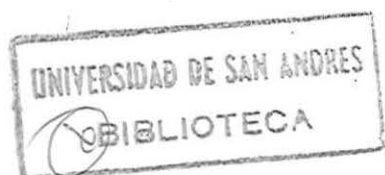


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The debate on the failure of the gold standard in Argentina (1867-1899) revisited .Notes on the Monetary History of Argentina.*

Draft, only for comments

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I. Introduction:

The late XIX Century Argentine monetary experiences has been considered by the literature as an example of the impossibility (and inconvenience) for a primary producing "peripheral" country to remain within the gold standard. The classical study in which this interpretation was based was A. G. Ford's, The Gold Standard, Britain and Argentina, published in 1962. Ford explained why the gold standard was successful in a mature, economy like Britain and why it failed in a primary producing "peripheral" country like Argentina.

This are his main points: "In the British case the success of the gold standard, in the sense of the maintenance of convertibility by the Bank of England (and not in the sense of avoidance of cyclical fluctuations and the preservation of full employment) has been shown to depend on a combination of particular circumstances at a particular phase of world economic development, which ensured the Bank of England never had to face severe and prolonged strain on its gold reserves. For the international monetary institutions and arrangements which were centered in London ensure that a speedy (temporary) relief was provided by international movements of short term funds in response to Bank rate increases occasioned by falls in Bank's reserves."¹, adding "... Furthermore, although Britain was undoubtedly an export economy she was also a lending economy, so that an export-induced boom was often accompanied by an adverse balance of autonomous items in her international accounts (because of foreign lending). Hence as distinct from Argentina, another export economy, such booms were accompanied by monetary stringency, as in the case of home investment boom, while such slumps were accompanied by monetary ease, so that the gold standard medicine served to damp down somewhat the economic fluctuations. Lastly, the supreme confidence in sterling greatly facilitated the Bank's task"². But, on the contrary: "The study of Argentina, an export economy and a debtor, has revealed many economic and non-economic contrasts with Britain, most of which made for greater difficulty in maintaining specie payments...", the lack of institutional mechanism "for easing the loss of gold until autonomous items could adjust themselves, together with the ever present risk of domestic speculative run on gold reserves, made the maintenance of convertibility a harder task for an economy whose export prices were independent determined and some portion of whose export volumes depended on

¹ A.G. Ford, The Gold Standard 1880-1914 Britain and Argentina, Oxford, Clarendon Press, 1962 pages 189-90

² Ford Ibid page 190.

vagaries of the weather and locust. In Argentina booms and favorable balance of payments, slumps and unfavorable balances were associated together, so that the gold standard, as operated by the monetary institutions, was a matter of international gold movements making the boom bigger and the slump worse"³ Then, the main points of Ford's study could be summarize as follows:

- a. In countries where exports represented a high proportion of the economic activity fluctuations of foreign trade are the main determinant of aggregate demand. Under a fix exchange system those fluctuations has additional effects, expanding or contracting money supply, widening the booms or worsening the slumps.
- b. In more mature lender export economies, capital movements offset the results of the merchandise account. The contrary happen in debtor countries .⁴

2. Ford's study had an important antecedent. Although it was written with a different purpose, John WWilliams 's book, Argentine International Trade under inconvertible system, a careful and well document work in which information rested Ford' , explained the abandonment of convertibility in 1876 and 1885 due to difficulties in the Balance of Payments : "Suspension was due to the unfavourable balance of payments of 1884, and the

³ Ford Ibid pages 191/192

⁴ This is an additional explanation given by Ford: "Accordingly in "export economies" such as Argentina, where internal fluctuations in incomes are extremely sensitive to external factors and are predominantly determined by them, the effects on booms and slumps (initially caused by variations in foreign currency receipts) are aggravated by induced investments (if any). In contrast, in investment" economies, where booms and slumps originated for domestic reason (e.g. fluctuations in domestically financed investment) and the quantity of money is determined more by the domestic banking system, rising activity is accompanied by a tendency toward balance of payment deficit and loss of foreign exchange, falling activity with balance of payment surpluses and gains of foreign exchange, so that booms meet with tighter monetary conditions, slumps with easier monetary conditions, and thus fluctuations in activity tend to be mitigated. In the export economy case, any sudden fall in foreign currency receipts (as exports values declined) at the top of a boom would have particularly sharp effects on the balance of payments which might strain governmental adherence to the gold standard and overwhelm an "extended" banking system for the "induce" adjustment process may be summed up as "making the slump worse" as gold is lost A.G. Ford op cit pages 124 and 125.

consequent fall of exchange "-said Williams .⁵

The data he presented supported the proposition that external factors (affecting the Balance of payment) and not excess of money issues (as the contemporaries believed) were the causes of the abandonment of convertibility and, why for primary producing countries, was inconvenient the rigid scheme as the gold standard .

3. Ford also said that different institutional frameworks contributed to the success or the failure of the gold standard. He mentioned the existence of a modern financial system in Britain and the lack of it in Argentina, and the political influence of the landed classes in Argentina interested in a depreciated currency. This was explain as follows:

a) "...the lack of any institutional mechanism (such as had evolved in Britain) for coping with a Balance of payment deficit by short term capital movements, and, perhaps, in the long run, by credit contraction ". While in the United Kingdom the Bank of England could manage the rate of interest when reserves were running down, in the "peripheral" countries any action on interest rates did not have any effect on international capital markets .⁶

In addition : " a creditor (lending) country can always -easily- bring immediate relief to its balance of payments lending less abroad; a debtor (borrowing country) will find it hard or even impossible to bring relief by borrowing more.. ⁷

b) In the primary producing countries the social sectors with powerful political influence were in favor of a depreciated currency (they received their income in gold and paid its debts in depreciated local currency) .⁸

An extensive literature based on those cases had argue on the negative effects of the gold standard for a "peripheral" country

⁵ Williams, John Argentine International Trade under Unconvertible paper money, Cambridge Mass., Harvard University Press, 1925 ,page 51

⁶ Ford said: "It is true that institutional conditions were inadequate. For slender reserves, together with little hope of "automatic" short term international capital flows, such as London enjoyed provided an insufficient cushion to protect the exchange rate, whilst income effects gradually reduces import purchases after, say, an immediate decline in foreign currency receipts."(page 150). But he recognizes that: "The lagged effects were not easily reinforce by induce banking policies, for in the nineteenth century were weak and weakly enforced in Argentina", (Ford, op cit, page 150)

⁷ Ford op. cit. page 137

⁸ Williams op, cit, page 159
Ford op. cit page 121

and in favor of a managed monetary system in view of its macroeconomic advantages .(Ferrer 1967).

4. In this paper we are going to discuss the relevance of some of those arguments and the postulate that Argentina had to abandon convertibility due to negative Balance of Payments caused by external factors. Furthermore we are going to sustain that some of the arguments by Williams and Ford came from a misinterpretations of the argentine experiences under convertibility due to a deficient or inadequate knowledge of the facts.

II. The points of the debate revisited.

In this section we are going to discuss the principal arguments on the debate.

1.a. The consequences of the wide fluctuations in trade on the demand and supply of gold.

Williams (and to some extent Ford) argued that negative Balance of Payments resulted in outflows of gold that made it impossible for the Banks to sustain convertibility. Ford added that knowing that, economic agents began speculative assaults against the peso¹⁴.

In order to back up his assertion Williams had built an impressive series of Balance of Payments statistics that had general acceptance since 1919. But there are serious flaws in his interpretation of the data and on the data itself.

First, it is correct to assume that all the liabilities on the Balance of Payments had the same effects on the demands of gold? Second, the data is accurate?

Williams had estimated all foreign claims against argentine residents coming from different sources: loans, public and privates, and direct investments. The problem is that those liabilities had different effects on the demand for gold. There were those, public or private, that had a fixed date of maturity and fixed interest, mainly financial operations. But there were others -direct investments- that had no guarantee of profits, which if it may existed were in domestic money. Therefore the demand for gold would depend in obtaining profits but also on

¹⁴ "It is clear that the new currency were subjected to sharp strain in late 1884 by adverse balance of payment movements. Previously, gold and foreign currency had flowed into banking reserves when net foreign borrowings had been transferred; when the lagged rise in imports and the increase in service charges made themselves felt in 1884, foreign borrowings were declining and these reserves ebbed away again. The effect of this excess of payments over receipts on the banking system was intensified by the domestic speculative tendencies it prompted. (Ford op. cit. page 135)

the convenience to exchange those eventual profits in domestic money into foreign currency, when the rate of exchange was too high. Finally there were those claims coming from commercial transactions (goods imported through credit). In those cases the sellers either, would choose to stop giving credit, selling in cash, or to agree a new schedule of payments postponing the remittance to times when the rate of exchange were more favorable.

In the XIX Century financial obligations were mainly public. For this reason the relevant debt to affect the demand for gold is the public debt. The Williams estimated payments of foreign debt of 60 to 100 million gold pesos were reduced in our estimates to 10 to 12 million gold pesos (the effective amount that the government paid for the foreign debt). (Cortes Conde 1989).

On the accuracy of the data. There are serious difficulties in the estimation of the Balance of Payments. It comes first from the lack of reliable data on the Balance of Trade. As it was explain in other work (Cortes Conde, Halperin and Gorostegui de Torres, 1963)¹³ the Argentine statistics of export values did not reflect market prices but tariff values for payments of custom duties (aforos). On the other hand at the end of the 80's the data were stated in gold pesos when in some cases it was in paper money converted at the official rate but not at market values. Export values were corrected in the aforementioned work, but there is no reliable data yet on import values.

In order to show that problem we are going to compare the data on the Balance of Payment from the argentine sources with that from sources of the countries that had large trade with Argentina: United Kingdom, France, Belgium, Germany and the United States.

Table Argentine Balance of Trade, Argentine and Foreign sources.
(millions of gold pesos)

	B.Trade(foreign)	B. Trade(arg.)
1880	10.6	12.8
1881	-2.8	2.2
1882	4.0	- 0.8
1883	5.0	-20.2
1884	1.2	-26.0

¹³ Roberto Cortes Conde, Hayde Gorostegui de Torres, Tulio Halperin Donghi, El Comercio Exterior Argentino (t. I Exportaciones), Buenos Aires, 1963, (mimeo)

1885	14.8	-8.3
1886	14.5	-25.6
1887	-2.3	-32.9
1888	-7.6	-28.3
1889	-31.0	-74.4
1890	8.3	-42.2

Source: Anuarios de Comercio Exterior Argentinos and Statistics of Foreign Trade several countries (U.K., U.S.A., Germany, Belgium, France)

This problem is still more serious if we note the differences between with what Williams named the Balance of Loans (first column) and the data of the net public foreign loans obtained from the Balance sheets of the Treasury (second column).

Bal of Loans(W). Net Public F. credit(CC)
(mililons \$ gold)

1881	2.1	11.9
1882	9.6	-6.4
1883	27.9	-2.8
1884	12.2	2.2
1885	15.5	n.a.
1886	40.8	3
1887	116.2	24.7
1888	198.3	33.9
1889	93.8	18.7
1890	-14.5	3.4
1891	-23.3	-9.9
1892	-15.9	-6.2
1893	-20.1	-6.2
1894	-30.6	-15.8
1895	-21.0	-13.1
1896	-2.7	-12.4

1897	-5.7	n.a.
1898	-4.5	-10.1
1899	-29.7	n.a.
1900	-31.0	n.a.

Sources: Williams y Cortes Conde(1991)¹⁶

On the other hand considering the balance of payments as the net variation of metallic reserves the variations would be as it is shown:

Table: Variation of metallic Reserves of the Banks of Issue.
(in millions of gold pesos)

1882	2.7
1883	6.3
1884	- 7.22
1885	- 1.48
1886	13.5
1887	-15.8
1888	35.7
1889	-31.3
1890	- 5.85
1891	- 1.23

Source : Roberto Cortes Conde 1989

But what affected mainly the exchange fluctuations was the government's demand for gold. It was clear that after the agreement with the lenders (Rotschild Committee) the pressure on the exchange market had alleviated considerably. On the other hand the problem of the external debt was more a fiscal problem than a balance of payments problem.¹⁷

1.b. The external negative effects are widening through

¹⁶ From the payment of the external public debt we deducted the yearly receipts from foreign loans. In 1888 and 1889 it should be added approximately around 5 millions for payments of the provincial external debt. But even with this addition there are appreciable differences with the amounts estimated by Williams.

¹⁷ Except if the government decided to buy gold issuing money as it had done in 1890, but not in 1891.

monetary mechanism under a rigid scheme as the gold standard.¹⁶

If the money supply were determined by its balance on international exchanges (in the current and capital account), for a country mainly dependent on foreign trade, it would be affected by fluctuations of the foreign demand or of by international capital flows. In periods of export expansion positive balance of payments would be translated in an increase in money supply. During slumps (fall in export values) it would result in monetary contraction. Because of the small share of domestic activity on the GDP, this would not have any significant effect on the Balance of Payments and on the money supply. Money supply would reinforced the expansionary movements induced from abroad and also the contraction during slumps. (there is additional consequences due to the money multiplier). In mature economies less dependant on foreign trade the contrary would happen. Expansion in domestic activities would be reflected in negative Balance of Payments (due to the increase in imports) and contraction in money surpluses and the equilibrium would be restored (decline in Money supply would check the expansion, and it increase would allow to leave the recession). Regarding the overexpansion of money supply during booms and excessive contraction during slumps there is nothing that proves that increases in exports in an open export economy would not be followed by increases in imports eliminating the monetary effects of the increase in reserves.

Moreover in a new country like Argentina export booms corresponded with cycles of capital investments in which imports of capital goods increased (when relative prices are cheaper). When the reverse situation happened (the 30's) capital imports stopped.

1.c. Terms of trade. Secular trends.

Also it was said that in the long run there are also problems resulting from a declining secular trend for prices of primary products. Under the gold standard the effect of a negative trend would oblige a primary producer country to lower its prices (wages) to remain competitive in international markets.

But, this argument did not take into consideration that in natural resources intensive countries the incorporation of new land (or mineral resources) always causes a decline of prices, but the higher productivity of the new lands or natural resources (as it happened in late XIX Century) compensated or exceed the decline of prices.

In Argentina while prices were falling the volume of exports had increased, because of that the proportion of the public external

¹⁶ On the debate on the Gold Standard see Bordo, Michel D. and Anna J. Schwartz A Reinterpretation on the Classical Gold Standard, Chicago, Chicago University Press, 1984, and Eichengreen, Barry (ed) The Gold Standard in Theory and History, New York and London, Methuen, 1985.

debt payments on export values in the late years of the 90's declined.

Table : Export Prices (IN 1883=100) and payments of the Public External debt as percentage of exports.

Year	Export price	Debt/% Exp.val ues
1883	100	16.84
1884	95.8	17.45
1885	82.1	n.a.
1886	87.1	26.96
1887	84.4	n.a.
1888	70.7	27.70
1889	67.6	37.75
1890	64.6	24.39
1891	76.7	16.14
1892	67.0	10.59
1893	62.2	28.21
1894	52.4	24.12
1895	76.8	12.69
1896	74.6	n.a.
1897	81.0	11.72

Sources: Anuarios de Comercio Exterior y Memoria de Hacienda

1.d. External trade shocks aggravated by reinforcing capital flows. A perverse trend in capital flows Periods of booms (surpluses in the Balance of trade) did not coincide in exporting, primary producing countries, as it occurred in more advanced ones (due to the declining rates of interest, and higher prices of bonds and other assets), with outflows of capital. On the contrary they were reinforced by capital movements. During slumps falling export values coincided with capital outflows reinforcing the recession. Even though

does not exist any empirical evidence on the existence of a direct relationship between export booms and trade surpluses and inflows of capital and fall in export values and outflow of capital during slumps, the lack of interest of non resident to invest in primary producing countries when assets prices were low and the rates of return of capital high, could be explain among other by the following reason : in a fiscal system largely base on custom duties (import tariffs) fiscal revenues depend on imports and in the long run on exports. The fall in exports values affects imports purchases and therefore fiscal revenues. In those conditions one would expect that in need of alternative resources (due to the falling revenues) the government could not resist to impose explicit or implicit taxes on capital assets. (devaluation, inflation). That presumption discourage foreign investment in spite of the eventual high returns that could be obtain.

1. d. The problem of capital flights.

But if the problem comes from the capital account due to the lack of confidence that led to portfolio changes (capital flights), in that case the outflows of capital would be offset by claims held by residents abroad.

1. e. But why did Argentina received important capital inflows under an inconvertible floating exchange system ?

The reason was that until 1885 there was a fix exchange system, and later there was a widespread belief (until 1887) of a rapid return to convertibility . Finally, the Public Debt was in foreign currency (gold or sterling)

With some securities there were also a notable confusion on what monetary unit were issued. Cedulas, bonds of internal debt were issue in different units of account: hard peso, peso, gold peso moneda nacional. Was the gold peso moneda nacional a liability in gold or not ? The fact that the government misinformed the public to reduced its liabilities affected property rights and generated afterwards a serious lack of confidence in business .

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2. The institutional explanations

a. The weakness of the institutional financial system in Argentina
 Ford had advanced another important argument : "furthermore there was nothing comparable with the institutional framework of London or other European centres which ensured convertibility in those regions..." and "... the lack of any institutional mechanism (such as had evolved in Britain) for coping with a balance of payment deficit by short term capital movements..."¹⁹ His argument may be true. But it was precisely the lack of a system of rules that caused the "institutional failure" .Without convertibility (as Ricardo said for the Bank of England during the Restriction period) it was possible for the Banks to increase

¹⁹. See A. G. Ford op. cit. page 137

profits expanding notes issues beyond demand, which lately led to the depreciation of the currency and capital losses for the holders of monetary assets.

Regarding the argument of the Bank of England ability to manage capital flows through the rate of interest and the inability to obtain the same results in Argentina it was omitted that what negatively affected capital markets in Argentina was a past experience of monetary disorders and continuous depreciations. In those cases the domestic rate of interest included a premium for risk. When expectation are that government policies would lead to inconvertibility and future devaluations the premium rose. Under those conditions in order to induce capital inflows the Bank should raise the rate to incredible levels, including the risk premium to the international rate. Hence, in order to produce any effect it would necessary to raise the rate with negative macroeconomic effects. (which was the reason why the Bank did not do it).

Ford did not mention that the action of the Bank of England on the rate of interest was possible because of the absence of risk premium in England, which was precisely the consequence of the operation of the gold standard.²⁰

b. The United Kingdom currency was used as international reserve currency.

The aforementioned argument did not take into account the investments in reputation the UK had to face for it: the deflationary cost during slumps and the cost of maintaining reserves.

Besides, the countries that maintained reserves in sterling usually did not kept them for the most part in notes but in gold coins or in securities (that paid interest)

c) That exporters received income in gold while their debts were in local depreciated currency (Fetter, Williams, Ford)²¹.

We mentioned already that the price of land, the main assets of exporters, declined after 1892 more that the rise of gold premium (Cortes Conde 1979). Williams and Ford compared gold premia with wages noting that depreciation produced more adverse effects on

²⁰ This was recently noted by Barry Eichengreen See "The Gold Standard since Alec Ford" Discussion Paper 347, Centre for Economic Policy Research, 1989.

²¹ "Nor indeed, was depreciated paper currency regarded with the customary European horror by the landowning and exporting interest who formed the dominant political group. For in Argentina the economic and political structure was such that a depreciating paper currency (in terms of gold) moved the distribution of a given income in favor of those interest and against wage earners both rural and urban." Ford, op. cit. pages 90, 91

real wages. But I also explained (Cortes Conde, 1979) that depreciation and the crisis had also negative effects on land values, the main assets of the landowners sector. See Tables

	Wages paper peso Index Numbers 1886=100	Gold premium Index Numbers 1886=100	Land paper peso	Land gold
1886	100	100	100	100
1890	125	181	239	132
1892	138	239	301	126
1894	146	257	153	60

Source J.H. Williams op, cit. page 192 (In Ford page 91)
Land R. Cortes Conde, El Progreso Argentino (1979) page 164

In a more recent study Albert Fishlow found out that the Balance of Payments of Argentina, Chile and Brazil were affected significantly by changes in domestic money supply. He suggested that the interpretation that blamed the landowners for its failure may assume more foresight and influence that they actually had. He attributed more responsibility to the banking and financial sectors: "In sum the beneficiaries of inflation are not necessarily the villains of the piece. Attention is much more usefully direct to the relationship between repeated government issue and the fragility of a national banking and financial system in competition with foreign intermediation..." "... banks were active participants in the political process and... financial development lagged." ²²

This paper tend to agree with Fishlow's interpretation on the absence of an adequate institutional framework to maintain convertibility.

1. The reiteration of inconvertibility (curso forzoso) was basically an institutional failure. There was no legal framework for Banks to impose constraints on bankers discretion. In spite of the common belief that in 1857 and 1881 Argentina was under the gold standard this was not the case. The law that enacted convertibility did not have any rule obliging the Banks to reduce the amounts of notes outstanding when there were outflows of gold. This was a discretionary system and not a system of rules (as it is the "currency principle"). Besides the Guarantee Bank system was quite different from the National Banks of the United States (See Cortes Conde 1989)

2. It is clear that someone benefitted and someone else lost from that institutional failure, but it is difficult to imagine that the successive and complicated steps taken leading to those results were deliberately planned by the local oligarchy.

²² Albert Fishlow "Market Forces or Group Interest: Inconvertible Currency in Pre 1914 Latin America" Unpublished paper Univ. of California, Berkeley. 1987, pages 27/28

Instead it seems the consequences of the lack of a competitive banking system (limited to two chartered Banks of Issue public or semi public) that allowed the Director of the Banks, the national and local government and politician to profit (themselves or their friends or clients) through credit expansion and interest below market rates.

3. The adjustment mechanism of the Balance of Payments.

Williams said that balance of payment adjustments were produced because : "... changes in the value of paper money effect changes in the foreign trade. The explanation of theory is that a depreciating paper currency operates like a protective duty. To the exporter it acts like a bounty; to the importer, as an added cost. The result is to encourage exports and diminish imports. The effect of depreciating paper on foreign trade grow out of the fact that the prices of commodities that enter into en foreign trade are more sensitive to fluctuations in the value of the currency than are wages, rents, and other cost of production "²³.

Ford, on the other hand, reject Williams explanation saying the neoclassical assumption that there existed a relation between exports and a rising gold premium was not dominant in Argentina where from 1894 to 1900 a falling trend of gold premium was accompanied by rising export volumes..²⁴ Changes in relative prices were not the main reason for the changes in the Balance of Payment, but instead changes of income. Devaluation produced changes in the distribution of income, reducing the level of consumption for those who earn wages. This produced a decline of imports and the change in the sign of the Balance of Payments. Changes in exports occurred due to other factors (expansion of Railways, weather conditions etc) and usually appeared with a lag.

Two points deserve consideration:

1o The relation between gold premium and exports. The Ford argument actually refers to the movements along the supply curve (rising gold premium -prices- and export volumes). The rise of exports at the time of falling gold premium he found was due to the shift in the supply curve as consequence of the incorporation

²³ Williams op cit page 174.

²⁴ "It is difficult to attribute much importance to the influence of changes in the gold premium on the quantity of export supplied... " "... certainly from 1894 to 1900 a falling trend of the gold premium was accompanied by rising export volumes, indicating that in practice the direct reaction suggested by neoclassical theory between the gold premium and the volume of exports was not dominant in Argentina..." Ford page 143 also pages 151 and 152.

of new fertile lands with higher productivity. (lower cost).
 2o. Factors affecting imports or exports are relevant in studying the premium of gold but much more important was at that time (as I demonstrate in R. Cortés Conde, 1987, 1989) the enormous inflows and outflows of gold produced in a very short period of time (1888-1889). Those gold movements resulted from the inflow of foreign loans in 1888 (Provincial External Debt for the Bancos Garantidos) and from the sale of gold (coming from the same funds) in 1888 and 1889 ordered by the government trying to sustain the rate of exchange.

The basic mechanism for adjustment was the drastic fall in money supply due to the removal of deposits from the Money Supply when Banks came into liquidation (Cortés Conde 1989). (See Graph page) This was not noticed by Williams and Ford because they did not include deposits as part of money supply. The enormous contraction of money supply in 1891 restored equilibrium.

4. Some historical factual errors.

We said that as a common belief the Argentina from 1867 to 1876 and from 1883 to 1885 was under the gold standard. This conclusion came from the study by Williams in which he sustained:

1o. That there were the experience of the period of convertibility from 1867 to 1876 that we thought was similar to the Caja de Conversion (gold standard), and
 2o there was a subsequent experiment of convertibility between 1883-85.

(In both cases problems of the Balance of Payments - said Williams- made impossible to remain within the gold standard:

We are going to show that he failed to grasp some important facts:

1o. The system actually was quite different of that of the Caja de Conversion (or the Issue Department of the Bank of England): there were notes issued (Office of Exchange) with 100 % reserves in gold (as it was the case with the Caja de Conversion), but there were some others (the so called metallic notes) backed with the general assets of the Banks.²⁵

b) That in 1883 to 1885 contrary to what he said there was an important expansion in money supply.

Let us explain both cases:

The Convertibility period, 1867- 76. The 1873-76 crisis. Causes. Abandonment of convertibility. "Curso Forzoso", fiduciary standard. Floating exchange system.

a. The expansion of credit in gold. The Public Works Loan of

²⁵ For a summary of of the monetary regimes see Appendix and in more detail Cortés Conde (1989)

1871: monetary effects.

In 1870, a foreign loan was negotiated in London for Public Works for 6m Pounds sterling or 30 m\$F. The total money supply in that year was 50 m\$F, and that the currency in the hands of the public was 23m \$F, then it is easy to notice the impact that this inflow of gold would produce. Moreover, once the government received the funds, being unable to spend it immediately in public works, it deposited them at interest in the metallic section of the BAP Bank, thinking that the interest to be received would partially compensate for the interest that had to be paid (around 2 m\$F per year, with estimated revenues of 12m \$F). Operating under fractional reserves the rise in reserves produced a multiple increase in deposits. In 1870, gold reserves at the BPBA were 1.8 m\$F, in 1872, they rose to 5.5m\$F. The deposits from 11.8 m\$F to 27.5 m\$F. On the other hand, had the gold gone to the Exchange Office the amount of notes issued should be equal to the amount of the gold deposited.

b) Fall in Reserves contraction of currency in circulation from the Exchange Office. Expansion of notes issued by the Banks.

When the government withdrawn the sums deposited, first because the government changed its financial agent (the new National Bank in 1872), and later, because it began spending them - a large porportion in imported goods- the reserves fell drastically producing a a multiply monetary contraction . Between 1872 and 1873 , reserves in BAP Bank fell from 5.5 m \$F to 0.6 m \$F , deposits, from 27.5 m \$F to 16.8 m\$F. On the other hand, reserves in the National Bank, rose from 1.9m \$F, in 1873 to 3.4m \$F in 1874, and deposits went from almost nil to 6.6m \$F in 1874, and 5.2m \$F for the metallic notes. In 1875 in the same Bank reserves fell to 2.6m, deposits to 1.6m \$F, and notes rose to 3.4m\$F . In 1877 reserves fell to 0.8m\$F, notes to 0.3m\$F and deposits to 0.1m\$F (no balance was available for 1876).

Thus the extraordinary amount of the foreign funds coming from the Public Works Loan and the deposit of those funds in the Banks without increasing the reserve/deposit ratio produced an enormous disturbances in the monetary and credit markets.

Table Currency, Deposits, Reserves, BAP Bank, Office of Exchange and National Bank, 1869-1876

Year	1869	1870	1871	1872	1873	1874	1875	1876
BAP Bank								
Res.met.	0.6	1.8	3.7	5.5	0.6	1	0.8	0.9
Dep.met	10.9	11.8	14.6	22.5	16.8	12.1	15.1	12.3
Notes	3.9	4.8	5.9	5.7	8.5	8.9	10.5	16
Ex.Off.								
Issues	5.88	7	10.53	15.41	10.16	6.24	2.84	4.15
Nat. Bankn								
Res.met.					1.9	3.4	2.6	n.a.
Dep. met.					0	6.6	1.6	n.a.
Notes					2.3	5.2	3.4	n.a.

Source: MHN, MHBA in Roberto Cortes Conde (1989)

Through loans granted in metallic by the Banks, a fraction of the gold was converted into notes in current pesos in the Exchange Office (more than in metallic bank notes). This explains the large increase in the issuing of notes in current peso in the Office, from 10.5 m\$Fin 1871 to 15.4m. in 1872 (they were even quoted in pesos corrientes. (Conversion to \$F was made to facilitated the reading).

The following year the trend was reversed and note holders began withdrawing gold from the Exchange Office. The fall in notes went to 10.2m in 1873. Once the fall in reserves was known by the public the process of gold withdrawal was accelerated. From 10.2m\$F, in 1873, the reserves fell to 6.2m \$F in 1874, and 2.8m\$F, in 1875. Initially orthodox policies were adopted - the rise of the rate of interest, the ruling that loans would not be renewed automatically all these producing a strong impact in the market (accompanied by a reduction in expenditures by the government) - but later on, the banks changed to expansionary policies. In order to offset the contraction of currency in the Office of Exchange new issues of metallic notes were authorized in the Buenos Aires Province Bank. Then, while the notes in current pesos (Exchange Office) fell from 10.2m (\$F), in 1873, to 6.2 m (\$F) and 2.8m (\$F) the years '74 and '75, the metallic bank notes in pesos fuertes rose, from 5.7 m \$F in 1872 to 8.5 m\$F in 1873 and 8.9 m\$Fin 1874. Finally, in 1876, the year in which inconvertibility of all notes was decreed, the total amounts of notes was 15 m\$F, (5m (\$F) in Exchange Office current pesos and 10.5 \$F metallic banknotes) close to the 15.9 m \$F in 1873.

The contraction of paper currency (Exchange office notes), as a consequence of the drain of gold was offset by the new issues of metallic banknotes without the same backing of gold (See Graphs).

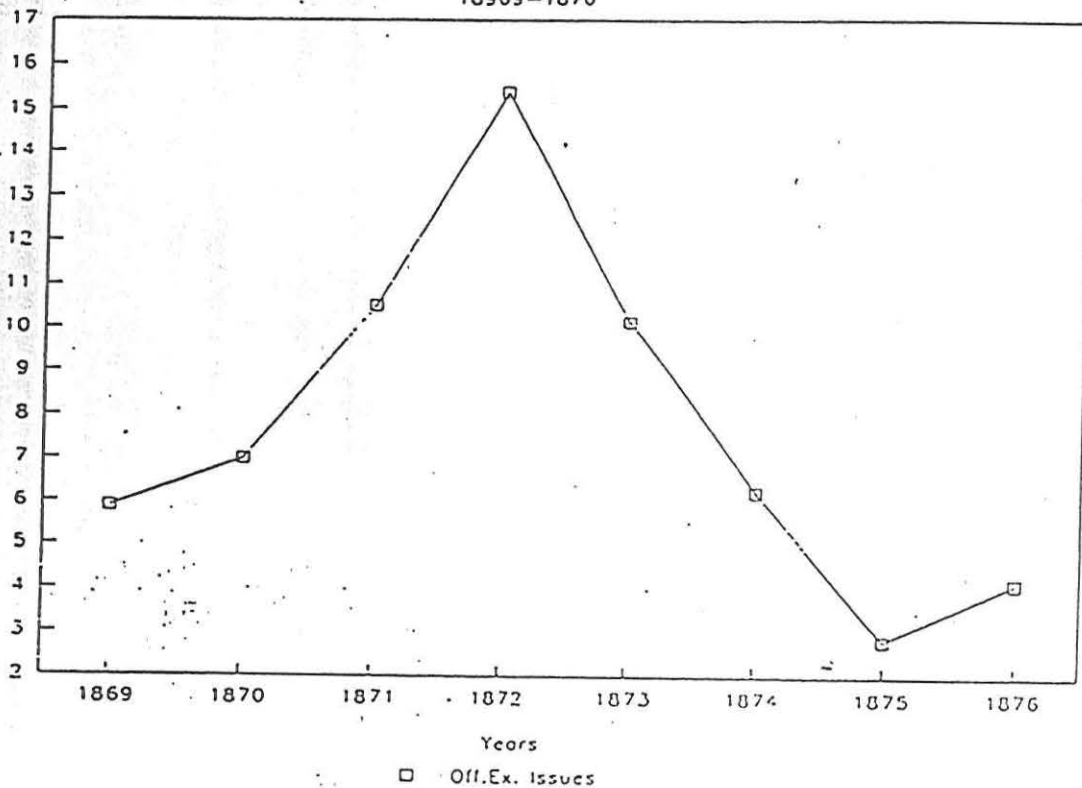
Besides, to issue new notes, 3 m\$ in gold was withdrawn from the Exchange Office, and when there was a drain of gold and currency was not eliminated, the drain accelerated. Being aware that gold reserves were falling, the public assumed that the banks would not have much time and resources to resist a speculative run against the peso, and hastened to change their monetary assets in notes, for specie. This produced the final run leading the BAP Bank's demand that the provincial government suspend convertibility. This was done in may 1876. A few days later, the national government decreed the suspension of convertibility for the notes of the National Bank.

As I mention at the beginning a closer look into the events of the 1870's in Argentina shows that the crisis was the consequence of a drain of gold that was not followed by an equivalent reduction in notes, one of the basic requirements of the gold

OFCAM Issues

18969-1876

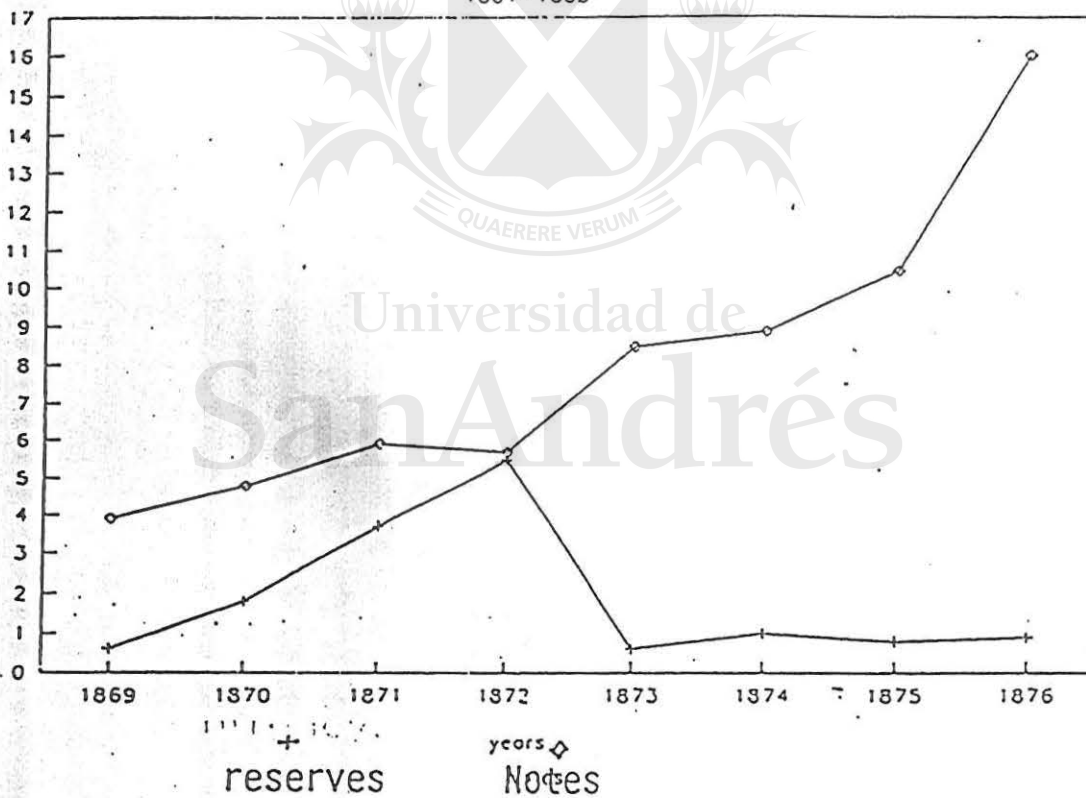
m\$F



Currency, Reserves, BAP Bank

1881-1885

m\$F



standard. To the extent that the authors mentioned were not aware of the existence of metallic notes, they did not take into account its effects on the monetary expansion in those years.

c) The other example refers to the period of convertibility 1883-85 when Williams sustained that there was not monetary expansion and suspension was due to Balance of Payments problems. "It may be noted from the outset that in this period there were no issues of paper money. In 1883, as I have said, the great mass of old worthless notes was exchange for new metallic notes. I find no mention of any further emission until December 1886..." and "The years 1884 and 1885 afford an instance of still another sort. In 1884 paper was converted into gold at par, there were no issues whatever of paper money: yet an unfavorable balance of payments by causing a demand for gold for export raise the price of gold, exhausted the resources of the Banks, threatened a commercial crisis and forced the suspension of specie payments. In other words, paper depreciated without any change in its quantity."

The facts were different. Between the end of 1882 and the end of 1883, the notes in circulation rose from 18.70m \$ gold, to 24.3 m \$ gold, reflecting the increase of monetary reserves (mainly the product of loans to the National Bank) that rose for 0.9m \$ gold in 1882 to 14.2m \$ gold in 1883. Deposits increased from 53.8 m\$ gold to 75.7 \$ gold, and money supply from 82.5m\$ gold to 110.6m\$ gold. But the subsequent year gold reserves fell to 6.8m \$ gold (more than 7 m \$ oro) but notes in circulation only from 24.9m\$ gold to 21.4 m\$ gold. Total deposits, on the contrary, increased, and the reserve ratio (gold reserves/currency plus deposits) fell from 14 % at the end of 1883, to 6 % at the end of 1884. The reserve ratio (gold reserves/ metallic notes) from 57 % to 32 %.

Table , Currency, Deposits, Reserves. 1881, 1884

Year	1881	1882	1883	1884
Res. Met.	5.1	0.94	14.2	6.81
Dep. Met.	12.2	15.5	11.81	10.91
Dep. Tot.	48.77	53.82	75.71	95.51
Notes	18	18.7	24.85	21.4

Source: MHN, MHBA in Roberto Cortes Conde (1989).

It is clear then, that the adjustment of the gold standard did not took place because notes in circulation were not reduced in the same amount of the reduction of the gold reserves.

↪ Williams op. cit page 45 and 11

requirement that never was established for the Banks of Issue. Knowing that the banks with that amount of notes would not be able to sustain convertibility, speculation against the peso increased and there was a drain of gold at the end of 1884 that led the government to decree the suspension of convertibility for the National Bank and immediately after for the remaining Banks of Issues (at that time, four in the country). For the first time in Argentine economic history the government declared, in the same decree, those notes as legal tenders, with the proviso that they should be received at face value as payment of all obligations .

d) That the 1890 crisis was mainly due to the Balance of Payments problems, when the inflows of loans stopped.

In another work (Roberto Cortes Conde ,1989) we have demonstrated that the outflow of gold was largely caused (under the policies follow for the Bancos Garantidos) by the preference of the noteholders , afraid of capital losses , to held more secure foreign assets .

5. The relation between gold premium, money issues and the Balance of Payments.

Williams draw two graphs: one relates paper money in circulation with gold premium and the other gold premium with the Balance of Payments(Ford did the same see page)

In the first he notices, that in the 90's while gold premium declines paper money increases or remain stable : " Between 1885 and 1887 paper money increases some 20m \$; the gold premium remain stationary (declining 37 % in 1885 to 35 % in 1887, Then comes the great expansion of the currency beginning with the passing of the Guaranteed Banks Act in November 1887. The rise of the curve of paper money is paralleled up to 1891 by a rise of the premium of gold. But from this point on, agreement between the two curves ceases. Paper money continued to increase until 1893, but gold premium falls sharply after 1891". ²⁷

There are two factual errors there. (Mentioned already in Cortes Conde , 1987 and 1989). Compare graph a) (Cortes Conde²⁸) b) (Williams) and c) Ford:

1o.The lack of coincidence between issues and depreciation from 1886 to 1888 was due to the intervention of the Bank selling gold in the market (Dirty flotation)

2o.From 1890 to 1892 Williams and Ford observe that there were increases in paper money issues but the gold premium decline.

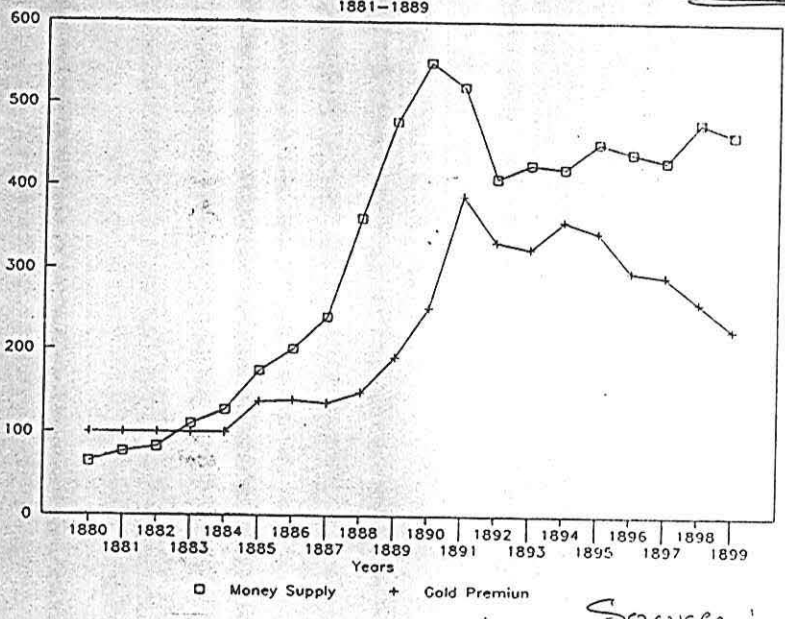
²⁷ Williams op. cit. pages 164 and 165

²⁸ In this graph we include deposits of the two main Banks until 1887 and after that also deposits of the main private Banks, Banco de Italia, Banco Frances, Nuevo Banco Italiano, Banco Espanol del Rio de la Plata.

a)

Money Supply—Gold Premium — Cortés Conde

millions \$ - Money Supply
Gold Premium 1881-1889

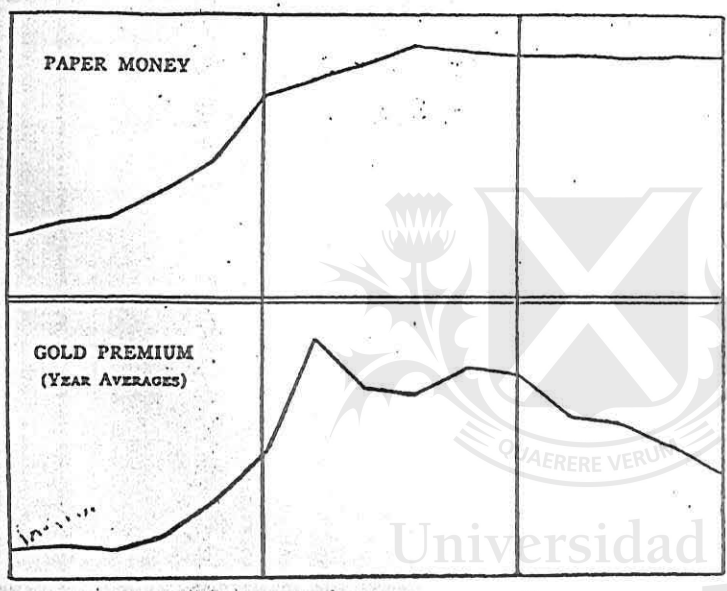


Source: Cortés-Conde (1989) and Dirección de Estadística: Veinte años de Estadística Bancaria - Buenos Aires

b)

PAPER MONEY IN CIRCULATION AND GOLD PREMIUM, 1885-1899 - Williams

Million Pesos



1885 -6 -7 -8 -9 -1890 -1 -2 -3 -4 1895 -6 -7 -8 1899

Source: Williams

GOLD PREMIUM - NOTE ISSUE - FORD

c)

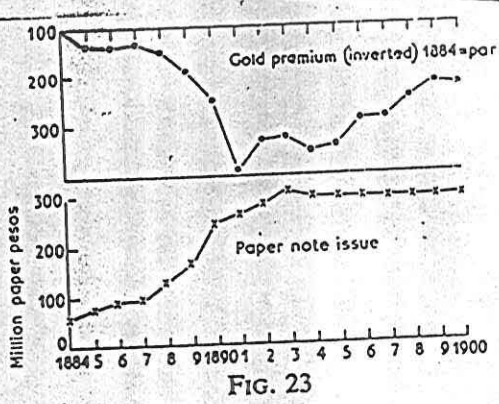


FIG. 23

Source: Ford (1962)

However if deposits were added to Money supply (see Graph a), it is observed that decline in money supply in 1891 and 1892 coincide with appreciation of the gold premium. (The liquidation of the two main Banks during 1891 had the effect to eliminate their deposits as part of the money supply. (See Cortes Conde, 1989) .

Taking into consideration the factors producing divergences the graph a) show the expected relation between money supply and gold premium.

V. Finally let us see how perform the Argentine economy under those alternative systems

1. In 1876 it was true that the suspension of convertibility avoided a strong contraction of the money supply (in fact the contrary happened). But it is also true that only thanks to fiscal discipline and money contraction was it possible the resumption at the former parity in few years with an impressive response from international capital markets in the following decade.

But in any case from 1875 to 1880 the GDP had decline at a rate of -0.5 by year .

2. In 1885 the suspension of convertibility also avoided a severe contraction that eventually would take place.

There was not a fall in GDP. In spite of the suspension , the previous experience of resumption led the people to trust in the government ²⁹ thinking that suspensions was transitory and convertibility would be restore at par. As a result Money supply and GDP (2.6 % by year) increases. But knowing the policies adopted in 1887, the conviction changed and the public began exchanging domestic financial assets for foreign ones, movements that the government try to halt selling gold in the market with negative results: the public bought all the gold offered which was largely the outflow of gold that deplete Bank reserves leading to the 1890 crisis .(Cortes Conde 1989).

From 1889 to 1891 GDP felt -8.6 by year.

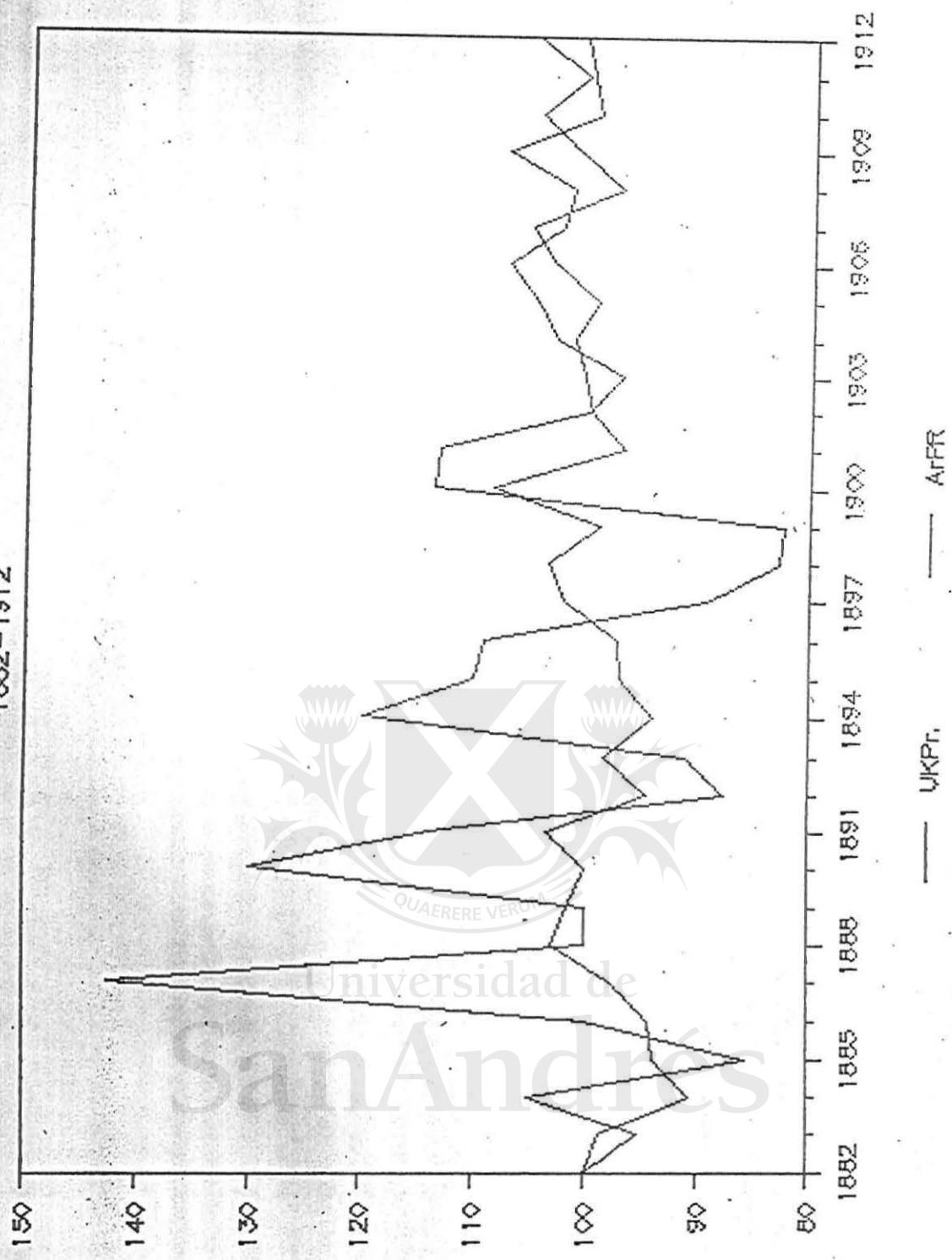
The Recovery began slowly after the "arreglo Romero" in per capita terms just 1893 was reached again the 1889 level.

The abandonment of the gold standard obviously avoid the monetary contraction that it would take place instead, but the alternative policies followed ended in more serious crisis.

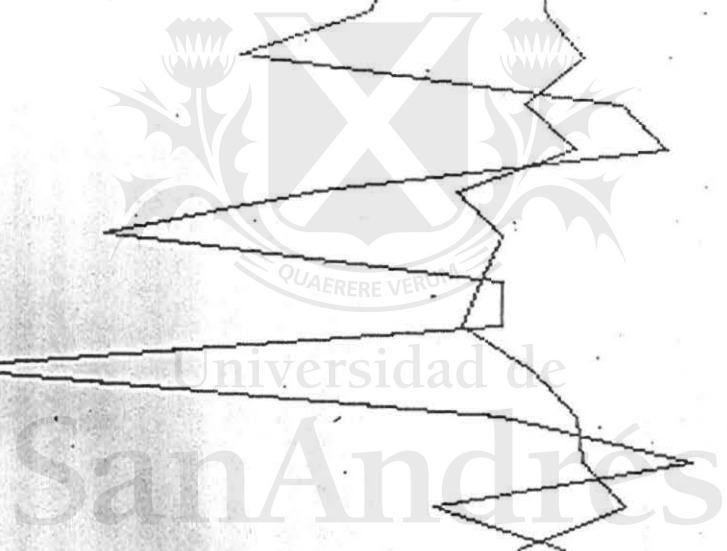
The problem was not the cost of the gold standard (external shocks, idle resources , but whether the alternative system of discretionary money management would not have led to worse

²⁹ See Michael Bordo and Finn Kydland "The gold Standard as a Rule"(manuscript), 1989

Precios United Kingdom-Argentina 1882-1912



Source: UK, Mitchell
 Arg. Cuntis (1979)



results (on prices, rate of interest and growth)

3. Prices under inconvertibility (floating exchange system) and convertibility (gold standard).

During the inconvertibility period Argentine domestic prices had wide fluctuations and diverge largely from international ones. During the convertibility period there is a tendency to converge. See the following graph

Graph Argentine Prices and United Kingdom Prices 1880-193
Index Numbers 1882=100.

4. Effects on growth and prices.

The main argument in favor of a managed monetary system is that a fix exchange system affected by external shocks produce negative effects on growth. The empirical evidence did not sustain that point

New estimates in GDP allow us to compare the GDP per capita in the period 1882-99 (floating exchange system) with the period of 1900-1913 (gold standard), both periods characterized by a strong pull of external demand.

During 1885-99 the rate of growth of GDP was 3 % by year and 1,4 per capita.

During 1900-1913 was 8.2% and 6.2% per capita (Cortes Conde, 1992)³⁰. Moreover in the first period the impressive growth of the 1880's was offset for a fall in the early years of the 1890's (see above),

Finally if we compare two different experiences. One under the gold standard 1899-1929 and the other under a managed monetary system the differences are striking. From 1900-1929 GDP grew 5 % by year and 2 % per capita. Prices increases 2 % by year. From 1930 to 1989 GDP grew at 2.6 % and 1.0 % per capita. From

³⁰ Roberto Cortes Conde, Preliminary estimates of GDP in Argentina 1875-1935 (in preparation)

1946 to 70 , prices increases 21 % by year and from 1970 to 1985, 67 % by year. Not a very successful experience, indeed.

Conclusions

This paper did not pretend to reach definitive conclusions in the long debate on the subject. Instead it was its intention to explain that much of the well established arguments were based on a very weak and disputable empirical evidence. Also it tried to reveal some peculiarities of the Argentine case that were neglected in previous studies with the purpose to add some new insights into the problem.

Finally, even much of the conclusions are not definitive, it is its main point that the two experiences with convertibility (1867-76 and 1883-85) were not meet with credible commitments from the part of Banks and the Government (especially with rules that bounds the circulation of notes with gold reserves) exacerbating the fears of the public on forthcoming depreciations, that finally end in the financial crisis (1890).

2

Appendix : The Historical Background

1.The Argentine Monetary systems

What was money in Argentine in those years? What instruments were used as means of payments, unit of account and store of value? Which were the system to issue paper money ? Was it government paper money or private bank notes ? Did the Banks create money through credit ?

1. Means of payments

Coins (silver and gold, foreign coins), paper money (inconvertible bills and convertible notes in Buenos Aires) and demand deposits were used as means of payments.

1.1.Coins.

Silver coins circulated mainly in the interior provinces. Gold coins were seldom used as means of payment, instead gold deposits or bills of exchange were used for large transactions. In Buenos Aires, for retail trade and wages, paper money was used. Coins were mainly foreign (especially Bolivian and Chilean silver coins, since Argentina did not mint silver or gold in large amounts). The main source of silver production was in Potosi, Bolivia.

1.2 Paper Money. Notes.

Except for briefs and isolated experiments in some provinces,

Office (Oficina de Cambio) issued notes (promissory notes) in current money (billetes en moneda corriente) at the rate of 25 of those notes to 1 hard pesos of metallic notes. The Exchange Office with its vaults depleted suspended its activities in 1876. Then, between 1867 and 1876 there existed two different systems to issued notes:

- a) The issue of Bank metallic notes in the Banking section of the Buenos Aires and National Bank (since 1872), in hard pesos (pesos fuertes \$F), and
- b) the issues of the Exchange Office (oficina de Cambios) similar to the Issue Department of the Bank of Englenad were the issues were 100 % backed in gold.

1.3. Deposits.

In Pesos Corrientes and in metallic (\$ Fuertes). In 1857 deposits in gold were authorized in the Bank of Buenos Aires Province. The Bank received metallic (gold or silver) and had to pay in the same specie. This provision formalized the substitution of currency between notes (paper) and gold that existed for many years as a consequence of the depreciation of the paper peso (quoted at par in 1822, in 1862 it was worth 5 cents of the former silver peso). The gold deposits in metal had reached by 1867 amounts close to those of the paper deposits 9.3m \$F and 11m \$F and in 1870 almost equal 14.6m \$F and 14.9m \$F. The public used those deposits as a store of value, but through the years they extended its use to large transactions. Thus, deposits were held in different "numeraire" paper and metallic money (in pesos fuertes, silver pesos, 16 pesos fuerte one gold ounce).

Keeping fractional reserves, the Banks lending in metallic also created deposits but in another unit of account (metallic, silver or gold).

It is important to notice this because some of the strong monetary fluctuations in the 1860's and 1870's were produced by the variations in gold reserves and metallic deposits.

Banks of Issue and Commercial Banks.

The other relevant feature of this period is that until 1872 there was just one Bank of Issue: The Bank of the Buenos Aires Province, bank of the provincial state with fiscal privileges. The Province, since 1862 resisted with success all the attempts of the national government to establish other Banks of issue (including the foundations of the Free Bank, when the government project of Free Banks Law in 1862 did not get Congress approval). In 1872, finally a second bank of issue was establish, a mixed corporation, private with a major government participation. It began competing with the BAP Bank. In a monetary market, as the Argentine one, the emergence of a new bank would have as result the fall in demand of Buenos Aires Bank notes. The creation of this bank was resisted for that reason.

There were other commercial Banks. In 1862, the London Bank was founded. In 1872, the Italian Bank opened as a commercial bank. Neither one had the right to issue. Also, their deposits were too small in comparison with those of the official or semiofficial banks.

1.2. Unit of Account.

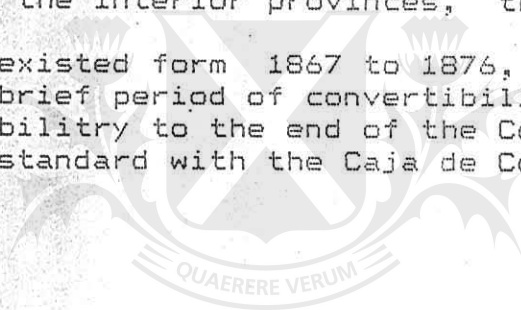
Peso Fuerte (hard peso). Given the different monetary regimes, the national government adopted in 1863 a unit of account ("numeraire"), the peso fuerte with the same silver content as the old Spanish colonial peso of 8 reales (27 grams of fine silver, 900), worth 16 pesos the gold ounce. The government decided to keep its accounts in that unit, and also, to pay its expenses and collect its revenues in any currency paper or metallic coins, converting them to that unit at its market value. This was of great importance, because for the first time Argentina indexed its revenues and expenditures.

The other important fact to be considered is that given the depreciation of the paper peso the banks of issue began issuing notes in a different "numeraire", the metallic standard to provided confidence that those notes were truly backed by metallic (gold or silver).

Peso "moneda corriente" in Buenos Aires Province.

Peso (silver peso) during the government of the Confederation 1853-62, and in the interior provinces, the spanish peso of 8 reales.

2. Covertibility existed form 1867 to 1876, Incovertibility from 1876-83. Then a brief period of convertibility from 1893-85 and finally incovertibility to the end of the Century when Argentina went to the gold standard with the Caja de Conversion.³¹



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³¹ A complete detail of this is found in Cortes Conde (1989)

1. An early discussion of this subject in relation to the crisis of 1890 was present in Cortes Conde (1987 and 1989)

2. A very preliminary version of this paper was presented at the Workshop of Economic History at the University of Chicago, and the Bank of Portugal Conference on "The Gold Standard in Peripheral Countries" in Lisbon, both in 1991. The author wants to thank the comments of David Galenson and of George Mc Candless, who read an early version of the paper, in Chicago. Also to Michael Bordo and Gianni Toniolo and the participants of the seminar for their comments on the Lisbon Paper, especially Michael Bordo who read and commented the revise version. As usual all the responsibility for its contents correspond to the author.



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