BCRA, 1938.

<sup>29</sup> In 1925, only 8% of Argentine exports were directed to the United States market. Imports from that country, on the other hand, had come to account for 23% of total Argentine imports, and the United States had become Argentina's largest supplier, displacing the United Kingdom (see Dirección Nacional de Comercio Exterior, 1941).

To begin with, mention has already been made of the behaviour of imports: their rapid expansion resulting in trade imbalances in booms and temporary downward rigidity in slumps, thus making those imbalances even worse. Government finances, also, tended to behave in an asymmetrical manner. When funds were easily available, expenditure –which was also supported by the higher revenues fed by the ensuing expansion of the economy– would increase at a fast pace. But in a downturn, the reduction of such expenditure became more difficult because of the rigidity of commitments previously entered into. Consequently, in slumps there was a tendency for fiscal deficits to explode, thus preventing the economy from adapting to the new level of availability of foreign exchange.

Additionally, service on foreign debt in the 1920s, on average, absorbed 20% of export proceeds (this proportion shot up to 35% in the first few years of the Depression). Current account deficits plus amortization on private and public lending resulted in high financing requirements, so that although it normally registered trade surpluses, year after year the country had to find large new resources to finance service on foreign debt and investment.<sup>30</sup>

There were therefore two almost fixed charges against foreign exchange proceeds: somewhat rigid imports, and service payments on the foreign debt and capital invested in the country. In contrast, both exports and capital inflows were extremely volatile. According to Prebisch those were the circumstances that made the Argentine economy “vulnerable” to an unstable international economy.

Out of those observations on the sources of instability and the rigidity of some elements in the economy, in the late 1920s Prebisch developed his model of the “Argentine business cycle”. In this model the mechanics of the cycle hinged upon credit and monetary expansion and contraction and their impact on import levels. Only later, in the 1930s, did the Keynesian –or Khanian– income multiplier enter into his analysis.

In Prebisch’s scheme, expansion of exports –due to a bigger harvest but mainly to better market

conditions abroad– or larger capital inflows leads to the creation of “high-powered money”. Banks expand through the “monetary base” multiplier, creating purchasing power additional to that originally produced by the inflow from abroad. Trade and industry expand and imports –remember that they form a high proportion of GDP– surge up and the expanded availability of foreign exchange is rapidly exhausted. Either gold –under the “Currency Board” system– or “foreign exchange” start leaving the country or, under the floating exchange regime that predominated in Argentina for some time after the closing of the “Currency Board”, the national currency will experience a depreciation. A cyclical downturn in either export proceeds or capital inflows may add an additional recessionary force on top of all this. In the meantime, foreign obligations also have increased.

The scene is now set for the descending phase of the cycle. The outflow of gold and foreign exchange contracts the monetary base and the expansion of credit not only comes to a halt but in fact reverses itself. For that to happen smoothly, Prebisch insists, credit should have been granted only for short-term purposes, meaning that its repayment would be almost automatic, its purpose of financing merchandise trade having been fulfilled. If that had been the case, no financial crisis should necessarily happen. If expectations of sales had been too optimistic, some difficulty could arise in the repayment of credit, but then it would be the responsibility of the commercial banks and the Central Bank to resort to their reserves and rediscounting operations to fix the problem. Thus what Prebisch would criticize as an unwarranted contraction of credit could be avoided.

On the other hand, Prebisch took a strong stance vis à vis those advocating the use of bank credit to finance long-run investment. In his opinion, a confusion between credit and savings is the reason for advocating this, and banks should refrain from granting credit for such purposes unless funds from the public have been collected specifically for that purpose. Again the main reason for his opposition is based on the impact of such operations on imports, and consequently on foreign imbalances.

If the cycle has followed its course and the whole country has been subject to its ups and downs, however, the government’s financial position also suffers because of the impact on revenues. And, then, the rigidity of fiscal expenditure coupled with that of imports would only worsen the imbalances that the economy has run into. Prebisch also points out the pernicious character

<sup>30</sup> Financing requirements were around 25% to 30% of exports in the 1920s, increasing to almost 60% in the 1930s. On the whole, the net transfer of resources was clearly negative; in the 1925-1929 period it came to almost 5% of GDP. For figures on the debt burden and financing requirements in relation to export proceeds, see Ministerio de Finanzas de la Nación/BCRA (1952), and for the net negative transfer of resources, see ECLAC (1958), tables 24 and 28.

of short-run capital inflows: what he labels as “floating funds”. In his vision, these funds “...tend to duplicate foreign exchange demand; once to pay for imports that result from their inflow and (twice) for the need to support their later outflow”.<sup>31</sup>

Prebisch also introduced another element in his analysis of the short-run behaviour of an “emerging market economy”. Businessmen’s expectations are brought in as a motive force that could lead to the expansion or contraction of output and the consequent demand for credit. In the case of a rural country, however, he made those expectations dependent on the state of the rural sector, thus returning to the idea that weather and external prices are the main determinants of the cycle, coupled with the vagaries of capital inflows.

In all his writings and analyses, dependence on imports –with its high income elasticity to increases in GDP and its asymmetric downward rigidity– is the factor that plays the main role in erecting an insurmountable obstacle to expansion and also to any attempt at a counter-cyclical policy –such as an expansive monetary policy– in conditions of a balance of payments crisis.

Economic policy therefore had very limited autonomy for coping with the “Argentine business cycle”. With such a primitive fiscal and monetary system as the one described above, many instruments for such counter-cyclical policies simply did not exist. The only possible course was one of extreme prudence during expansionary periods so that excessive credit and government expenditure based on further indebtedness could be avoided. That would make what Prebisch considered to be the inevitable downturn more manageable.

#### 4. The Depression and further developments in Prebisch’s thinking

It was under such circumstances that a new downturn in the international economy –beginning in late 1929– hit the country. Export prices continued to fall until 1932, and import prices also fell, although less so. As a result, the terms of trade deteriorated over that four-year period.<sup>32</sup> Price levels were also important, and not

only their relative decline. Thus, in 1932 export prices stood at half their pre-First World War level, placing an enormous burden on the indebtedness of producers and their creditors.

For their part, capital inflows almost dried up, only partially recovering in 1933.<sup>33</sup>

The Argentine economy only began to recover in 1934 (and even more firmly afterwards) due to a prolonged serious drought in North America that later extended to Australia. On the one hand, this drought generated the famous “dust bowl” that brought misfortune to poor farmers in the United States, but on the other hand it brought prosperity to Argentina, which saw its export prices climbing by the second quarter of 1934 to unexpected levels. The country experienced a balance of payments bonanza fed by exports at those high prices, and on top of this a return of capital inflows partly due to political instability in Central Europe. This time, however, these inflows were mainly short-term and started leaving the country as soon as the situation began to deteriorate in 1937 (with the recovery of harvests in the main competing countries).

Argentina, which almost alone had not defaulted on its foreign debt service, actually repatriated part of it, besides engaging in major domestic sterilization operations.<sup>34</sup>

The consequences of the abundance of foreign exchange were obvious: imports shot up –by 74% between 1932 and 1937– and GDP expanded by 27% in that same period.<sup>35</sup>

<sup>33</sup> Some short-run “compensatory finance” (in reality, it was used to repay a previous loan from Phoenix Corp.) was provided –in the absence of a body like the IMF– by Brown-Harriman of New York, and the British railway companies managed to issue some debentures in both 1930 and 1931.

<sup>34</sup> Perusal of the minutes of the discussions for the Anglo-Argentine Treaty of 1933 reveals that the Argentine delegation was insistent in complying with full debt service, even under pressure from the British side to leave some resources for British exports and, above all, for profit remittances by British-owned firms –especially the railways– in Argentina. By the way, Raúl Prebisch was a member of that Argentine delegation as financial expert; in 1933 he was formally still an official of the Research Department of the Banco de la Nación Argentina, in which capacity he had been invited to attend the preparatory meetings (in Geneva) for that year’s World Economic Conference and had gained the appreciation of the head of the British delegation, Sir Frederick Leith-Ross. Later in the 1930s the newly created Central Bank and its General Manager, Raúl Prebisch, were widely praised, for instance by the League of Nations economic and financial section, for the debt repatriation and sterilization measures adopted.

<sup>35</sup> Export prices increased by 43% in 1933-34, 21% in 1935-36 and 22% in 1936-37. By 1937 the terms of trade were at their highest

<sup>31</sup> See BCRA, 1937c, chapter II for this sentence (my translation) and, more generally, for a succinct later account of Prebisch’s thinking about the “Argentine business cycle”.

<sup>32</sup> Export prices fell 64% between 1928 and 1932, while the terms of trade dropped 40% over the same period. For figures on foreign trade prices and terms of trade, see Ministerio de Finanzas de la Nación/BCRA (1952).

In opposition to both traditional and some modern scholarship, Prebisch himself, however, was careful not to claim that the recovery was mainly due to the policies followed. In the *Economic Review*, published since the mid-1930s by the Central Bank, Prebisch –speaking again about the cycle the country had been going through– said: “From 1934 up to the present there has been... a gradual improvement (of the economic situation in Argentina), partly brought about by the adoption of measures tending to facilitate readjustment of international accounts and revive internal economic activity, but mainly as the result of the gradual rise in the world prices of the country’s export products”.<sup>36</sup>

The way in which Argentina overcame the Depression, therefore, was more related to “exogenous” events –a prolonged and serious drought that hit foreign competitors– than to any shift in economic policy-making. At the same time, however, it is true that the crisis forced some changes both in economic policy and in economic structure.

In terms of shifts in economic policy “régime”, perhaps the most important event was the introduction of exchange controls right after the pound sterling went off the gold standard in September 1931. Priority was given to essential imports and the service of the foreign debt, with other imports and remittances of profits being relegated to a second order of importance.

Once again, rather than fed by a visionary policy of “import substitution”, rationing of foreign exchange became a necessity because of the balance of payments crisis. Exchange controls were to remain in place for decades, although undergoing significant changes, the first one inspired by Prebisch himself at the end of 1933.<sup>37</sup> Rationing of foreign exchange, in fact, took the place of a true real devaluation like those undergone by other countries in South America.<sup>38</sup>

---

level in the century up to that moment. Export values rose explosively by 128% between 1932 and 1937. For an account of how the drought in North America determined the recovery of the Argentine economy, see O’Connell (1984).

<sup>36</sup> See BCRA, 1937c, page 1.

<sup>37</sup> Under the new régime instituted in November 1933, a “free market” was established, separated from the “official” market. In the free market exchange would be sold by the authorities by auction. That was thought to introduce an element of flexibility that would lead to the gradual fading away of the controls. The official market, in its turn, was divided between a buying and a selling rate, with some margin in between. This margin was to pay for the increased cost of foreign public debt service –after a devaluation of around 20% was introduced– plus a price support scheme for wheat, maize and linseed.

<sup>38</sup> In Argentina, the peso had become overvalued against the pound

Almost as soon as the new scheme was introduced in late November 1933, foreign exchange –boosted by good market conditions for Argentine exports– became abundant for reasons already mentioned. The market-determined “free rate” tended to fall towards the pegged “official” rate, at which point the authorities decided to fix the margin between the two. In this sense –as Prebisch acknowledged later in life– it was confirmed that the system was being used mainly as an element of discrimination in favour of Great Britain and some of the European countries and against the United States. Investors and exporters from those countries were to benefit from the official rate, while United States exporters and firms established in Argentina had to resort to the “free” market. Such a policy, of course, had to do with the extreme triangularity of Argentine trade, that worsened the sterling area deficit with the U.S. dollar area, and the leverage Great Britain had to force the country into a bilateral exchange agreement.

The other decisive innovation in the economic policy régime was the institution of a Central Bank, beginning in 1935. This move consolidated and reinforced the role that the Banco de la Nación Argentina had been playing in shoring up banks –and the government– and represented a further step away from the “Currency Board” system.

As already noted, Sir Otto Niemeyer –our British “money doctor”– was extremely critical of the workings of the Gold Standard, and although Prebisch disagreed with Sir Otto about some of his recommendations for the Central Bank, he did share those criticisms.

The Gold Standard –or the “Currency Board” system based on gold– was deemed to be too rigid a mechanism both in the upswing and in the downswing for a country whose economy was dominated by frequent movements in export values and capital inflows. It would lead to easy over-expansion in an era of abundant foreign exchange and to excessive contraction in a moment of slump.

Thus, Prebisch –who always had thought of himself as an orthodox economist– ended up defending the exchange control system. In his view, exchange controls were absolutely necessary in order to be able to introduce a “national monetary policy” that would gain some autonomy for the country from world forces beyond its control. He thought of exchange controls only as a mechanism in the financial sphere and not

---

sterling over the 1929-1933 period, and this was not fully corrected by the devaluation of November 1933.

—at least in his writings— as an element of protectionism for the country's produce. For that, he said, Argentina must have its own customs policy; otherwise this would be imposed by the great powers.

The other novel element in Prebisch's thinking was that relating to the role of industry. Industrialization —a larger share of GDP originating in manufacturing activities— was reckoned as a further way to regain autonomy, as this sector would be less connected with developments abroad. At that time, however, his writings did not contain any of the other arguments in favour of industrialization that would make him and ECLA famous in the late 1940s.

For the rest, both in his writings, speeches and lectures and in economic policy making Prebisch resorted to consecrated orthodox solutions, i.e., a restrictive monetary policy and sound government finance as well as a banking system based on short-term credit and under strong supervision by the Central

Bank, and of course the honouring of debts. No wonder, then, that if a comparison is made between the availability of foreign exchange and the rate of growth of GDP or of manufacturing in Argentina and in other "emerging market" economies of the era —Brazil and Chile in South America as well as India or the Danube basin countries in Europe— the performance of Argentina was decidedly slower.<sup>39</sup>

In the present new era of financial globalization, however, Prebisch's vision of the problems of an "emerging market economy" in an unstable international system has regained significance and it stands as a source of insights about its mechanics. "Vulnerability" is back with us. From that point of view his enemies —advocating the reinstatement of "free" international trade and capital movements— have ended up paying him the greatest homage of them all.

(Original: English)

#### Bibliography

- Abreu, M. (1984): Argentina and Brazil during the 1930s: The impact of British and American international economic policies, in R. Thorp (ed.), *Latin America in the 1930s: The Role of the Periphery in World Crisis*, Oxford, U.K., St. Antony's College.
- BCRA (Central Bank of the Argentine Republic) (1937a): *Economic Review. New Series*, vol. 1, No. 2, Buenos Aires.
- \_\_\_\_\_ (1937b): *Economic Review. New Series*, vol. 1, No. 3, Buenos Aires.
- \_\_\_\_\_ (1937c): *Economic Review. New Series*, serie II, vol. 1, No. 1, Buenos Aires.
- \_\_\_\_\_ (1938): Introducción, *Memoria anual*, Buenos Aires.
- BNA (Banco de la Nación Argentina) (1929a): El movimiento internacional del oro, *Revista económica*, vol. 2, No. 6, Buenos Aires, June.
- \_\_\_\_\_ (1929b): Situación bancaria, *Revista económica*, vol. 2, No. 10, Buenos Aires, October.
- \_\_\_\_\_ (1929c): La posición de 1928 y las variaciones económicas de la última década, *Revista económica*, vol. 2, No. 1, Buenos Aires, January.
- \_\_\_\_\_ (1929d): Los pagos internacionales y el sistema monetario, *Revista económica*, vol. 2, No. 12, Buenos Aires, December.
- \_\_\_\_\_ (1930): *Revista económica*, vol. 3, No. 1, Buenos Aires, January.
- \_\_\_\_\_ (1934): *Revista económica*, vol. 7, Nos. 5-8, Buenos Aires.
- \_\_\_\_\_ (various issues): *Revista económica*, Buenos Aires.
- Bordo, M., B. Eichengreen, D. Klingebiel and M. S. Martínez-Pería (forthcoming): Is the crisis problem growing more severe?, *Economic Policy*, London, Centre for Economic Research, Spring.
- Cashin, P. and C. J. McDermott (2001): *The Long-Run Behavior of Commodity Prices: Small Trends and Big Variability*, IMF working paper No. 68, Washington, D.C., International Monetary Fund (IMF), May.
- Diéguez, H. L. (1972): Crecimiento e inestabilidad del valor y el volumen físico de las exportaciones argentinas en el período 1864-1963, *Desarrollo económico*, vol. 12, No. 46, Buenos Aires, Institute of Economic and Social Development (IDES).
- Dirección Nacional de Comercio Exterior (1941): *Anuario de comercio exterior, 1940*, Buenos Aires.
- DNEC (Dirección Nacional de Estadística y Censos) (1921): *Anuario de comercio exterior*, Buenos Aires.
- \_\_\_\_\_ (1922): *Anuario de comercio exterior*, Buenos Aires.
- \_\_\_\_\_ (1923): *Anuario de comercio exterior*, Buenos Aires.
- \_\_\_\_\_ (1924): *Anuario de comercio exterior*, Buenos Aires.
- \_\_\_\_\_ (1926): *Anuario de comercio exterior*, Buenos Aires.
- \_\_\_\_\_ (1927): *Anuario de comercio exterior*, Buenos Aires.
- \_\_\_\_\_ (1928): *Anuario de comercio exterior*, Buenos Aires.
- \_\_\_\_\_ (1929): *Anuario de comercio exterior*, Buenos Aires.
- ECLAC (Economic Commission for Latin America and the Caribbean) (2001): Seminario "La teoría del desarrollo en los albores del siglo XXI" (Seminar: Development theory at the dawn of the 21st century), to commemorate the centenary of the birth of Raúl Prebisch, Santiago, Chile, 28-29 August.
- IMF (1999): Global economic outlook and policy responses to the global slowdown, *World Economic Outlook*, chap.1, Washington, D.C., April.
- \_\_\_\_\_ (2001): Database, *World Economic Outlook*, Washington, D.C., May.
- Krugman, P. (1994): The fall and rise of development economics, in L. Rodwin and D. Schön (eds.), *Rethinking the Development Experience. Essays Provoked by the Work of Albert O.*

<sup>39</sup> For such a comparison with Brazil see Abreu (1984), and for a comparison with other countries see O'Connell (1984).

- Hirschman, Washington, D.C., The Brookings Institution/The Lincoln Institute of Land Policy.
- Mandelbaum, W. (1953): *The World Wheat Economy, 1855-1939*, Cambridge, Massachusetts, Harvard University Press.
- Ministerio de Economía y Obras y Servicios Públicos, Secretaría de Hacienda (1932): *Memoria Anual*, Buenos Aires.
- Ministerio de Finanzas de la Nación/ Banco Central de la República Argentina (1952): *La evolución del balance de pagos de la República Argentina*, Buenos Aires.
- O'Connell, A. (1984): Argentina into the depression: Problems of an open economy, in R. Thorp (ed.), *Latin America in the 1930s: The Role of the Periphery in World Crisis*, New York, St. Martin's Press.
- \_\_\_\_\_ (1986): Free trade in one (primary producing) country: The case of Argentina in the 1920s, in G. Di Tella and D. M. Platt (eds.), *The Political Economy of Argentina, 1880-1946*, Oxford, U.K., St. Antony's College.
- Phelps, D. M. (1936): *Migration of Industry to South America*, New York, McGraw-Hill Book Company, Inc.
- Sociedad Rural Argentina (1979): *El precio de la tierra*, Buenos Aires.
- Taylor, H. C. and A. D. Taylor (1943): *World Trade in Agricultural Products*, New York, Macmillan Co.
- Timoshenko, V. P. (1933): World agriculture and the depression, *Michigan Business Studies*, vol. 5, No. 5, Ann Arbor, Michigan, University of Michigan, School of Business Administration.
- United Nations (1949): *International Capital Movements During the Inter-War Period*, New York, Department of Economic and Social Affairs.
- Whyte, G. (1945): *Industry in Latin America*, New York, Columbia University Press.