

Fiscal Crisis and Inflation in XIX Century Argentina

By Roberto Cortes Conde

Harvard University and Universidad de San Andrés

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Only for discussion

I. Introduction

As is well known, the majority of the former Spanish colonies experienced long periods of political unrest and economic instability after their independence (1810-1820). Prolonged wars and endless domestic conflicts lasting almost a century had a negative impact on economic growth (Coatsworth; 1993).

In previous work (Cortes Conde, 1989; Cortes Conde, 1997 and Cortes Conde and Mc Candless, 1998), I extensively discussed the fiscal aspects of the transition from colony to nation. I did not agree with the common wisdom that the failure to form stable governments in Argentina lied in the heritage from Spain not allowing the *criollos* to experience self-government. This did not explain why they were unable to learn from other experiences like that of the United States. I argued instead that one of the causes for this failure was the inability of the new states to find regular sources of revenue needed to maintain an army and to assure the monopoly of coercion for the central government¹ (North; 1981).

After independence, the northern territories of the Upper Peru with the rich mines of Potosi were lost. This was the main source of fiscal revenue in colonial times (Klein, 1973; Halperin, 1982; and Amaral, 1988). From a regime based on the collection of dominial revenues (royalties on mine production, the fifth and the tenth) Argentina turned to a new one based on the collection of taxes (Tax State) during the period of independence. Although the new government opened the country to international trade, due to the poverty of resources and limited international trade, taxes on trade were not enough to compensate for the losses of Potosi. I would argue, however, that some of the institutions inherited from Spain -enormous bureaucracies, Viceroyalties, audiencias, etc.- had negative consequences when lacking mineral resources and the new countries turned to new sources of revenues.

¹ Military outlays were the major part of expenditures during the early stages of formation of the nation states. (Ardant; 1971).

This paper states that the failure to consolidate a new state within the boundaries of the former colonial administration, as provider of public goods, lied in the inability to secure revenues to pay ordinary and extraordinary expenditures (wars).

Given the existence –during the time of independence- of technologies instrumental for issuing long-term debt ² to finance those extraordinary expenses, why were they not adopted or why did they fail? I point out that there were circumstances: the colonial institutional heritage, the availability of resources, and external shocks that made the government unable to follow institutional arrangements experimented in other parts of the world. Under severe constrains, they choose instruments readily available instead, usually inflationary taxes, force debt and confiscation. When tax collection was not possible ³ (during blockades) an inflationary tax was not irrational. The solution convenient for them, and an outcome of the diverse interest of heterogeneous groups (Alesina and Drazen; 1991) created a reputation problem that negatively affected the future (the country was denied access of capital market and the rate of interest rose).⁴

This work has been inspired by the recent literature in institutional economics, and political economy. It owes much to the articles of North and Weingast (1989) on the effect of institutional reforms after the Glorious Revolution's establishment of credible commitments to gain access to

² They were known as it is seen in the 1821 reform.

³ More than 80 % of the revenues came from the Buenos Aires customhouse. The Brazilians blockaded the Buenos Aires port from 1826 to 1828. The French did it from 1838 to 1840 and the French and the British from 146 to 1848. Bulow and Rockoff (1989) sustained that the credit line of any country has a ceiling (the present value of the country's future income). If the ceiling is reached the country will gain by repudiation its debt.

⁴ In addition the government was concerned with its own survival, and not with the consequences of its behavior on the future governments. Under political regimes not characterized by a peaceful succession of political parties, leaving a difficult financial situation to the new government could contribute to its failure and to avoid its perpetuation in office.

capital markets, Sargent and Velde (1995) on the comparison of the French and British cases, Bordo and White (1991), Alesina and Drazen (1995), Alesina (1988) and Eichengreen (1990).

II.

In this paper I will discuss Argentina's fiscal experience in the XIX century and its political and institutional framework. I will present data on revenues, expenditures, the deficit, and the evolution of the public debt (foreign and internal) and its yield. I will compare, through time, the yield on British consols with the yield on Argentine bonds. The difference between them is what is called the country risk. Market government debt quotations indicated the present value of the future government revenues.

I will point out that several factors had an effect on the market evaluation of sovereign debt:

1. The capacity to generate surpluses (due to the rise of revenues or the fall in expenditures). I will consider the debt/public-revenue ratio specifically.
2. The power of the government to implement its plans and to remain in office (Sargent and Velde; 1995). This will depend on:
 - a. Internal opposition, conflicts or civil wars.
 - b. External wars, especially when wars affected the capacity to obtain revenues (blockades). When, despite of its performance, the government is perceived as unable to collect revenues, or because it is at the edge of breaking down, the markets discount it, and public bonds' values fall.
3. Finally, the existence of institutions that constrained the government from controlling expenditures and the creation of money. (North and Weingast; 1989).

I argue that in periods of fiscal equilibrium, and internal and external peace, country risk diminished; the contrary happened in periods of deficit and internal or external wars. Also, country risk diminished when the market perceived the existence of credible institutions able to limit the government (such as Convertibility in 1867 or the Currency board in 1899). The same

happened when there was a history of good performance of the government (as in 1880 when after the suspension of convertibility in 1876, the country went back to prior parity).

I will relate the perception of the market on the sovereign debt (Country Risk) to the debt/fiscal-revenue ratio (D/FR). Also, I will try to see to what extent political events, government performance and institutional changes affected that perception. (See Graph 1. Country Risk).

III. History

1. *The formation of a new nation state*

Not all the former viceroyalty provinces followed the revolution of May 1810 that removed the Viceroy and established a new government in Buenos Aires. The northern regions (the Upper Peru, what is now Bolivia) rejected the authority of the revolutionary government of the Rio de la Plata and ever since, they remained autonomous, failing all the attempts of Buenos Aires to reoccupy them and the rich mines of Potosi. Because mining royalties were the main source of fiscal revenues this had negative impact on the Treasury and affected the economy through a severe shortage of currency (due the widespread use of silver coins). (See Table 1. Income from Potosi and from customs).

Revenues of the Real Caja de Buenos Aires, in thousands of pesos

	1791 - 1795	1806 - 1810	1811 – 1815
Potosi	8,063	3,635	420
Customs	947	2,338	6,453

Source: Halperin (1982)

In the meantime the government, responding to its liberal ideologies but also to its financial needs, had embarked in free trade policies not obtaining the expected results due to the high cost of transportation that maintained European markets far from the reach of the South-American nations. While the fiscal revenues coming from the increased international trade were not enough

to compensate Potosi losses, the government had the need to organize an army to sustain its authority, challenged not only in the central and northern provinces but also in Paraguay and Uruguay. Having limited resources and not willing to launch inflationary policies (after the assignats experience in France) the government failed to maintain an efficient and loyal army in the distant territories.

The poverty of the rural economy did not allow sustaining the bureaucracies that existed in colonial times. However, the decision to maintain a modest army affected the government that had to struggle with local strongmen (caudillos) who successfully challenged its authority with the advantage of having resources in kind (horses and peons).

In addition, the lack of financial instruments (unknown in Spain and in its colonies) worsened this situation. Even with very small deficits they were not able to get long term financing. (See Graph 2. Fiscal Deficits). The government was thus facing reiterated crisis due to the short-term maturity of its debt.

Attacked from different places and with an uncommitted army that finally rebelled in 1819, the central authority collapsed in February 1820 before the irregular forces of the caudillos of Santa Fe and Entre Rios.

2. The divided country. The Confederation of Provinces.

For the following three decades, the country was split up in different autonomous provinces.

In this period the following political events and institutional reforms are worth noticing:

- I. Financial reform in 1821 and foundation of the first Bank of Issue in 1822.
- II. War of Brazil and blockade during 1825-27. Inconvertibility in 1826. Default of foreign debt in 1827.
- III. War and blockades in 1837, 1838-40 and 1846-48.

The Buenos Aires' 1821 financial reforms.

Having experienced reiterated fiscal crisis due to short term financing, the new government of the province of Buenos Aires started an ambitious financial reform.⁵ The reform had different objectives:

To raise revenues by widening the tax base including property taxes (contribucion directa).

To reduce expenditures eliminating military personnel and subsidies to the Church.

To organize the administration, making the presentation of a yearly budget compulsory for the first time, and creating organisms of control.

To organize a system of Public Credit. They created a Sinking Fund for the payments of the long-term debt. They consolidated preexistent national debt after solving all the claims up to 1.5m pesos. Not surprisingly, after a civil war, the debt jumped to more than double during the consolidation processes, and in 1821 the Government issued bonds up to the amount of 3m pesos.

To a large extent the new bonds recognized debts to the military that were left out of their jobs after the end of the civil war in 1820.

Because of the large increment in the consolidated debt, the attempt to reduce its financial cost failed. The new debt was offered in secondary markets with a discount of almost 50 %. So the wars left a negative legacy reflected in bond quotations.

In 1822, a Bank of Issue was created inspired by the experience of the Bank of England. The government was trying to widen the market for debt, exchanging large denominated government debt placed in the Bank for small notes that the Bank would place with the public (Sargent and Velde; 1995).

But the Bank Board was more inclined to give cheap credit to friends and associates, embarking in a policy of over issues of notes that affected metallic reserves.

Having been unsuccessful in both attempts, the government tried to exchange expensive domestic debt for cheaper international debt (Amaral; 1984). With that goal in mind, in a moment of expansion in financial markets, the government initiated negotiations in London that concluded in the Baring Loan of 1825.

⁵ The Buenos Aires treasury continued the National treasury and the BA customhouse remained with the province that instead did not have the need to maintain a national army or to help the other provincial administrations.

Debt Market. Baring Loan 1825, Failure

The Baring Loan (Amaral; 1984) –among other things- was intended to improve the conditions of the capital markets to place government debt at a lower cost. The idea, as Amaral pointed out, was to exchange expensive domestic debt for international cheaper one, using Baring funds to buy domestic debt and therefore rising its value in domestic secondary markets. When they began receiving those funds, at least in one case, they exchanged bonds at a parity higher than that of the market. But instead, in the end, the government embarked in a complicated financial operation by which it discounted private bills at a much higher rate (1.5 % monthly) than the one they had to pay for them (8.5 % by year). The idea was to profit from the interest differential, obtaining revenues not only to pay the interest of the Baring Loan but also to use its surplus to pay for the growing domestic debt. But the market rate was reflecting the premium that the public was giving to the capacity of the government to repay. In addition, it was affected by an imminent war with Brazil (declared in November 1825). Under these conditions, the holders of government bonds discounted that the government would be unable to repay, and hedging against this, demanded specie from the Discount Bank through credit (the Bank losing reserves). When the Loan Committee (Comision del Empréstito), discounted local bills they also obtain profits buying foreign currency (sovereign) or bills of exchange in sterling with their own bills.

Once the war was under way, after suffering speculative attacks against its notes, the Buenos Aires Discount Bank asked the government for the authorization to suspended convertibility, granted by a decree in January 1826 and confirmed in May. The second decree widened the previous one, declared those notes legal tender, giving them cancelatory rights at face value for the payment of any obligation private or public. Granting those rights, the government made possible the repayment of the credits given in gold with local devalued currency.

As a consequence of the government's losses in specie, default was unavoidable (1827) and the fixed exchange collapsed. In the long run this had serious negative consequences for the economy, closing the access to international and domestic capital markets for decades, increasing the yield on the public debt (the risk premium) with its effects on fiscal finances and the economy as a whole.

But why did the government take those negative measures, why didn't it opt for more reasonable ones? Why did this inflationary method of financing remained during decades if it was so inconvenient?

The political economy of default and inflation

The government was suffering from rather extraordinary circumstances. Not only did it have small domestic support in the interior, but it also had to face military challenges more serious than the war of independence. Brazil had an outstanding naval superiority that allowed it to impose a blockade to the Rio de la Plata.⁶ This produced the collapse of custom revenues in Buenos Aires that were more than 80 % of the total government revenues (See Graph 1. Country Risk). It was not the war but the blockade that exhausted the government. (Wars always produce serious fiscal disturbances but it is different when revenue sources are not largely affected as in Britain in the XVIII Century). When the port of Buenos Aires was closed and custom revenues fell the government had no other substitute.

Under those circumstances it was clear that it could not meet its commitments. Because access to revenues or capital markets didn't depend on performance, the government had no incentives to follow a responsible behavior. Instead it seemed more convenient to impose taxes on capital, to default or to reduce debt in real terms through inflation (Alesina and Drazen, 1991; Alesina, 1988).⁷

But in fact the government was only partially successful in taxing its creditors (diminishing its liabilities in real terms). The creditors, on the other hand, succeeded in hedging, buying foreign assets with their own debt, discounted at the Bank or the Loan Commission.⁸

In the asset side of the balance sheet of the Comision del Emprestito, domestic bills replaced foreign funds. Later on those assets were the main capital assets of the new Banco Nacional which, acting as a financial agent of the government, issued currency backed with those commercial bills to finance the war with Brazil. (See Table 2. Balance Sheet of the Comision del Emprestito).

Table 2. Balance Sheet of the Comision del Emprestito

⁶ Britain did not dissuade the Brazilians to blockade Buenos Aires as it had done with Spain during the war of independence.

⁷ Alesina, 1988, page 40. The result of fiscal deadlock forced monetisation of the debt.

⁸ Here applies Alesina and Drazen (1991), on heterogeneous groups and war of attrition. Nobody was accepting to bear the burden of the war. Finally those small savers of Bedford Square were the most damaged by the argentine default. See also Eichengreen (1990) on capital flights.

Comision del Emprestito			
Opening Balance, April 24 1825			
Thousands of pesos			
Assets		Liabilities	
Cash	504.57	Treasury	2926.66
Bills of exchange, London	1149.59		
Fondos Publicos	407.85		
Treasury	864.64		
	2926.66		

Comision del Emprestito			
Ending Balance, February 1826			
Thousands of pesos			
Assets		Liabilities	
Credits	2656.46	Balance april24	2926.66
Others	487.21	Others	217.56
	3144.23		3144.23
Source: Halperin (1982)			

In the end, public domestic debt declined in real terms and paper money issues increased, while the government acquired a depreciated private domestic debt in exchange of specie or foreign assets (Baring funds). The foreign debt increased substantially. However, this was not relevant for practical purposes since it was defaulted. But the incoming government was going had to suffer the erosion of fiscal revenues (collected in paper pesos) in real terms.

The precarious national government, after confronting a strong internal opposition due to the peace treaty with Brazil, was dissolved. The returning army, feeling deserted, ousted the new Buenos Aires' government in December of 1828.

3. *Fiscal administration, crisis and blockades under Rosas.*

The Rosas administration lasted for almost 30 years but lived under permanent threats from inside the country and from abroad except for brief periods, in spite of its dictatorial methods. Besides, Rosas did not rule the whole country. He was the governor of the major province, Buenos Aires, and represented the country before foreign powers. It is true, however, that he exerted strong influence in the province through military threats or financial help.

The Rosas government fluctuated between short-lived attempts of stabilization and unconcealed recourse to inflation. Affected by internal conflicts from 1829 to 1830, it had unusually peaceful years from 1835 to 1837 and from 1841 to 1845. The war with Bolivia in 1837 but especially two blockades, in 1838 and 1845, affected negatively Rosas' finances. In both occasions he resorted to the condemnable resource of issuing money to offset the fall in revenues.

After the Brazilian war, several attempts had been made to stabilize public finances and to restrict monetary issues.

The Finance Minister Jose Manuel Garcia inspired the two attempts (one under Viamonte, the other under Rosas). The first one in 1829 was a deflationary plan leading back to the metallic regime (through the amortization of notes with fiscal surplus). The second and more ambitious was based on obtaining a new loan in Britain to pay the arrears of the Baring 1825 loan and to produce enough reserves to go back to convertibility. All those attempts failed and the government without access to capital markets until 1857 incurred in short term debt (mainly forced debt from its creditors, providers and personnel).

Under those conditions the quotation of the domestic debt remained at low levels, risk premium and interest rates were high.

But the situation worsened when the French and later on the French and the British, blockaded the Buenos Aires port from 1838 to 1840 and from 1845 to 1848. Custom revenues fell dramatically and the government again issued money directly, this time from the Casa de la Moneda. Those issues produced an enormous depreciation of the notes) and consequently a correlative rise in inflation. (See Table 3 on Monetary Supply and Gold Premium).

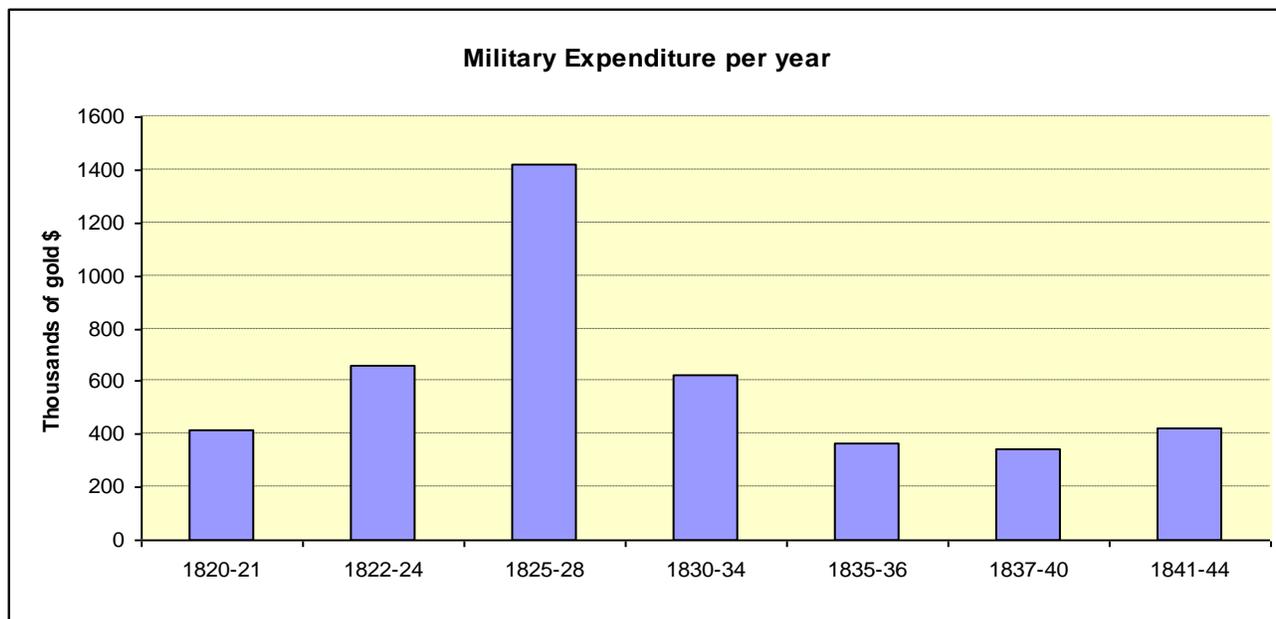
Why did the government persist in this inflationary financing knowing already its negative consequences?

In this case it is necessary to see what were the incentives of each group and to what extent they were harmed by the governmental policies.

If the government lacks resources it has the option instead to reduce its expenditures. But was this so?

A large majority of expenditures were in military expenses and personnel. No government since the war with Brazil and the 1828 revolution, dared to reduce military personnel. More so when it had to confront external and internal challenges. Therefore, mainly in those years, inflation was a tax on military salaries, and as the following graph presents, a very effective one. (See Graph 3. Military Expenditure).

Graph 3



Source Halperin (1982)

Bondholders were affected by depreciation because they owned assets in current paper pesos, but inflation was spread throughout all the sectors of society while an additional increase in debt would affect only bondholders. Besides, bondholders were mainly government providers and they discounted future depreciation increasing their prices.

Exporters also did not suffer by a depreciation of local currency.

Therefore, with inelastic costs (military expenses and personnel) the government used an inflationary tax to adjust military salaries.⁹

But the incapability of the government to reduce nominal military expenditures and its repeated appeal to inflationary financing showed how conflictive the Argentine society was.

4. *National organization and the consolidation of the state, 1852-1900*

The long lasting conflict between the interior provinces and Buenos Aires (and within each province) was a consequence of the lack of agreement among regions and groups on who would

⁹In those days the share of military salaries was larger than that of the civil employees.

bear the cost of a national government. Because there was no party able to impose itself and due to lack of strength of successive governments, a war of attrition continued for decades.

A Tax State requires (as it happens in Europe) the definition of the national boundaries and government jurisdictions, and to know who has the right to tax the inhabitants. The breakdown of independence exacerbated the already existing conflict (since colonial times) on who would pay for the government (Klein, 1973; Cortes Conde and Mc Candless, 1998).

When the former Viceroy was removed, the new Buenos Aires' government took control of the customhouse. In the interior cities where there was a treasury (a Caja), a local government was established to collect taxes (alcabalas on internal trade) and pay for expenditures through its local treasuries (cajas secundarias). Since colonial times, in spite of the centralist bourbon policies, there was a degree of local autonomy. The government established in Buenos Aires in 1810 tried to assert its authority over the former Viceroyalty of the Rio de la Plata and lived of revenues from the Buenos Aires' Customs. The local administrations, on the other hand, remained quite independent collecting revenues that supposedly had to be sent to the central government. The de facto autonomy turned to a formal separation of provinces when in 1820 the central government broke down.

Because of the lack of power to implement new institutional arrangements (which meant a new definition of property rights) a practice that existed in the colony continued. Every city (later on province) that had a treasury retained its control. Those local treasuries were the bases for supporting the new autonomous provincial governments.

The attempts to form a national administration failed because there was no agreement on who had the right to perceive custom revenues (the new main source after the loss of Potosi). Buenos Aires understood that taxes on imports (largely the main source of income) were basically on consumption made largely by its inhabitants. (The difference between the amounts received by import duties in Buenos Aires and the accumulated internal trade duties of all the other provinces show that this was not completely wrong).

On the other hand the provinces claimed the right to share those revenues because they were perceived at the entrance to the national territory. They also demanded the right to participate in the decisions on tariffs. Not because (as it was believed) they looked for protection - that was

already assured by distance and cost of transportation- but because they tried to sell their products in the Buenos Aires' market (where they had to compete with foreign imports).

Then, the conflict on who was going to support the national government was among different provinces and groups.

Buenos Aires, looking for a solution, nationalized the customhouse and decided the elimination of internal ones in 1825. This was rejected by the interior provinces that felt deprived of their unique source of income and by the Buenos Aires *federales*, who knew that the existence of any national government would finally affect Buenos Aires' revenues.

After four decades of internal conflicts, a coalition of the littoral provinces led by Entre Rios' governor Urquiza defeated Rosas in 1852. With The Pacto de San Nicolas, an agreement was reached by which Buenos Aires ceded its Customhouse to the national government and internal customs were eliminated. A military victory was necessary to arrive to that solution. However, former confronted parties (unitarios and federales) joined forces rejecting the pact and Buenos Aires seceded from the National Confederation.

Ten years later, with a military victory over the central government in Parana, Buenos Aires led the organization of a new government and Mitre, his former governor, was elected President. Under certain conditions (the transfer of provincial debt and the concession of subsidies) Buenos Aires accepted the cessions of its Custom.

But why did it accept a measure that was rejected for 40 years? The experience of unending years of civil wars and new circumstances made possible that dramatic change. Some of them are the following:

- a. The understanding of the high cost for all the participants of the subsistence of a permanent conflict. (Capital flights, high interest rates).
- b. The perspective of economic progress that would work in benefit of Buenos Aires if there was political stability and the government could enforce property rights.
- c. A new technology of transportation: railroads that allowed the integration of segmented markets (BA, Littoral provinces, North and Cuyo) in one national market. The widening of the market would allow the spreading of the cost of the government; on the other hand, economic growth would ease that burden.

In this period several important political events and institutional reforms are noted.

- 1) 1853, the approval of the first National Constitution. New fiscal regime in art. 4.
- 2) 1862, the unification under one federal government. Buenos Aires' customhouse transferred to the nation.
- 3) 1862, the organization of the Public Credit.
- 4) 1863, Monetary Reform in Buenos Aires.
- 5) 1867, return to specie standard. Convertibility in Buenos Aires.
- 6) 1880, solution of the conflict on the nation's capital.
- 7) 1881, Monetary reform: Gold peso.
- 8) 1887, Free Banks Bancos Garantidos.
- 9) Monetary Reform. Currency Board in 1899.

The war with the Confederation embarked Buenos Aires in an enormous expansion of monetary issues. They rose from 125 million with the fall of Rosas in 1852 to almost 300 million a decade after. The effect was a strong depreciation. Because the latest issues were authorized as an advance on new taxes (that would be collected to amortize those issues), once the war ended paper money began to be withdrawn from circulation rapidly leading to the reverse of depreciation. At the same time the national government initiated several reforms, the collection of taxes in gold, and the organization of the Public Credit to have access to a long-term market for debt. In both cases the government was successful: balancing its accounts and getting an important increase in the quotation of the public debt (See Table 1 in the appendix on Country Risk)

The next institutional reform was the return to a metallic standard decided in Buenos Aires.¹⁰ In the Banco de Buenos Aires, an Office of Exchange was established that sold gold ounces and silver pesos for paper pesos at a fix exchange rate (25 paper pesos to 1 hard silver peso).

¹⁰ The interior provinces were in silver standard since colonial times.

From 1864 to 1874 Country Risk diminished. (See Graph 1. Country Risk).

In other work, (Cortes Conde, 1989) I discussed extensively the characteristics and flaws of this scheme. Convertibility without the provision of the currency principle on reserves led to an expansion of banknotes with losses of metallic reserves. When the public noticed that reserves were running out -1874/76 - the Bank could not defend itself against speculative attacks and convertibility was suspended in 1876. Country risk increased from 1874 to 1877.

From 1877 to 1879 a severe program of fiscal austerity was implemented and, after the 1876 jump on paper issues, there were no further issues until the end of the decade (See table 3 on Money Issues). Fiscal equilibrium allowed the government to go back to convertibility under the previous parity, de facto in 1880 and legally in 1883. Country Risk diminished.

After the conflict that finally solved the problem of the nation's capital a new period of peace was inaugurated under president Roca. As part of the new policies that aimed to consolidate the central government, a monetary reform was enacted in 1881. The law established a uniform currency (as a unit of account) for the whole nation: the gold peso at a parity of 1,03 to the former hard peso or dollar. At the same time it compelled the Banks of issue to change their notes to the new denomination and make them convertible as of 1883. As it happened in 1867, the law did not make any requirement on reserves, except those established in the charters of the Banks. From 1878 to 1885 Country Risk continued to decline. (See Graph 1. Country Risk).

In this case, as in the previous one an excess of issues led to the outflow of reserves, to the incapacity of the banks to pay in gold and to the suspension of convertibility in 1885 that lasted until the end of the Century. Country Risk rose from 1885 to 1891.

Crisis and recovery 1890. 1899 Monetary reform: Currency Board

After the 1885 suspension of convertibility until the 1890-91 crisis, there were several attempts of stabilization. All of them failed mainly because there was no a solution to the distributional conflict on who was going to bear the burden of fiscal and monetary adjustments, given the debt incurred by the national and provincial governments. A solution was reached several years after in 1892-96, when there was a definition in favor of external creditors, provincial governments and some privileged domestic creditors. In some cases they obtained more than full satisfaction for their claims (financial and commercial); in others they passed the debt incurred on to the

government (as provincial governments and debtors of the banking system). Finally there were others left to bear the burden. Who were they? One was the national government that undertook private and provincial debts. However, even when the debt arrangements ended with an enormous increase in its stock, they rescheduled it in a way that financial charges were reduced. Money holders, mainly wage earners (that were an important mass of population this time), also suffered its consequences. Why did they accept the losses (fall in real wages, increase in costs due to tariff and duties paid in gold)?

Primarily, they had no other escape but migration that was not an easy thing. However they did it in 1891-92. Secondly, because they may have thought that it was a circumstance that would change in a short time. In fact after few years, wages and conditions improved, making the alternative of moving more costly (Cortes Conde, 1979). But mainly the taxpayer, especially future ones were left with the cost of the debt. Future generations were not asked (intertemporal problem). However, since taxes were mainly in imports, and the economy was later on expanding and wages raising, there were no complaints. This was also possible because of the extraordinary increase in fiscal revenues (due to the increase in exports and similarly in imports).

Let me now explain the development of the main events leading to the crisis and its solution. After three years of rising government spending and foreign debt, and a strong monetary expansion, there was a speculative attack against banknotes in 1885. The government authorized the suspension of convertibility, extended also to deposits in specie this time. A 30 % depreciation of the peso produced a loss in all the credits not only in peso paper but also in those denominated in gold. With this measure, the government had intended to have access to specie in the vaults of the Banks. Foreign creditors that had invested in internal Bonds in pesos and domestic ones that had done so in internal debt in pesos Fuertes (gold), complained against a decision that generated widespread disbelief. In the following years the government was suffering the consequences of depreciation because the taxes could be pay in paper pesos at face value under the law of *curso forzoso*. While government revenues were in paper pesos it had to pay the foreign debt in gold. Because of this, the government was embarked in a policy of sustaining the rate of exchange selling gold in the market using for that purpose sales of public assets (among them gold deposit for the Banks of Issue – Bancos Garantidos- created in 1887).

For the national government, free banks with guarantee of national debt in gold, was a way of obtaining gold without placing debt into international markets again. For the provincial governments (that almost without exemption found banks in each province) this was an instrument to monetize their debts. The Provinces lived under serious financial problems ever since 1852, caused by the loss of internal customs not compensated by direct taxes. Under the Bancos Garantidos law the currency stock duplicated in one year, while the government was selling gold (dirty float) in order to stabilize the exchange. The public was changing assets in domestic money for foreign assets producing the depletion of gold and later on of notes reserves that led to the crisis (running of deposits, closure of banks). The Baring failure (November 1890) ended the government's hope to reach a solution through external loans and started the liquidation of the crisis. The stabilization was reached between 1891 and 1896, once all the claims were solved. The external credits, through a new loan (Morgan Bond), got recognition not only of the financial debt but of others commercial claims, like Railroad guarantees and water Supply privatization, which had increased the debt between 1891 and 1893.

The Provinces succeeded in passing its debt of around 70 m gold pesos to the national government. The privileged local creditors obtained the conversion of their debt from paper pesos to gold in 1888. Who lost? Wage earners with a reduction of salaries in real terms due to depreciation and the future taxpayers for the cost of the enlarged debt..

But in the end the solution was less conflictive this time. It was reached in the middle of a process of economic growth that increased impressively in the following decade and was reflected in a big rise in fiscal revenues.

During that period no new foreign debt was issued. After 1890, all debt registered were the conversions of former ones, government liabilities converted to Bonds (as the RR guarantees), or the undertaking, under pressure, of some private debts.

The fall in prices produced by a severe monetary contraction allowed Argentina, at the end of the century, to converge to international prices (See Graph 4. Prices in Argentina and England).

Then the government initiated an ambitious reform: the return to convertibility under a Currency Board inspired in the currency principle. The rule, well known in Argentina and throughout the world, was very simple. Although a monetary rule, it had also fiscal implications. A shock of

credibility immediately followed. Not only foreign capitals but also Argentine savings in gold entered, increasing the inflows of gold.

Under the new institutional framework, with the new payment schedule agreed with foreign creditors and the improved perspectives on fiscal accounts, the country gained access to international capital markets again. It could thus reschedule its debt in 1906 at a rate of interest much lower than that of the 90's. Debt conversion was extraordinarily successful; the new 6 % bonds were quoted at 96 %. With this Argentina started a period of stability that lasted until 1930.

Conclusions

I. One of the most intriguing problems in the history of Argentina is the extraordinary delay in forming a national government (from 1820 to 1862). What were the causes?

I consider that the decision to establish a national government was, to a large extent, a decision on who would pay for it. During the colonial period patrimonial revenues coming from Potosi paid the burden of administration. After independence this source of income was no longer available. Given that the need for resources affected different groups in diverse ways solving this problem was not easy. A new agreement implied eventual gains and losses not anticipated in the older scheme. The transition from a patrimonial to a tax state required an agreement on property rights, that under the circumstances were difficult to reach (There was no such a problem in the British American colonies).

After unending wars, a solution was reached when one faction prevailed, but moreover when the winners accepted a compromise as the least expensive outcome. Also because it was perceived that a stable solution, including a government able to enforce property rights, could open a period of economic expansion through trade, given the spreading of a new technology of transportation.

II. The failures of the Argentine experiences of fiscal stabilization can be explained by a multiplicity of factors:

II.1 The technology that organized long term debt successful in other parts of the world failed because it was adopted with changes that allowed discretion. The governments applied them to gain respect from the public in order to obtain access to their savings but with some changes, allowing discretion. When they had to face severe financial problems they used this discretionary power to break the rules and to impose taxes on savings (in the form of repudiation of the debt or its depreciation in real terms). But those affected also reacted in such a way that the government generally lost those advantages.

II.2 The market's view on the government not only depended on the institutional constraints imposed, or its reputation but also on:

Its strength, its viability against internal or external threats.

Its access to revenues. When for practical reasons this (as in blockades) was denied, the market perceived the government as unable to comply with its commitments. Under critical circumstances –when access to revenues or credit was closed and when its survival was at stake - there were no incentives for the government to preserve its reputation. It had no future. In that case it was more rational to proceed to tax what existed at its disposal. That led to default and depreciation of the internal debt (1826-1827).

II.3 Because of the heterogeneity of interests, those measures affected several groups in different ways.

The current government gained access to revenues that were denied to forthcoming ones (but later on also suffered from the depreciation of revenues (collected in paper pesos).

Local bondholders suffered the depreciation of their assets in real terms but they were successful in hedging, discounting their bills in domestic currency buying foreign assets (Baring 1825).

Because they were government suppliers (internal debt was placed mainly among them) they also discounted future losses rising prices. On the other hand the alternative to increase revenues via debt would only damage them while inflation could spread the losses.

Inflationary tax affected mainly wage earners but in an economy like that of Argentina in the first half of the XIX they were a small group, mainly public employees, the majority being military personnel. So inflation affected them and diminished government expenditures. The

government that could not get rid of military used inflationary tax to reduce military expenses (1826-1840). However those measures affected not only future access to financing as it is shown in the increase of Country Risk but also political stability. In 1890, wage earners were those mainly affected instead.

II. 4 Stabilization was obtained when a definitive solution on the distribution problem was reached. In the 80's the conflict consisted on who would pay the enormous expenditures demanded for the construction of infrastructure. Although it was clear that the investments would produce enough revenues in the future, that was not the case in a short period of one decade. The solution reached, partially imposed the costs on wage earners and mainly on the future generations in the form of an engrossed debt.

But what was new, regarding past experience, was how weak was resistance to this agreement. There is not a simple answer to this question, but it is possible to suggest that that the workers had less power to resist it and that the future generation did not vote because it was not born yet. In the long run different circumstances helped that solution. Wages that lost purchasing power in the early 90's rapidly recovered and improved substantially at the end of the century thanks to stabilization. The generation that followed received not only the benefits of the infrastructure constructed, but the general increase of wealth following the reduced burden of the debt.

II.5 Only when credible institutions forced the government to comply, and this coincides with a political and economic favorable environment, the market perceived the government debt in a favorable way. The 1899, the Currency Board was a very simple and well-known rule that compelled the government to exclude inflationary financing. Under political and economic favorable conditions, with the solutions to external and internal conflicts and without restrictions on revenue, Argentina initiated a very successful path. Not only country risk diminished dramatically but a period of strong economic growth continued until WW I.

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