Public debt, public finance, money and balance of payments in debtor countries, 1890-1932/1933

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B16

Proceedings
Twelfth International Economic History Congress
Madrid, August 1998

FUNDACIÓN FOMENTO DE LA HISTORIA ECONÓMICA

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UNIVERSIDAD de SEVILLA

Fundación EL MONTE

Instituto de Estudios Fiscales
Ministerio de Economía y Hacienda
Secretaría de Estado de Hacienda

FUNDACIÓN FOMENTO DE LA HISTORIA ECONÓMICA

Sevilla, 1998

Serie: Ciencias Económicas y Empresariales
Número: 49

Edición financiada dentro del Convenio
Universidad de Sevilla y Fundación El Monte.

© SECRETARIADO DE PUBLICACIONES
DE LA UNIVERSIDAD DE SEVILLA, 1998
Porvenir, 27 - 41013 Sevilla.
Telfs. 95 423 19 58 - 95 423 59 75. Fax: 95 423 22 45
© Autores, 1998
© Editor: Clara Eugenia Núñez, 1998
Impreso en España - Printed in Spain
I.S.B.N. de la obra completa: 84-472-0271-2
I.S.B.N. del tomo: 84-472-0452-9
Depósito Legal: SE-1.592-1998-B16
Maquetación e Impresión:
Imprenta A. Pinelo. Camas-Sevilla

PREFACE

As in previous meetings, all the authors were asked to supply their text in English or French, yet we decided to accept also papers submitted in the mother tongue of the host country, this being the first International Economic History Congress to be held in a Spanish-speaking country. Furthermore, in an attempt to increase the possible spillovers of having such a scholarly meeting in our country, and thanks to a generous grant from the Spanish Ministry of Education and Culture, we have included an abstract of the largest possible number of papers in the local language.

Lack of time, financial strains and possibly inadequate editorial skills help to explain some of the errors the reader may still find in these Congress Proceedings. That most of these problems have been overcome is due to the dedication and ability of a most capable group of collaborators: Stefan Houpt, Begoña Moreno, José María Ortiz-Villajos (the author of all translations into Spanish), Gloria Quiroga, and Graciela Sylvestre. We would also like to thank all those who submitted their papers, especially those who did so in time and were kind enough to follow our cumbersome editing directions, and above all those who organized the B-Sessions and are responsible for the final selection of papers.

Finally, recognition is due to the Universidad de Sevilla and the El Monte Foundation which have made the publication of this volume possible as well as to Instituto de Estudios Fiscales which has contributed to finance it.

CLARA EUGENIA NÚÑEZ
Editor

TABLE OF CONTENTS

INTERNATIONAL LENDING, DEBTOR COUNTRIES AND THE GREAT DEPRESSION

DEREK H. ALDCROFT
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Though debt delinquency and default were by no means unknown in the 19th century, especially among Latin American countries, most of the international lending in this period was serviced satisfactorily primarily because a large part of it found its way into areas of high growth potential, for example North America and the British Dominions. 20th century experience has been a much less happy one. Apart from the losses incurred in the first world war, especially those by France as a consequence of the Bolshevik repudiation of Tsarist debts, the two major bursts of commercial lending in the 1920s and 1970s/early 1980s were both disasters. The first ended in delinquency and default, while the second gave rise to a global debt crisis which threatened to rock the Western financial world. Ironically, the more recent debt crisis was very much a re-run of that of the 1920s.

THE PATTERN OF POSTWAR LENDING AND BORROWING

The First World War had a marked effect on the pattern and character of international lending and foreign investments. For one thing it created a whole series of new international debts in the form of reparations and Allied war loans. Secondly, Western Europe's status as a creditor was considerably weakened. Most creditor countries lost or were forced to sell part of their foreign holdings of securities, while Germany became a net debtor as a result of the peace treaty provisions. Thirdly, the US emerged as the world's strongest creditor country, the more so if one includes inter-governmental debts owed to the United States by the Allied countries (Lewis 1938: 447, 450).

During the 1920s international lending was resumed on a scale comparable to that before 1914 and by the end of the decade the total volume of foreign-owned assets was considerably larger than before the war. During this period the United States replaced Western Europe as the major capital supplier. Between 1919 and 1929 her long-term investments abroad rose by nearly $9 billion and accounted for some two-thirds of global new investment. This raised America's stake to about $15.4 billion or nearly one third of the world total, while her net long-term position, after allowing for the purchase of

US securities by foreigners, rose to over $9.5 billion (Lewis 1938: 447, 450). No other country approached the American scale of lending. Britain resumed lending on a diminished scale shortly after the war but the total disbursed was less than half that of the United States. By the end of the 1920s she had just about managed to recover her prewar position, though her foreign assets now accounted for less than 40% of the world total. France, by contrast, failed to recoup her large wartime losses despite substantial foreign lending in the latter half of the decade. Hence her share of the global total fell to less than 8%. These three countries accounted for over three-quarters of all foreign investments in 1929. The other much smaller creditors were the Netherlands, Sweden, Switzerland and Czechoslovakia (Buchanan and Lutz 1947: 156; Feinstein and Watson 1995: 100, 116).

The main borrowing regions were Europe, Latin America and the British Dominions. Within Europe Germany was by far the largest debtor, incurring a long-term debt of some $7.5 billion by the end of the 1920s, a large part of which was owed to the United States. This was a striking contrast to the position before 1914 when Germany, along with Britain and France, had been a major creditor country. The flow of American capital to Germany was largely responsible for the significant rise in the European share of American overseas investment, from 13.4 to 31.4% between 1913-1930. Investments in other European countries combined were less than those to Germany, the major debtors being Austria, Italy, Hungary, Poland, Romania and Greece. South America and the British Empire accounted for the major part of the remaining new investment in fairly equal proportions. Much of the investment in the former was of US origin, with Argentina by far the largest borrower followed by Bolivia, Brazil, Chile, Colombia, Cuba, Mexico, Peru and Uruguay. London was the main source for Imperial borrowing except for Canada which was served primarily by the United States. Australia, New Zealand and Canada had the distinction of having the highest *per capita* external debt in the world (Schedwin 1970: 2-3, 68-75; Copeland 1934: 15).

THE VOLATILITY OF CAPITAL MOVEMENTS

The pattern and trend of capital movements during the postwar years was highly erratic with large swings in amplitude in certain years. In the immediate postwar period virtually the only country in a position to service the world's capital and foreign exchange needs was the United States. The UK resumed foreign lending soon after the war but was in no position to

carry the burden alone. Most of the other former creditors were out of commission for one reason or another and in fact were capital importers in the immediate postwar years.

With a large favourable trade balance America therefore became the automatic source of finance in the years following the Armistice. In 1919 and 1920 her net outward capital movements totalled nearly $7 billion, much of which found its way into Europe whose needs were most pressing. France alone recorded net capital imports of some $2.3 billion in these two years much of it for reconstruction purposes, while Sweden imported $384 million. The flow of funds was disbursed in a somewhat haphazard fashion rather than in relation to specific needs. A considerable part of it —possibly $3 billion— consisted of inter-governmental credits of one form or another (sometimes under the auspices of the League of Nations), while much of the remainder was accounted for by short-term capital transactions on private account, often speculative funds attracted to Germany and other European countries with depreciated currencies or the repatriation of short-term balances abroad as in the case of the Netherlands, Sweden and Switzerland. These movements made an important contribution to financing Germany's import surplus in the form of much-needed foodstuffs and raw materials (Holtfrerich 1986: 8, 27). Long-term privately floated capital issues were fairly rare in these uncertain years.

International lending was curtailed sharply once the postwar boom broke. The US cut back its aid programme to Europe very abruptly, while the deterioration of the current account balance checked the outflow of private funds. The unstable political and economic conditions in Europe, especially the currency turmoils, deterred would-be private investors. Thus the net movement of capital from America had dwindled to a mere trickle by 1923 (Table 1). The resumption of lending by the UK and France only partly offset the massive fall in American capital so that the aggregate net capital movements from the creditor countries declined by 60% between 1920-23.

The setback in overseas lending occurred at a most inopportune time for debtor countries and it was a foretaste of what was to come later in the decade. Reconstruction in Europe was still far from complete and many countries, especially in Central and Eastern Europe, were desperately short of resources. The sudden drying-up of government aid and credits hit hard since private investors were reluctant to commit funds to these countries. Under pressure they were forced to let their exchanges fall further, thereby exacerbating the inflationary potential, in an effort to balance external accounts and ease the process of reconstruction (Aldcroft and Morewood 1995: Ch. 2). Moreover,

the sharp drop in commodity prices and export earnings imposed a heavy burden on debtor countries everywhere, especially those which had incurred large debts at inflated price levels. It created a severe transfer problem for many primary producers who found difficulty in acquiring sufficient dollars to service their debts. This in turn encouraged them to raise output in an effort to maximise earnings but this merely served to aggravate the downward pressure on prices (Lary 1943: 146).

Fortunately things took a turn for the better in 1924. Foreign lending on a large scale was resumed in that year, encouraged by the improvement in political and economic conditions, especially in Europe where significant progress had been made with currency stabilisation and the control of inflation. During the next few years many countries obtained capital from the main creditor countries, though there was a heavy concentration in certain regions. American investment flowed mainly to Europe, especially Germany, Latin America and Canada, while Britain focused on the Dominions and Asia. Europe and Latin America took up almost 60% of the net capital issues on foreign account in the United States and Britain between 1924-29 (League of Nations 1931: 367). Apart from 1926, when there was a dip in capital exports, the net capital outflow from the major creditors more than doubled from 1923 to a peak of $2,241 million in 1928. Thereafter overseas lending diminished sharply; by 1930 it had almost dried up and in the following year the creditor countries had become significant net capital importers on balance (Table 1; North 1962: 43).

INTERNATIONAL LENDING AND GLOBAL EQUILIBRIUM

How significant was international lending in relation to the stability of the international economy in the later 1920s and its subsequent collapse? The pros and cons of foreign lending have frequently been debated though with differing conclusions as to its impact. The argument here is that it did play a crucial role in the global economy of the 1920s in the sense that it created an illusion of soundness and stability which did not really exist. (Ellsworth 1964: 405). So long as the flow of funds from creditors to debtors continued the cracks in the international economic system remained concealed. Yet ironically, the flow of funds also served to widen the cracks so that once the flow was cut off the system was undermined. Dunning (1970: 20) read the situation correctly when he wrote that "a climate of investment so radically different from that of prewar days, combined with substantial short-term

capital movements, powerfully contributed to the world economic collapse of 1931 and its aftermath."

On the other hand, theory would postulate that inter-country capital flows serve as an equilibrating device. A neo-classical factor flow model can be invoked in support this contention. One such model, the regional convergence model, may be extended to a global situation wherein capital flows from rich to poor countries and labour resources flow in the reverse direction so that factor returns are equalised under conditions of perfect factor mobility. This is presumably what Beenstock (1983: 82-5, 119) has in mind when he refers to poor nation (LDCs) indebtedness as an equilibrium phenomenon. In this context any initial rise in the marginal productivity of capital as a result say of industrialisation in the LDCs leads to a temporary disequilibrium in world capital markets, because the marginal productivity of capital in the latter rises relative to that in the developed countries (DCs). Therefore capital will move from the DCs to the LDCs in order to restore equilibrium. It follows therefore that the LDCs must run current account deficits to match their capital account surpluses which reflect their import of capital goods from the DCs. In other words, the capital account drives the current account rather than the reverse, and this should be seen as a concomitant part of the process of industrialisation rather than an indication that poor nations are borrowing more than is good for them.

On the basis of this analysis one should have little cause to worry about debtor nation insolvency. However, the model does entail some heroic assumptions. First it assumes perfectly ordered markets and free factor flows in which distortion and misallocations rarely arise. Secondly, it presupposes that borrowers ensure that capital imports are channelled into exchange earning activities (either import substitution, export promotion, or both), rather than into current consumption, so that debts can be serviced satisfactorily. Otherwise borrowing nations move deeper into debt. Thirdly, it reckons without the emergence of large destabilising shocks, for example, a sudden cutback in lending, a sharp fall in commodity prices or the presence of large destabilising short-term capital movements.

In the 1920s none of these conditions held. Capital misallocation was a common occurrence and borrowing was often used to finance consumption or prestigious projects rather than for productive exchange earning investment. Consequently few countries were able to gain entry to the virtuous circle whereby borrowing was self-financing, as in the case of the Pacific Basin region after the second world war or many of the borrowing countries of the

19th century. More commonly, the majority of borrowers in the 1920s ran deeper into debt and renewed borrowings were required simply to service old debts. Consequently, debt servicing costs rose and ultimately they exceeded the inflow of new funds. In this situation borrowers became highly vulnerable to sudden shocks such as the cessation of capital flows, the collapse in commodity prices and the volatility of short-term capital movements.

THE EXPERIENCE OF BORROWING COUNTRIES

There is ample evidence that debtor countries overborrowed in the 1920s and that the proceeds were not always used wisely: that is imported capital was used to finance current consumption, retire previous debts or to finance prestige projects rather than being invested in foreign exchange generating activities. This is true of Germany, Eastern Europe, Latin America and the British Dominions.

The situation in Germany is well-known. German business and banks had become very dependent on external funds during the 1920s and any curtailment was bound to be a cause of concern (James 1986: 136-7). Though the misappropriation of funds is sometimes exaggerated Schuker's (1988: 123) conclusion holds good:

> The Reich was singularly vulnerable to the reverse flow of capital. It had overborrowed in the 1920s and squandered much of the proceeds on public or private consumption, and it had persistently failed in the early years to adjust tax, budgetary, labour, and trade policies to take account of reparations requirements added to a growing commercial debt.

During the latter half of the decade most of the debtor countries of Eastern Europe and the Balkans relied heavily on capital imports to plug the gap in their external accounts. Of the total flow of funds, both long and short term, into Hungary, Poland, Bulgaria and Yugoslavia between 1924-28, one half went to cover an import surplus of goods and services, while most of the remainder was earmarked for servicing foreign debts. By 1929 capital inflows were barely sufficient to cover interest and dividends on existing debts (Nötel 1974: 84-5, 1984, 182-3). Only a small proportion of the loans was used to increase productive capacity (Political and Economic Planning 1945: 110; Ellis 1941: 74). In fact by the end of the decade the financial position of much of Europe was becoming critical. The increasing burden of Europe's payments

on account of private loans, war debts and reparations together with the suction of funds back to New York as a result of the stock market boom, served to intensify Europe's dollar shortage and threatened the collapse of the international financial system (Costigliola 1976: 499).

In the case of Latin America, few countries were as fortunate as Venezuela, where valuable oil wells managed with great efficiency enabled the country to retire the whole of its external debt by 1930 (Royal Institute of International Affairs 1937a: 277; 1937b: 182). In many cases capital imports were used to retire previous debts, to cover domestic deficits or to prevent default on exiting loans. The Bolivian government, for example, relied on American loans to cover its domestic deficits, while some of the proceeds were used to retire previous debts in Britain and France (Harris 1944: 264). A large part of the debt contracted by Argentina was used for unproductive purposes, in that it gave rise to little additional exchange earnings, and the success in obtaining funds abroad allowed the country to maintain persistent budgetary deficits (Peters 1934). Similarly, much of Colombia's borrowing was dissipated in public works projects of a somewhat dubious nature. Between 1924 and 1928 Colombia borrowed some $153 million, a large part of which went into constructing an expensive railway project between two valleys, the commercial justification for which was limited as Sir Arthur Salter (1933: 105) explained:

> There was no commercial justification for it, since both valleys had their own outlet to the sea. A very expensive tunnel through the top of the mountain range was begun and then abandoned; and while the Federal authorities were driving a tunnel through the mountains the local authorities were making a costly road over them. I have had a vivid account from one who was in Colombia at the time of the way in which the offers of competing lenders resulted in the public authorities incurring greater and greater obligations for these extravagant ventures.

The position was much the same in the British Dominions where public authorities were the major borrowers. In the case of Australia public foreign borrowing did little to promote exchange earnings since two thirds of its went to cover the deficit in the balance of payments (Gilbert 1973: 104). Salter (1933: 106) was very dubious about the utility of public borrowing; with particular reference to the years 1926-28 he wrote: "with the exception of loans recommended by the League of Nations and the Central Banks, the

bulk of the foreign loans in these years to public authorities in debtor countries would better not have been made."

Of course the creditor countries must share some of the blame for the increasing vulnerability of the debtor nations in the later 1920s. As Salter (1933: 101) recognised both lending and borrowing could be reckless, extravagant and wasteful. Inadequate control over the volume of foreign lending and the uses to which it was put, together with the failure tom ensure that debts would be self-liquidating, constituted the initial lapse in responsibility. The second was the sharp curtailment of lending at the end the decade when debtors had piled up heavy obligations, the servicing of which would have proved onerous even at the best of times. In the case of Latin America, for example, the United States and Great Britain had accumulated by the end of the decade a total stock of investment claims equal to four times the combined value of the continent's exports (Jorgensen and Sachs 1989: 53).

Arguably a smaller and more stable flow of investments would probably have been better. But instead borrowers were encouraged by the more unscrupulous investment houses to live beyond their means. The attractions for the lenders were considerable since many countries were avid to secure capital for infrastructure investments and the returns offered were far better than those at home. Nominal rates varied between 6-9%, but the low price of bond issues and other charges often raised the effective rates to 12% or more (Political and Economic Planning 1945: 110). Thus overborrowing could arise through creditors pressing funds on their clients with little regard for their ability to repay. Palyi (1972: 207) quotes the case of Bolivia who was said to have pledged 80% of the country's tax revenues for the service of just one loan with no questions asked as to how the Bolivian government would manage on the remaining 20%. While all foreign lending was not a product of ruthless and greedy international bankers inducing impoverished and unwilling debtors to run further into debt, there is evidence that, with the lure of high profits the creditors could easily overlook the pecuniary welfare of the recipient countries. The United States was most at fault in this respect. There was little control over foreign lending (Hogan 1977) and competition for business among the banking organisations coupled with the share-pushing activities of the issue houses ensured that the borrowers were rarely left in peace. According to Lary (1963: 96):

> Enticed by the prospect of commissions much higher than those available on domestic issues and faced with the necessity for a

> continuous flow of new securities to keep large staffs of bond salesmen employed, American investment bankers had their agents sitting on the doorsteps of prospective borrowers, as one observer put, offering them money and many times persuading them to borrow more than they actually needed.

Even Great Britain, whose long experience in the field of international lending might have ensured more prudent behaviour, can be criticised for the rather lenient attitude to the excesses committed by some of her European and Imperial clients (Royal Institute of International Affairs 1937a: 165).

Uncontrolled lending inevitably led, as in the 1970s and early 1980s, to unwise and wasteful borrowing and it should have been obvious by the later 1920s that many countries were finding difficulties in meeting their obligations. In any case, the fact that much of the lending, especially to public authorities, consisted of fixed interest securities at relatively high interest rates, was bound to cause difficulties once the international economic climate deteriorated. Yet by and large the creditor countries gave little thought to the ultimate question of the repayment of debts, nor even for that matter to the servicing of the growing debt burden. Lending to repay without ensuring the means of repayment became the order of the day. In turn, the debtor nations became adjusted to a situation whereby new borrowing provided the wherewithal to service old debts (Smith 1934: 430; Timoshenko 1933: 86-7). "Neither in lending nor in borrowing countries was it generally appreciated that debtors could only repay the service charges on their debts by means of an export surplus of goods and services" (Royal Institute of International Affairs 1937a: 289).

It would be misleading of course to imply that all foreign lending was used unproductively, but in general borrowing countries failed to utilise capital imports in a manner which permitted full servicing of their debts. To complicate matters the volume of foreign short-term funds was larger than before the war and these were not self-liquidating in terms of foreign exchange. For example, funds used to finance the holding of agricultural stocks in South America generated little foreign exchange so that borrowers could not readily amortise their debts. The same applies to the substantial short-term funds located in Central and Eastern Europe some of which were used for long-term purposes, and the consequences of which were "to transfer abroad the effective ownership of some countries' international monetary reserves" (Williams

1963: 94). It was the unstable and volatile nature of these funds which was to prove so troublesome in the financial crisis of the summer of 1931.

But before that point was reached the writing was already on the wall for many debtor countries. Debt service burdens were growing steadily larger in the 1920s (Table 2) and capital imports were barely covering these costs. By the late 1920s Latin America was paying some $660 million abroad annually on its debts, nearly three times its then current capital inflow (United Nations 1955: 15). On long term account the debtors of the US and UK were paying $686 million in 1928 (in interest, dividends and amortisation payments) more than they received in new loans and investments, and by the following year this burden had nearly doubled (Royal Institute of International Affairs 1937a: 284). Eichengreen and Portes (1986: 604) state that the crossover point occurred at the beginning of 1929 in the case of the US and from then on the major creditor was draining liquidity from the borrowing regions, that is new lending fell short of servicing costs; for Britain interest and amortisation costs exceeded new lending throughout the interwar period.

The increasing burden of servicing costs in terms of export earnings is shown for a selection of countries in Table 2. The ratios rose sharply after 1928/29 as a result of the large fall in commodity prices. At the same time there was a significant decline in capital inflows between 1928-30 (Table 3). Germany recorded a fall of 50%, Hungary 58%, Poland 45%, Finland 70%, Australia 48%, India 45% and Italy 27%. In the case of Argentina, Yugoslavia and Japan large capital inflows were transformed into losses. The areas most severely affected were Latin America, Central and Eastern Europe, Australia and the Far East.

The cessation of the flow of capital affected these areas directly by leading to a tailing-off in investment and economic activity. Certainly in the case of Central and Eastern Europe the reduced volume of lending caused some check to economic activity (Williams 1963: 98; Fleisig 1976: 55), though Temin (1971) has argued that it was the decline in domestic inventory investment that was crucial in Germany (see also Balderston 1993: 401; Sommeriva and Tullio 1987). Moreover, as Fleissig (1972) argues, the decline in American lending to Europe probably contributed to a decline in the rate of European import demand and thence to a curtailment of European lending to the periphery. Outside Europe it has been argued that even by 1928 the decline in American lending was inflicting a balance of payments constraint on many primary-producing countries and that this had an adverse effect on Britain's traded services with low-income economies (Solomou 1996: 95).

It was through the balance of payments mechanism that the impact first made itself felt since many debtor countries had come to depend upon a continued flow of lending to meet their debt service costs. Thus when capital imports declined the only way of meeting their obligations initially was to draw upon their limited reserves of gold and foreign exchange. The collapse of foreign borrowing by the Australian state governments, for example, led to a substantial liquidation of overseas reserves in 1929-30 (Gilbert 1973: 104-5; Walker 1933: 14). Latin America was affected severely by the sharp contraction of American lending and the region suffered substantial gold losses in 1929. Germany and many East European countries also faced a similar situation while several countries in Asia and Africa were experiencing strains in their external balances (Fleissig 1972: 156-7; Phelps 1938: 53-4, 116; Aldcroft and Morewood 1995: 60-1). In brief, long-term lending declined, short-term loans were being called in or not being renewed and the reserves of the debtor countries began to seep away in the backwash (League of Nations 1943: 23).

The initial shock to the system might have been accommodated, at least for a time, had it not been for the subsequent turn of events. Debtor countries could meet temporary difficulties by drawing upon their reserves, but this process of adjustment could not go on indefinitely in the face of a prolonged strain following the collapse of primary product prices and the decline in American import demand after the downturn in economic activity in the summer of 1929. Many primary producers therefore faced a severe and prolonged deterioration in their terms of trade and in their trade balances as export earnings fell faster than import values, while external interest obligations, which were fixed in terms of gold, rose sharply as a proportion of export receipts (Table 2; Raupach, 1972: 240; Smith 1934: 447). Attempts to make up the deficiency in international income by releasing stocks of commodities onto the world market only made matters worse by aggravating the fall in prices. Thus with dwindling reserves and an inability to borrow further debtor countries of the periphery were forced to take drastic measures to staunch the outflow of funds. The way out of the impasse was sought through a combination of measures including deflation, devaluation, exchange control and debt default.

Inevitably the burden of external adjustment fell with a vengeance on the domestic economy, especially in countries which adopted deflationary measures to suppress internal demand (Bandera 1964: 132). The initial deflation was quickly transmitted through the links forged by the fixed exchange rates of the gold exchange standard. Consequently, several countries sought to ease

the pressure on their domestic economies by abandoning gold and devaluing at an early date. They included Australia, New Zealand, Argentina, Bolivia, Brazil, Paraguay and Uruguay, all of which depreciated their currencies in relation to gold in 1929-30. This was the first crack in the restored gold standard system and it imposed a greater burden for those countries still on gold and hence intensified the deflationary spiral. Once started the deflationary process became cumulative and ultimately ended in the complete collapse of the gold standard (Campa 1990: 678; Cassel 1936: 62; League of Nations 1937: Table 1 Appendix).

The process was aggravated by the short-term liquidity crisis in Europe in 1931. The curtailment of capital flows in 1928-9 was the initial shock to the stability of the international economic system which set the stage for the disturbances which culminated in the international financial crisis of the summer of 1931 (United Nations 1949: 66-7). The problem arose from the very large volume of short-term credits on capital account in the European banking system which were vulnerable to any crisis such as the failure of a major bank. The collapse of the Credit-Anstalt rocked the whole economic structure of the continent and alerted creditors to the inherent dangers in countries dependent on short-term credits from abroad and the implications this might have for currency convertibility, especially in those countries which had experienced serious inflation in the previous decade (Schubert 1991: 4; Balderston 1994: 64; Eichengreen and Portes 1987: 25-7). It led to pressure on many continental banks and resulted in the large-scale withdrawal of short-term funds and loss of reserves from Germany and Eastern Europe in the summer of 1931 until brought to a halt by the imposition of exchange control (Saint-Etienne 1984: 17; Ranki 1985: 71; Ellis 1941: 74; James 1984: 84, 1986, 398). The gold and foreign exchange reserves of 18 European debtor countries fell by nearly one half between 1928 and 1931 and most of the loss occurred in 1930-31 (League of Nations 1944: 40-41). The consequences of the crisis for Eastern Europe have been well told by Nötel (1986: 227):

> The financial crisis of mid-1931, superimposed upon the protracted export crisis in both commodities and manufactures, transformed the haunting spectre of the collapse of national currencies, within a few months or weeks, into an immediately threatening and practically unescapable reality for most east European countries. The sudden shift from continuing, even if irregular, capital imports to fast-spreading capital withdrawal and flight—with the balance-of- payments position

> already weakened by the sharp and long-lasting fall in export receipts and the rising or at least maintained debt service— in all countries threatened to exhaust, or actually exhausted, the rapidly shrinking proceeds and reserves of foreign exchange.

The final consequences of the crisis are well-known. The continental panic had repercussions in Britain whose short-term liquidity position gave rise to concern and eventually Britain was forced to suspend the gold standard in September. In quick succession countries adopted defensive measures including the abandonment of gold and devaluation, import controls, exchange control and debt default. The majority of borrowing countries defaulted on their debt payments or negotiated moratoria. In the case of Latin America all but Argentina, Haiti and the Dominican Republic suspended debt servicing. For two years or more currencies remained in a state of turmoil and the prospects for international lending remained bleak.

CONCLUSION

While the short-term liquidity crisis of 1931 culminated in the final disintegration of the postwar international economic system, it is easy to read too much into the tumultuous events of that summer. For most debtor nations the crucial turning point occurred much earlier when creditor countries began to cut back on their lending. It is not always fully appreciated that by the late 1920s most of the main debtors were already overstretched and that capital movements, far from working as a global equilibrating device, were producing a destabilising situation. Thus once capital imports ceased to shore up their external accounts the situation became critical and many debtors were left in a very vulnerable position. But the pressure was compounded by the simultaneous collapse in commodity prices, the declining import capacity of the creditors and the large volatile movements of short-term capital. This convergence of adverse forces was more than sufficient to undermine the postwar international economic system.

APPENDIX

Table 1. *Net Inward (+) or Outward (-) Capital Movements Measured by Estimated Deficits or Surpluses on Account of Goods Services and Gold ($mn).*

	US	UK	France	Other creditors	Total
1919	-3,990	—	+1,420	+145	-2,425
1920	-2,912	-881	+935	+354	-2,504
1921	-878	—	-394	-18	-1,290
1922	-376	-682	-268	-9	-1,335
1923	-162	-700	-187	+36	-1,013
1924	-731	-380	-535	-91	-1,737
1925	-784	-261	-450	-138	-1,633
1926	-352	+126	-483	-154	-863
1927	-829	-385	-504	-252	-1,970
1928	-1,250	-569	-236	-186	-2,241
1929	-628	-574	+20	-340	-1,522
1930	-380	-112	+257	-128	-363
1931	-330	+313	+791	+665	+1,439
1932	-116	+179	+917	+151	+1,131
1933	-280	-	+39	-65	-306
1934	+837	+35	+172	-164	+880
1935	+1,876	-158	-941	-435	+342
1936	+1,365	+90	-1,182	+131	+404
1937	+1,302	+277	-166	+137	+1,550
1938	+690	+269	+207	+35	+1,201

Source: UN (1949, 10).

Table 2. *Debt Servicing as a Percentage of Export Earnings.*

Country	1926	1928/29	1931/32
Argentina	10.0	10.4	27.6
Australia	—	28.0	—
Bolivia	7.3	7.8	50.0
Brazil	13.1	16.7	40.4
Bulgaria	—	12.3	22.0
Canada	16.6	22.2	53.5
Chile	5.5	9.2	102.6
Colombia	2.7	11.9	21.8
Greece	—	32.0	44.0
Hungary	—	17.9	48.0
Peru	2.6	7.4	21.4
Poland	—	11.3	27.0
Romania	—	14.6	36.0
Yugoslavia	—	18.1	36.0

Sources: Drabeck (1985: 425); Nötel (1986: 223); Mazower (1991: 112, 202); Jorgensen and Sachs (1989: 58); Cardoso and Dornbusch (1989: 119); Urquhart and Buckley (1965: 160-61).

Table 3. *Net Capital Movements of Selected Debtor Countries ($mn).*

Country	1927	1928	1929	1930	1931	1932
Argentina	+61	+131	-10	+287	-89	+10
Australia	+187	+209	+250	+40	-50	-31
Finland	-2	+40	+12	-5	-24	-18
Germany	+1,037	+967	+482	+129	-540	-103
Italy	+28	+133	+97	+47	-50	-23
Japan	+50	+80	-9	-128	-11	-44
New Zealand	+8	-9	+52	+52	+2	-12
South Africa	+26	+46	+65	+32	+19	-76
Bulgaria	+4	+7	+21	+1	+5	+1
Greece	—	—	+45	+34	+37	+12
Hungary	+89	+91	+38	+22	+37	+4
India	+120	+67	+37	+92	-86	-25
Poland	+82	+124	+68	+3	-1	-4
Turkey	+22	+11	+50	-6	+3	-3
Yugoslavia	+23	+27	-13	+35	+3	+7

Source: UN (1949: 11-12).

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THREE STRATEGIES FOR SOLVING THE FOREIGN DEBT PROBLEM: HISTORICAL EXPERIENCE

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As the contemporary experience of developing and post-socialist countries shows, the key element of successfully dealing with the foreign debt problem is the activation of the trade balance to obtain the inflow of foreign currency needed for debt service. There is a universal agreement that such activation will in the longrun be beneficial only if it presupposes increasing exports but not decreasing imports, because long-term reduction of import expenditures is incompatible with economic growth (see, for example, Feder and Just 1977: 28).

International trade theory and economic practice allow us to distinguish three general strategies for increasing export revenues that can be used to overcome the foreign debt problem.

1. Real devaluation of national currency in order to shift the orientation of production away from domestic demand to export markets. The theoretical core of this strategy is formed by S.Alexander's absorption approach which states that a decrease in domestic absorption (i.e., domestic purchases of domestically produced goods) induced by real devaluation leads to the export expansion due to (a) the possibility to export products which are in excess of newly established level of domestic demand, and (b) the incentive to transfer productive resources to export industries because of falling profitability of demand-constrained industries which are oriented to the domestic market (Alexander 1952, 1959). There are two main ways to perform a real devaluation: nominal devaluation of national currency and cutting the inflation rate by monetary contraction and reducing the budget deficit. It is important that since the beginning of debt crisis in early 1980s this strategy seems to be crucial for the IMF recommendations to debtor countries, with the emphasis on nominal devaluation in so called adjustment programs and on cutting inflation in stabilization programs (Schweikert 1993).

2. Expansion of exports in lines predicted by the Hecksher-Ohlin theory of international trade that considers natural endowment by productive factors as a key determinant of export specialization. For primary exporting debtor countries this strategy prescribes the development of traditional (not capital-intensive) export industries and/or new industries that require factors of

production relatively abundant in a country. A specific feature of this strategy is that it does not require any activist government policy; its success depends on the evolutionary process triggered by a liberal foreign trade policy and the free inflow of foreign and domestic capital into the proper industries.

3. Shifting the structure of comparative advantages in foreign trade by developing manufacturing industries. Industrialization is a necessary but not sufficient condition for the realization of this strategy: the latter requires that new manufacturing industries achieve such degree of competitiveness so as not only to ensure import substitution on the domestic market but also to expand sales on foreign markets. The main theoretical arguments for the strategy are that (a) adverse terms-of-trade movements are less likely for the expansion of manufacturing exports than for the expansion of primary exports (because the elasticities of foreign demand for manufacturing exports are as a rule higher than for primary exports; see Spraos 1983) and (b) specialization on manufacturing exports provides flexibility to the export structure which prevents sharp declines in export revenues during foreign demand contraction.

Assessing the historical experience related to these three strategies can do much to clarify some important points in the contemporary controversy about alternative variants of debtor countries' behavior. The 1881-1933 period appears to be a promising one for performing this task. First of all, it covers the final half-century of the bond finance era (Eichengreen and Fishlow 1996) with two subperiods of intensive foreign lending —1881-1913 and 1920s as well as two subperiods of major disruptions in this process caused by the First World War (1914-1918) and Great Depression (1929-1933). Accordingly, the potential of the three strategies under consideration can be studied both for years of stability and for crisis years.

Furthermore, the 1881-1933 period is characterized by very low (or absent) government interference in economic activity, so we can examine the impact of the economic developments that correspond to each specific strategy, when nobody consciously intended them to promote the alleviation of the foreign debt problem. This fact enables us to interpret our study as an unbiased experiment whose results can in some sense serve as guidelines for assessing the prospects of the intentional application of these strategic alternatives.

In the present study, a sample of 48 developed and developing debtor countries was used to estimate for the period 1881-1933 the impact of strategies actually —and unintentionally— realized on the foreign debt burden (measured as the ratio of public foreign debt to the value of exports) and the incidence

of defaults on foreign public debt obligations. For details on the choice and calculation of corresponding data, see Statistical Appendix. We will proceed with the consideration of each strategy's effect on the international solvency of the respective debtor countries; then we will articulate some conclusions on their applicability and make some practical inferences.

STRATEGY 1: CURRENCY DEVALUATION

As was noted above, real exchange rate devaluation can be obtained by two ways: by nominal devaluation of the national currency and by cutting the inflation rate. Due to the limitations of the data available, we will consider only one reason for real exchange rate alteration, namely fluctuations of the nominal exchange rate measured with respect to the US dollar. Underlying the devaluation strategy is the hypothesis that exchange rate fluctuations as such are quite strong incentives for shifting economic resources between the domestic and the export sectors. So the estimation of the degree of success associated with the devaluation strategy requires a broader view on the impact of the exchange rate movements on the the debt-export ratio. For this purpose the following interpretation of the exchange rate hypothesis was adopted:

(1) devaluation (i.e., an increase in the national currency price of US dollar) leads to the decrease in the the debt-export ratio;

(2) revaluation of national currency leads to the exacerbating of the debt burden (i.e., to the increase in the debt-export ratio);

(3) stable exchange rates are compatible with rising or constant, but not falling the debt-export ratio.

The first proposition corresponds to the classical case of the devaluation strategy with its supposed effect and is in the focus of our study. Propositions (2) and (3) exclude the possibility of releasing the debt burden unless the devaluation strategy takes place. It means that without the stimulation of exports by currency depreciation the value of exported products will rise slowly than the amount of debt. This is of course a very strong assumption but it seems fruitful because our concern at this stage is with the refined devaluation strategy as a principal instrument for decreasing the the debt-export ratio, abstracting from the alternative strategies —those of traditional export expansion and comparative advantages shift.

For testing the validity of the propositions presented above the dynamics of the the debt-export ratio was compared with the direction of exchange

rate fluctuations. The entire period of intensive exchange rate fluctuations (1914-1933) was divided for analytical purposes into four subperiods according to the nature of economic and political developments. The crucial points are: 1914 —beginning of First World War; 1918 —the end of the war; 1922 —first year of economic stabilization after the post-war crisis whose impact was most severe in 1921 (see Lewis 1949: ch.2); and 1928 —the last year of economic prosperity. The respective periods under consideration are 1914-1918, 1918-1922, 1922-1928 and 1928-1933. It is noteworthy that these periods form couples as far as the frequency of classical devaluation cases is concerned. For 1913-1918 period only 4 such cases were determined, for 1918-1922 —24, for 1922-1928 —only 4 again, for the crisis period 1928-1933 -25 cases. This is an additional analytical advantage because we are allowed to examine results obtained during periods of intensive versus occasional realization of the devaluation strategy.

The results of testing the three propositions stated above are presented in Table 1 which in turn rests on Table A1 and Table A2 in the Statistical Appendix. For testing proposition 3, exchange rates were assumed to be relatively stable when their rate of change did not exceed 5% (the same assumption holds for the stability of debt burdens).

The most striking conclusion is that devaluation is neither a necessary nor a sufficient condition of debt burden relief. On the one hand, many countries which experienced a fall in their the debt-export ratio actually had rising or stable rather than decreasing exchange rates. This is true for 11 out of 13 countries in 1913-1918, 4 out of 12 countries in 1918-1922, 15 out of 19 in 1922-1928, and 1 out of 2 countries in 1928-1933; total result: 33 country-cases out of 48 (i.e., 67% of country-cases). On the other hand, the majority of the devaluation cases have failed to stimulate the debt burden relief. The story of the devaluation success in this field is quite limited and can be traced mainly for periods of occasional devaluations: 2 out of 4 cases in 1913-1918, 8 out of 24 in 1918-1922, 4 out of 4 in 1922-1928 and 1 out of 25 in 1928-1933; total result: only 15 country-cases out of 57 (i.e., 26% of country-cases under consideration).

Especially remarkable are the evidences for the crisis period of 1928-1933 when the the debt-export ratios of all debtor countries except 3 —Switzerland, Ireland, and Venezuela— rose irrespective of their exchange rate movements. In Japan, some decrease took place, but it was quite insubstantial (by only 2%) and does not seem to suggest the strategy's success. This can be interpreted as a sign of a basic inability of exchange rate movements to restore the pre-crisis

level of exports (not to say surpassing it) in times of widespread economic and debt crisis. This denies the possibility of finding effective emergency solutions which could prevented the debt burdens from rising by means of exchange rate manipulations.

The inadequacy of the short-term devaluation strategy as a principal instrument of debt burden relief draws our attention to the longer-term determinant of the the debt-export ratio —the structure of commodity exports. For estimating the prospects of the second and third strategies under consideration we should explore the connection between export orientation and seriousness of the debt problem. Let us begin the discussion with the question the development of the traditional export lines.

STRATEGY 2: EXPANSION OF TRADITIONAL EXPORTS

For 10 primary exporting debtor countries we can trace the dynamics of the the debt-export ratio and the history of the debt repayment difficulties for the entire 1881-1933 period (with some limitations for the early years). Table 2 summarizes available information on these points.

As for the period before 1914, five countries of this sample (namely, Argentina, Australia, Brazil, Canada, and Mexico) are usually considered to be in a development debtor position, the bulk of foreign capital being directed to the development of industries for which natural comparative advantages existed (Fishlow 1986). It is important to emphasize some differences in their performance. Two countries —Argentina and Canada— relieved significantly their debt burdens from the beginning of 1890s to 1913 and after that —during the 1913-1928 period, when the value of exports rose threefold in both countries. Two other development borrowers, Australia and Mexico, appeared less successful in decreasing their the debt-export ratio (it is interesting that the indices of export value expansion during the period 1913-1928 in both countries are also very close, —1.82 for Australia and 1.86 for Mexico).

The important aspect of the Australian-Mexican pattern as distinct from the Canadian-Argentinian one is the less sharp increase in the the debt-export ratio in 1928-1933 (its growth indices being 1.41 for Australia and 1.83 for Mexico, on the one hand, and 2.43 for Argentina and 2.8 for Canada, on the other).

Brazil holds an intermediate position but demonstrate a stronger resemblance with the Australian-Mexican pattern. This country had a steadily growing the debt-export ratio between 1892-1914 and, despite the significant

(fourfold) increase in exports —measured in devaluing paper milreis— was unable to reduce its debt burden considerably during the 1914-1928 period. But the decrease in the the debt-export ratio, though indecisive, did take place, as distinct from the proper cases of Australia and Mexico. This decrease was followed by a significant (almost twofold) rise in the the debt-export ratio during the crisis period. Thus, the Brazilian case can be interpreted to support the observed regularity in the distinguishing feature of the two patterns: namely, the more pronounced the decrease in the the debt-export ratio during the period of world economic prosperity, the more significant is its increase during the world crisis.

The experience of the so called revenue borrowers in our sample —Peru, the Dominican Republic, Turkey, Egypt, and Greece, despite the fundamental difference in the main purpose of their foreign borrowing (which served as a source of government expenditure financing) can nevertheless be analyzed in the framework of the Canadian-Argentinian and the Australian-Mexican patterns. It can be noted that the case of the Dominican Republic resembles, the Canadian-Argentinian pattern in (1) intensive export growth; (2) radical decrease in the debt-export ratio before the World Depression; and (3) sharp increase in the the debt-export ratio after 1928. Peru also can be regarded as an example of this pattern (after the default of 1877, foreign borrowing began in 1906, so the increase of the the debt-export ratio before 1928 can be interpreted to be a result of the normal borrowing process beginning from zero debt). Greece, having before 1913 and also in 1913-1928 a much higher the debt-export ratio than both Australia and Mexico, displayed tendencies close to those of the latter countries: (1) continuous, but not decisive decrease in thethe debt-export ratio before 1928; and (2) moderate increase in the the debt-export ratio during the World Depression (explosive rise in nominal export revenues being the result of a paper drachma devaluation).

The case of Egypt is quite special. After an attempt to default in 1876 and imposition of foreign administration, this country seems to display the ideal type of the debt-export ratio behavior associated with the strategy of traditional exports expansion. Its main characteristics are: (1) radical decrease in the debt-export ratio throughout the period 1883-1928 (as in Canadian-Argentinian pattern) and (2) moderate increase in the debt-export ratio during the World Depression (as in the Australian-Mexican pattern). Turkey seems to resemble Egyptian pattern, but, due to the data limitations for 1928, it is difficult to make a more decisive conclusion.

According to the patterns presented we can classify the primary exporting countries for which reliable data are available for the 1913-1933 period (Table 3). As can be seen, countries of the Canadian-Argentinian pattern managed to relieve substantially their debt burdens during 1913-1928, but this gain was offset during the crisis period due to the sharp rise in their debt-export ratio. Most of these countries engaged heavy defaults in the beginning of the thirties (as far as Ecuador is concerned, the first default took place in 1927, when the debt burden was quite low, and the second in 1931). Nondefaulters are the Dominican Republic (due to its close relations with United States), on the one hand, and Canada and Argentina —due to their close relations with United Kingdom. In the latter cases, as can be concluded, potential gains from complete default were less than the potential gains of undisrupted relations with their traditional partners, with the debt-export ratio increase in these three countries being even sharper than in any defaulted country of this pattern except Guatemala.

All countries of Australian-Mexican pattern (except Thailand), despite their less sharp increase in the debt-export ratio during the 1928-1933 period, had a higher the debt-export ratio in 1933 than any country of the Canadian-Argentinian type. Even countries of the Brazilian subpattern, that is, characterized by moderate decrease in the debt-export ratio during the period 1914-1928, encountered serious difficulties during the crisis period. Three countries —Salvador, Brazil and Uruguay— defaulted in the early thirties. Mexico had been already in default since 1911. Among nondefaulters, in 1933 Australia and New Zealand have had the highest debt burdens among all countries of our sample (except Chile and Paraguay), and India during the period 1928-1933 experienced the second sharpest increase of its the debt-export ratio of all countries of the Australian-Mexican pattern (the sharpest being that of Salvador). The absence of default in the cases of these countries can be attributed (as well as in the cases of Canada and Argentina) to their close economic and political ties with United Kingdom.

The countries of the Egyptian pattern fully respected their obligations (for Honduras, that defaulted in 1914, this is true for the after-War period). The most successful representative of this type of country is Venezuela that managed to repay its foreign debt by1930.

The special failure pattern is marked by a high and rising the debt-export ratio without any signs of alleviating the debt problem. All four countries of this type (Bolivia, Chile, Panama, and Paraguay) defaulted on their obligations

in 1931-1933, Bolivia being the first Latin American country to default on its dollar obligations on January 1, 1931.

It is very difficult to establish any connection between the commodity structure of primary exports and the pattern of the debt-burden dynamics (see Table A3 and Table A4). The most important conclusion seems to be that the level of export diversification itself does not play an important role in determining the debt pattern of a country: monoexporters as much as diversified exporters can be found in any of the four groups of countries. Among the countries of the Egyptian pattern, for example, Egypt and Honduras were monoexporters of cotton and bananas respectively, Haiti and Nicaragua diversified their exports during 1913-1928, and Venezuela changed its principal export orientation from coffee to petroleum (petroleum resources being its natural comparative advantage the exploitation of which contributed to successful debt repayment by this country).

It is also noteworthy in this connection that the commodity lottery factor (see Diaz-Alexandro 1983) does not affect seriously the position of countries in the classification presented. Countries that have exported similar commodities and thus have been similarly affected by world price dynamics belong to different patterns. For instance, monoexporters of coffee represent the Canadian-Argentinian pattern (Colombia, Costa-Rica, Guatemala) as well as the Australian-Mexican one (Salvador and Brazil). Monoexporters of bananas can be found in the Egyptian pattern (Honduras), the Canadian-Argentinian pattern (Costa-Rica), and the failure pattern (Panama). Moreover, countries that experienced the more intensive decrease in their export prices have sometimes performed better than countries that were luckier in the commodity lottery. For example, from 1929 to 1930 the world price of tin (principal export commodity of Bolivia) fell by 29%, the price of copper (principal export commodity of Chile) by 26%, and the price of coffee by 43% (Lewis 1949: 56); nevertheless, Bolivia and Chile performed in a worse manner than any of the coffee-exporters. It seems therefore likely that in the long run the key question is not what to export but how to attain substantial growth of traditional exports, whatever they are.

The main conclusion of the analysis at this stage is that relying on the expansion of primary exports along the lines predicted by the theory of comparative advantages may lead to four different debt patterns, only one of which (the Egyptian pattern) guarantees actual long-term alleviation of the debt burden. The Canadian-Argentinian pattern is marked by a continuous decrease in the debt-export ratio because of rapid growth of exports during

the periods of world prosperity, but this favorable effect is almost fully offset in the period of world demand contraction. Countries of the Australian-Mexican pattern experience a moderate increase in their debt-export ratio during the crisis, but they were not able to reduce their debt-export ratios substantially during the period of export expansion. Finally, the failure pattern is associated with inability to increase the export volume in order to alleviate the debt burden (the most striking example being Panama, whose exports actually decreased during 1913-1928).

STRATEGY 3: SHIFTING COMPARATIVE ADVANTAGES

According to the very essence of the shifting comparative advantages strategy, its prospects depend on the behavior of the debt-export ratio in respect with (1) the evolution of the manufactured products' share in total exports and (2) the rate of increase of manufactured exports over the period studied. The available information on manufacturing exports of a number of countries allows us to reach some conclusions on this point. Table 4 summarizes data on the debt-export ratio for these countries, Table 5 —data on the share of manufactures in total exports and on the volume of trade in manufactures at 1913 prices.

The dominance of manufactured exports is associated with a low (or absent) debt burden to the beginning of World War I (Switzerland, Germany, France, Belgium, Italy), and a comparatively low level of the debt-export ratio in 1933 (all countries except Austria). The dynamics of the French debt-export ratio calculated on the basis of total debt is quite impressive, but, if we ignore the war debt, we can observe even a decrease in the debt-export ratio; this should be interpreted as evidence of a considerable potential for coping with the debt problem. The position of Germany even in 1933 was not at all catastrophic in the long-term perspective, its default being accounted for not by the absolute value of the debt-export ratio but by a sharp rise in this ratio, as well as the outflow of short-term capital and the high the debt-service obligations amounting with reparation payments to 21-22% of export earnings in 1930 (Fishlow 1986: 83). Thus, the main problem was that of liquidity, not of solvency; political developments also played their role. Czechoslovakia —that exported in 1926-1928 even more manufactured articles than Austria, Switzerland, and Canada— also experienced a substantial increase in the debt-export ratio in 1928-1933 (it was even sharper than that in Austria), but in terms of absolute debt burden the position of this country should be

considered as favorable, especially when compared with that of other countries of Eastern and Southern Europe in our sample —Hungary, Poland, Spain, and Greece— that were primary exporters.

Of the countries with the principal export specialization on primary commodities, Finland and Denmark had low the debt-export ratios that increased only slightly in 1928-1933. In this respect both countries cannot be attributed to any of the already studied patterns of primary exporters. By contrast, Norway demonstrates resemblance to the Australian-Mexican pattern with a moderate increase in the debt-export ratio during the whole 1913-1933 period.

Most interesting is the comparison of Spain, Canada, and India. These countries had quite high —for primary exporters— shares of manufactures in total exports: 21.45, 27.10 and 25.89% respectively in 1926-1929. Nevertheless, they demonstrate typical debt patterns of primary exporters, Spain being close to the Canadian-Argentinian pattern with a radical decrease in the debt-export ratio during 1913-1928 and a sharp increase during the world crisis. While the cases of Spain and India are not very revealing about the effect of an increase in the share of manufactures (for Spain it was comparatively stable over the 1901-1929 period; for India, the share of cotton and jute manufactures was 20.1% in 1913 and 19.0% in 1928, as indicated in Table A4), the conclusion is that there can be some threshold of manufacturing export orientation below which primary exporters' debt patterns dominate.

In our sample Italy and Japan are the very countries that have successfully overcome this threshold. Italy demonstrated a continuous rise in the share of manufactures in total exports from the beginning of 1890s, with this rise being associated not only with zero foreign debt before World War I but also with a successful debt performance in 1913-1928 and 1928-1933, the debt burden being very low. The example of Japan is even more striking. While the share of manufactures in the total exports of Japan remained quite stable before the marvelous rise from 1913 to 1926-1929, the absolute volume of manufacturing exports has been rising from the beginning of 1890s; its rate of increase exceeded even that of the US (see Table 5). These developments were accompanied with a long-term decrease in the debt-export ratio which was not terminated by the world depression: the debt burden of Japan had not risen during 1928-1933 (there was even a slight decline). Moreover, it was the only country out of 48 comprising the sample of this study whose exports actually remained stable during the same period, the rate of their decrease being only 2%. It can be assumed that a positive effect of shift in

the composition of exports was enhanced by the devaluation during 1928-1933. This fact can be interpreted as supporting the theoretical assumption that the shift of comparative advantages structure in favor of manufactures made the debt problem more effectively manageable because of the higher elasticity of foreign demand for manufactured goods.

In the general assessment of shifting comparative advantages strategy it is important to take account the following consideration. Though the deterioration of the terms of trade for manufacturing exporters during the crisis period was less sharp than that for primary exporters (the average world price index fell from 1929 to 1932 by 37% for manufactured products, by 48% for foodstuffs and by 56% for raw materials, —see Lewis 1949: 56), the rates of increase of the debt-export ratio for manufacturing exporters during the period of 1928-1933 are on average quite substantial. Exceptions are Switzerland (the most mature manufacturing exporter in our sample with the share of manufactures in total exports amounting almost to 79% in 1926-1929), Japan, and France (for commercial debt). For Belgium and Italy, the rates of increase of the debt-export ratio during this period were quite close to the figures for the Australian-Mexican pattern of primary exporters; for Germany, Czechoslovakia, Austria, and France (for total debt) they were high even when compared with those of primary exporting countries of the Canadian-Argentinian pattern. Thus the advantage of developing manufacturing exports seems to be primarily associated not with the insurance against jumps in the debt-export ratio during crises but with decreasing debt burdens or keeping them low during the periods of world economic prosperity. In this respect the strategy under consideration is like the Canadian-Argentinean pattern of previous strategy with the substantial difference between them consisting in the degree of positive developments induced by the economic (and export) expansion.

CONCLUSIONS

The principal results of the study may be summarizes as follows.

No systematic relationship has been found between the incidence of national currency depreciation and the pressure of debt burden. This conclusion is especially important for the crisis period of 1929-1933 because it is just for crisis times that the strategy of devaluation is now recommended to debtor countries by the international financial institutions.

For countries experiencing policy developments prescribed by the strategy of traditional exports expansion the central problem seems to be associated not with the commodity lottery but with the pattern dilemma: the more substantial the progress in alleviating the foreign debt burden during prosperity, the more destructive are the results of trade contraction. The condition for successful debt performance (demonstrated by countries of Egyptian pattern) requires that the primary export expansion should be intensive enough to obtain a substantial decrease of the debt-export ratio during periods of favorable world trade climate, but at the same time it should not generate such a dependency on foreign markets that their contraction could lead to an abrupt fall in the debt-servicing capacity. Failure to reach this ideal equilibrium should be considered as the main source of developing countries' defaults on foreign debt obligations during the period 1881-1933.

It appears that no dilemma of the sort described above exists for the strategy of shifting comparative advantages. In most instances studied, it made possible for countries to sustain (or achieve) a level of debt burdens low enough that even their increase as a result of economic contraction does not in itself provide a reason for insolvency. The key factor for the realization of this strategy is overcoming the manufacturing export threshold. The debt performance of countries that have carried out this task successfully (Italy and Japan in our sample) shows sharp contrast with that of Spain, Canada, and India, with the latter —despite quite substantial share of manufactures in their exports— demonstrating the traditional debt patterns of primary exporters. Thus, escape from the primary exporter status can be regarded also as an escape from the long-term debt problem (though, of course, it does not provide safe insurance from short-term debt service difficulties).

The results presented above allow us to make some comments on the contemporary foreign debt problem of developing countries. The study seems to point out that the most promising way of alleviating the debt burden in the long run is neither manipulations with domestic demand by real devaluation of the national currency nor attempts to rise the volume of traditional (i.e. primary) exports but deliberate efforts to expand export-oriented manufacturing industries. Rising the volume of manufactured exports as well as their share in total exports provides an opportunity to overcome the pattern dilemma and to increase the the debt-repayment capacity. The necessary conditions for the success of that strategy are international efforts to liberalize world trade in manufactures and to equalize the treatment of manufacturing commodities from developed and developing countries on the world market.

In the long run such measures can be beneficent to all because it is in everybody's interest to help debtor countries reduce their debt burdens, thus lowering the risk of widespread debt crises in the future.

STATISTICAL APPENDIX: SOURCES OF INFORMATION

Foreign Public Debt

A. For period 1914-1933: Public Debt..., 1948. Deviations from standard years (1914, 1918, 1928 and 1933) are: Austria (1919), France (1932), Norway (1929), Greece (1912), Czechoslovakia (1923, 1929), Hungary (1924), Poland (1919, 1929), Rumania (1929), Brazil (1932), Costa-Rica (1919), Haiti (1991, 1924), India (1915), Thailand (1932), Turkey (1923), and Egypt (1929).

Debts of Greece and Italy were recalculated from gold to paper currency using exchange rates that are presented in Wynne (1951: 338), and Public Debt... (1948: 89). For Turkey 1914 – Wynne (1951: 479).

B. Pre-1914 period: Australia – Butlin (1962: 424 for 1881 and 1900); Canada - calculated on the basis of Fishlow (1986: 60-61) and Urquhart (1965: ser.G 21) for 1893; Argentine - Williams (1920: 100) for 1891 and (1920:133) for 1900; Brazil – Franco (1987: 541) for 1892 and 1904; Mexico - Bazant (1968: 155) for 1900; Peru - Thorp and Bertram (1978: 339) for 1877; Greece – Wynne (1951: 327) for 1897, recalculated from gold to paper currency using exchange rates presented in Wynne (1951: 338); Turkey – Wynne (1951: 452-453) for 1881; Egypt – Wynne (1951: 627) for 1883.

Exports

Series F1 of books Mitchell (1983, 1986, 1987) were used in all cases except the following: Australia – Butlin (1962: 410) for 1881 and 1900, and (1962: 443) for 1933; Canada - Urquhart (1965:173) for 1893; Argentine – Shepherd (1933:46) for 1892 and 1900; Brazil - Franco (1987: 523-524) for 1892 and 1904; Mexico - Turlington (1930:344) for 1899.

To calculate the debt-export ratio for 1914, export figures for 1913 were used; exceptions are Greece (1912), New Zealand (1914), Haiti (1912), and India (1915). For period after 1914, deviations from standard years (1918, 1928 and 1933) are the same as those for debt figures.

Exchange Rates

For period 1914-1933: Public Debt..., 1948.

Export Composition

A. Primary exports (Tables A3 and A4): series F3 of books Mitchell (1983, 1986, 1987) were used in all cases except the following: Australia - Butlin (1962: 212), Butlin (1964: 30); Canada - Urquhart (1965:174-175, 178-179); Latin America countries, 1914-1928 - The Foreign Trade..., 1952.

B. Manufacturing exports (Tables 5 and 6): Industrialization and Foreign Trade, 1945, Tables IX, X, XII.

Defaults

Information on the history of defaults was taken from the following publications: Lindert and Morton 1987; Eichengreen and Portes 1986, 1989.

Table 1. *Results of testing Exchange Rate Hypotheses.*

	1913-1918	1918-1922	1922-1928	1928-1933
1. Devaluation (classical case)	Total: 4 cases.	Total: 24 cases.	Total: 4 cases.	Total: 25 cases.
1.1. Predicted effect	2 cases: Portugal, Bulgaria.	8 cases: Sweden, Greece, Spain, Rumania, New Zealand, Ecuador, Venezuela, India.	4 cases: Belgium, France, Portugal, Ecuador.	1 case: Ireland.
1.2. Contrary to prediction	2 cases: Finland, Brazil.	16 cases: Denmark, France, Norway, Switzerland, Portugal, Argentina, Bolivia, Brazil, Chile, Costa-Rica, Guatemala, Mexico, Peru, Uruguay, Japan, South Africa.	0 cases.	24 cases: Denmark, Finland, Norway, Greece, Portugal, Spain, Australia, Canada, New Zealand, Argentina, Bolivia, Chile, Colombia, Costa-Rica, Ecuador, Mexico, Paraguay, Peru, Salvador, Uruguay, India, Egypt, Japan, South Africa.
2. Revaluation	Total: 11 cases	Total: 0 cases	Total: 10 cases	Total: 6 cases
2.1. Predicted effect	1 case: Venezuela.		4 cases: Norway, Australia, Bolivia, India.	5 cases: Austria, Belgium, Czechoslovakia, Italy, Hungary.
2.2. Contrary to prediction	10 cases: Denmark, Norway, Sweden, Spain, Argentina, Chile, Mexico, Salvador, Uruguay, India.		6 cases: Denmark, New Zealand, Argentina, Costa-Rica, Uruguay, South Africa.	1 case: Switzerland.
3. Stability of exchange rates	Total: 9 cases.	Total: 7 cases.	Total: 18 cases.	Total: 13 cases.
3.1. Predicted effect	5 cases. Australia, New Zealand, Ecuador, Panama, South Africa.	3 cases: Canada, Dominican Republic, Honduras.	7 cases: Finland, Switzerland, Czechoslovakia, Colombia, Panama, Peru, Salvador.	13 cases: France, Germany, Bulgaria, Poland, Rumania, Cuba, Dominican Republic, Guatemala, Haiti, Honduras, Nicaragua, Panama, Thailand.
3.2. Contrary to prediction	4 cases. Canada, Dominican Republic, Honduras, Japan.	4 cases: Australia, Haiti, Panama, Salvador.	11 cases: Spain, Canada, Brazil, Chile, Dominican Republic, Haiti, Honduras, Mexico, Nicaragua, Venezuela, Japan.	0 cases.

Table 2. *Long-Term Evolution of Debt Burdens.*

Australia		Mexico	
DER 1881	2.06	DER 1900	1.50
1900	3.77	1914	1.35
1914	2.89	1928	1.67
1928	3.99	1933	3.05
1933	5.63	Default	1911
EVI 1928/1913	1.82	EVI 1928/1913	1.86
Argentine		Brazil	
DER 1891	3.38	DER 1892	0.98
1900	2.50	1904	1.77
1914	0.72	1914	1.85
1928	0.47	1928	1.52
1933	1.14	1933	3.01
Defaults	1891, 1931*	Defaults	1917*, 1931
EVI 1928/1913	3.00	EVI 1928/1913	4.04
* - on local governments' debts		* - on local governments' debts	
Canada		Turkey	
DER 1893	1.62	DER 1881	12.01
1914	0.68	1914	7.14
1928	0.43	1928	
1933	1.19	1933	2.50
EVI 1928/1913	3.00	Defaults	1881, 1914
Egypt		Greece	
DER 1883	8.04	DER 1897	11.09
1914	2.87	1912	5.75
1928	1.77	1928	4.58
1933	2.45	1933	6.33

Defaults	1876		Defaults	1893, 1932
EVI 1928/1913	1.72		EVI 1928/1913	41.61
Peru			Dominican Republic	
DER 1877	6.54		DER 1897	2.00
1918	0.15		1914	1.24
1928	0.75		1928	0.69
1933	1.76		1933	1.73
Defaults	1877, 1931		Defaults	1911, 1914
EVI 1928/1913	6.65		EVI 1928/1913	2.75

Comments: DER - debt-export ratio.
EVI - export value index.

Table 3. *Debt Burdens of Countries Exporting Primary Products, 1914-1933.*

	Debt-Export Ratio: Absolute value			Index	
	1914	1928	1933	1928/ 1914	1933/ 1928
Canadian-Argentinin pattern					
Canada	0.68	0.43	1.19	0.62	2.80
Argentina	0.72	0.47	1.14	0.65	2.43
Colombia		0.53	1.24		2.32
Costa-Rica	1.41	0.78	1.71	0.55	2.21
Dominican Republic	1.24	0.69	1.73	0.56	2.50
Ecuador	0.95	0.47	1.12	0.49	2.41
Guatemala	0.79	0.53	1.59	0.67	3.02
Peru		0.75	1.76		2.34
Australian-Mexican pattern					
Australia	2.89	3.99	5.63	1.38	1.41
Mexico	1.35	1.67	3.05	1.24	1.83
India	1.32	1.35	2.95	1.03	2.18
Salvador	0.58	0.84	1.86	1.45	2.21

	Debt-Export Ratio: Absolute value			Index	
	1914	1928	1933	1928/ 1914	1933/ 1928
Brazilian subpattern					
Brazil*	1.85	1.52	3.01	0.82	1.98
New Zealand	3.18	2.59	5.17	0.81	2.00
Thailand	0.65	0.52	0.93	0.80	1.80
Uruguay	1.77	1.38	2.77	0.78	2.01
Egyptian pattern					
Egypt	2.87	1.77	2.45	0.62	1.38
Haiti	6.34	0.68	1.23	0.11	1.80
Honduras		0.51	0.72		1.41
Nicaragua	1.08	0.29	0.53	0.27	1.83
Venezuela	0.75	0.07	0.001	0.10	0.02
Failure pattern					
Bolivia	0.40	1.58	3.36	3.95	2.13
Chile	3.01	3.26	25.24	1.08	7.73
Panama	0.28	3.98	6.74	14.31	1.70
Paraguay		12.16	15.19		1.25

Note:

* Actual debt-export ratio for Brazil in 1933, comparable with that in 1914 and 1928, should be somewhat lower than stated in column 7 due to the shift from general Trade to the more narrow special trade basis of export data calculation in 1930.

Table 4. *Debt Burdens of Manufacturing Exporters, 1914-1933.*

	Debt-Export Ratio: Absolute value			Index	
Country	1914	1928	1933	1928/1914	1933/1928
Switzerland	—	0.17	0.06		0.34
Germany	—	0.07	0.62		8.61
France:					
total debt*	—	3.46	9.96		2.88
commercial debt	—	0.33	0.22		0.67
Austria	n.a.	0.78	3.06		3.92
Belgium	0.08	0.91	1.31	11.39**	1.43
Italy***	—	0.47	0.84		1.78
Czechoslovakia		0.26	1.19		4.61
Japan	2.14	0.61	0.59	0.28	0.98
Sweden	0.75	n.a.	n.a.		
Spain	0.95	0.43	1.36	0.45	3.16
Canada	0.68	0.43	1.19	0.62	2.80
India	1.32	1.35	2.95	1.03	2.18
Australia	2.89	3.99	5.63	1.38	1.41
New Zealand	3.18	2.59	5.17	0.81	2.00
Finland	0.43	0.42	0.52	0.97	1.25
Denmark	0.43	0.33	0.57	0.77	1.73
Norway	0.86	1.16	1.30	1.36	1.12
Poland	n.a.	1.51	4.68		3.09
Hungary		1.55	3.41		2.20

Notes:

* Total foreign public debt includes commercial as well as war debt.

** Increase due to the accumulation of war debt.

*** Commercial debt only.

n.a. - data not available.

Table 5. *Dynamics of Manufacturing Exports.*

	Share of manufactured products in total exports (%)					Trade in manufactured articles: Amount					Trade in manufactured articles: Index			
						Annual averages in $ (000,000's), 1913 prices					1891-95 to	1901-05 to	1913 to	1926-29 to
	1881-85	1891-95	1901-05	1913	1926-29	1881-85	1891-95	1901-05	1913	1926-29*	1881-85	1891-95	1901-1905	1913
Switzerland		73.02	73.84	71.64	78.81		114	149	192	191		1.31	1.29	0.99
Germany	61.54	65.78	66.67	67.04	71.59	521	616	941	1615	1251	1.18	1.53	1.72	0.77
France	57.45	59.14	61.18	65.35	67.10	425	478	612	875	848	1.12	1.28	1.43	0.97
Austria	62.59	57.37	57.21	65.37		207	222	280	370	132	1.07	1.26	1.32	0.36
Belgium			41.19	39.55	57.14			195	280	280			1.44	1.00
Italy	20.00	18.52	29.49	39.67	53.90	48	43	102	194	251	0.90	2.37	1.90	1.29
Czechoslovakia										248				
Japan		29.17	30.83	32.90	47.37		17	48	102	282		2.82	2.13	2.76
USA	13.94	14.50	22.42	29.68	41.24	121	158	376	721	1267	1.31	2.38	1.92	1.76
Sweden	18.18	24.42	25.23	30.22	41.40	13	26	33	68	111	2.00	1.27	2.06	1.63
Spain			23.49	23.30	21.45			46	48	50			1.04	1.04
Canada					27.10					210				
India&Burma					25.89					191				
Finland		17.39	17.07	18.99	14.19		5	8	15	14		1.60	1.88	0.93
Australia				3.11	4.62				11	19				1.73
New Zealand					0.80					1.2				

Note: Additional data for European countries: Denmark — 29, Norway — 28, Poland — 28, Hungary — 18, Greece — 1.

Table A1. *Results of Testing Excahnge Rate Hypotheses, 1914-1918 and 1918-1922.*

	1918/1914			1922/1918		
Country	DER Index	ER Index	Direction	DER Index	ER Index	Direction
Denmark	0.86	0.87	– (2)	1.06	1.47	– (1)
Finland	2.03	1.56	– (1)			
France	*	1.06		0.95	2.54	– (1)
Norway	0.52	0.84	– (2)	1.33	1.86	– (1)
Sweden	0.46	0.86	– (2)	0.78	1.08	+ (1)
Switzerland	*	0.93		10.51	1.09	– (1)
Greece				0.28	4.37	+ (1)
Portugal	0.63	1.46	+ (1)	1.44	8.54	– (1)
Spain	0.95	0.93	– (2)	0.77	1.32	+ (1)
Bulgaria	0.17	1.28	+ (1)			
Rumania				0.13	31.59	+ (1)
Australia	1.49	1.05	+ (3)	0.75	1.05	– (3)
Canada	0.74	1.01	– (3)	1.13	1.02	+ (3)
New Zealand	1.02	1.00	+ (3)	0.78	1.10	+ (1)
Argentina	0.56	0.94	– (2)	1.15	1.20	– (1)
Bolivia				3.46	1.52	– (1)
Brazil	0.99	1.13	– (1)	1.14	2.24	– (1)
Chile	0.50	0.68	– (2)	2.66	1.66	– (1)
Costa-Rica				1.18	2.05	– (1)
Cuba						
Dominican Rep.	0.48	1.00	– (3)	1.69	1.00	+ (3)
Ecuador	1.38	1.05	+ (3)	0.62	2.12	+ (1)
Guatemala				1.11	1.51	– (1)
Haiti				0.22	1.00	– (3)
Honduras	0.65	1.00	– (3)	0.98	1.00	+ (3)
Mexico	1.02	0.90	– (2)	1.68	1.14	– (1)
Panama	4.22	1.00	+ (3)	0.78	1.00	– (3)

	1918/1914			1922/1918		
Country	DER Index	ER Index	Direction	DER Index	ER Index	Direction
Peru				1.25	1.21	– (1)
Salvador	0.86	0.71	– (2)	0.81	0.95	– (3)
Uruguay	0.62	0.88	– (2)	1.53	1.40	– (1)
Venezuela	1.35	0.90	+ (2)	0.56	1.14	+ (1)
India	1.00	0.90	– (2)	0.70	1.30	+ (1)
Japan	0.29	0.98	– (3)	1.17	1.07	– (1)
South Africa	1.03	1.00	+ (3)	1.05	1.10	– (1)

Comments:

DER - debt-export ratio, ER – exchange rate;

"+" - predicted effect; "-" – effect contrary to the prediction.

Figures in brackets correspond to the number of proposition examined:

(1) – increase in ER index (devaluation) should be associated with decrease in DER index;

(2) – decrease in ER index should be associated with increase in DER index;

(3) – stability of ER index should be associated with stable or increasing DER index.

[ER and DER are assumed to be stable if their rates of change do not exceed 5%.]

Note:

* – no foreign debt in 1913.

Table A2. *Results of Testing Exchange Rate Hypotheses, 1922-1928 and 1928-1933.*

	1928/1922			1933/1928		
Country	DER Index	ER Index	Direction	DER Index	ER Index	Direction
Austria				3.92	0.80	2
Belgium	0.89	2.66	1	1.43	0.58	2
Denmark	0.85	0.79	– (2)	1.73	1.75	– (1)
Finland	2.15	1.00	3	1.25	1.11	– (1)
France	0.63	1.85	1	2.88	0.99	+ (3)
Germany	*			8.61	1.00	+ (3)
Italy	*			1.78	0.82	+ (2)
Norway	1.96	0.64	+ (2)	1.12	1.28	– (1)
Switzerland	1.18	0.98	+ (3)	0.34	0.64	– (2)

	1928/1922			1933/1928		
Country	DER Index	ER Index	Direction	DER Index	ER Index	Direction
Greece				1.38	2.33	– (1)
Ireland	*			0.56	1.45	+ (1)
Portugal	0.94	1.70	+ (1)	1.39	1.17	– (1)
Spain	0.62	0.96	– (3)	3.16	1.27	– (1)
Bulgaria				2.83	1.00	+ (3)
Czechoslovakia	0.99	0.99	+ (3)	4.61	0.64	+ (2)
Hungary				2.20	0.82	+ (2)
Poland				3.09	1.00	+ (3)
Rumania				1.90	1.00	+ (3)
Australia	1.24	0.91	+ (2)	1.53	1.50	– (1)
Canada	0.75	0.97	– (3)	2.80	1.20	– (1)
New Zealand	1.02	0.87	– (2)	2.00	1.85	– (1)
Argentina	1.01	0.89	– (2)	2.43	1.26	– (1)
Bolivia	2.00	0.70	+ (2)	2.13	1.43	– (1)
Brazil	0.73	1.01	– (3)			
Chile	0.82	1.03	– (3)	7.73	1.26	– (1)
Colombia	1.03	1.00	+ (3)	2.32	1.51	– (1)
Costa-Rica	0.82	0.91	– (2)	2.21	1.13	– (1)
Cuba				5.62	1.00	+ (3)
Dominican Rep.	0.69	1.00	– (3)	2.50	1.00[3]	+ (3)
Ecuador	0.57	1.10	+ (1)	2.41	1.20	– (1)
Guatemala				3.02	1.00	+ (3)
Haiti	0.53	1.00	– (3)	1.80	1.00	+ (3)
Honduras	0.04	1.00	– (3)	1.41	1.00	+ (3)
Mexico	0.72	1.01	– (3)	1.83	1.73	– (1)
Nicaragua	0.31	0.99	– (3)	1.83	1.02	+ (3)
Panama	4.32	1.00	+ (3)	1.70	1.00	+ (3)
Paraguay				1.25	1.98	– (1)
Peru	4.08	1.05	+ (3)	2.34	1.80	– (1)

	1928/1922			1933/1928		
Country	DER Index	ER Index	Direction	DER Index	ER Index	Direction
Salvador	2.08	1.01	+ (3)	2.21	1.57	– (1)
Uruguay	0.82	0.82	– (2)	2.01	1.38	– (1)
Venezuela	0.13	0.96	– (3)	0.02	1.01	**
India	1.46	0.76	+ (2)	2.18	1.42	– (1)
Japan	0.84	1.00	– (3)	0.98	2.22	– (1)
Thailand				1.80	1.00	+ (3)
Egypt				1.38	1.35	– (1)
South Africa	0.72	0.87	– (2)	1.62	1.45	– (1)

For Comments, see Table A1.
Notes:
* – no foreign debts in 1928.
** – all foreign debts have been repaid in 1930.

Table A3. *Long-Term Evolution of Export Composition.*

		% of total exports			
Australia		1881	1905	1913	1928
	Agricultural products		8.9	11.58	16.62
	Pastoral products	48.7*	45.55	53.66	58.56
	Gold&Silver	23.78**	19.07	4	2.66
	* - wool ** - gold&specie				
Canada		1881	1900	1913	1928*
	Agricultural & animal products	63.0	60.9	59.86	58.51
	Wood & wood products	27.1	17.8	15	21.59
	Iron & iron products	1.2	2.1	3.87	5.29
	* - composition of domestic exports only.				
Argentina		1892	1900	1913	1929
	Meats	5.4	5.8	15.1	14
	Hides	17.6	13.6	9	5.5

		% of total exports			
	Wool	38.8	18.1	8.7	7.3
	Cereals&Flax	23.0	46.6	55.3	62.5
Mexico			1900	1913	1929
	Gold refined			15.8	
	Silver refined		46.8	13.5	11.6
	Copper (in bars)		7.0	8.9	12.3
	Lead (in bars)		3.2	2	12.6
Brazil		1892	1904	1913	1929
	Coffee beans	56.3	50.9	62.3	71
	Sugar	6.3		2.4	2.7
	Rubber (crude)	7.7	0.3	15.9	1.6
	Cotton (raw)	1.4		3.5	4
	Hides&skins (raw)			4.6	4.4
Egypt			1883	1913	1928
	Cotton		62.5	77.9	81.8
Peru			1890	1913	1929
	Cotton (raw)		9	15.9	15.4
	Sugar (refined)		28	15.4	10.1
	Crude petroleum				15.2
	Gasoline				20.2
	Copper (in bars)		1	17	19.6
	Wool		15	5	3
	Silver		33	5	4

Table A4. *Export Composition of Selected Primary Exporting Countries (Main Export items).*

		Share of total exports(%)					Share of total exports (%)		
		1913	1928	Change			1913	1928	Change
Canadian-Argentinen Pattern					Egyptian pattern				
Colombia					Haiti				
Index of total exports	Coffee	60.6	61.5	0.9	Index of total exports	Coffee	77.1	49.9	-27.2
growth, 1913-1928: 4.43	Petroleum	21.3	25.8	4.5	growth, 1913-1928: 6.65	Cotton	12.4	15.1	2.7
Costa-Rica					Honduras				
Index of total exports	Coffee	34.4	67.2	32.8	Index of total exports	Bananas	50.1	84.9	34.8
growth, 1913-1928: 3.59	Bananas	49.6	25.2	-24.4	growth, 1913-1928: 7.3	Gold & silver	26.8	6.1	-20.7
Ecuador					Nicaragua				
Index of total exports	Cacao beans	63.2	24.7	-38.5	Index of total exports	Coffee	64.9	54.3	-10.6
growth, 1913-1928: 2.91	Coffee	5.3	13.6	8.3	growth, 1913-1928: 1.71	Gold	13.8	4.0	-9.8
	Gold		8.3			Bananas	5.6	18.3	12.7
	Crude petroleum		17.6	17.6		Woods	4.2	11.8	7.6
	Hats of toquilla straw	7.2	7.9	0.7	Venezuela				
	Tagua	13.5	7.1	-6.4	Index of total exports	Coffee	56.3	17.2	-39.1
Guatemala					growth, 1913-1928: 4	Cacao	16.8	3.1	-13.7
Index of total exports	Coffee	84.8	76.6	-8.2		Livestock	5.7	0.8	-4.9
growth, 1913-1928:						Petroleum		76.3	

		Share of total exports(%)					Share of total exports (%)		
		1913	1928	Change			1913	1928	Change
Australian-Mexican Pattern					Failure pattern				
El Salvador					Bolivia				
Index of total exports	Coffee	83.2	92.6	9.4	Index of total exports	Tin		73.3	
growth, 1913-1928: 2.13					growth, 1913-1928: 1.16				
India					Chile				
Index of total exports	Cotton & Jute	34.5	28.0	-6.5	Index of total exports	Copper	5.5	41.8	36.3
growth, 1913-1928: 1.63	Cotton & Jute manufactures	20.1	19.0	-1.1	growth, 1913-1928: 1.48	Nitrate	78.0	42.1	-35.9
	Tea	7.2	8.0	0.8	Panama				
New Zealand					Index of total exports	Bananas	57.6	71.7	14.1
Index of total exports	Butter	7.2	15.2	8.0	growth, 1913-1928: 0.76				
growth, 1913-1928: 2.13	Meat	18.0	12.5	-5.5	Paraguay				
	Wool	28.5	22.3	-6.2	Index of total exports	Cattle hides	21.2	8.0	-13.2
Thailand					growth, 1913-1928: 2.84	Wood	17.5	12.3	-5.2
Index of total exports	Rice	98.0	69.4	-28.6		Quebracho	12.5	20.5	8.0
growth, 1913-1928: 2.5						Tobacco	10.5	8.6	-1.9
Uruguay						Yerba mate	13.7	9.0	-4.7
Index of total exports	Wool	45.0	30.8	-14.2					
growth, 1913-1928: 1.47	Meat	20.2	22.2	2.0					
	Hides & skins	18.5	12.8	-5.7					

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LE PRIX DE LA CREDIBILITE: DETTES PUBLIQUES ET STABILITE DE L'ETALON OR EN EUROPE 1880-1914

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INTRODUCTION

Le propos de cet article est de tenter de renouveler, par la collecte et la constitution de nouvelles séries, notamment sur les finances publiques des Etats européens, le débat sur les fondements de la stabilité de l'étalon or et d'apporter ainsi de nouveaux éléments de réponse à la question, rituelle chez les chercheurs en économie monétaire internationale, du miracle de la stabilité de l'étalon or, entre 1880 et 1914. Si elle a été souvent débattue, cette question revêt un intérêt particulier dans le cadre européen actuel, puisqu'il s'agit aujourd'hui encore de fonder le développement économique du continent sur la création d'une zone monétaire homogène.

Dans ce programme de recherche, notre ambition est double. D'un côté, il s'agit d'éclairer les évolutions actuelles sous l'angle de la longue période. En effet, dans l'esprit de la majorité des économistes, l'étalon or décroche sans nul doute un prix de vertu. Il fournit donc une sorte de point de repère orthodoxe par rapport auquel on peut juger de la situation présente. En second lieu, il s'agit pour nous d'enrichir l'étude du fonctionnement de la zone or avant 1914. En particulier, nous voulions, au travers de ce travail, élargir le cadre excessivement anglo-centrique dans lequel la discussion de la stabilité de l'étalon or est habituellement conduite. [1] Placée sous un éclairage global, la situation britannique apparaît bien plus originale qu'exemplaire. [2] Ceci, bien sûr, obligeait à quitter les terres relativement bien cartographiées des grandes puissances européennes (Allemagne, France, Grande-Bretagne) pour s'aventurer dans des histoires nationales complexes, tortueuses, tourmentées, qui compliquent à l'infini la tâche du statisticien, mais enrichissent sans aucun doute l'ensemble d'information de l'économiste, et partant multiplient les sources de réflexion et d'inspiration.

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1. Pour une critique du caractère excessivement anglo-centrique de la littérature sur le système monétaire international dans la période antérieure à l'émergence de l'étalon or (1848-1873), voir Flandreau (1995).

2. Pour un point de vue analogue, du côté réel, voir Crafts (1984).

LES DETTES PUBLIQUES EUROPEENNES, 1880-1914

Faits stylisés

Comme le montre le graphique 1, qui décrit l'évolution des ratios dette/PIB pour un large échantillon de pays européens, l'étalon or, dont la réputation d'orthodoxie monétaire et financière est excellente, fut un système où le niveau des dettes publiques était considérable: une majorité de pays européens avaient des ratios d'endettement public (dette/PIB) très élevés, généralement au-dessus du seuil de 60% et même bien souvent au-dessus de 80%. Parmi ces pays, que l'on qualifierait aujourd'hui de très endettés, on trouve les économies du Sud (Espagne, Italie, Grèce, Portugal), mais aussi la France et les Pays-Bas. Même l'Angleterre connaît au début de la période un endettement élevé (environ 60%). Ce boom des dettes publiques européennes fut d'ailleurs vite identifié par certains contemporains qui, comme Baxter, écrivaient en 1871:

> Les nations latines grèvent leur développement industriel par l'acharnement qu'elles mettent à s'endetter. La France ploie sous l'accroissement récent de son fardeau. L'Italie se retrouve presque écrasée. L'Espagne et le Portugal accroissent les obstacles sur le chemin de leur redressement commercial. L'Amérique latine accroît régulièrement ses impôts à la hauteur de ses dettes. En Europe de l'est, l'Autriche continue d'emprunter pour financer ses dépenses militaires; la Russie s'en va chargeant sa pauvre population; tandis que la Turquie et l'Egypte empruntent jusqu'à la banqueroute. Tous ces Etats, sont en train de se disqualifier pour la course avec les industries anglo-saxonnes et teutonnes.

En termes de tendance, deux phases peuvent être distinguées. La première, qui prend en fait sa source dans les années 1870, est caractérisée par une augmentation générale des ratios d'endettement public, d'autant plus remarquable que l'on est dans une situation générale de paix. Echappent cependant à ce mouvement l'Angleterre, et plusieurs petites économies —pays scandinaves et Suisse.[3] A partir du milieu de la période (1896, environ), une décrue importante s'engage, particulièrement dans les pays qui ont connu les accroissements les plus substantiels auparavant. En 1913, tous les pays de

3. La similitude des ratios de dette publique scandinaves est tout à fait remarquable et permet sans doute de comprendre pourquoi ces pays ont pu maintenir avec succès l'Union monétaire scandinave pendant toute la période. A titre de comparaison, on pourra opposer l'évolution des dettes publiques dans les 4 Etats membres de l'Union monétaire Latine: France, Belgique, Italie et Suisse.

notre échantillon se retrouvent au-dessous de 100%, et pour une majorité, au-dessous de la barre des 60%.

L'étalon or semble donc avoir été capable d'accommoder des niveaux de dettes extrêmement hétérogènes. En effet, s'il est vrai que les principales crises financières qui ont affecté l'étalon or (Espagne, Grèce, Portugal) touchent des pays ayant des ratios d'endettement élevés, plusieurs Etats très endettés traversent la période sans encombre: c'est le cas notamment de la France, mais aussi des Pays-Bas et, dans une certaine mesure, de l'Italie. Aussi, l'hétérogénéité des niveaux de dette tranche-t-elle avec l'extraordinaire convergence des taux nominaux longs qu'indique le graphique 2, tous se trouvant dans un intervalle d'un peu plus d'un point à partir de 1908 environ.[4] Ce résultat transversal se retrouve aussi dans une approche longitudinale. Ainsi, la période antérieure à 1896, où les dettes publiques s'accroissent par rapport au PIB, est caractérisée par une décrue des taux nominaux, tandis que la période où les dettes publiques refluent, s'accompagne d'une remontée des taux. Finalement, le niveau élevé des dettes publiques européennes et leur extrême hétérogénéité est en contraste total avec la tendance lourde de convergence des taux longs.

On arrive ainsi à une conclusion qui, à première vue, ne semble qu'épaissir l'énigme de la stabilité de l'étalon or, puisqu'il paraît tout à fait impossible de justifier cette stabilité en invoquant des motifs de modération financière. Au contraire on serait tenté de renverser les termes de la causalité, pour suggérer que c'est la stabilité de l'étalon or qui aurait permis l'accumulation considérable des dettes publiques.

Soutenabilité de la dette et rentabilité des dépenses d'infrastructure

Se peut-il que l'étalon or ait caché en filigrane un problème plus fondamental, celui d'une insoutenabilité à terme ? En fait, la tendance générale au déclin des ratios d'endettement après 1896 invite à répondre par la négative. Par ailleurs, le niveau élevé des dettes publiques n'est peut-être pas surprenant, si l'on garde à l'esprit que, contrairement à l'idée reçue, les Etats ont joué un rôle considérable dans le développement économique au XIXéme siècle. En effet, pour la quasi-totalité des pays considérés, les dettes publiques correspondaient, pour une fraction importante —voire dans certains cas pour

4. Force est de constater cependant que cette convergence semble s'être accompagnée de difficultés vers le milieu de la période, du moins pour les pays du Sud, ainsi que l'indique la hausse des taux espagnols, portugais et grecs pendant les années 1890.

la totalité—, à des investissements d'infrastructures, pris en charge par les pouvoirs publics. Ceci est particulièrement saillant pour les Etats allemands, où la quasi-totalité de la dette est constituée de *railway debts*, mais aussi pour les pays scandinaves, pour la Russie, pour l'Autriche-Hongrie, et, dans une moindre mesure, pour la France à la suite du plan Freycinet. En fait, par rapport à cette tendance générale, c'est encore l'Angleterre qui fait figure d'exception, puisque son ratio d'endettement, qui décline régulièrement, n'est que le mauvais souvenir des obligations énormes contractées pendant les *French wars* au début du siècle, tandis que ce sont les capitaux privés qui ont financé son développement.

L'évaluation de la soutenabilité doit donc tenir compte de l'existence de cette dette publique d'infrastructure. D'abord, ces dépenses ont financé des actifs productifs dont les recettes nettes appartiennent à l'Etat, et qu'il faut donc déduire du service de l'intérêt. Sous cet angle de grandes différences peuvent être observées d'un pays à l'autre et il faudrait pouvoir cerner avec plus de rigueur l'écart entre dette brute et dette nette. [5] A un pôle, les Etats scandinaves ou certains Etats allemands équilibrent leurs comptes ou même gagnent de l'argent sur leurs investissements d'infrastructures. Il se peut même que certains Etats, qui, comme l'Etat fédéral suisse, ne se sont endettés qu'à des fins productives, soient en fait des créanciers nets et non des débiteurs nets. Dans ce cas, l'Etat s'est substitué à l'entreprise privée. A l'autre pôle, la Hongrie, l'Autriche ou la France ont nationalisé certaines lignes de chemins de fer alors que celles-ci perdaient de l'argent, ce qui en retour grève les finances publiques. [6]

Même dans ce cas cependant il se peut que les dépenses d'infrastructure aient en fait contribué à améliorer la soutenabilité de la dette publique, par exemple lorsque les investissements ont favorisé le développement économique. Il semble bien, en effet que tel ait été le cadre de raisonnement des investisseurs pour juger de la soutenabilité des dettes d'Etats très endettés. C'est ainsi par exemple qu'Alfred Neymarck déclarait en 1887 à propos du Portugal —avec il est vrai peut-être un peu trop de confiance et d'enthousiasme:

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5. Il va sans dire que cet exercice est extrêmement difficile, puisqu'il implique de collecter une information détaillée sur les rendements de l'investissement productif.

6. Ainsi le Portugal cédera-t-il à ses créanciers, dans les années 1890, l'usufruit de ses manufactures de tabac, extrêmement rentables.

> Il convient de faire remarquer que le capital emprunté par le gouvernement portugais depuis 1871 a été appliqué à la construction de chemins de fer, routes, postes, télégraphes, etc., ainsi qu'au développement et à l'amélioration des colonies. Tous les progrès accomplis n'ont pu être obtenus qu'en augmentant les charges de la dette, mais le Portugal ressent déjà les heureux effets de ces dépenses productives. Les recettes du trésor augmentent progressivement et la conséquence naturelle est la diminution du déficit. [7]

Finalement on s'acheminerait ainsi vers une explication réelle de la compatibilité entre l'importance des dettes publiques et la stabilité de l'étalon or, imputable à la rentabilité, directe et indirecte, des investissements que ces dettes avaient financés.

Ce type d'analyse n'est pas sans évoquer la thèse classique de Gerschenkron, suivant laquelle les nations appartenant aux générations successives de développement économique auraient utilisé un input public croissant, d'autant plus grand que le retard relatif d'une génération donnée par rapport aux nations déjà industrialisées était important. L'accumulation des dettes européennes refléterait alors des trajectoires nationales, et les fluctuations du rapport dette/PIB seraient l'image des vagues successives d'industrialisation. Tout en remettant le test rigoureux de cette proposition à un travail ultérieur, on peut d'ores et déjà souligner les limites d'une telle explication. En effet, le mouvement d'accroissement des dettes publiques identifié entre 1880 et 1914 inclut des pays ayant connu un processus d'industrialisation à des dates fort différentes. [8]

Le rôle de l'inflation?

La correspondance des évolutions haussières, puis baissières des ratios d'endettement public avec les mouvements bien connus des prix sur longue période suggère une explication simple: l'alourdissement des dettes a coïncidé avec la baisse des prix, son allégement avec la hausse régulière de la Belle Epoque. D'un côté, la déflation mondiale d'avant 1896 aurait agi de façon mécanique dans le sens d'une augmentation des ratios d'endettement public,

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7. Neymarck (1887: 54-55).

8. Il serait intéressant de clarifier la dynamique comparée de croissance de la dette publique et de l'économie, afin de mieux cerner le sens
et la portée de la thèse de Gerschenkron.

annulant ainsi une partie des effets positifs de la croissance de la période. A l'inverse, l'inflation d'après 1896 se serait superposée à la croissance dans l'amortissement de la dette publique.

Cette explication permettrait de comprendre les liens, en surface surprenants, entre l'évolution des ratios dette/PIB et celle des taux d'intérêt longs. En effet, on sait que le phénomène bien connu du paradoxe de Gibson s'est traduit par une corrélation négative entre le taux d'inflation et le taux d'intérêt réel. On obtient donc finalement un accroissement du poids des dettes quand les taux nominaux baissent et une réduction des ratios quand les taux nominaux montent.

Bien sûr ces deux mouvements sont susceptibles de produire des mouvements opposés en termes de convergence ou de divergence des taux d'intérêt. En effet, l'alourdissement de la dette publique en termes du PIB finira par plonger les pays dont les finances publiques sont les moins bien organisées dans des crises sérieuses. De fait, la hausse des ratios d'endettement public jusqu'en 1896 culmine avec des difficultés dans les finances publiques de trois des six pays qui ont connu les hausses les plus marquées (Espagne, Portugal et Grèce). De façon intéressante ces trois pays sont aussi les moins développés, et donc apparaissent comme les plus fragiles. Les crises des années 1890 seraient la résultante de deux facteurs, structurels d'un côté et nationaux de l'autre, puisque ce n'est pas n'importe quel sous-ensemble de pays qui plonge dans les difficultés. A l'inverse, l'inflation régulière de la Belle Epoque aurait joué un rôle important dans la stabilité de l'étalon or. Finalement derrière le secret de la stabilité systémique de la zone-or se cache peut-être, bien plus que la croissance, l'inflation.

CRISES DE LA DETTE ET CONVERGENCE

L'identification d'une combinaison de facteurs nationaux et internationaux dans les pathologies, qui se développent à la fin de la longue déflation de 1873-1896, invite à réfléchir de façon plus approfondie sur la nature des crises qui ont affecté la périphérie européenne de l'étalon or, au cours des années 1890.

Pathologies de l'étalon or, 1890-1902

Les crises de dette publique prennent leur source dans une succession de difficultés budgétaires conduisant un pays donné à recourir systématiquement à l'emprunt étranger, libellé en devises or, auprès de l'un des principaux marchés du centre, c'est-à-dire Paris ou Londres. Ces emprunts sont réalisés auprès

d'un intermédiaire bancaire, qui souvent gère les relations du Trésor avec l'étranger (service des intérêts, émission de traites sur le Trésor, etc.). Cet intermédiaire se charge, le plus souvent en coopération avec un syndicat bancaire, de l'émission (placement et *underwriting*) de la dette extérieure.

Au fur et à mesure que cette dette s'accumule, cependant, les exigences de l'intermédiaire habituel, en termes de garanties, de transparence et de contrôle des comptes publics, et de retour prompt à l'équilibre, s'accroissent. Souvent, cet intermédiaire tente d'utiliser le rôle de signalement et de réputation que sa participation à l'émission lui confère, pour imposer ses vues. Ceci conduit le débiteur à chercher l'aide d'autres intermédiaires (généralement des maisons de second rang, ou moins bien implantées sur la place) qui, au prix d'un taux d'intérêt généralement fort élevé, acceptent de contribuer à la fourniture de crédits courts, et à leur éventuelle consolidation. Il se peut qu'à ce stade les finances soient remises en ordre: tel fut le cas de l'Autriche-Hongrie et de la Russie à la fin des années 1880, et de l'Espagne dans les années 1890. Cependant, il arrive que la détérioration se poursuive. Dans ce cas, la part de la dette publique à court terme augmentera régulièrement, jusqu'à la crise finale où les refinancements sont refusés. Le débiteur n'a alors plus d'autre choix que de suspendre le paiement des intérêts. Ce schéma général fut illustré par l'Espagne en 1882 et par la Grèce et le Portugal dans les années 1890. Il suggère l'existence d'une certaine discipline de marché —les primes de risque croissant avec le niveau d'endettement—, mais relativement faible et, dans la plupart des cas, bien tardive.

Procédures budgétaires et structures fiscales

En dehors des conflits armés —la guerre hispano-américaine de 1898, le conflit gréco-turc de la même époque, la guerre russo-japonaise de 1905—, et des guerres civiles, qui constituent des causes bien connues de dégradation de la situation financière des Etats, l'une des caractéristiques communes à tous les pays qui connaissent des crises ou des difficultés plus ponctuelles au cours de la période 1880-1913 est de nature institutionnelle. Dans les pays d'Europe du Sud et en Russie, le contrôle des assemblées parlementaires sur l'élaboration du volet dépenses des budgets est, en effet, faible, voire inexistant, et, faute de procédures d'audit, l'exécution peut s'écarter sensiblement des engagements. En outre, on retrouve, dans la plupart de ces pays, des lacunes similaires dans les structures fiscales: faible élasticité des recettes à la croissance des revenus, en raison notamment de la prépondérance des impôts indirects d'accises et d'impôts directs souvent cédulaires, de l'absence d'un impôt progressif sur

les revenus et d'insuffisances des systèmes de collecte et de contrôle fiscal. En pratique, force est de constater que les stabilisations réussies de la Russie ou de l'Autriche-Hongrie, sont passées par des réformes profondes du système fiscal (régime d'imposition, audit des comptes publics, etc.).

Cette importance du processus fiscal dans la détermination de la stabilité monétaire peut d'ailleurs être illustrée dans le contexte des Etats à structure fédérale, comme l'Allemagne ou l'Empire austro-hongrois: dans les deux cas, la faiblesse des ressources fiscales propres du centre et la difficulté d'obtenir des Etats fédérés des contributions suffisantes pèsent sur l'équilibre financier des budgets centraux. C'est ainsi que l'Empire allemand doit payer jusqu'en 1914 une prime politique lorsqu'il emprunte sur les marchés internationaux, qui lui facturent un taux de près d'un point supérieur à ceux pratiqués pour la France ou la Grande-Bretagne.

Des effets systémiques?

Les dates auxquelles surviennent les principales crises financières et leur géographie suggèrent l'existence possible de facteurs systémiques liés aux choix de portefeuille des grands investisseurs internationaux et à leurs pratiques d'analyse du risque-pays. Les difficultés financières des pays du Sud se manifestent, en effet, après la résolution des problèmes dans les Empires —et singulièrement en Russie— et leur stabilisation, une réorientation des flux de financement internationaux s'opérant alors au profit de ces Etats, et au détriment de l'Europe du Sud. D'autre part, le développement, par les grands établissements financiers anglais et français, de techniques modernes d'analyse du risque-pays, avec une classification des pays en catégories, est susceptible d'avoir favorisé une certaine contagion, un effet Tequila avant la lettre. Le graphique 2 montre bien que le début des années 1890 est caractérisé par une hausse violente et concomitante des taux longs en Espagne, en Grèce et au Portugal, hausse qui coïncide avec des mouvements similaires dans plusieurs pays d'Amérique latine, ainsi qu'avec les difficultés de la Banque Baring en Grande-Bretagne (voir Kindleberger 1985).

La résolution des crises

En dépit de la gravité des crises d'endettement recensées et d'un ostracisme initial évident des prêteurs internationaux à l'égard des Etats affectés, la convergence des taux s'opère en quelques années. Les trois pays du Sud (Espagne, Grèce, Portugal) qui connaissent les difficultés les plus sérieuses dans les années 1890 illustrent trois configurations possibles.

L'Espagne, moins touchée que les deux autres pays, réussit à piloter à vue dans les années 1890. La guerre de 1898 avec les Etats-Unis, à l'issue de laquelle l'Espagne perdra les derniers restes de son Empire colonial, débouche sur une forme de défaut partiel par lequel les agents espagnols sont contraints de changer leurs créances or en créances papier. Ce mécanisme, qui s'inspire de la méthode des *affidavits* développée par les Italiens plus de vingt ans plus tôt, a l'avantage de doter le gouvernement d'un coussin amortisseur: lorsque la monnaie se déprécie, le service des intérêts s'allège, facilitant ainsi la gestion de la dette ; avec la moitié de sa dette externe convertie en monnaie interne, l'Espagne pourra limiter la dépréciation de sa monnaie jusqu'en 1914.

Le cas grec, en revanche, se présente comme une mise en ordre drastique des finances publiques, imposée par l'extérieur: c'est la thérapie de choc. Les créanciers étrangers —notamment la France et l'Angleterre, puissances garantes de la dette publique grecque—, qui, par l'intermédiaire de leurs Etats, avaient dû supporter le paiement des coupons détenteurs, imposent la création d'une société privée sous contrôle international qui prend en charge la collecte des impôts et le paiement des dépenses publiques, les excédents budgétaires étant répartis entre les créanciers (60%) et l'Etat grec (40%). Très vite, les surplus s'accumulent permettant à la Grèce dès 1904 un retour sur les marchés internationaux, ainsi que la convergence des taux. Par ailleurs la réforme fiscale et la croissance économique induisent un allégement de la charge de la dette.

Le cas portugais enfin, représente un troisième cas de figure. La crise initiée en 1890 traîne en longueur pendant toute la décennie, au fur et à mesure que les différentes solutions proposées butent sur les rivalités des créanciers. Le Portugal se verra même fermer par les autorités publiques françaises l'accès au marché parisien pendant quelques années. C'est finalement le *Convenio* de 1902 qui viendra mettre un terme à de longues négociations: techniquement, il s'agit d'un défaut, ce qui vaudra au gouvernement portugais la méfiance des investisseurs. Pendant la période 1902-1913, on assiste au développement de multiples techniques d'interventions sur les marchés des changes et de crédit de court terme qui aboutissent à stabiliser le cours du milreis. Comme l'Espagne, cependant, le Portugal conserve jusqu'à la fin de la période des finances fragiles, ainsi que l'indique la forte proportion du service de la dette dans les dépenses totales.

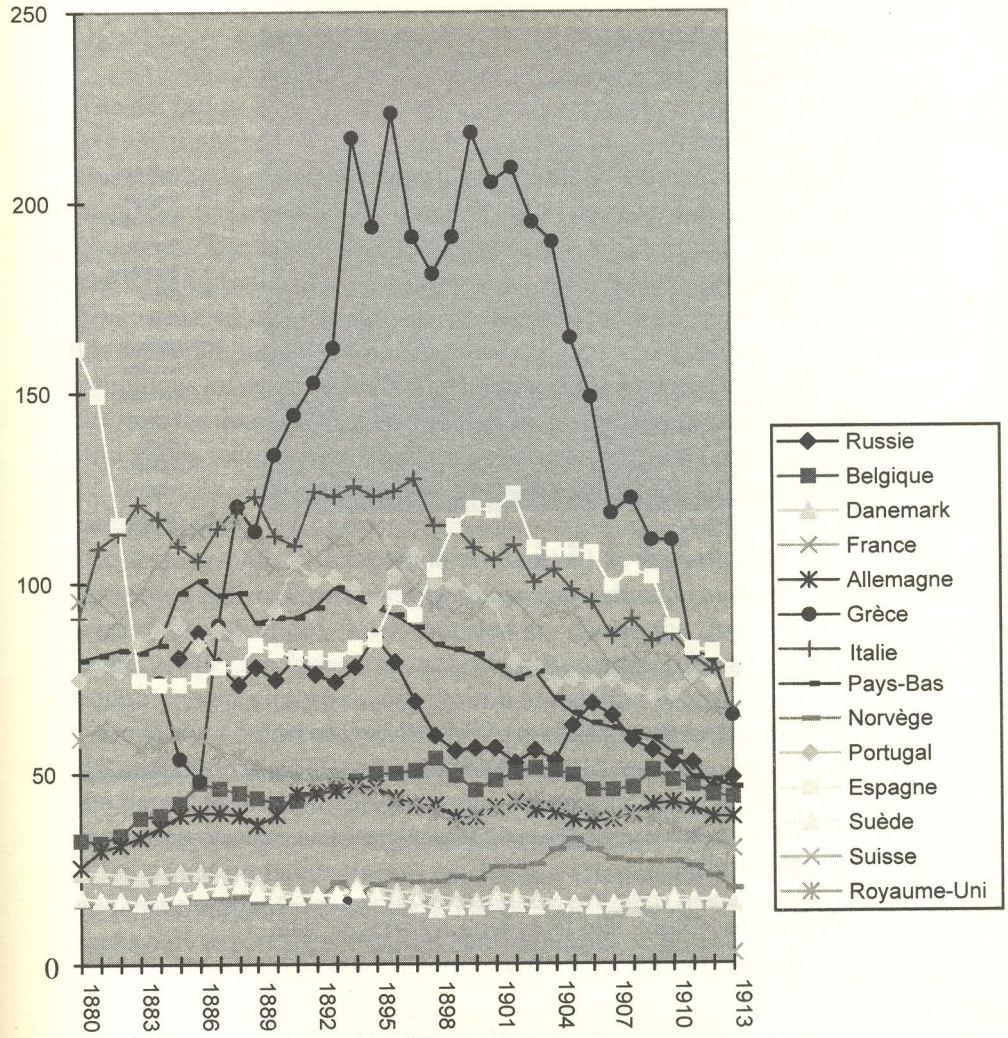
CONCLUSIONS

Au cours de la période 1880-1914, les tendances générales à la stabilisation, puis à la résorption des ratios d'endettement public dans la plupart des pays européens membres du système monétaire international d'étalon or, la convergence, marquée en fin de période, de leurs taux d'intérêt longs, et les caractéristiques des crises d'endettement et de leurs modes de résolution, suggèrent quelques pistes de recherche qui pourraient permettre de mieux cerner la nature de l'étalon or, ainsi que les mécanismes ayant assuré la cohésion de cette zone monétaire décentralisée.

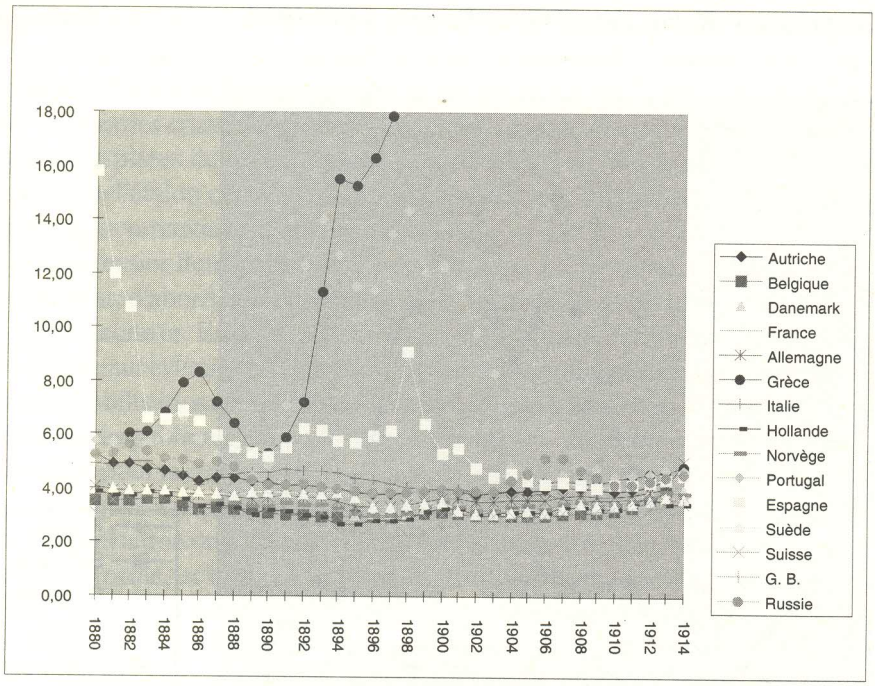
En premier lieu, il semble que le taux d'inflation global ait joué un rôle important, d'abord en fragilisant (1880-1896), puis en affermissant (1896-1913) la zone or. En second lieu, le rôle des flux internationaux de capitaux, leur montant et leur structure peuvent avoir servi de courroie de transmission aux déstabilisations des années 1890: dans un marché globalisé, les problèmes de finances publiques d'un pays donné peuvent avoir des conséquences considérables pour la stabilité d'autres pays. Ceci conduit à notre troisième point, qui concerne aux processus de contrôle des finances publiques: l'évolution de l'organisation du processus budgétaire dans les pays concernés, son éventuelle réforme, et la possible convergence vers un modèle uniforme ainsi que l'a suggéré Théret (1995), semblent avoir joué un rôle important dans la stabilité du système. Enfin, l'articulation entre dettes publiques et croissance économique apparaît déterminante pour éclairer les fondements réels de la stabilité du *gold standard*, édifice qui fut capable d'accommoder des dettes publiques extrêmement élevées.

APPENDIX

Graphique 1. *Ratios dette/PIB en Europe, 1880-1914.*



Graphique 2. *Taux longs en Europe, 1880-1914.*



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PUBLIC DEFICIT, DEBT, MONETARY POLICY AND EXTERNAL EQUILIBRIUM. SPAIN. 1880-1930

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The evolution of the Spanish economy during the long period from 1880 to 1930 is marked by two characteristics: its incomplete integration into the financial and goods international markets, and the difficulty of reducing the distances that separated its *per capita* GDP from the more advanced Western countries. The first characteristic has its main expression in Spain's non-participation in the gold standard. After joining the Latin Monetary Union, Spain entered in a de facto silver standard until 1883, when it renounced the convertibility of the peseta. Despite being on several occasions in favorable conditions for returning to convertibility, it did not do so. The lack of integration into the financial markets was complemented by a low level of integration into goods markets as a result of heavy tariff protection.

Secondly, Spain at the end of the 19th century was still a traditional agricultural country, backward in comparison to Europe. At the turn of the century two thirds of the active population worked in the primary sector, which generated 40% of the national product. The reduction of the dependence on agriculture advanced slowly but steadily during the first third of the 20th century, when the Spanish economy began to catch up the advanced European countries, especially between the end of the First World War and the international economic crisis of 1929. The annual growth rates of the GDP were 0.8 and 2% from 1890 to 1913 and from 1913 to 1929, respectively.[1] Over the period as a whole the *per capita* income of Spain was around 50% of the average income of France and Great Britain.[2]

It would be interesting to establish a relationship between these two elements. However, such a task lies outside the scope of this paper, which seeks only to present some brief considerations on the relationship between financial and commercial variables in Spain in the period 1880-1930, highlighting their repercussions on the evolution of the economy. The text is divided into three parts, which try to make a comprehensive review of the

1. Prados (1995).
2. Tortella (1994).

period and analyze principally three fundamental aspects of it. The first considers the effects of abandoning convertibility. The second studies the repercussions of neutrality during the First World War. The third analyses the possibility of returning to gold in the inter-war period.

ABANDONMENT OF THE GOLD STANDARD AND EXTERNAL EQUILIBRIUM.1880-1914

The establishment of a modern monetary system in Spain took place in 1868 with the passing of the monetary reform that introduced a bimetallic standard and established the peseta as the monetary unit. In 1874 the plurality of issue was eliminated with the granting of the monopoly to the Bank of Spain, although authorization of the limits of issue remained in the hands of the government. The fall in the price of silver from 1873 and the discrepancy between its official price and its market price caused a flight of gold coinage and the gradual reduction of the gold reserves of the central bank, despite which convertibility was maintained due to the balance of payments surpluses and imports of capital.[3] However, the crisis of the Paris Stock Exchange in January 1882 slowed the entry of metal through foreign investment and caused a sharp downturn in the gold reserves of the Bank of Spain, so the suspension of convertibility sought to defend the latter's reserves of precious metals.

The objective of abandoning the gold standard was to safeguard the Bank's reserves, because the Spanish economy did not possess alternative institutional mechanisms to deal with temporary balance of payments problems. Leaving the international monetary system did not affect the exchange rate of the peseta, which remained stable throughout the 1880s as can be seen in Figure 1. This lack of effect on the exchange value of the peseta shows that the decision was a hasty one, for the tensions in the financial market were only temporary. It was the restrictive monetary policy that helped to maintain confidence: Spain's money supply increased more slowly during the last quarter of the century than that in other countries, such as the United States, the United Kingdom or France.[4] Taxation policy was characterized by the maintenance of continual budget deficits. Of the twenty-five years from 1874 to 1900 only two presented a surplus. Despite the persistence of deficit, its values never rose above 1.5% of GDP.

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3. Martin Aceña (1993).
4. Tortella (1974).

The stability of the exchange rate lasted until the early 1890s. From 1890 the peseta depreciated steadily, though gently until 1896, as a consequence of the exhaustion of the methods of financing balance of payments deficits through imports of capital. It is difficult to know exactly or even approximately the magnitude of Spain's foreign capital transactions. Official trade figures were manipulated for political ends in order to gain better positions in tariff negotiations, and the new estimates based on the foreign trade figures of the countries that received Spanish products and exported to Spain are incongruent with other known variables. Therefore we can only venture a hypothesis.

The depreciation of the peseta was linked to an increase in the negative balance of trade, a result of the slower growth of exports. From 1880 onwards, quantitative indices of foreign trade show a steady improvement in exports, faster than that of imports, due mainly to increased exports of Spanish wine because of the philoxera disease that attacked the vineyards of France and iron ore. The wine export boom began to slacken in the first years of the next decade, and the difficulties in financing imports returned. The deficit had traditionally been financed by the entry of capital from foreign investment but in the last decade of the century, due to the international crisis and to financial problems in several countries, movements of capital were reduced. At the same time, the export of capital increased owing to the repatriation of Foreign Debt, which had already begun in the 1880s with the conversions of 1881 and 1882, to and which the worsening of the colonial problem contributed.

The depreciation of the peseta became the mechanism for adjusting the deficit of the Balance of Trade, which together with the establishment of a new set of tariffs in 1891 attenuated the worsening of the balance of payments in the first half of the decade. The real exchange rate of the peseta against the pound and the franc depreciated steadily, so that the Spanish economy recovered the competitiveness lost in the 1880s. Given that international prices fell more than Spanish prices, all the strain of the adjustment was borne by the depreciation of the exchange rate.

The Cuban war of independence gave rise to a wave of speculation against the peseta which, from 1895 to 1898, suffered a depreciation of about 30%. The war was financed through the monetarisation of the debt, which led to an increase in the money supply of over 50%. This episode ended with the loss of Spain's last American colonies, and with the stabilization of the money supply at the level reached. The disappearance of the speculation stopped the peseta downward movement. However this whole episode left the peseta

under-valued by 10% in comparison with its parity before the abandonment of the gold standard.

The disappearance of these exceptional circumstances led to a long period of appreciation of the Spanish currency, based on the solution of the balance of payments problems and on the achievement of internal equilibrium. Spain was a debtor nation in which the services of the foreign capital invested in the country accounted for a large part of its exports of capital.[5] The repatriation of capital belonging to Spaniards after the loss of Cuba, the earnings of emigrants, which must have increased with the growth of emigration at the end of the century, and the possible renewal of the entry of foreign investment, allowed capital exports to be compensated and the national currency to be revalued in foreign markets. At the same time, the trade balance benefited from the under-valuation of the currency and from the growth of the international economy. With the end of the favourable situation for wines, minerals became the main export items, causing a long-lasting increase in quantitative indices that contrasts with the stability of the index of imports, helped by the establishment of a new protectionist tariff in 1906 as well as by the appreciation of the exchange rate.

The application of a stabilizing policy enabled internal equilibrium to be achieved. The contraction of public spending helped to eliminate budget deficits and thus to contain the growth of the money supply which did not recover 1898 levels until 1912. Money restrictions permitted stability of prices in Spain, while international prices increased. The gain in competitiveness achieved was compensated by the appreciation of the currency which enabled balance of payments problems to be solved. Monetary policy and tariff protection separated the evolution of prices in Spain from that of international prices.

The results of Spain's exchange policy remain to be considered. The aspect to which we will pay most attention is the variation in the cost of international financing as a consequence of the abandonment of convertibility. In an integrated currency system there must be parity of interest rates: the Spanish interest rate must be equal to the British interest rate for assets of equal risk and liquidity, being Great Britain the center of the system. With fixed exchange rates, equality is strictly fulfilled; with variable exchange rates the equality of interest rates include the expectations of appreciation or depreciation of the exchange rate. When Spain abandoned the system of fixed exchange rates,

5. Acording to Sardà, the interests payments of foreign capital in francs seems to have amounted annually to 160 millions (Sardà 1948).

the uncertainty over the evolution of the exchange rate established an exchange risk premium which must be reflected in the interest differentials. Figure 2 shows that Spanish interest rates were higher than those of the other countries considered, France and Italy, in the period prior to the abandonment of convertibility, but at the same time also shows the convergence of the Spanish rates. From 1883 this trend disappeared and Spanish rates were consistently higher than those of other countries.

The control of taxation and money variables in the 1880s allowed the differential to be gradually reduced, although the expectations of a return by Spain to the gold standard throughout the decade, and the uncertainty over the parity of the return, must have affected investors' expectations. Also, the risk of lending to the Spanish government was not similar to the risk of lending to any other government. The conversions of public debt effected in 1881 and 1882 caused a lowering of confidence in the strict fulfillment of the obligations of the state, which had been forced to take these measures in order to avoid the situation of bankruptcy which was foreseeable with a debt/GDP ratio of 180% in 1879.

In the 1890s interest rate differentials increased by about two points due to the re-appearance of balance of payments problems and the threat of war in the 1890s. Over the course of the decade the confirmation of the threat of conflict forced the abandonment of the controlled monetary policy: the money base had grown from 1880 to 1895 by an average of about 1.5% per year, which rose to 7.7% from 1896 and 1900.

When all these elements of disturbance disappeared, about 1900, we can measure clearly the effect of abandoning the gold standard on the Spanish economy. As can be seen in Figure 2, the yield on long-term public debt converged among the three countries, although differences can be observed between Spain and Italy on the one hand and France on the other. Interest rate differentials between the first two were reduced from 2% in 1900 to 0.5% in 1913, one year before the effects of uncertainty would be felt again in the international finance markets.

The commitment of the gold standard acted for the international capital markets as a sign of maintaining a controlled monetary policy and a balanced budgetary policy.[6] However, remaining within the system did not prevent the existence of crises which threatened the currencies, and therefore the need

6. Bordo and Rockoff (1996).

to uphold the confidence that there would not be an abandonment at the first sign of difficulty. The ease with which countries could leave the system and return to it did not guarantee that compliance with its rules of operation was enough to maintain confidence. More important than being in or out was the maintenance of a currency and taxation policy in accordance with the rules of the standard. When Spain was able to follow this path, from 1900 onwards, the cost of inconvertibility over international financing was not high. Previously, the threat of war and the outbreak of the conflict generated expectations of depreciation of the peseta, increasing the risk for investors. This risk explains, at least in part, the high interest rate differentials in the 1890s.

THE IMPACT OF THE FIRST WORLD WAR, 1914-1920[7]

War and the disturbance of the international markets

From the end of the 19th century, Spain had stood at the margin of the political tensions affecting the principal European countries. It is therefore understandable that the Spanish government decided to declare itself neutral when the conflict broke out in August 1914. This neutrality, however, did not prevent the Spanish economy from being deeply affected by effects of the conflagration. The main field in which this connection occurred was that of foreign trade.

From an economic point of view, the start of the war imposed a radical change of preferences on the countries in conflict. This change affected both the type of products and the amounts demanded and the preferred time for their consumption. In other words, the countries at war reduced their demand for some products (unnecessary luxuries) in favour of others (those necessary for the war and the survival of the population) and at the same time changed their inter-temporal preferences, i.e. they wished to increase their immediate consumption at the expense of reducing their future consumption. Furthermore, the adversaries' intention of preventing supplies reaching the enemy increased the risks of international transport, restricting the possibilities of acquiring supplies in places very far from the conflicting countries themselves.

Consequently, a series of goods produced in Spain saw an extraordinary increase in their demand from abroad. These were goods directly related to the war and those whose production had been temporarily relegated in the conflicting countries. Such was the situation of, among others, textiles of

7. The ideas reflected in this section are taken from a joint study by Francisco Alcalá and Carles Sudrià, as yet unpublished, and from Sudrià (1990).

almost all fibre, leather articles and some metal products. In the markets for these goods, given their relative inelasticity of supply and of foreign demand, prices sharply increased and supplies were displaced from home trade to exports. In other cases the opposite effect occurred. Foreign demand decreased or was more elastic to the general rise in prices and Spanish exporters faced serious difficulties. Such was the case of fresh fruit, cork manufactures or non-ferrous metals, among other traditional export products. On the import side, changes were just as great. There were difficulties in the import of basic raw materials (coal, cotton, fertilizers) and manufactured products for both consumption and investment, and a general rise in prices.

Since export demand was much more inelastic than home demand, the aggregate effect was a notable increase in the value of exports (with a moderate fall in volume) and maintenance of the value of imports (with a steeper fall in volume). The consequent surplus of the trade balance was increased by the sudden multiplication of the foreign earnings of the Spanish merchant fleet. Altogether, the current account balance —including transfers— showed from 1914 to 1920 a positive aggregate value of 4,500 million current pesetas. The transformation of the export sector affected, as is natural, all aspects of the Spanish economy. However we will concentrate on the aggregate effects that it had on prices and the value of the currency.

The adjustment of the Spanish economy: currency, prices, and exchange rate

The outbreak of war changed completely the habitual framework within which Spanish monetary policy moved. The general suspension of the convertibility of European currencies and the uncertainty generated by the conflict led to an appreciation of the peseta against them and against gold. By law, the Bank of Spain could not acquire gold above its official price in pesetas and this was impossible under normal circumstances since the peseta was quoted below par. The new situation allowed the Bank to acquire large quantities of the metal at official prices and even lower.

The circuit was as follows. The balances in foreign currency obtained by private individuals were channeled to the United States, where they were exchanged for dollars at favourable prices. These in turn were converted into gold in American banks and the gold was finally sold to the Bank of Spain for pesetas. This process naturally caused a considerable increase in the money supply and the consequent increase in home prices. The money supply (MI) increased by 121% from 1914 to 1919, while prices did so by 108%. The directors of the Bank of Spain were not aware of the effects that their decisions

were having. It is however possible that a more restrictive currency policy —in a context of substantial increase in export prices— would have caused more serious maladjustments.

The overall rise in prices had several effects. On the one hand it caused a temporary fall in real wages with the consequent rise in profits. On the other, it affected public accounts in the sense of raising costs above income, with the consequent increase in the deficit. The total debt of the state increased more than 25% in six years.

The reduction of public and private debt abroad

The current account balance of payments surpluses were not only used to acquire gold abroad. They were also used to acquire public and private securities that were in foreign hands. With reference to public debt abroad, it was estimated that in 1914 about 700 million pesetas was in foreign hands. In 1921, the sum had descended to 110 million, an almost insignificant amount. The long process of repatriation of the public debt abroad had ended.

The securities of Spanish firms in foreign hands also underwent a process of repatriation. In this case the calculation is more difficult. Estimates by contemporaries, which agree with those made later by several historians, speak of a reduction from 2,200 million before the war to about 700 after it. The vast majority of purchases made by Spaniards in these years were concentrated on railway securities. On the other hand industrial and mining firms with activity in Spain but with headquarters outside the country remained in the hands of foreigners, an investment estimated at about 1,300 million.

Finally, it must be pointed out that the acquisitions of gold and securities abroad were not enough to cover the excess of the balance of payments on current account. Consequently there remained a surplus in private Spanish hands in the form of foreign currency. This amount has been estimated at about 1,500 million pesetas, which was very probably reduced substantially by the effect of the great depreciation suffered by most European currencies after 1920. Spain thus lost part of its gains during the war and, very much in spite of itself, helped to pay the cost of it.

THE 1920s (1919-1930)

The evolution of the Spanish economy during the 1920s was characterized by steep growth of GDP, in relative terms, compared to previous decades, accompanied by a notable structural change. Even though the imbalances of this transformation are inseparable from the high tension arising after 1931,

the mean annual rate of increase of GDP between 1920 and 1930 was, in Prados de la Escosura's estimate,[8] around 3%. The steepest rate of increase occurred between 1923, when General Primo de Rivera staged a *coup d'etat* annulling a constitutional regime, and 1929. During these six years, the increase exceeded 4%. Simultaneously, the industrial sector increased in size and in relative weight in the economy, diversified its structure, and in some activities notably increased its productivity.

The causes of this expansion are related fundamentally to ~~two~~ factors: the greater possibilities of importing technology after the World War largely due to the extraordinary profits accumulated during the conflict; and the strong expansion of public investment when the public sector began a wide-ranging program of public works to foment industrial growth.[9] It is also possible that expectations for private investment, which increased at rates much higher than in the previous decades, improved with the setting-up of the dictatorial regime. The repression of trade union protest put an end to the social conflicts that had started during the last years of the war and had reached a peak just before the coup.

The unreliability of foreign trade statistics, manipulated as we have noted for trade policy reasons, make it difficult to demonstrate rigorously the first of these two factors and complicates the analysis of the main variables considered in these pages. However, the quantitative index of imports of machinery reflect a strong rate of growth during these years, a clear sign of improvement in the productive structure. Also, estimates of the net capital stock of the economy likewise show an acceleration from 1919, and very especially from 1923 to 1929, when they reached the highest annual rates of increase of the first third of the century.[10]

Even with the caution imposed by statistical deficiencies, we cannot fail to mention the high rate of increase of foreign trade in these years. From 1922 to 1929 both imports and exports grew at 5.3% at constant prices, one point above the growth of GDP.[11] As has been implied when referring to imports of machinery, this was accompanied by a substantial change in the internal structure of imports. Manufactured items came to represent about 50% of the total, when in previous decades they had scarcely reached 30%. On the side

8. Prados (1995).
9. Palafox (1992).
10. Cubel and Palafox (1997).
11. Tena (1987).

of exports, however, the variations in their composition were not so great. Their expansion was mainly due to foods, with over 50% of the total, after the exhaustion of mineral exports, evident before 1914. The increase in the shipment of oranges from the Valencia region was added at this stage to Spain's traditional export products: wine, oil and until 1914 mineral ore. The insufficiency of exports led, especially in the last years, to an appreciable increase in the trade deficit even when, taking into account the evolution of the exchange rate, the existing estimate presumably overvalues its importance.

The policy of public works is better known. Throughout the decade, and more intensely after 1926, with the solution of the military conflict in Morocco, the dictatorial regime undertook a wide-ranging plan for the improvement of infrastructures. The modernization of the road and railway networks, together with the waterworks policy were the preferential sectors of this policy. In constant pesetas, public investment between 1920 and 1929 was 2.3 times that of 1910-1919 and 3.3 times that of the first ten years of the century. Though financed in an unorthodox manner from 1926 (a large part of the spending was not included in the public budget) and although the use of resources was in a several cases inefficient, the effects of this expansion of investment on the private sector were obvious, increasing the demand for investment goods and expanding their production.

The index of basic industries, drawn up by Albert Carreras, [12] confirms this last point. Estimated on a base 100 in 1929, its value in 1919 was 59. The contribution of the investment goods sector of industry to the index of industrial production, also drawn up by Albert Carreras (IPIES), [13] is perhaps the best indication of this transformation of the secondary sector in which other industries such as chemicals or electricity also participated. With the same basis 100 for 1929, the IPIES value in 1919 was 63.8, a variation that reflects the importance of the change. Thus between these two years the capital goods industries' share in total industrial production almost tripled, passing from 7.7 to 20 %. The consumer goods industries sustained a less expansive trend due partly to their lower income-elasticity and partly to the situation of excess supply in the unskilled labor market and its effect on wages. As taxation did not increase, one consequence of the expansion of public investment was increased indebtedness. Unlike the relatively modest expansion of the previous decades, during the 1920s the public debt in circulation grew

12. Carreras (1982).
13. Carreras (1984).

rapidly. In 1920 it amounted to 13,056 million pesetas, in 1923 it had grown to 16,228; and in 1930 it had reached 20,757 million. In constant pesetas this implies an increase between 1920 and 1930 of 18%. As a result, the indebtedness as a percentage of GDP increased by 14%, from 44% to 58%. This imbalance was added to that of the trade balance even when the export-import rate seems to have remained stable at 80%. And it must be kept in mind that these figures do not consider the numerous issues of special debt guaranteed by the state, included as public debt during the 1930s due to the insolvency of the issuers.

Here our certainties end, however. With the information available it is not possible to make a rigorous explanation of the relationships between public deficit, monetary policy and foreign trade balance during these years. As there is practically no information on such a fundamental aspect as the Balance of Payments, and particularly the movements of capital, the relationships among these variables remain indeterminate. In spite of this, there is enough information both to discard some explanations (such as that the exchange rate was determined by the relative price level) and to offer a narrative explanation of what may have happened.

The exchange rate of the peseta was one of the principal concerns at the time, especially in the final years of the decade. In 1920, the average exchange rate against the pound sterling was 23.30 and against the franc 43.88, compared to the 1913 rates of 27.09 and 107.43. From then onwards it underwent a process of depreciation, accompanied by wide monthly fluctuations, while the stability of prices after a sharp reduction in 1920, was much greater. After a brief period of appreciation, stimulated by the government's declarations of its desire to return to the gold standard, the peseta depreciated sharply against the pound and the franc as from late 1927. This led to the creation of a committee to study the causes of this evolution, known as the Gold Standard Commission. Its main conclusion was that, in the long term, the peseta quotation depended on the movements of relative prices. Nowadays however, this conclusion cannot be sustained. Martin Aceña showed years ago [14] that the fluctuations over the course of the decade did not fit the purchasing power parity theory. His hypothesis that what happened in 1926 and 1927 must be explained on the basis of variations in interest rates does not find confirmation either. The modest fluctuations in the profitability of public debt (as

14. Martín Aceña,(1983).

an approximation to interest rates) and the evolution of the peseta do not show a significant correlation.

However, the difficulties of a quantitatively rigorous interpretation of what happened do not end here. The annual variations in the money supply, prices and GDP do not offer a clear relationship either, and the differentials with other countries in interest rates (discount rates and profitability of public debt) do not improve the explanation. All of which invites us to deduce that the process of structural transformation and modernization noted above together with the monetary international instability, made the adjustments between variables not immediate.

The lack of enough quantitative information and the results just mentioned, make only possible to attempt a narrative explanation as consistent as possible with the available information. This must start from the fact that, in spite of the above-mentioned difficulties caused by the European conflict, the neutral position adopted by Spain and its limited degree of commercial openness made it possible for its economy to remain outside most of the international tensions during the difficult years of recovery, and particularly after 1918. On the other hand, from 1914 to 1918, inflation, though considerable, was far below that of the countries at war and the Bank of Spain, and also the private sector, were able to accumulate an appreciable quantity of gold. Thus, in US dollars, the central bank quintupled its gold reserves, from 92.4 million in 1913 to 471.5 million in 1919. In pesetas the increase was also notable, though less: the amount was multiplied by 3.5. This Spanish position would have its reflection in a favourable exchange rate after the war since Spain did not participate in the tensions generated by the negotiations linked to German reparations and inter-Allied debts.

As the European recovery advanced, however, the increase in the national debt and the trade deficit worsened the relative situation of the Spanish economy. The Bank of Spain had as one of its objectives the acquisition of gold, in spite of which the growth of its reserves of this metal, as a proportion of that of other central banks, continued to diminish during the 1920s, as shown in Table 1. The volume did not diminish, but its increase was much smaller than that of other countries including Great Britain.

It seems possible, then, to sustain that the growing trade deficits could not be balanced by the remittances sent by emigrants, the yields of foreign securities held by Spaniards abroad and the entry of new foreign capital, even though there is no information on any of these variables. On the last, however, one can assume a decreasing trend of foreign investment as opposition to

the dictatorship increased, and with it, the uncertainty about the political future of Spain. In this way, once the expectations of the possible revaluation which would have implied the peseta joining the gold standard vanished, the peseta exchange rate restarted the downward trend linked to the two fundamental imbalances of the economy: the public and foreign sectors.

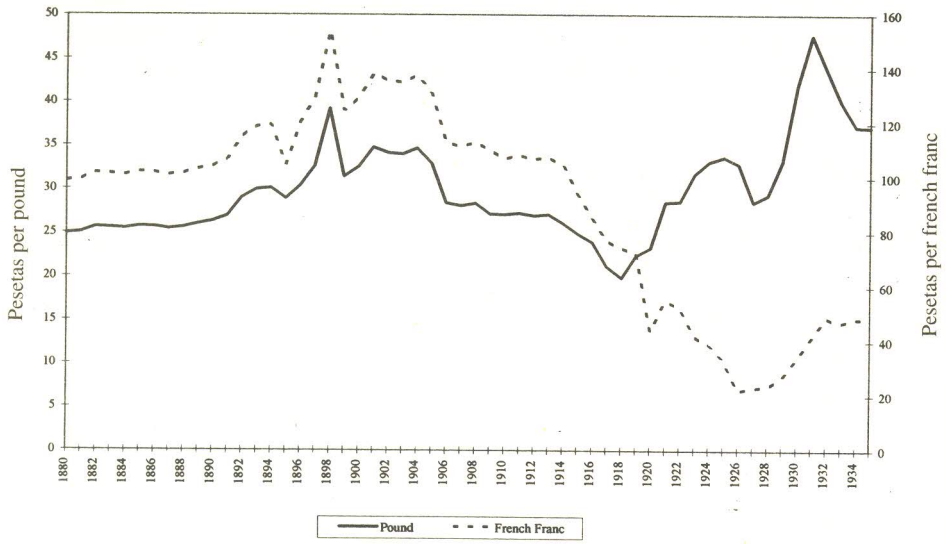
APPENDIX

Table1. *Gold Reserves of the Bank of Spain (as % of others central banks)*

	France	Germany	Great Britain	Italy
1919	67.9	181.7	81.4	235.3
1920	69.1	182.2	81.9	229.8
1921	70.2	204.4	64.3	228.6
1922	68.7	203.5	64.5	221.9
1923	68.7	438.4	65.7	223.6
1924	68.9	270.3	65.6	221.3
1925	68.8	170.4	65.4	220.9
1926	69.4	113.1	71	220.7
1927	52.7	113.1	68.9	207.6
1928	39.4	76	66	185.8
1929	30.3	91	69.8	181.4
1930	22.4	89.1	65.5	168.9

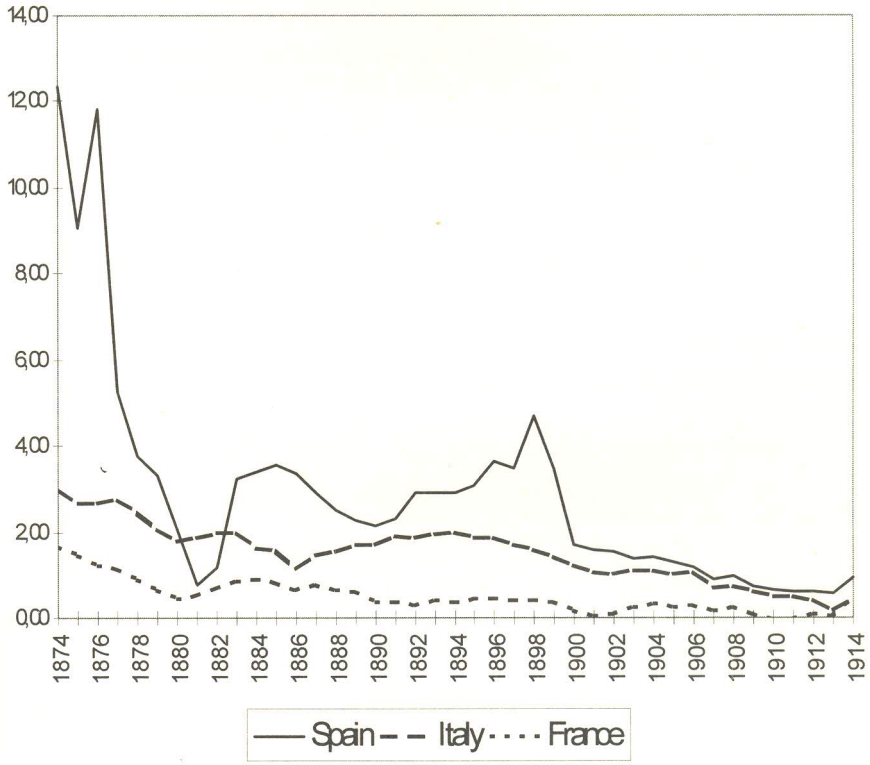
Source: *Federal Reserve Bulletin*

Figure 1. *Exchange rate of the Spanish peseta against the pound and the franc.*



Source: *Estadísticas Históricas de España* (1988).

Figure 2. *Public debt interest rate differentials in relation to British Consols.*



Sources: Spain, *Estadísticas Históricas de España* (1988); Italy, Fratiani and Spinelli (1984); France: Martín Aceña (1993); Great Britain: Capie and Webber (1985)

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MONETARY EVOLUTION, PUBLIC FINANCE AND BALANCE OF PAYMENTS: PORTUGAL 1891-1990

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INTRODUCTION

This paper examines one century of Portuguese monetary experience, and discusses its relations with the evolution of public finance and the balance of payments. Its time span goes from the 1891 crisis which broke, once and for ever, the links of the Portuguese monetary sytem to gold-standard, to the efforts of the late 1980s and the early 1990s to insert Portugal in the European monetary system. Sections 2 to 9 review the main features of the relevant periods of the century under consideration. Section 10 tries to elaborate on the theoretical framework that explains the various facts reviewed in previous sections.

The paper is based on a few texts that present recent research on the evolution of the Portuguese economy in the 19th and 20th century. Justino (1988), Nunes, Mata, Valério (1989), Lains (1990), Lains, Reis (1991), Nunes, Mata, Valério (1991), and Nunes, Mata, Valério (1992) are the main references in what concerns Portuguese economic growth. Valério (1984), Mata (1987), Reis (1990), Sousa (1991), and Macedo, Eichengreen, Reis (1996) are the main references in what concerns the Portuguese monetary evolution. Mata (1993), and Valério (1994) are the main references in what concerns the evolution of Portuguese public finance. Fontoura, Valério (1994) deals with the evolution of Portuguese foreign economic relations. Mata, Valério (1994) provides a synthesis of Portuguese economic history.

THE 1891 CRISIS

In July 9, 1891, the Bank of Portugal became the only issuing bank in Portugal, and convertibility of its notes was suspended *sine die*. As convertibility was never restored, Portugal has been living ever since in a purely conventional monetary system.

This departure from the prevailing monetary canons of the epoch was the consequence of sharp short term problems and of deep structural features of the Portuguese economy. The short term problems resulted from the combined effect of the international economic crisis usually known as the Baring

crisis, of diplomatic friction with Great Britain about some territories in Southern Africa, and of internal political unrest that led to an unsuccessful republican revolution. The deep structural features resulted from chronic public accounts and balance of payments deficits. Public accounts deficits had started in the 1850s as a device to finance the building of public works (mainly the railway network) and had become chronic as mismanagement allowed the service of public debt to feedback on the deficits. Balance of payments deficits were the result of trade deficits, partly financed by emigrants remittances (mainly from Brazil, the main outlet of 19th century and early 20th century Portuguese emigration), partly financed by government borrowing abroad (also linked to public accounts deficits) and by private capital flows (still to be thoroughly studied).

Thus, there was a delicate mechanism to finance public deficit and external payments between the 1850s and the 1880s. This mechanism collapsed in 1891 as a result of short term problems, leaving the Portuguese economy in a rather uncomfortable situation in what concerns its monetary system.

THE EPOCH OF THE INTERNATIONAL GOLD-STANDARD 1891-1914

Between 1891 and 1914, the conventional monetary system prevailing in Portugal was in sharp contrast with the gold-standard system, which remained the monetary regime of the most important economic powers and of the world economy. As a consequence of this contrast, to come back to gold was the dream of the Portuguese monetary authorities.

Such a dream could not become reality because of three reasons. First, the Portuguese monetary unit —the real— depreciated in exchange markets against the pound sterling and other currencies linked to the gold-standard. Second, the Bank of Portugal was unable to build enough reserves, because of the deficits of external payments, however moderate (it should be noted that the reserves required to reestablish convertibility would perhaps be higher than the reserves needed to sustain convertibility in stable circumstances). Third, in spite of the fact that the Portuguese government made a significant effort to balance its accounts, deficits prevailed until World War I, surpluses being only sporadic. Moreover, in 1892, the Portuguese government had to suspend amortization and to reduce interest payments of external public debt. In spite of an agreement with foreign bondholders ten years later, international financial markets would remain closed to the Portuguese government until the second half of the 20th century.

Depreciation and inflation were the result of this situation. Depreciation attained a maximum around 81% (£ 1 = 8,135 *réis*, as against the par of £ 1 = 4,500 *réis*) in July 1898, but the exchange rate came back to the interval of the old gold points for a short period during the autumn of 1906 and the winter of 1907. Thereafter, depreciation remained usually low, attaining around 16% (£ 1 = 5,232 *réis*) at the beginning of World War I. Prices increased around 16% until 1898, but roughly stabilized thereafter. Thus, depreciation and inflation were rather moderate and similar for the whole period under consideration.

During this period, the government turned to the Bank of Portugal to finance part of its deficits. This implied monetization of public debt and a significant increase of the amount of banknotes in circulation. However, such increase had only moderate inflationary effects because most of the the banknotes issued replaced gold coins withdrawn from circulation. Nominal gross domestic product grew around 40%, what corresponded to an increase around 20% of real gross domestic product and near stagnation of *per capita* gross domestic product.

In these circunstances, it is only fair to point out that monetary problems were not the most important of Portuguese economic problems of the time. However, they attracted a lot of concern. Contemporary views tended to blame the public deficits and the absence of convertibility for everything that went wrong in the economic field.

In October 5, 1910, the monarchy was overthrown, and in May 22, 1911, the new republican government replaced the old monetary unit of the monarchy, the *real*, by a new monetary unit, the *escudo*. The change was mainly formal, because the new monetary unit was 1 000 times the old one. The gold definition was 1 *real* = 1,626 mg of gold and became 1 *escudo* = 1,626 g of gold; the par was £ 1 = 4,500 *réis* and became £ 1 = 4.5 *escudos*.

WORLD WAR I AND POST-WAR INFLATION 1914-1924

Between 1914 and 1924 Portugal experienced a clear inflationist process: there was a depreciation that attained a maximum at an exchange rate of £ 1 = 157 *escudos*, and stabilized around an exchange rate of £ 1 = 108.25 *escudos*, and consumer prices were multiplied by a factor around 24. At the same time, the money supply was multiplied by a factor around 17, nominal gross domestic product was multiplied by a factor around 11, and there was an overall stagnation of real gross domestic product and of *per capita* real gross

domestic product. (Notice that the increase of the gross domestic product deflator is rather lower than the increase of consumer prices, a statistical divergence that calls attention the still rough character of some estimates).

The start of this inflationary process was a consequence of the Portuguese participation in World War I: Portuguese expeditions had to be sent to Angola and Mozambique from 1914 on and to Flanders from 1916 on, military expenditures boomed, and borrowing at the Bank of Portugal, together with contraction of war debt towards Great Britain, was the only way to finance them.

The inflationary process went on in the immediate post-war years. From a domestic point of view, this was a consequence of the high public deficits and of their financing by borrowing at the Bank of Portugal, that remained the practice of the Portuguese government. From an external point of view, this was a consequence of the uncertainty surrounding the payment of German reparations and of war debts. Thus, the return to sounder financial practices, with lower public deficits and issuing of internal public debt to finance them, and the (transitory) solution of the German reparations and of war debts problems by the Dawes plan were pre-conditions for the stabilization of Portuguese monetary situation. These pre-conditions were attained in 1924. Stabilization was almost immediate, and was consolidated during the following years.

STABILIZATION, THE GOLD-EXCHANGE STANDARD, AND THE PORTUGUESE RESPONSE TO THE GREAT DEPRESSION 1924-1939

From 1924 on, the exchange rate and the price level remained around their 1924 levels. For a while, deficits of external payments and of public accounts still threatened this stabilization, but surpluses of public accounts became usual from 1928 on, and surpluses of external payments became usual from 1931 on. Thus, stabilization became quite solid during the 1930s.

In July 1, 1931, the Portuguese monetary authorities tried to go one step further and to adopt the gold-exchange standard as the Portuguese monetary system. A new gold *escudo*, roughly equivalent to the current paper *escudo*, was introduced: the definition was 65.5 mg of gold. The pound sterling should be the indirect link to gold at the fixed rate of £ 1 = 110 *escudos*.

However, gold-exchange standard lasted for Portugal only 81 days. In September 21, 1931, the pound sterling went off of gold, and the Portuguese monetary authorities were left with the choice of remaining in gold or

following the pound. They choose the second possibility. Until World War II the escudo remained pegged to the pound at the exchange rate £ 1 = 110 *escudos*, except for very short periods.

Price and exchange rate stability, coupled with some economic growth, during the 1930s, demonstrated that this was a good policy. By 1939, the money supply, the nominal gross domestic product, and the real gross domestic product had roughly doubled when compared to their 1924 levels, what allowed an increase of *per capita* real gross domestic product around 90%.

WORLD WAR II AND POST-WAR INFLATION 1939-1947

During the World War II years, Portugal experienced an inflationary process due to a radical, though transitory, change in its external payments position. For some years, the trade balance became positive, because of the increase of tungsten ore exports. At the same time, the country became a step in the way to America or a definitive refuge for many people fleeing from Nazi occupied Europe. Thus, capital inflows and remittances to refugees (mainly from the American Jew community) helped to make for very high surpluses in external payments, which the monetary authorities were unable to sterilize fully. As a consequence, money supply was multiplied by a factor around 4, while nominal gross domestic product and consumer prices roughly doubled, corresponding to an overall stagnation of real gross domestic product and of *per capita* real gross domestic product.

Of course, the comfortable position of external payments sustained a stable exchange rate. When the pound sterling began to depreciate against the dollar in 1939, the Portuguese monetary authorities adopted a scheme of milder devaluation that lasted for nearly one year. Then came the official pegging of the pound sterling to the dollar, which left the *escudo* at the rates of £ 1 = 100 *escudos* and $ 1 = 25 *escudos*, which prevailed until 1949. Thus, the 1940s were a period of transition from a pound-pegged to a dollar-pegged Portuguese monetary unit.

THE EPOCH OF THE BRETTON WOODS SYSTEM 1947-1973

Portugal remained formally outside the Bretton Woods system between 1945 and 1961, though, as the *escudo* was pegged to the dollar, Portugal behaved according to the IMF rules of the time. There was only a slight depreciation of the *escudo* against the dollar in 1949, when the pound sterling suffered

its first significant devaluation of the post-war years: the exchange rate became $ 1 = 28.75 *escudos*, a small correction compared to the pound sterling devaluation. At the same time, Portugal was one of the beneficiaries of the Marshall Plan, became one of the founding members of the European Organization for Economic Cooperation, and participated in the schemes of the European Payments Union and of the European Monetary Agreement.

The late 1940s and the 1950s were also a period of very moderate price increases. Both the money supply and the nominal gross domestic product roughly doubled, while prices experienced a less than 20% increase, what implied significant growth for real gross domestic product, which nearly doubled, and for *per capita* gross domestic product, which increased by around 70%. Public accounts and external payments showed moderate deficits, that did not arise significant financial problems —the Portuguese government was even able to come back to international financial markets.

In 1961, Portugal became at last a member of the IMF and of the World Bank, and the practice of the previous fifteen years became official rule. The exchange rate remained $ 1 = 28.75 *escudos* as established in 1949.

Of course, this was not a very big change. However, three important changes occurred more or less at the same time. One was the increase of emigration flows towards highly developed European countries (mainly France). Another was the beginning of the colonial war against the liberation movements in Angola, Guiné-Bissau and Mozambique. The third was the participation in the European Free Trade Association.

The increase of emigration flows meant an increase of emigrants remittances, and significant surpluses of the balance of payments. This produced an inflationary effect that the monetary authorities were again unable to sterilize fully. During the 1960s and early 1970s, the money supply was multiplied by a factor of around 4, the nominal gross domestic product was multiplied by a factor of around 3.5, and prices increased by around 60%.

The beginning of the colonial war meant higher deficits in the state accounts because of the increase of military expenditure. Issuing of public debt both in internal and external markets was enough to finance these deficits. This means they had no direct inflationary effect.

Inflation did not harm modern economic growth, at least in the short run. Growth of real gross domestic product and of *per capita* gross domestic product accelerated during the 1960s and the early 1970s, quite in line with international trends. Between 1961 and 1973, their levels more than doubled.

RECENT INFLATION 1973-1990

The final collapse of the Bretton Woods system almost coincided with the first oil shock, and with the Portuguese democratic revolution of April 25, 1974. Together, these three facts ushered a new epoch of Portuguese monetary evolution.

The crucial fact was, perhaps, the deficits of the balance of payments triggered by the oil shock. The trade deficit increased, because of the higher price of the main energy source of the Portuguese economy, and emigrants remittances tended to decrease, in the short run because of the widespread economic difficulties, in the long run because of the reduction of emigration flows. Thus, dependence on private capital flows and on public borrowing abroad to balance external payments became a structural feature of the Portuguese economy. In good years private capital flows closed the gap betweem the trade deficit and emigrants remittances; in bad years problems in external payments arose. Twice during the period under consideration (in 1977 and again in 1983) Portugal had to submit stabilization plans to the IMF to get exceptional help to improve its external payments situation.

The democratic revolution (and, in the short run, the exceptional inflow of refugees fleeing from civil war in Angola and Mozambique, the main former Portuguese African colonies, which became independent, but far from peaceful) called for the implementing of welfare measures, comparable to those of the European welfare states of the epoch. This implied higher public expenditure, and overcame the effect of the reduction of military expenditure resulting from the end of the colonial war. High public deficits, partially financed by borrowing at the Bank of Portugal, and monetization of these increases of public debt came back to Portuguese financial practice, with its unavoidable inflationary effect.

Internal inflation and problems of external payments, in the context of floating exchange rates, led almost inevitably to depreciation of the Portuguese monetary unit. During most of the period under consideration, this depreciation was controlled by the Portuguese monetary authorities according to a crawling-peg scheme, that led the dollar exchange rate from $ 1:25 *escudos* (the situation prevailing after the slight dollar devaluation of the early 1970s) to $ 1:150 *escudos* (the situation prevailing in the late 1980s).

Between 1973 and 1990, the money supply was multiplied by a factor higher than 12 and the nominal gross domestic product was multiplied by a factor of around 29, while prices were multiplied by a factor of around 20. This

allowed room for some real grwoth: real gross domestic product increased by nearly 65% and *per capita* gross domestic product increased by nearly 45%.

Another structural change that should be noticed was the gradual replacement of EFTA by the European Community as the main European institutional link of the Portuguese economy. An association treaty was signed in 1972, Portugal applied for membership in 1977, and became a member of the European Community in 1986.

THE DRIVE TOWARDS THE EUROPEAN MONETARY UNION

The drive towards the European monetary union brought some new features to the Portuguese monetary situation in the late 1980s and early 1990s. There was a hard attempt to bring inflation and depreciation under control, by means of budget discipline, which is succeeding. Of course, Portugal shared the dismal evolution of world and European economies in the early 1990s, an evolution that was aggravated by the negative impact of liberalization in the context of the European Union on several productive sectors, and eased by the positive impact on economic activity and on the standard of living of the same liberalization process and of the subsidies from European structural funds. It is likely that Portugal will be ready to join the new European currency in 1999, though not accomplishing fully all convergence criteria.

CONCLUSIONS

The six periods identified in the Portuguese monetary evolution between the late 19th century and the late 20th century may be divided into three types:

a) Periods of internal inflation and external depreciation —It is the case of the epoch of the international gold-standard (1891-1914), of World War I and post-war inflation (1914-1924) and of recent inflation (1973-1990).

b) Periods of internal inflation without external depreciation —It is the case of World War II and post-war inflation (1939-1947) and of the epoch of the Bretton Woods system (1947-1973).

c) Periods without either internal inflation or depreciation —It is the case of the late 1920s and 1930s stabilization period (1924-1939).

Periods of internal inflation and external depreciation were caused by deficits of public accounts, financed (at least partially) by monetized borrowing at the Bank of Portugal, coupled with problems of external payments.

Periods of internal inflation without external depreciation were caused by surpluses of external payments, that triggered increases of the money supply higher than real economic growth, coupled with surpluses of public accounts, or with deficits of public accounts, financed by public debt issued in the market.

Periods without either internal inflation or depreciation were caused by absence of significant deficits both of external payments and of public accounts.

None of these situations may be considered surprising from a theoretical point of view. Anyway, they show a variety, that might be unexpected in the case of a debtor country.

APPENDIX

Table 1. *Rates of growth of economic activity, money supply and prices.*

Period	nominal GDP (%)	Real GDP (%)	Real GDP per head (%)	Money Supply (%)	GDP Deflator (%)
1891-1914	+ 1.3	+ 0.8	* + 0.0	+2.6	+ 0.6
1914-1924	+ 25.4	* - 2.2	* - 2.5	+29.7	+ 27.6
1924-1939	+ 3.7	+ 4.8	+ 3.5	+6.1	- 1.1
1939-1947	+ 8.0	* - 0.3	* - 1.2	+21.3	+ 8.3
1947-1973	+ 7.5	+ 5.5	+ 5.3	+7.6	+ 2.0
1973-1990	+ 20.7	+ 2.8	+ 2.4	+15.2	+ 17.8
1891-1990	+ 9.1	+ 3.0	+2.3	+10.7	+ 6.1

* not significantly different from 0 at a 10% confidence level
Source: computations based on data from Mata, Valério (1994).

Table 2 . *Behavior of public finance and of the balance of payments*

Period	public surplus (+) or deficit (-) (% of GDP)	borrowing at the Bank of Portugal (% of public (% of Public deficit)	balance of payments surplus (+) or deficit (-) (% of GDP)
1891-1914	- 0.4	53	- 1.8
1914-1924	- 5.9	75	- 11.1
1924-1939	- 0.6	—	- 4.1
1939-1947	- 1.2	—	+ 0.0
1947-1973	- 1.1	—	- 1.3
1973-1990	- 7.6	22	+ 0.8
1891-1990	- 2.5	—	- 2.3

Source: computations based on data from Mata, Valério (1994).

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FOREIGN DIRECT INVESTMENT WITHIN A RECONSTRUCTED BALANCE OF PAYMENTS PRELIMINARY RESULTS FOR BELGIUM, 1879 - 1939

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INTRODUCTION

As in most countries, in Belgium data series on Foreign Direct Investment (FDI) and on the Balance of Payments (BOP) do not exist prior to 1948. Although researchers like Fernand Baudhuin and B.S. Chlepner bravely tried to establish some figures right after WW I and for some years during the Interwar Period, incomplete data and unfinished methodology until now prohibited a consistent approach. Other authors focused on Belgian investment in one country or region In effect, Baudhuin (and others) only gives us aggregate series on a limited number of years. This does not enable us to make a detailed breakdown. [1]

Though Belgium was already active in foreign markets long before this date, 1879 marks the earliest entry of an FDI company on the Brussels' stock exchange. To put the research concerning FDI into the right perspective, and in order to prevent becoming one of those studies trying to maximise the role of FDI (and of *l'Expansion belge*), we chose to make a thorough and detailed reconstruction of the balance of payments (BOP) for Belgium in relation to FDI.

Since there is no consistent documentation available on Belgian capital transfers prior to the foundation and of the International Monetary Fund (IMF) in 1947, we had to find a way to reconstruct time series on capital outflows through companies active abroad, and on the returns these FDI enterprises generated for the Belgian Capital market (inflow). Consistent with the IMF proposals, we choose the level of the enterprise itself as the point of measurement for these capital transfers.

1. Baudhuin (1924, 1932, 1944), Berger (1931), Billiard (1915), Chlepner (1930).

USING BALANCE SHEETS TO RECONSTRUCT FDI ON A BALANCE OF PAYMENTS FRAMEWORK

Since the foundation of the International Monetary Fund (IMF), transfers on the balance of payments have usually been measured top-down. In Belgium, right after the second world war, government approvals, which were required to perform inward/outward investment were the main source of information. But these figures only accounted for those types of investment requiring a priori approval. Over the years, as the economies gradually opened up the need to acquire government approval all but vanished.

Nowadays, most countries use the International Transaction Reporting Systems (ITRS), which is a system requiring banks performing inward/outward transactions with a foreign economy to report these transactions to their central bank, which in its turn transmits them to the IMF. Though it guarantees a higher degree of reliability, since all categories of investment are included, it still relies heavily on the reports from the banking institutions. Especially for smaller transactions, this often poses problems. Also, ITRS only monitors cash transactions, whereas non-cash transactions such as changes of equity capital should also be regarded as capital transfers.

The IMF itself implicitly encourages the use of enterprise surveys for FDI-BOP reconstruction. In its most recent *Compilation Guide* (1995), we found the following overview of possible sources for measuring BOP capital transfers through FDI on a year-to-year basis (Table 1).

Not only does this overview imply that the major disadvantages of enterprise surveys are in cost and labour intensity, rather than in methodological imperfections, it also shows that the inverse reasoning goes for both other sources (ITRS or approvals), which are relatively cheap but eclectic in their structure. Another major problem is that ITRS leaves no possibility to (re)construct data series before its implementation in the international monetary system.

In the same way, information from approvals only reflects those capital flows for which government approvals were necessary at that time, and as recent FDI history shows, these categories have a tendency to shift rapidly and drastically when policy evolves. This leaves us with enterprise surveys as the most reliable source, and as the sole type of data series for which consistent, long-term data series can be (re)constructed.

Table 1. *Sources for information on FDI on the BOP, their advantages and disadvantages.*

Advantages	Disadvantages
International Transaction Reporting System (ITRS)	
• Most of the information is readily available from banking records.	• In general, only cash transactions are measured. Supplementary records are necessary for non-cash transactions (e.g. reinvested earnings, equity in form of machinery, etc.).
• Saves the expense of developing alternative collections for countries already this method.	• FDI involves a number of classification problems on a generalised foreign exchange/banking report form. The level of detail for FDI transaction is therefore limited.
	• ITRS may not provide information on levels of investment.
	• Transactions in domestic currencies or through accounts of non-resident banks are difficult (but not impossible) to measure.
Enterprise Surveys (ES)	
• ES provide for complete recording of FDI transactions and stocks of investment by each enterprise surveyed.	• It may be difficult to maintain comprehensive lists of enterprises with direct transactions.
• Information on other economic activity relating to FDI can be easily collected for analytical purposes and for quality control.	• Countries that do not formally use enterprise surveys for BOP measurement will incur costs in developing and implementing specialised FDI surveys.
• ES provide the best opportunity to explain to data providers the concept of FDI and the treatment of particular transactions.	

Advantages	Disadvantages
Information from Approvals	
• Information is readily available as by-product.	• Approval processes are rarely set up with BOP requirements in mind. The range of information for BOP compilation is therefore limited. • There can be significant time lags between approval and actual investment, or approved investment may never actually take place. • Information on income (incl. reinvested earnings) may not be available. • Information of non-equity transactions, such as lending and intercompany accounts is limited. • Information on stocks of investment valued at market price is not available. • The approval process may relate only to investment in particular industries or to investments greater than thresholds. • Generally, approvals only relate to direct investment in the reporting (host) country and not to outgoing FDI.

Source: IMF, *Balance of Payments Compilation Guide*, Washington DC, 1995, pp. 153-154.

As we will try to prove in the following paragraphs, a bottom-up reconstruction of BOP and FDI through information supplied by FDI companies does not conflict with the methodology of the BOP as it has been developed by the IMF. In table 1a and 1b, we give a very brief overview of the Balance of Payments structure as the IMF proposed it in 1949 and 1993. Throughout the years, the methodology underwent several changes; but the basic structure remained intact.

Table 2a. FDI on the (original) Balance of Payments (IMF 1947).

Current Account		Capital Account	
Merchandise (Export - Import)		Private	
Non-monetary gold movement		Long-term capital	
Foreign Travel		- Direct investment	
Transportation (Freight)		- Portfolio: bonds	–
Insurance		- Portfolio: shares	–
Investment Income		Short-term capital	–
- Direct Investment	+		
- Other Interest	+	GOVERNMENT & BANKS	
- Other Equity		Long-term capital	
Government		Short-term capital	
Donations		Monetary Gold	

Source: IMF, *Balance of Payments Yearbook* 1938-1947-1948.

Table 2b. FDI on today's Balance of Payments (IMF 1993).

Current Account		Capital Account	
Merchandise		Direct investment abroad (FDI)	
Shipping		- equity capital	–
Passenger services		- reinvestment of earnings	–
Other transportation		- other long-term capital	–
Travel		- short-term capital	–
Reinvested earnings		Direct investment (reporting economy)	
Investment Income	+	Portfolio Investment	
-Direct investment income		Other long-term capital (official sector)	
- Portfolio investment income		Other long-term capital (banks)	
- Other investment income		Other long-term capital	

Source: IMF, *Balance of Payments Manual*, 1993.

By introducing balance sheet information on a balance of payments, as we will do further on in this paper, one has to take into account that the IMF's balance of payments was and is structured on a different basis than a company balance sheet. This measures the displacement of capital, by registering the actual international payments made by banks. Our FDI figures do the same, with this caveat that we assess these transfers at its origine (the company), by accounting for the yearly differences in foreign investments on the balance sheet. There is also another important difference between the outflow of capital (foreign investment), which is measured on the Capital Account, and the investment income which resulted from these investments, which is accounted for on the Current Account.

OUTLINE OF THE RESEARCH PROJECT

To compensate for the lack of Belgian data on BOP transfers through FDI before 1947, we decided to set up a comprehensive enterprise survey. The sample of enterprises we used here to estimate capital outflow through FDI currently includes all Belgian stock companies which stated their prior activity to be in FDI. Furthermore, some Belgian companies with branches abroad were included, and a number of foreign enterprises set up with Belgian capital. We continually seek to enlarge this sample, so that in time it could incorporate all Belgian ventures (regardless of their juridical status). For the moment, though, the sample is constituted mainly by stock companies set up under Belgian corporate law, and quoted on the Brussels' stock exchange.

The generalised balance sheet

From this sample (784 companies), we took a number of surveys (1880, 1890, 1900, 1910, 1913, 1920, 1930, 1939). For all the companies involved, we processed the balance sheets for that year. Under the 1873 law, all stock companies based in Belgium where forced to publish their yearly figures in the *Annexes au Moniteur belge*. These publicly accessible balance sheets were, of course, of great value for contemporary financial analysts, and from 1890 onwards they were compiled into a (privately owned) yearbook, the *Recueil financier annuel*—which we used for convenience. Apart from the intensity of labor, Belgian corporate law was still not that well-defined that it did not leave room for (entrepreneurial) interpretation.

Extract from the 1873 company law.

Art. 62. Chaque année, l'administration doit dresser un inventaire contenant l'indication des valeurs mobilières et immobilières et de toutes les dettes actives et passives de la société, avec une annexe contenant, en résumé, tous ses engagements.

...

Art. 62. Every year, the board of directors has to make an inventory indicating the movable and immovable assets and all active and passives company debts, with a supplement containing all company engagements.

...

Art. 65. Le bilan et le compte des profits et pertes doivent, dans la quinzaine après leur approbation, être publiés aux frais de la société...

Art. 65. The balance sheet and profit and loss account have to be published within fifteen days, at the company's expense...

Only in 1913 would company regulation set out some standards for companies reporting their balance sheet (Liabilities: *Envers elle-même; Envers des tiers;* Assets: *Immobilisé, Réalisable; Disponible*). Although this facilitated processing the company results, in terms of reliability the traditional biases remained. To compensate for these imperfections, and in order to focus on the figures relevant for the reconstruction of FDI and the balance of payments, we processed these data into a generalised balance sheet. All data were taken at the end of the year (December 31st), after distribution of profits. In this way, they represent the actual financial situation of the company.

Table 3a. *Generalised balance sheet structure.*

ASSETS (Actif)	Liabilities (Passif)
Fixed Assets (*Immobilisé*) *	Actual Stock Capital (*Capital social*) **
Portfolio (*Portefeuille*)	Bond Capital (*Obligations*)
Investments (*Participations & Prêts*)	Reinvested Earnings (*Autofinancement*)
Consolidated Losses (*Perte*)	Bank Loans (*Emprunts & Hypothèques*)
	Reserve Funds (*Réserves*)
War Losses °	Repayments on War Losses °

* This category also includes the (estimated) value of initial transfers in concessions and grounds (occasionally listed as Apports) which in a number of cases were paid for in shares or a combination of cash and shares.

** In some cases, this differs from the official figure, either by undercapitalisation (not all the stocks have been underwritten) or by a company policy aimed at reacquire stock capital (*Amortissations*). The figures used here represent the actual value of stock capital.

° These categories emerge in 1920. War Losses represent those fixed assets and other investments lost through the First World War. War repayments are the company's debts towards government, which financed reconstruction by extending credit to company affected by war. Since we are not occupied with actions on Belgian soil, we do not take them into account.

Based on the model introduced by Mark De Geyndt, *Financiële Intermediatie en economische Groei. De Belgische Ervaring in de 19e en 20e eeuw.* Appendix IV.2.

Table 3b. *Generalised profit and losses account*

PROFITS (*Profits* or *Crédit*)	LOSSES (*Pertes* or *Débit*)
Year earlier profit (*Solde reporté*) *	Payed out dividends (*Dividends*)
	Bond payments (*Intérêts sur Obligations*)
	Interest payments (*Intérêts*)
	Royalties (*Tantièmes, Parts fondateur, Patentes, etc.*)
Profits remaining after distribution	

* These are accounted for as reinvested earning., which are part of the generalised balance sheet.

a) Assets

The figures proposed here do not represent the whole of the balance sheet value of the companies involved. On a whole, the four subtotals listed on the assets side represent between 70% and 94% of balance sheet totals. Fixed assets usually make up the bulk of these assets, though we only took into account those in direct connection with the foreign activities —if distinguishable.

As this study tries to establish the amount of Belgian capital which was invested (and in a number of cases lost) in foreign investments, we must consider the fact that not all the companies resources were active abroad. Fixed assets were calculated as being those assets which were invested beyond

retrieval. Losses of these investments could in fact be generated by far more factors than just the bankruptcy of the company. Other forms of non-retrievability of investment include: robbery, fraud (e.g. during the acquisition of concessions or grounds), natural and other disasters, wars and revolutions, nationalisation and other forms of confiscation by state authorities. As we will see, these situations were not at all imaginative (e.g. the Russian Revolution). To incorporate all these eventualities into our figures, we took the following categories into account:

* Investment in land sites, concessions, buildings, machinery in foreign countries directly and indirectly linked with the exploitation, including housing for the work force, junctions to the railway system, power supplies and all other investment in infrastructure (*Terrains, concessions, travaux, constructions, matériel, outillage, immeubles, habitations, raccordement, travaux en cours*)
* Sums paid out in order to start up the company (*Premier établissements, études*)
* Payments to the initiators or original owners (*Apports*)
* Total rent paid on grounds and concessions in exploitation (usually listed as *Terrains or concessions*).
* All other downpayments on the former categories.

The other categories which fall under fixed assets such as buildings and grounds in Belgium were NOT taken into account, because they do not fit in the global view of foreign investment as capital exports. Also, for the larger part, they were retrievable in case of e.g. nationalisation, and were as such not entirely lost when dividing up the remains of the bankrupt company.

Portfolio and participating interests are categories which become increasingly important after the emergence of holdings and banks, specialising in foreign investments. They have been separated here, given the different nature of the risks (stock market fluctuations vs bad management & bankruptcy).

Consolidated losses are a key post in determining the success ratio of Belgian foreign investment. The remainder mainly consists of merchandise in stock (listed as *Magasin* or *Marchandises*) and bank accounts or cash (listed as *Banque* or *Caisse*).

Immediately after WW I, War Damages (*Dommages de Guerre*) start making up an important part of the balance sheet. In the case of foreign investment however, it is unclear whether these damage claims were directed towards

the Belgian, German, Austrian or other governments. Furthermore, we notice that during the 1920s and 1930s, these claims start disappearing without being paid out —indicating, probably, that the companies accepted their defeat.

b) Liabilities

On the liabilities side, our census reflects between 65% and 83% of balance sheet totals. Initially, our aim was to record only stock and bond capital —given the fact that these categories are the most clear and direct form of long-term export of Belgian (financial) capital. To reflect the impact on the Belgian capital market, we also incorporated bank loans into the census (listed as *Emprunts, Hypothèques* or simply as *Banquiers*). In cases where these could not be distinguished from other creditors, we took all listed debt capital (*Créditeurs*) into account. We noticed, however, that after WW I these categories had a rapidly decreasing impact on the balance sheet.

The 1913 law on limited companies reduced the risk for investors by introducing obligatory reserve —and sinking finds (*Reserve statutaire, Fonds de Reserve, Fonds d'Amortissement, Fonds de Prévoyance*) in order to protect shareholders' interests. As these funds are crucial in estimating the rate between the investors' risk (stock investment) and returns (dividend payments & the probability of regaining stock investment after bankruptcy), we chose to take them into account as internal financing —recurrently, incorporating all reserve funds listed before 1913.

The remaining categories here are either yearly benefits, suspense accounts or the balance between unpaid bills to suppliers and the value of IOUs owned by the company.[2] All these are very volatile categories, closely linked with the accountants' attitude (in a time where there were no laws on corporate accounting). A company could make its account as misty as it wanted them to be —e.g. to delude competitors.

2. These observations are similar to those of M. De Geyndt in *Financiële Intermediatie en Economische Groei*. Measuring the financial health of Belgian companies, he also took into account a number of other categories —such as *Réalisable* and *Disponible* on the assets side, and *Bénéfices* and all *Créditeurs* on the liabilities side. Before 1920, these categories were seldom stipulated separately, and could not be processed properly. Also, because they have little direct impact on the foreign investment balance, we chose not to research them. M. De Geyndt, *Financiële Intermediatie en Economische Groei,*. p. 67 & appendix IV.

c) Profits and Losses Account

Dividend payments: The main incentive for buying stock in a company (apart from getting a grip on management), were the dividend payments one received —if the company fared well.

Bond payments: Bond payments are probably the return category which have the strictest legal protection. There are only a very limited number of situations in which a company —after agreement with state and shareholders— can hold bond payments. This does not mean this is an easy to measure category. First of all, the name changes: *Interêts sur obligations, Interêts, Service financier,* etc. Furthermore, a great number of companies do not mention their bond payments separately in their yearly accounts. Bond payments, payments on bank loans, overhead costs, taxes and other costs were all simply accounted for as *Frais et interêts*.

Still, after trying to compensate for all these difficulties, we could only find bond payment figures for 60-70% of the companies working with bond capital (according to their balance sheet). This anomaly could be explained partly by suspension of bond payments, but for the larger part by the unclear composition of the yearly accounts.

Royalties & directors' bonuses *(Tantièmes):* This category of return-on-investment flows to a very limited number of persons: the company managers and the *commissaires* (directors), usually a group of 8-16 *capitalistes*. They represented the major investors (shareholders), the bankers (shareholders, providers of loans, etc.) and in a number of cases, were men of social importance (nobility, captains of industry), which were being used as a visiting card to convince foreign governments of the importance of their company.

Furthermore, not only were these *tantièmes* paid out to only a few investors, these men usually also held positions in several companies at one time. On the specific links (concentrated around certain regions and/or sectors) between different companies and their results in terms of strategy and management, further research is necessary.

If we allow ourselves some conjectural arithmetic, we might assume that 5-10% of managers and directors held a position in more than one company at a time —or over the whole period, switching between companies. 784 companies were taken into the sample, of which between 18 and 324 were active at one time. Assuming an average number of 10 managers and directors per company, this would suggest a total of 180 up to 3,240 directors. With an overlap of 5%, this would result in a figure of 162 up to 3,078 beneficiaries

of these royalties. But only detailed study of the company charters will provide us with a clear picture of the situation.

In later analysis, we will not incorporate these figures on the return side. Although they provided a capital flow towards the Belgian capital market (supposing that the larger majority of *administrateurs* were Belgian), these funds were not the main incentive for investors to venture abroad. And as one could only become administrator through election (and thus through possession of shares), most of these directors got their income form dividend payments. On another field, it is remarkable that most *tantièmes* were paid out in the transport sector (and in Europe and the Belgian Congo), where the holding and trust structures were the most prominent. So it is very probable that these sums were only another form of capital transfers between the different constituents of a holding than an actual return on foreign investment.

Interest payments on bank loans: Another form of return was the interest payments companies made on their bank loans, supposing these banks were Belgian banks, of course. Given the fact that these funds had to be borrowed on market interest, and the conservative strategy of banks towards such risky ventures as foreign investment, one would expect a handsome return from these funds. Unfortunately, this hypothesis could not be sufficiently checked. We already mentioned the fact that most of the balance sheets and profit & loss accounts do not always separately account for the different costs. Categories such as *interêts, frais, frais d'exploitation* and other may from year to year and from company to company have completely different meanings, and only in a very few (8) cases did we find separate mentioning of interest paid on bank loans.

Processing the balance sheets

This bottom-up approach is not without risk of bias. Relying on companies' balance sheets always inhibits the danger of copying their (deliberate?) mistakes. Different fiscal regimes, both in time and space, might have driven these companies to exaggerate some parts of their balance sheets.

As a whole, however, given the long-turn comparative approach and the fact that these errors are bound to show up sometime, we do not think this to be a significant error, or at least not more significant than in today's balance of payments. Include the fact that the general fiscal regime at least in Belgium (i.e. the reporting economy) in that period was very, very mild (not to say absent), and this leaves very little incentive for FDI companies to falsify data.

We could drive this argument even further the other way. The success of a privately owned journal such as the *Recueil financier annuel* and of various newspapers focusing on the Brussels' stock exchange (e.g. de *Moniteur des Interêts materiels*) bears witness of a developed capital market, eager to attract investors. One could argue that this might have lead some entrepreneurs into exaggerating their profits in order to influence share prices or to attract new investors. But given the strict laws on dividend and bond payments, and the fact that shareholders would no doubt insist on their share of the profit, such behavior would prove counterproductive even in the short turn.

A second, possible bias could lie in the fact that for the moment, we mostly incorporated private enterprises which were quoted on the stock exchange (Brussels, Paris, Saint Petersburg). It was clear from the beginning of the research that not all Belgian enterprises active on foreign markets operated within the legal framework of a (Belgian) stock company. Family enterprises, branches of existing Belgian companies (e.g. Solvay) and other types of investment with no formal, juridical character do not show up in our figures —for the moment. In its yearly overviews, the *Moniteur belge* distinguished between five types of companies. [3]

I. *Sociétés en nom collectif* (Partnerships)
II. *Sociétés en commandite simple* (Limited partnerships)
III. *Sociétés anonymes* (Public limited company)
IV. *Sociétés en commandite par actions* (Limited stock company)
V. *Sociétés coopératives* (Co-operatives)

Of these five official types of enterprises, only companies working on the basis of public stock capital (III & IV) were taken into account when the initial list of companies was compiled. We do not believe this to result in a serious error.

In 1905, the *Société d'Etudes coloniales* published a list of *Etablissements belges à l'Etranger*. This was meant as an address-book and a voluntary survey on Belgian enterprises active abroad. It gives a fairly accurate list of Belgian foreign investment companies, since there were no questions asked or strings

3. Article 2 of the *Loi contenant le titre IX, livre Ier, du code de commerce, relatif aux sociétés.* (*Moniteur belge*, May 25th, 1873).

attached. Participation resulted in the publication of the company's address and main occupation and thus in free advertissements towards possible customers, without fear of leaking vital information to state authorities or competitors. The incentive to participate was maximum, while non-participation could even result in a loss of market share. [4]

The inquiry revealed a total of 739 Belgian *établissements* (industrial or exploitation sites) active in foreign countries which could be regarded as Belgian foreign direct investment. After omitting some double entries, this number could be narrowed down to 449 companies active abroad (a number of them, like Solvay had up to 12 *établissements* in different countries). Our own figures for 1905, which represent the companies on which we possess enough reliable and continuous information (published balance sheets) get us at 285 Belgian companies active in foreign investment—the bulk of them constituted under Belgian law.

The damage inflicted by the First World War, the sudden collapse of the Russian market (among others), the growing post-war protectionism and the increasing Belgian domestic focus on the Congo (private hunting ground for Belgian companies) probably further eliminated a number of smaller businesses and also a number of larger ones (e.g. Solvay's investments in Russia and Germany) which did not show up in our figures. Other enterprises were forced, either by the circumstances cited above or because the company's need for new capital exceeded private financing possibility, to enter the public capital market and to transform itself into a stock company.

Other comparisons for different years, though incomplete, suggest likewise. For the Interwar Period, in which investment in the Belgian Congo was predominant, the correspondence between our figures and government and independent surveys, such as the *Annuaire coloniale belge* (1930, 1935) is over 95%. [5]

At first, it might seem arbitrary to take the legal position of a company as basis for selection. As we already mentioned above, there are clear incentives, however, why entrepreneurial and shareholder behaviour should

4. The simple fact that an entrepreneur was not informed of the inquiry would of course also result in non-participation. From our point of view this constitutes no real problem though, since the fact that he was out of touch with what was going on in Belgium classifies him as an expatriate and so he does not enter into our scheme of foreign investment.

5. This is no surprise, since almost all of these companies were active in the Belgian Congo, and Belgian regulation almost forced them to take the juridical form of a stock company. Other surveys include the *Annuaire coloniale belge (1908, 1920, 1930)*, the publications of the *Société d'Etudes belgo-russe* and the yearly (sometimes fragmentary) reports of Belgian consuls abroad.

eventually converge towards the juridical form of a stock company, especially in the case of FDI.

The legal framework of a stock company clearly defined mutual responsibilities of both investor and *investee* (entrepreneur, director, manager), which was no superfluous measure, taking into account that the capital would be exported into a foreign, far-away country. To the entrepreneur, it facilitated the raising of capital, while the shareholder was always at liberty to downsize or upgrade his financial interests as he deemed fit.

Especially after World War I, when the (colonial) holding companies (with their pyramidal system of stock companies and cross-over ownership) strengthened their grip on the Belgian capital market, the correspondence between a survey of FDI companies on the Brussels' stock exchange and the actual situation is striking. But even before that date, there is a demonstrable correlation between firm size and convergence towards the juridical form of a stock company. Only a very limited number of capitalists were willing to finance the growth of their overseas enterprise by their own means. Increasingly, this was done by bank loans, and even more so by raising capital on the stock market (shares, bonds). By doing so, they transformed their enterprise into a stock company, and as such are quoted in our figures.

The main advantage is that through the bottom-up way of reconstruction, we were able to present an actual balance of payments, without losing track of the actual capital flows involved. Rather than being based on aggregate information coming from monetary exchange, this bottom-up approach takes into account the actual capital flows outward (fixed assets, portfolio, etc.). Whereas in current balance of payments the link between capital transfer and investor completely disappears, the bottom-up method will eventually allow us to analyse who did it, how he did it and why he did it.

This logic is reflected in the figures. We might start by supposing that, if between 65 and 95% of the companies active in FDI had the legal form of a stock holding company, our figures also represent about 65-95% of total capital investments from Belgium to foreign countries through FDI.

We do believe, however, that the actual correlation of our figures is much higher. First, when we take a look at the companies mentioned in the 1905 and 1935 surveys which did not show up in our survey, we notice that most of them ware active in trade and commerce. This lowers their impact on the figures, since this type of companies usually made few capital investments and invested the bulk of their capital in merchant goods, transport fares and rents (offices, warehouses).

Secondly, it is very probable that the remainder of the non-registered companies were rather smallish businesses. Not only does the share of stock holding companies in Belgian FDI rise as time progresses (from 65% to 95%), but there also is the general tendency to formalise company structures as firm size increases and the need for new (stock) capital arises. This was especially the case for pre-war Belgium, where mixed banks held a strong grip on the capital market. So, we could put forward the hypothesis that a large firm is more likely to have the legal form of a stock holding company.

This then implicates that firms which do not have this legal form, are most probably smaller (family) businesses. Although their (innovative and enterprising) role in FDI merits further research, what concerns us here is the fact that the impact of these small enterprises on the BOP was low. If they made up 35% or 5% of the total number of Belgian companies active abroad (see above), literature seems to imply that their share in capital transfers has to be evaluated much lower. If their impact increases, so does the probability that they will become a stock company, and they will show up in our survey.

Working through balance sheets of stock companies thus proved to be a reliable method of selection. In many ways, our method of selection resembles the IMF's proposals for enterprise surveys. To ensure coherence, the IMF developed standardised forms for its contemporary enterprise surveys. As shown in table 4, the so-called *IMF Model Form 12* is best fitted for our uses, since all the relevant categories can be found on the balance sheet and profits and losses accounts.

Table 4. *The IMF's Model Form 12 in practise.*

Elements considered necessary to establish Foreign Direct Investment and International Investment Position.	Corresponding categories on our generalised balance sheet or profits and losses account (table 4a and 4b) *
Financial Instruments	
• Equity includes stocks (shares) and other equity (investment in branches). Non-voting stock (e.g. preference shares) should be recorded as bonds.	• Stock Capital (Capital social) had to be accounted for by law, up to the amount that was actually deposited.
• Bonds and money market instruments include bonds, commercial papers and other tradeable non-equity securities.	• Bond Capital (Obligations) Belgian law required a very detailed, yearly report on the amount of bonds in circulation and those repaid.
• Financial derivatives include tradeable financial derivatives or secondary market instruments (options, futures, etc.).	• (Does not apply for 1879-1939)
• Loans include loans and financial leases.	• Bank Loans (Dettes à court terme; Envers les tiers) Only after 1913 were companies required to make detailed statements on their liabilities towards banks and third persons. Before 1913, these information is sporadically available.
• Deposits include checking accounts and other time deposits.	• Bank Deposits (Caisse, Banquiers) are generally incorporated on the assets side.
• Trade credits are commercial credits extended by and prepayments made by exporters and importers.	• Most of these were accounted for as Comte des créditeurs/ débiteurs.

Elements considered necessary to establish Foreign Direct Investment and International Investment Position.	Corresponding categories on our generalised balance sheet or profits and losses account (table 4a and 4b) *
Position, Transactions and Income	
• Opening position refers to the value of the claims and liabilities at the beginning of the period. The closing position refers to the value of claims and liabilities at the end of the period.	• Year-to-year analysis of the balance sheets provides ample information on stocks and flows. (Up untill this moment, we measured FDI flows with 10-year intervals)
• Financial transactions are transactions relating to acquisition/disposal of financial claims or liabilities (stock sales/purchases, etc.).	• The generalised balance sheet is designed specifically to reflect these flows.
• Income refers to income receivable from claims or as income payable as a result of liabilities. The most common forms are dividends, remittances of profit and interests.	• The generalised profit and losses account reflects flows through dividend payments, bond payments, interest payments and royalties (directors and patents).

* The definitions are taken from the original, 1873 Belgian corporate law and later changes and refinements (1919, ...).

Source: IMF, *Balance of Payments Compilation Guide*, Washington DC, 1995, p. 33-36 and 331-342.

PRELIMINARY RESULTS

Processed results from the balance sheets, 1879-1939

With the remarks made above in mind, we processed the balance sheets of the 784 companies for 1890, 1900, 1910, 1913, 1920, 1930, 1939, in order to get an overview of Belgian, pre-war foreign investment. A first parameter we took into account was the amount of equity capital (stocks and bonds) that was invested in these enterprises (table 5), being a measure of investor's interest. If we take into account inflation,[6] then the period 1890-1910 marks the zenith of *'L'Expansion belge*, while the Interwar period is characterised by its growing and predominant focus on the Belgian Congo.

6. All figures are in current prices, in order not to disturb the balance of payments approach. Only after WW I did the value of the *Belgian Franc* (BEF) start to fluctuate, as the Golden Standard was left. By 1935, the Franc had stabilised at 10,4 % of its pre-war value.

Table 5. *Capital invested in Belgian FDI, 1879-1939 (flows).*°

(mln BEF, current) yearly averages	1879-1890	1891-1900	1901-1910	1911-1913	1914-1920*	1921-1930*	1931-1939*
Europe	10.4	41.8	44.4	24.5	36.4	246.5	68
Russia	2.6	67.9	14.1	28.9	5.6		
Belgian Congo	3.3	13.1	13.5	35.7	38.5	854.2	-604
Africa (rest)	0.2	2.2	-0.1	0.1	0.7	9.3	-43
North America	1.4	0.4	8.1	11.1	-0.2	7.1	-79
Southern America	8.2	12.5	31.8	34.5	17.8	57.4	-100
Far East		0.9	7.7	7.9	12.9	46.2	-5
Middle East	0.3	6.3	24.8	8.5	11.5	49.9	21
Oceania		0.3	-0.1		-0.6		
Total Capital Outflow	26.5	145.6	144.5	150.7	123.0	1241.8	-749

° Based on equity capital and bond capital.

* After the end of WW I, the value of BEF started to depreciate rapidly. In 1920, the BEF had already fallen to 37.5 % of its pre-war value (in *Francs d'Or*), and continued its downwards course. From 1927 onwards, this ratio was stabilised at 14.4 %, in the period from 1935 until 1939 it was at 10.4 %. (Baudhuin, *Histoire économique*, pp. 436-437)

The capital invested in these FDI companies was then translated in foreign, investment (table 6). As we described above, we took into account all investment in Fixed Assets, Participating Interests and half of the company's Portfolio —to the extent that these investments were outside Belgium. The total of these three categories represents the capital outflow generated by FDI companies.

In general, the characteristics of these flows resemble the activity on the stock exchange (see table 5). Around the turn of the century, Belgian investment was present in almost every continent. Europe and later Russia (1895-1900) attracted the bulk of Belgian FDI investments, while Central and South America and the Middle East were late arrivals. WW I changed the picture drastically, neutralising investments in (Soviet) Russia and focusing most

interest on the Belgian Congo.[7] The world-wide crisis after 1929 is reflected in a very sharp decline in FDI investment, and in net disinvestment in a few areas.

Table 6. *Capital Account Outflow through Belgian FDI, 1879-1939.* °

(mln BEF, current) yearly averages	1879-1890	1891-1900	1901-1910	1911-1913	1914-1920*	1921-1930*	1931-1939*
Europe	12.8	36.4	35.7	31.7	35.2	298.1	265
Russia	3.2	60.9	6.6	27.2	15.3		
Belgian Congo	1.4	11.9	13.3	-12.6	72.5	786.8	588
Africa (rest)	0.1	1.5	-0.3	0.1	-0.1	6.8	-36
North America	1.4	0.5	5.9	8.6	0.6	2.8	-10
Southern America	7.3	12.3	29.5	37.8	18.4	151.7	-100
Far East		0.6	7.2	6.4	12.2	53.3	-27
Middle East	0.4	5.1	21.5	10.6	-1.3	59.1	49
Oceania		0.2	-0.1		-0.1		
Total Capital Outflow	26.7	129.6	119.4	109.8	152.6	1358.8	708

° Based on investments in Fixed Assets, Participation interests and 50 % of Portfolio investments.
* See table 5.

Though not all these investment generated profits, and a great number went bankrupt, the return on Belgian overseas investment was everything but negligible (Table 7 and Figure 1). While the period 1891-1900 marked the era of investment, most of the pre-war profits were generated in the years after. Europe and Russia, the main destinations of Belgian FDI also generated most of the pre-war returns, but also the Congo (Freestate), Central and South America and the Middle East proved interesting. WW I, marks the beginning of a different era. Still, although the Belgian Congo was the most important source of returns, its role was less impressive, as Europe, Southern America

7. These figures do not take into account government expenditure in the colony. Given the strong interaction between some companies and colonial government, total investment will probably be much higher.

and the Far East exhibited higher rates of return. A second shock comes after 1929, which seems to hit the non-colonial investments harder.

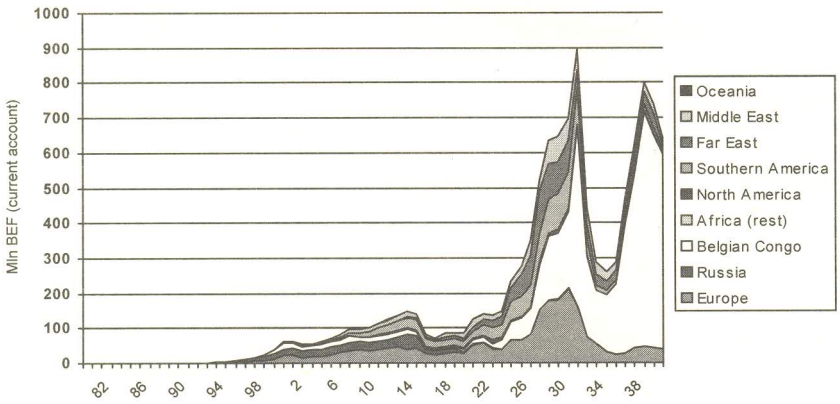
Table 7. *Current Account Inflow generated by Belgian FDI, 1879-1939.* °

(mln BEF, current) yearly averages	1879-1890	1891-1900	1901-1910	1911-1913	1914-1920*	1921-1930*	1931-1939*
Europe		8.6	29.9	43.1	40.2	118.1	383
Russia		8.4	21.8	34.9	8.8		
Belgian Congo	0.1	4.9	14.9	14.9	9.1	145.6	3426
Africa (rest)		0.0	0.1	0.1	0.2	0.1	
North America		0.1	1.1	3.4	4.5	8.6	25
Southern America		0.9	9.4	27.4	24.7	72.9	162
Far East		0.2	1.1	3.5	10.2	67.7	289
Middle East		0.4	7.7	13.6	13.8	41.1	259
Oceania		0.1	0.2				
Total Capital Outflow	0.1	23.7	86.1	140.9	111.5	453.9	4545

° Based on dividend payments, bond payments and payments on short-term loans to Belgian banks.

* See Table 5.

Figure 1. *Yearly Current Account Inflow generated by Belgian FDI, 1879-1939.*



First attempt to reconstruct a balance of payments.

With capital inflow and outflow established, we can now start to make first attempt to integrate Belgian FDI into the balance or payments. In a first stage, we weighted the inflows on the Current Account against the investment accounted for on the Capital Account (Table 8).

The bulk of FDI income was generated by dividend payments, as one might expect. One striking example is the war period and the years immediately after WW I (1914-1920), when bond payments are almost as important. Thus is due to the strict legislation on bond payments, which forced companies to make their yearly payments, regardless of circumstances. A striking shift in investment strategy (Capital Account) was the period after 1929, when Belgian FDI focused its attention on taking participating interest rather than making fixed assets investments.

Following the hypothesis of the worst-case scenario, by assuming that war, revolution and crisis prohibited investors from retrieving their foreign investments, we could set forward two benchmarks: at the beginning of WW I, Belgian foreign investment had resulted in a total export of capital of 3,087 mln BEF, while only 1,521 mln BEF had been returned. At the eve on WW II, total outflow topped at 18,299 mln BEF, with return lagging behind at 11,274 mln BEF.

Not all these investments were permanently lost, though war and neglect probably destroyed many of them. Only in the case of Belgian FDI in Russia,

we are able to fully apply the worst-case scenario, since none of the investments lost through the Russian Revolution were ever recovered. At the end of the Russian civil war and the following confiscation of all capitalist property, Belgian investors had lost about 420 mln *Francs d'or* in their Russian adventure.

In other cases, the picture is less clear, since we don't know how much of exported FDI capital was recovered. Still, assuming that everything was lost, the investments in the Belgian Congo and Oceania still managed to accumulated a positive balance of payments in the period from 1880 up until 1913. If we take a look at the whole period 1879-1939, Oceania, North America but especially the Far East proved to be a successful bet. It is too early, though, to draw definitive conclusions.

Table 8. *The general result of Belgian FDI, 1879-1939.*

(mln BEF, current) yearly averages	1879-1890	1891 - 1900	1901 -1910	1911-1913	1914-1920*	1921-1930*	1931-1939*
Current Account (+)							
Investment income	0.1	23.7	86.1	140.9	111.5	453.9	4545
- dividend payments	*1*	*20.9*	*59.6*	*96.6*	*65.7*	*3827*	*3766*
- bond payments		*2.7*	*26.4*	*43.9*	*44.9*	*67.7*	*569*
- interest payments		*0.1*	*0.1*	*0.7*	*0.8*	*3.6*	*209*
Capital account (-)							
Direct Investment	26.7	129.6	119.5	109.9	152.6	1358.8	708
- Fixed Assets	*25.1*	*113.1*	*81.4*	*96.6*	*74.5*	*1146.7*	*-368*
- Participating Interests	*0.2*	*6.6*	*23.6*	*12.3*	*47.4*	*71.4*	*929*
- Portfolio (at 50%)	*1.4*	*9.9*	*14.4*	*0.9*	*30.75*	*140.7*	*147*
"X" (see 2.c.)	-26.7	-105.9	-33.3	+31.2	-41.1	-904.9	+383.7

* See Table 5.

FIRST CONCLUSIONS

In conclusion, the question whether a survey of company balance sheets provides a solid basis for a (re)construction of balance of payments cannot be solved on a national level. In theory, a balance sheet (bottom-up) approach would give us very detailed information, which would allow us to go much further on more levels than we would in today's balance of payments. Since companies are the origin and destination of FDI capital, it would seem plausible to take them as measuring rod. In stead of measuring capital transfers between currency zones or countries, it would allow us to analyse the structure of these transfers, and of the markets mechanisms behind them (import substitution, market integration, etc.). This is a very time-consuming research though, and one cannot ignore a number of bias problems.

Still, we believe that these biases can be overcome, and that the problems outlined in this paper are not of a nature that puts a reconstruction based on balance sheets in jeopardy. Comparable biases, errors and omissions still occur on today's balance of payments estimates, while their aggregate compilation and layout does not allow a detailed breakdown.

On another level, the bottom-up approach has a distinctive advantage to historians. While consistent information on capital transfers between states are generally inexistent before the IMF era, the use of balance sheets enables us to document back into the middle of the 19th century, almost as far as the beginning of the industrial age.

Apart from this, the consistent processing of company balance sheets would give us access to much more information than only the balance of payments. When taken up on an international level and with a consistent methodology it would reflect business and finance history in the most general sense. Combined with research on banks, holdings and corporate governance, it would thus break part of the code of industrial and economic growth, from the company level up to a national overview.

We believe that the bottom-up approach has much more advantages than disadvantages. International co-operation in this field would solve most of the problems of cross-over participation and U-bend constructions, and check the level of the balance of payments. On the company level, company clusters could defined and their impact re-assessed. And the international balance of payments would have gained an external means of calibration.

The preliminary results from these surveys suggest two main periods of Belgian FDI, separated by the First World War, with a distinctly different character.

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MONEY CIRCULATION, PUBLIC DEBT AND THE BALANCE OF PAYMENTS OF RUSSIA, 1880-1914

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One of the most important priorities of financial policy in Russia at the turn of centuries was the introduction of the gold standard. In 1843-1853 the Russian monetary system was based on silver monometallism, but it was abolished because of the enormous rise of state expenditures provoked by the Crimean War of 1853-1856. Throughout the next 40 years Russia had an inflation-prone paper money system which was replaced by the gold standard during the currency reform of 1895-1897. So the period under consideration (1880-1914) can be divided into two subperiods: 1880-1897 —paper money system, 1897-914 —gold money circulation.

The task of restoring monometallism was proposed in the 1860s by Russian finance minister M.Kh. Reutern, but his attempt to guarantee free exchange of the State Bank's credit notes on gold in 1862 failed due to the insufficiency of gold reserves. By the mid-1870s the Ministry of Finance has accumulated the necessary amount of gold reserves and was ready to declare the gold standard, but the Russian-Turkish war of 1877-1878 which caused government expenditures of some 1,1 bln roubles forced these plans to be rejected. "The foreign policy of the government have always ruined state finance," as Russian economists have noted on this issue. [1]

In fact, the imperialistic ambitions of Tsarist Russia have from time to time placed the country under the threat of bankruptcy, particularly during the Russian-Japanese War of 1904-1905 and the First World War. War expenditures were financed mainly by foreign borrowing. The second outlet for the borrowed funds was the construction of the railway network, that made significant progress since the 1860s. The principal goal of the Russian Ministry of Finance after the Russian-Turkish war, as it was formulated by Reutern in 1878, was the attainment of trade balance and current account surpluses that were crucial "for the preparation to the establishment of hard currency and especially for the access to the foreign credits." [2]

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1. Bogolepov (1910: 410-411).
2. Gindin (1960: 49-50).

For the accumulation of gold reserves to be used as a base for gold circulation, Reutern's successors had only two sources not related to foreign borrowing, namely domestic gold production and the expansion of exports. Russian gold production at the end of 19th century was approximately stable amounting to 32.2 mln roubles in 1880 and to 37.4 mln roubles in 1895.[3] I.A.Vyshnegradsky, Russian finance minister in 1886-1892, succeeded improving the trade balance considerably. As Table 1 shows, during the 1880s it turned from deficit to surplus due to the increase in exports and the contraction of imports.

The protectionist policy of Vyshnegradsky (who raised import duties and imposed a highly protective Custom's Tariff in 1891) was directed not only toward assisting the Russian industry in its competition with foreign producers but also —and more importantly— toward the attainment of the purely financial goal of increasing the trade balance surplus.[4] The so-called starvation export, i.e. massive grain export amounting to some 50% of total Russian exports, has performed the same function. Nevertheless the catastrophic famine of 1891 revealed the vulnerability of Vyshnegradsky's financial policy which depended on such accidental factors as good or bad harvests.

In 1881-1893 the Russian public debt grew by 23%, from 4,901 mln roubles to 6,058 (see Table 2.1), mainly due to the increase in domestic debt. Private foreign investment in securities of Russian joint stock companies during this period was still negligible, amounting to only 150 mln roubles in 1893. By the end of Vyshnegradsky's ministry the share of foreign investment in state securities and private foreign investments reached approximately one third of the total (see Tables 2.2 and 2.3). Budget revenues rose less sharply than public debt due to the economic stagnation of 1880s; moreover, the state budget was continuously in deficit (see Table 3). Interest and principal payments amounted to almost one third of total budget expenditures, although by the mid-1890s this share had fallen to 18% as a result of public debt conversions and increase in budget revenues. By the mid-1890s the government had accumulated considerable gold reserves of 911.6 mln roubles (see Table 4) that covered 87% of paper currency in circulation. The emission of paper currency in 1880s had been less intensive due to the deflationary policy.

According to P. Gregory, before the imposition of the gold standard the Russian balance of payments on current account was negative except for

3. Kashkarov (1898:153).
4. Kuprianova (1994).

the period of Vyshnegradsky's starvation export of 1887-1891.[5] Calculations of P. Gregory and T. Engeev present the cumulative current account deficit in 1881-1897 to be 1-1,5 bln roubles (see Tables 8.1 and 8.1). Nevertheless, according to T. Engeev, gold reserves have grown during this period by 873 mln roubles, of which 600 mln should be attributed to the domestic gold production and 273 mln to external financial operations. The last figure equals the difference between assets and liabilities of the Russian balance of payments on current account for 1881-1897 (see Table 7). Thus, by 1897 (the year when gold standard was introduced) the situation with the balance of payments made it possible to carry out the currency reform without the threat of gold reserves being drained abroad.

Gold circulation in Russia was adopted by means of a hidden devaluation which fixed the exchange rate of the paper rouble to the gold rouble as 1:2/3 (i.e., 1 paper rouble for 66 2/3 gold kopecks). Stabilization of the exchange rate by the gold content of the rouble converted the Russian currency one of the most stable in the world. During the period 1897-1914, 1 gold rouble was equal in gold content to 2.16 German marks, or 2.67 French francs. The currency reform of 1895-1897 which was accomplished by S. Yu.Witte (Russian minister of finance in 1892-1903) was expected to attract foreign capital (credits and direct investments) and to stimulate the expansion of Russian exports as well as the contraction of imports, thus activating the balance of payments on current account. [6]

The system of gold circulation introduced by Witte was one of the toughest in the world practice. The State Bank was entitled to issue no more than 300 mln roubles of paper money without gold backing, so the volume of paper money emission depended directly on the size of gold reserves. Accumulation of enormous idle gold reserves that amounted by 1914 to 1,695.2 mln roubles (see Table 4) had considerable costs in terms of economic efficiency. Other drawbacks of the Russian monetary system were accounted for by its insufficient flexibility because of the dependency on the size of the gold reserves, and also by its instability during social crises.

In the periods of the Russian-Japanese war and the revolution of 1905 massive conversion of paper notes into gold made the government almost bankrupt and caused such a drain of gold reserves that they could have been

5. Gregory (1983: 97-98).
6. Vlasenko (1949).

increased only by new foreign borrowings.[7] However, the resources obtained through these borrowings were partly transferred abroad. For servicing foreign debts, a considerable amount of State Bank's gold reserves and foreign currency reserves held by the Ministry of Finance was placed on the accounts of foreign banks. So by 1914 foreign banks accumulated enormous rouble assets (635 mln roubles), of which 431 mln roubles were placed in French banks. This amounted to almost one third of the gold reserves of the Bank of France (which were equal to 1,309 mln roubles on gold parity). These resources, officially called Russian gold abroad, served for current payments on foreign credits and were expected to prevent the outflow of gold from Russia in the years of balance-of-payments deficit.[8] The serious weakness of the Russian monetary system should be attributed to the fact that money circulation had been served primarily by gold and silver coins with falling circulation of paper notes, that resulted in a shortage of the means-of-payment. But the main feature of the gold monometallism in Russia was its dependency the balance of payments (e.g., a serious decrease in gold reserves in 1900 resulted from the balance of payments deficit —see Table 4).

By planning the currency reform, S.Yu.Witte first of all had in mind its external consequences, namely joining the community of developed countries and attracting foreign capital to Russia. He summarized his own position as follows: "The principal role of the gold currency is that it provides a gold bridge between wealthy and poor countries; the gold currency helps to overcome poverty faster while under paper currency this task takes more time to accomplish."[9]

Did this hope on the gold bridge turn out to be justified? The Russian trade balance before the First World War was favorable due to the rapid growth of exports (grain comprising some 50% of total exports) although imports were also rising considerably (see Table 1). In the financial sphere Witte launched the policy of intensive foreign borrowing expecting to pay for Russian debts to European countries with resources obtained by the increased exportation to Asia.[10] Gold currency and foreign borrowings were the main components of Witte's financial strategy. The Russian-Japanese war proved the expectations

7. Anan'ich (1967, 1970).
8. Bukovetsky (1962: 370).
9. Anan'ich (1970: 257).
10. Anan'ich (1970: 27-28).

of access to the Asian market to be unrealistic; at the same timea very considerable share of budget resources was devoted to the foreign debt service.

In 1893-1900 Russian state liabilities had risen from 6,058 mln roubles to 7,866 mln roubles, or by almost 30%. Most of this increase is accounted for by foreign borrowings; the domestic debt had risen only by 526 mln roubles while the foreign debt—by 1,282 mln roubles (see Table 2.1). These borrowings to large extent formed the basis for the gold currency circulation in Russia. The reason for the rising public debt was the traditional belief in the insufficiency of domestic savings. But in fact even those considerable resources that were received by State treasure were not directed to productive purposes. Data on the structure of expenditures financed by state borrowings (Tables 5.1 and 5.2) show that the bulk of resources borrowed domestically has been directed to the general needs of government, i.e., financing the system of state administration and imperial foreign policy, while railroad construction was financed primarily through foreign borrowing. The situation changed somewhat in the post-Witte period when considerable domestic resources were attracted by railroad construction loans guaranteed by the government. However, the whole picture before 1914 remained practically the same —domestically borrowed resources were devoted to the financing of administrative needs and operations of state mortgage banks, and foreign borrowings were used to compensate the transfer of domestic resources to unproductive purposes. It should be noted that an important function in directing domestic resources to fiscal system was performed by state savings banks. Most of these banks' liquid resources were invested in state securities. [11]

Another feature of Witte's ministry was the acceleration of the inflow of foreign direct investment due to the introduction of gold currency and the economic expansion of 1890s. Private investment in securities of Russian joint stock companies grew from 149 mln roubles in 1893 to 550 mln roubles in 1900 (Table 2.2). As a result, by 1900 the share of state and private liabilities placed abroad reached 38% of total investments (Table 2.3). Initially the service of new debts did not represent a serious problem for the state budget; the sum of debt service payments in 1900 was not higher than in 1890. At the same time, the rapid growth of budget revenues (which has to be partly associated with government policies, primarily the introduction of the state monopoly on alcoholic drinks in 1895 and with establishing state

11. Petrov and Kalmykov (1994: 149-151).

property on railroads through redemption) led to the decline in the relative share of debt service payments. By 1900 they comprised 14.8% of budget expenditures; by 1905 their share has further decreased to 9.4% (see Table 3).

The turning point was marked by the Russian-Japanese war and revolution of 1905 that revealed the serious threat associated with further increases in foreign debt. For financing the war and preventing departure from the gold standard, V.N. Kokovtsov (Russian minister of finance in 1904-1914) was forced to increase the public debt on an unprecedented scale: from the beginning of 1904 to the spring of 1906, i.e. during a period of 2.5 years, it increased from 6,651 mln roubles to 8,701 mln roubles, or by 2 bln roubles, with more than 1 bln roubles being obtained through new foreign borrowings. The main creditor nation was France: the spring of 1906 it provided to Russia with an enormous loan of 2,250 mln francs, equivalent to 843 mln roubles.[12] During 1900-1908, total state liabilities of Russia (including railroad construction loans guaranteed by government and mortgage bonds of state mortgage banks) have risen from 7,866 mln roubles to 11,128 mln roubles (see Table 2.1). Debt service payments had risen from 303 mln roubles in 1905 to 406.8 mln roubles in 1910, thus amounting to 15.7% of total budget expenditures (see Table 3).

Further increases of the foreign debt under these circumstances could have undermined the state budget and the balance of payments. Aware of this, Kokovtsov declared the policy of abstention from new borrowings on the international capital market. This policy was closely related to the task of balancing the state budget because resources borrowed abroad were traditionally used for financing the budget deficit. On the whole, during the period of economic expansion before the First World War there was no departure from this policy. After 1909 the Russian authorities did not resort to foreign borrowings; however, at the beginning of 1914 Russia placed a consolidated railroad construction loan in France guaranteed by the government. Good harvests and the economic expansion of 1909-1913 allowed the revenues of the state budget to surpass expenditures (see Table 3). This favorable budget evolution led by 1913 to a decrease in the share of debt service payments in total budget expenditures to 12.5%.

The absence of new foreign borrowings was compensated by the accelerated inflow of private foreign investments. By 1913 foreigners have invested

12. Petrov (1994: 149-151).

1,571 mln roubles in securities of Russian joint stock companies, bonds of mortgage banks and municipal loans, as compared to 814 mln roubles to 1908. The share of foreign investment in total investment has risen from 13.3% in 1900 to 18.6% in 1913 (see Table 2.2).

However, the actual amount of private foreign investment could be somewhat less impressive. Data used in this study are based on calculations of the Russian economist P.V. Ol' who in the 1920s performed most comprehensive investigation of the volume and dynamics of private foreign investments in Russian joint stock companies. [13] Nevertheless, new calculations that take into account additional statistical sources show that Ol's figures for the period of pre-War economic expansion overestimate the actual level of investments by 10-14%. [14] Applying a minimal (10%) correction we should conclude that foreign investment by 1913 amounted to 1414 mln roubles, or to 16.8% of total investment in Russian joint stock companies (see Table 2.2).

Table 2.3 shows that the share of foreign capital in the total sum of state obligations and private investments declined during 1900s (from 37.7% in 1908 to 33.5% in 1913) because of the faster growth of domestic investments. So just before the First World War one third of capital invested in state bonds and securities of private companies was of foreign origin, despite the fact that this share had somewhat declined.

Table 6 presents data on main creditor countries whose residents invested their capital in Russian state and private bonds. Among these countries France was the unquestionable leader: it accounted for 65% of Russian state debt, 40% of railroad construction loans guaranteed by the Russian government and 31% of private investment. The second most important creditor was Germany; its role was especially important in railroad construction loans (35%) and private investment (20%). Then follows Great Britain with 17% of railroad construction loans and 24% of private investment. Only these Big Three countries provided Russia with 80% of total foreign capital and made all types of investments; other countries either invested in securities of Russian state debt (Netherlands) or provided only private investments (Belgium, USA, etc.).

What was the impact of the foreign capital inflow on Russian balance of payments? According to the calculations of T. Engeev, during the period 1898-1913 total private foreign investments amounted to 2,225 mln roubles

13. Ol' (1922, 1925).
14. Bovykine (1991: 159-181).

and 2,240 mln roubles were derived from foreign borrowings and other types of investment, so the overall figure for the foreign capital inflow was 4,465 mln roubles (see Table 7). The cumulative trade balance surplus for this period was 4,122 mln roubles. Thus the asset side of the balance of payments was equal to 8,587 mln roubles. The liabilities side of the balance of payments consisted of foreign debt service (5 bln roubles), tourists' expenditures (2 bln roubles) and other expenditures (815 mln roubles), total liabilities having reached 7,815 mln roubles. As can be seen from these figures, the Russian balance of payments during the period 1898-1913 had a surplus of 772 mln roubles, foreign loans and private investments being of crucial importance for this favorable result.

For the same period, the balance of payments on current account turned negative every year except 1904, 1905 and 1909 when there were small surpluses.[15] The cumulative total of year-to-year data on the balance of payments on current account calculated by P. Gregory is comparable with T. Engeev's figures for the two main subperiods —1881-1897 and 1898-1913 (see Tables 8.1, 8.2). Both authors show the balance of payments on current account to be negative, deficit figures estimated by Engeev (1,552 mln roubles for 1880-1897 and 3,963 mln roubles for 1898-1913) being higher by some 500 mln roubles than those estimated by Gregory (1,010 mln roubles and 3,090 mln roubles). However, it should be noted that their estimates of the increase of the current account deficit in the age of the gold standard are almost the same (circa 2 bln roubles). For preventing departure from the gold standard Russia was forced to counterbalance the deficit on current account with the inflow of foreign capital. From 1900 to 1913 this amounted to 2,507 mln roubles, thus compensating the current account deficit.

To sum up, it can be concluded that the introduction of the gold standard in Russia in fact stimulated the integration of the country into the international capital market. By the beginning of the First World War the amount of Russian public debt was second largest in the world (the world leader being France), and Russian debt service payments exceeded those of every other country. However, after 1909 the increase of public debt was interrupted due to the efforts of Russian government. The structure of foreign liabilities began to shift toward direct investments that contributed more to the economic development than loans whose proceeds were spent unproductively on imperial

15. Gregory (1983: 97-98).

foreign policy goals. It seems that the increase in the share of private investments and the decrease in the share of state obligations would have been sustained had the economic expansion continued. However, the First World War destroyed this system of financial and economic relations. The result was the abolition of the gold standard in Russia as well as in all European countries and the enormous increase of Russian war debts.

APPENDIX

Table 1. *Russian Trade Balance, 1880-1913 (mln roubles)*.*

Year	Exports	Grain exports ** Amount	per cent of total exports	Imports	Balance
1880	498.7	231.8	46.5	622.8	-124.1
1885	537.9	292.2	54.3	435.4	102.5
1890	692.2	339.1	49	406.6	285.6
1895	689.1	335.9	48.8	526.1	163
1900	716	304.7	42.6	626	`90
1905	1,077.3	566.9	52.6	635.1	442.2
1910	1,449.1	746.1	51.5	1,084.4	364.7
1913	1,520.1	589.1	38.7	1,374	146.1

Notes:

* Table summarizes data on commodity exports and imports across all borders of Russian Empire but does not include data on trade operations with silver .

** Data on exports of main cereals (wheat, rye, barley, oats), as well as peas, flour, bran, etc.

Sources. For 1880-1895: Pokrovsky V.I. *Sbornik svedenij po istorii i statistike vneshnej torgovli* Rossii. T.1-2. Sankt-Petersburg, 1902, pp.105, 117.

For 1900-1913: Pokrovsky S.A. *Vneshnjaja torgovlia i vneshnjaja torgovaja politika Rossii.* Moskva, 1947, pp.348-349.

Table 2. *Russian Securities Placed in Russia and Abroad, 1881-1913 (min roubles)*

2.1. *State liabilities &state loans, railroad construction, loans guaranteed by government, liabilities of stage mortgage banks.*

Year	Total Liabilities Placed	Liabilities Placed in Russia Amount	per cent of total	Liabilities Placed Abroad amount	per cent of total
1881	4,901	2,337	47.7	2,564	52.3
1893	6,058	3,345	55.2	2,713	44.8
1900	7,866	3,871	49.2	3,995	50.8
1908	11,128	5,862	52.6	5,266	47.3
1913	12,556	7,095	56.5	5,461	43.5

2.2. *Private Investments (municipal bonds, mortgage bonds of joint stock mortgage banks, securities of Russian joint stock companies).*

Year	Total Investments	Domestic Investments amount	per cent of total	Foreign Investments amount	per cent of total
1893	2,173	2,024	93.1	149	6.9
1900	4,124	3,574	86.7	550	13.3
1908	5,010	4,196	83.7	814	16.3
1913	8,437	6,866	81.4	1,571	18.6
10 % correction	8,437	7,023	83.2	1,414	16.8

2.3 *Total Investments in State Liabilities and Securities of Private Companies.*

Year	Total Investments	Domestic Investments amount	Per cent of total	Foreign Investments amount	% of total
1893	8,231	5,369	65.2	2,862	34.8
1900	11,990	7,445	62.1	4,545	37.9
1908	16,138	10,058	62.3	6,080	37.7
1913	20,993	13,961	66.5	7,032	33.5

Sources: Bovykine V.I. *Rossijskije tsennye bumagi v Rossii i za granitsej* // Rossija. 1913 *god. Statistiko-dokumental'nyj spravoshnik.* Sankt-Petersburg, 1995, p.179-181; Shebaldin Yu.N. *Gosudarstvennyj buds'jet tsarskoj Rossii v nachale XX* v. // Istoricheskije zapiski, t.65. Moskva, 1959, p.178 (data on state liabilities for 1881).

Table 3. *State Budget of Tsarist Russia and Debt-Service Payments, 1881-1913 (mln roubles).*

Year	Total Revenues	Total Expenditures	Balance	Debt Service Payments Amount	% of Total Expenditures
1881	807	840.3	-33.3	239.9	28.5
1885	786	914	-128	295.3	32.3
1890	983	1,056	-73	280.6	26.6
1895	1,282	1,521	-239	274.2	18
1900	1,736.7	1,889.2	-152.5	279.2	14.8
1905	2,828.1	3,204.8	-386.7	303	9.4
1910	2,805.1	2,596.7	208.4	406.8	15.7
1913	3,431.2	3,382.9	48.3	424.4	12.5

Source: Shebaldin Yu.N. *Gosudarstvennyj bud'jet tsarskoj Rossii v nachale XX* v. // Istoricheskije zapiski, t.65. Moskva, 1959, p.164; Vlasenko V.E. *Denes'jnaya reforma v Rossii 1895-1898 gg. Kiev*, 1949, p.216; Migulin P.P. *Russkij gosudarstvennyj kredit.* T.1. Khar'kov, 1902, p.478-479; t.2, Khar'kov, 1904, p.552-553, 598-599; t.3, Khar'kov, 1907, ch.3, p.1083.

Table 4. *Gold Reserves and Money Circulation in Russia, 1880-1914 (min roubles)*

Year (January 1)	Gold Reserves of the State Bank in Russia and Abroad	Credit Notes in Circulation	% of Gold Backing	Gold Currency in Circulation	Silver Currency in Circulation
1880	276.1	1,129.9	24.4	—	—
1885	303.4	899.8	33.7	—	—
1890	475.2	928.4	51.2	—	—
1895	911.6	1,047.7	87	—	—
1900	843	491.2	171.6	641.3	145.3
1905	1,031.6	853.7	120.8	683.6	123
1910	1,414.6	1,173.8	120.5	580.9	112.5
1914	1,695.2	1,664.7	101.8	494.2	122.7

Sources: Gosudarstvennyj bank. Kratkij ocherk dejatel'nosti za 1860-1910 gody. Sankt-Petersburg, 1910, p.138-139; Otchet Gosudarstvennogo banka za 1916 god. Petrograd, 1917; Es'jegodnik Ministerstva finansov. Vyp. 1915 goda. Petrograd, 1917, p.158-159.

Table 5. *Structure of Expenditures Financed by State Borrowings, 1881-1914 (min roubles)*

5.1. Foreign Borrowings.

Year	Total	General Needs /1/ Amount	% of Total	Railroad Construction /2/ Amount	% of Total	State Mortgages /3/ Amount	Per cent of Total
1881	2,564	595	23.2	1,969	76.8	—	—
1893	3,018	595	19.7	2,365	78.4	58	1.9
1900	3,966	595	15	3,237	81.5	134	3.5
1908	5,265	1,904	36.2	3,195	60.7	166	3.1
1914	5,404	1,591	29.4	3,546	65.6	267	5

5.2. *Domestic Borrowings /4/.*

Year	Total	General Needs /1/ Amount	% of Total	Railroad Construction /2/ Amount	% of Total	State Mortgages /3/ Amount	% of Total
1881	2,337	2,210	94.6	127	5.4	—	—
1900	3,892	2,780	71.4	618	15.9	494	12.7
1908	5,863	3,662	62.5	1,146	19.5	1,055	18
1913	7,341	4,131	56.3	1,240	17.3	1,940	26.4
1914	5,404	1,591	29.4	3,546	65.6	267	5

Notes: /1/ "General Needs" - financing of internal and foreign policy of government
/2/ Railroad construction - state railroad construction loans and loans guaranteed by government
/3/ State mortgages - liabilities of state state mortgage banks, Nobles' Bank and Peasants' Bank
/4/ Domestic borrowings do not include mortgage bonds of joint stock mortgage banks

Sources: Bovykine V.I. *K voprosu o roli inostrannogo kapiala v Rossii* // Vestnik Moskovskogo Universiteta, 1964, no.1, p.70; Shebaldin Yu.N. *Gosudarstvennyj bud'jet tsarskoj Rossii v nachale XX* v. // Istoricheskije zapiski, t.65. Moskva, 1959, p.178 (data for 1881).

Table 6. *Creditor Nations of Russia, 1914 (mln roubles).*

Country	State Borrowings Amount	% of Total	Railroad Construction Loans Guaranteed by Government Amount	% of Total	Foreign Investments in Russian Joint Stock Companies /1/ Amount	% of Total	All Investments Amount	% of Total
France	3,000	65	600	40	687.9	31	4,287.9	51.6
Germany	400	9	525	35	436.1	20	1,361.1	16.4
Great Britain	250	5	250	17	535.4	24	1,035.4	12.4
Netherlands	450	10	125	8	—	—	575	6.9
Belgium	—	—	—	—	318.7	15	318.7	3.8
USA	—	—	—	—	114	5	114	1.4
Other	500	11	—	—	113.8	5	613.8	7.5
Total	4,600	100	1,500	100	2,205.9	100	8,305.9	100

Note: /1/ Data for 1915
Source: Bovykine V.I. *Rossia nakanune velikikh svershenij*. Moskva, 1987, p.132, tab.14,15.

Table 7. *Russian Balance of Payments, 1881-1897 and 1898-1913 (mln roubles).*

	1881-1897	1898-1913
ASSETS		
Exports	10,775	17,435
Private Investments	750	2,225
State Borrowings	1,050	2,000
Other	125	240
LIABILITIES		
Imports	8,140	13,313
Interest & dividend payments	2,900	5,000
Tourists' expenditures	1,000	2,000
Other	287	815
Increase in gold reserves	273	772
BALANCE	12,700	31,900

Source: Engeev T. *O plates'jnom balanse dovoennoj Rossii* // Vestnik finansov, 1928, no.5, p.82.

Table 8. *Russian Balance of Payments on Current Account, 1881-1897 and 1898-1913 (mln roubles).*

8.1. *Calculations of P. Gregory.*

	- 1 -	- 2 -	- 3 -	- 4 -	- 5 -	Total
1881-1897	2,517	-2,267	-415	-716	-129	-1,010
1898-1913	3,937	-3,016	-1,848	-2,396	-182	-3,090

8.2. *Calculations of T. Engeev.*

	- 1 -	- 2 & 3 -	- 4 -	- 5 -	Total
1881-1897	2,635	-2,900	-1,000	-287	-1,552
1898-1913	4,122	-5,000	-2,000	-815	-3,693

Notes: 1 - trade balance figures
2 - Interest & principal payments on state debts
3 - Dividends and corporate profit transferred abroad (including revenues on municipal bonds)
4 - expenditures of Russian tourists abroad
5 - other expenditures

Sources. For Table 8.1 - Gregory (1983, p.97-98).
For Table 8.2 - Engeev (1928: 82).

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DEBT, INVESTMENT, AND INTERNATIONAL CAPITAL MOBILITY: CANADA, AUSTRALIA AND ARGENTINA, 1880-1980

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INTRODUCTION

The comparative study of long period macroeconomic change in Canada, Australia, and Argentina presents puzzling differences that appear after similar economic beginnings (Figures 1-4; Bordo and Schwartz 1996). Why did Australia and Argentina experience interruption in capital inflow in the 1890s while Canada sat poised to receive the greatest inflow relative to GDP in her history? Why did Canada and Australia remain committed to the gold standard before 1914 while Argentina did not? Has the public debt played different roles in these countries? Why has Argentina not converged to the same level and growth rate of GDP *per capita* as Canada and Australia? The interplay of domestic and international circumstances and institutional constraints that seem likely to account for these differences warrants reexamination within a consistent economic framework that can identify the relevant constraints.

A critical link in the debt, savings and investment experiences of these countries appears to be the international mobility of capital that allowed them to make intertemporal choices within a world economy. How an open economy functions and the scope of macro-policy have been shown to depend on the choice of exchange rate regime and the degree of capital mobility (Obstfeld and Taylor 1996). International capital mobility has, of course, been widely studied for its theoretical and policy implications (Obstfeld 1986). Much of this past discussion, however, either assumes a degree of international capital mobility or undertakes inconclusive demonstrations of the existence of some degree of capital mobility. Here we take a new view by exploring the real resource allocation aspects of capital flows in accordance with permanent income theory. Current account deficits (surpluses) or capital inflows (outflows) occur to smooth consumption when domestic output less investment and government spending is expected to rise (fall) over time (Ghosh 1995). Borrowing against the future or running a current account deficit, for example, becomes optimal when future income is expected to rise, while saving or running a surplus is appropriate when the opposite is expected. Open economies maintain the appropriate relationship between domestic savings and investment by maximizing utility over time subject to an intertemporal budget

constraint. Evidence that movements in the current account can be explained in this way is evidence of both intertemporal maximization and international capital mobility. Unanticipated shocks result in capital flows that smooth consumption over time. If capital mobility is perfect, or nearly so, actual flows will have a similar volatility to optimal flows. If actual flows are less volatile, capital can be said to be less than perfectly mobile. An advantage of this approach is that it allows the investigator to gauge quantitatively the extent of capital mobility across time and among different institutional settings within a framework consistent with maximizing behavior and amenable to welfare assessment. [1]

In the remainder of this paper, we review the savings, investment, current account, debt and deficit history of each country, provide a brief outline of the theory and hypotheses to be explored, and describe the data and empirical results. We conclude by indicating a promising new direction for future research.

SAVINGS, INVESTMENT AND THE CURRENT ACCOUNT: DIVERSE PATTERNS TO EXPLAIN

Canada, in 1879 following Confederation in 1867, announced a National Policy committing its government to support, but not supplant, private enterprise in building a second transcontinental economy in North America. While a start was made in the 19th century to build the infrastructure for this, largely by completing the Canadian Pacific Railway, investment ratios peaked in the early years of the 20th century far in excess of domestic savings ratios, giving rise to a major inflow of capital from the United Kingdom and a corresponding current account deficit (Figure 2). While government spending was relatively low (Figure 5), the Canadian government played an important role in facilitating capital inflow, not only through its own bond flotations (about 35% of total calls on London), but also by underwriting much of the private investment. Canadian railways had such direct access to British merchant banks through bond houses that the general absence of investment banks of an American type in Canada did not inhibit investment. Commercial and industrial firms, as well as railways, received capital inflow (Aitken 1961; Paterson 1976; Davis and Gallman 1996).

1. For a summary of attempts to document and analyze the significance of capital flows, see Obstfeld and Rogoff (1995, 1996: ch. 2-3).

In Australia, the investment rate exceeded the savings rate by a greater margin than in Canada from 1880 to the turn of the century as a second pastoral boom initiated by wool was augmented by wheat, meat, and dairy products (Figure 3; Maddock and McLean 1987: ch 2). The separate colonial governments, prior to Confederation in 1900, exercised a development strategy that included state ownership of railways financed by external savings through the sale of government bonds in England. Government bond flotations were twice the Canadian fraction of total capital calls in London, while Australian trading banks and mercantile and agency companies account for nearly three times the Canadian fraction of calls for manufacturing and commercial activities before 1914 (Davis and Gallman 1996: Table 4). As in the Canadian case throughout this early period, government spending and deficits remained quite small relative to GDP (Figures 5, 6).

In the Argentine case, except for a brief interval in the early 1890s, the investment rate exceeded the savings rate and net capital inflow prevailed, although at a declining rate after 1890 (Figure 4). Savings rates were lower in this early period than in either Canada or Australia, and sometimes even negative, possibly reflecting Argentina's higher dependency rate (Taylor and Williamson 1994; McLean 1994). Despite the setback of 1890, Argentina achieved extraordinarily rapid growth before 1914 (Cortes Conde 1986). An expansion of railways facilitated pastoral expansion and conversion to grain growing. The combination of legal restrictions on domestic firms, and the innovation of the *cédula* that gave bank and government backing to mortgage loans, allowed foreign firms and capital to participate more fully in this growth and encouraged capital inflow (Davis and Gallman 1996).

Probably the largest single macroeconomic event of the pre-World War I era that affected these three developing economies rather differently was the depression of 1890. As Figures 2, 3, and 4 reveal, this shock was more catastrophic for Australia than for Argentina or Canada. Investment as a fraction of GDP recovers from a low toward end the 19th century to unprecedented heights before 1914 in both Canada and Argentina, while this fraction does not attain its 1880 level again in Australia until the early 1920s, and even then, only fleetingly until after World War II. It has been suggested that the possibilities for continued agricultural expansion and financial readjustment may have been less for Australia (McLean 1996; Ford 1962). Certainly, Canada in the 1890s was only on the threshold of a western settlement boom and agricultural expansion, and the pastoral sector in Argentina, though still expanding, was already declining in relative importance

(McLean 1996; Davis and Gallman 1996). Australian immigration relative to population, nearly zero for twenty years after 1890, contrasts dramatically with the Canadian and Argentine experiences. Argentina did default temporarily on her debt in 1890, whereas Australia did not, and the issue did not arise in Canada (Peters 1934: ch 2). Despite the sluggishness of the Australian recovery after 1890, Australian GDP *per capita* in real terms remained above that of Canada and Argentina from 1880 until after World War II (Figure 1).

During the interwar period all three countries approached the great depression with some tendency for investment to run ahead of savings resulting in modest net capital inflow. The investment to GDP ratio rose in Canada and Argentina in the 1920s, but declined in Australia (Figures 2, 3, 4). In the 1930s, investment ratios fell in all three and the inflow of long term capital ceased. Domestic capital markets demonstrated a new importance and saving rates temporarily rose above investment rates in Argentina, and to a lesser extent in Canada and Australia (Figures 2, 3, 4). But the impact of the depression was greater in Canada and Australia while Argentina was able to use accumulated gold reserves and debt conversion to particular advantage (Diaz Alejandro 1970: 55-66; Alhadeff 1985: 172-4; Dyster and Meredith 1990: 123-31). Argentina did not default on debt servicing in the 1930s. Australia began her own downturn in 1927 and Argentina in 1928, before the rest of the world. Canada appeared most vulnerable to the American downturn. Although none of these countries practiced counter cyclical fiscal policies, Canada, and to a lesser extent Australia, had less scope than Argentina to do so because of the accumulated debt of publicly owned railways and the burden of relief spending (Alhadeff 1985). The budget deficit to GDP ratio moved lower in Argentina for a brief interval in the 1930s than for Canada and Australia (Figure 6).

The lingering effects of the great depression of the 1930s prevailed until after World War II in all three countries. Rising investment and savings ratios returned in the late 1940s and early 1950s, most dramatically in Australia and Canada. A leveling out of these ratios in the 1950s turned into a decline for Argentina until 1960. At the same time, the current accounts moved into deficits that were not uniformly sustained after 1960 (Figures 2, 3, 4). Although Argentina and Australia initially developed current account deficits more sharply after 1945, Canada, followed by Australia, was more successful in maintaining net capital inflow in the longer term. The savings rate moved more erratically in Argentina than in either Canada or Australia after 1945

(Figure 4). The depression in Argentina reinforced policies of import substitution and hostility to foreign capital that appear to have had longer term consequences that set the country on a path of relatively slower growth (Figure 2; Diaz Alejandro 1970: ch 2). Overall in all three countries until very recently, current account imbalances appear remarkably smaller than in the pre-World War I era (Figure 2; Eichengreen 1990).

EXPLAINING THE CURRENT ACCOUNT: SOME HYPOTHESES

The consideration of the current account as a reflection of intertemporal allocation by countries trading assets internationally is relatively new and has spawned a growing literature (Sachs 1982; Obstfeld 1986, 1989; Obstfeld and Rogoff 1995, 1996). The fundamental theory begins with the treatment of an economy peopled by a representative permanent-income consumer, an infinitely lived national resident who consumes a single composite commodity and a consumption-indexed bond, freely traded with the rest of the world.[2] The resident permanent-income consumer maximizes utility subject to an intertemporal budget constraint stating that the present value of aggregate expenditure must equal initial net foreign wealth plus the present value of domestic production.[3] It can be shown, after allowing for uncertainty, that the solution to this problem yields the most fundamental equation of the intertemporal approach employed empirically (Obstfeld and Rogoff 1996: ch. 2):

$$CA_t = B_{t+1} - B_t = (Y_t - \bar{Y}_t) - (G_t - \bar{G}_t) - (I_t - \bar{I}_t)$$

Equation (1) states that when current output (Y) is above its permanent level ($\bar{Y}$) consumption smoothing results in a current account (CA) surplus, and when government consumption (G) or investment (I) are higher than they are expected to be in the future, a current account deficit, or reduction in domestic holdings of foreign assets (B) emerges. It follows that a growing economy can, in principle, remain in current account deficit indefinitely. Our first hypothesis, therefore, is that the actual current account is determined by (1).

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2. The model formally assumes labor immobility internationally and is typically cast in *per capita* terms. One justification for using the representative agent assumption is that prices and aggregate *per capita* consumption behave as though there were a single representative agent when asset markets are complete and agents face the same prices (Obstfeld and Rogoff 1996: 4, 292-294).

3. In the simplest setup, the consumer maximizes a time-separable utility function. At the macro level of aggregation over goods and individuals employed in empirical work, time-separability appears to be a not unreasonable assumption (Obstfeld and Rogoff 1996: 12-14).

While the key implications of the representative agent model presented above are not affected by excluding the explicit modeling of labor and capital markets, other implications warrant a reconsideration of its assumptions and alternative modeling of the current account. The infinite life of the representative agent greatly simplifies the derivation of the key implications, but it also strains the plausibility of consumer choice in the longer run. Does the current account converge to zero in the long run? Do fast growing countries have lower saving and larger current account deficits? Is Ricardian Equivalence in this model really an implication of infinitely lived consumers? Following Modiglini and Brumberg (1954), it appears that an alternative overlapping generations framework provides different answers that fit some empirical observations rather well. We may imagine an economy characterized by a new finite-lived generation born each period so that the horizon of individuals and the government is no longer the same. The consequence is that temporary output shocks can now have long run effects, and the timing of lump sum taxes can have real effects. Gains from intertemporal trade still occur, but their distribution across generations typically changes.

From the point of view of empirical testing is it useful to consider a marriage of the two approaches that brings out the point that infinitely lived agents are not critical to Ricardian Equivalence. One may consider infinitely lived dynasties that come into being on different dates (Weil 1989). In this model, the rate of population growth affects how fast the economy converges to the steady state. Output shocks have short run effects as in the representative agent model, but also long term effects absent from that model. Again, consumption also depends on government debt, both current and future deficits, a dependence that only disappears as population growth goes to zero and no new generations are born.

EMPIRICAL RESULTS

To implement equation (1), or other variants based upon it, requires finding some empirical counterpart to the unobserved expected variables. Using the methodology pioneered by Campbell (1987), we define net output as $Q \equiv Y - G - I$ and apply Campbell's transformation:

$$CA_t = -E_t \left(\sum_{s=t+1}^{\infty} \left(\frac{1}{1+r} \right)^{s-t} \Delta Q_s \right) \qquad (2)$$

When, for example, the present discounted value of future net output changes is positive, (2) implies that the current account ought to be in deficit. To test (2), we must predict its right hand side and compare that to the actual current account. Since consumers know at best the past values of the current account to predict future changes in net output, a general way to form these expectations is to estimate a first order VAR: [4]

$$\begin{bmatrix} \Delta Q_t \\ CA_t \end{bmatrix} = \begin{bmatrix} \psi_1 & \psi_2 \\ \psi_3 & \psi_4 \end{bmatrix} \begin{bmatrix} \Delta Q_{t-1} \\ CA_{t-1} \end{bmatrix} + \begin{bmatrix} \varepsilon_{1t} \\ \varepsilon_{2t} \end{bmatrix} \qquad (3)$$

where the Ψ are the VAR coefficients and the are errors with conditional means of zero. We can then express the optimal current account using (2) and a companion matrix of the VAR:

$$\tilde{C}A_t = -\,[1 \quad 0]\left[(1+r)^{-1}\Psi\right]\left[I - (1+r)^{-1}\Psi\right]^{-1}\begin{bmatrix} \Delta Q_t \\ CA_t \end{bmatrix} \equiv [\,\Phi_{\Delta Q} \;\; \Phi_{CA}\,]\begin{bmatrix} \Delta Q_t \\ CA_t \end{bmatrix} \qquad (4)$$

The intertemporal model is true when $CA_t = \tilde{C}A_t$, that is, when the companion matrix $[\Phi_{\Delta}, \Phi_{CA}]$ is equal to [0 1]. More precisely, the joint hypotheses of intertemporal consumption smoothing and of international capital mobility cannot be rejected. [5]

The results of estimating for Canada, Australia and Argentina the first order VAR described by equation (3) are reported in Table 1. Preliminary tests of these data for unit roots indicate a common tendency for undifferenced series, excepting the consumption smoothing component of actual current accounts, to be nonstationary, so that the form of equation (2) is particularly convenient and implies that the optimal current account is I(0) and the change in net output and the current account are cointegrated.

While formal testing tends to reject equation (2), it is clear from Figures 7, 8, and 9 that the turning points of actual current accounts are predicted rather well by the model. It is also the case for virtually all cases estimated that the actual current account was more volatile than predicted by the model,

4. Preliminary testing indicates that higher order VARS do not yield greater explanation.

5. The interest rate used in these calculations was a long term government bond yield averaged over the period of estimation.

suggesting the model may be under specified, and that capital mobility was quite high. Nonetheless, there is some evidence by this criteria that capital was less mobile to Argentina than to Canada over most of the overall period, and that Australia held an intermediate position with her degree of capital mobility.

Our three countries sustained substantial foreign indebtedness over long periods of time when their economies were growing. What steady state debt/output ratio is implied by an optimal current account in the present infinitely lived representative consumer framework? Is there any evidence that our cases may have been converging toward this steady state? Under a small open economy assumption it can be shown that an optimal current account deficit can emerge (Obstfeld and Rogoff 1996: 116-119). In this framework, higher investment, and lower saving are associated with higher growth rates. If B/Y is the steady state debt/output ratio, debt and output must be growing at the same rate, say g, and there will be a steady current account imbalance, $B_{s-1} - B_s = gB_s = rB_s + TB_s$. This implies that the economy will have to maintain a trade balance surplus of $-(r-g)B_s$ to pay out the excess of the real interest rate over the growth rate, in effect, the burden of the foreign debt. Developing countries, of course, accumulate debt to finance their development, and the stability condition required for their convergence to the steady state is that their output growth rate exceed the growth rate of the rest-of-the-world. [6]

Suppose, for example, recognizing the uncertainty associated with developing countries such as those we are examining over much of the period under consideration, we chose a real interest rate of 8%, a g of 5%, a productivity of capital of .4, and government spending a constant fraction, .3, of output. This would imply a debt/output ratio of -15 and a steady state trade balance required to maintain it as high as 45% of GDP. Part of the reason we do not observe such high foreign debt levels is because they are predicated on the assumption that the small open economy always grows faster than the rest-of-the-world when in fact there is widespread evidence of converging growth rates over time (Williamson 1996; Taylor 1996; Rapoport 1994). Given this type of convergence, there is reason to suppose that debt/output levels will become much lower before debt is allowed to reach such high levels. [7]

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6. In the long run, of course, this strains the small country assumption since any country growing at such a faster rate indefinitely will ultimately no longer be a small country.

7. Other considerations that argue for lower debt levels include difficulties with enforcing international financial contracts, and the implausibility of individuals being able to borrow against distant uncertain future output.

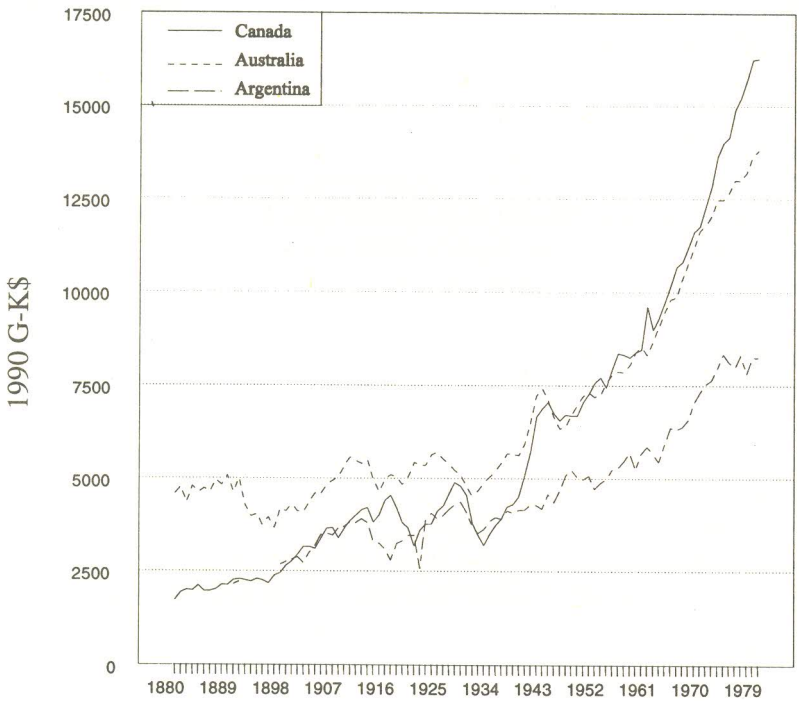
With these considerations in mind, the foreign debt burden for a constant real interest rate of 8% and average growth rates of real output over obvious subperiods (1880-1913, 1914-1939, 1940-80) is displayed in Figure 10. A pattern of convergence seems clearly evident here. Even the relatively high foreign debt burdens in the early years of development, especially in Argentina, never exceed a single year's GDP. Notice the high early instability of the Argentine debt burden. Argentina grew more rapidly than either Canada or Australia in the late 19th century and was also the recipient of heavy capital inflows before 1890 that were larger and more volatile than later in the 20th century. These are exactly the circumstances under which our model would predict the observed convergence of Argentina's debt burden toward that of Canada, Australia, and the rest-of-the-world as the growth rates of all three countries converge toward the world growth rate.

In the model we have considered, public deficits play no role since the government cannot shift taxes from today's population to unrelated individuals yet unborn. In the overlapping generations framework, by contrast, governments can redistribute income from future to present generations, that is, induce current account deficits by running budget deficits. Unlike the representative agent model, the fiscal deficit has permanent effects. In the historical cases we are examining, simple regression analysis using the ratios of fiscal deficit and current account to GDP indicate that these arguments may apply quite well to Australia and Argentina, though not to Canada, in the gold standard era when capital is thought to have been particularly mobile (Zevin 1992). Given this type of evidence, the next step must be to consider a synthesis of the overlapping generations and representative agent models as suggested above.

This preliminary excursus into intertemporal aspects of debt, investment and the balance of payments of Canada, Australia and Argentina over the past century has shown that the behavior of these aggregates is consistent with intertemporal analysis. The refinement of these methods ought to be the subject of future research.

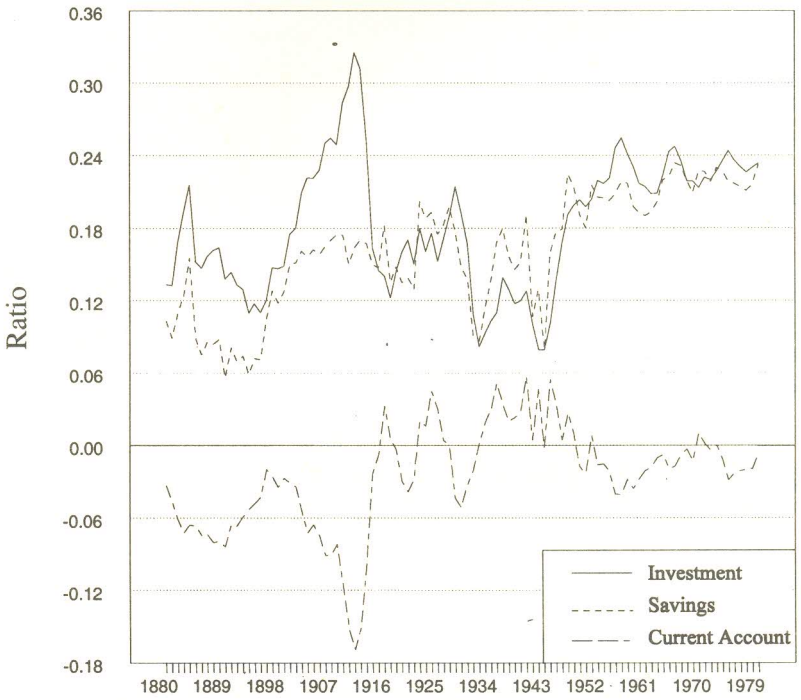
APPENDIX

Figure 1. *Gross Domestic Product Per Capita. Canada, Australia, & Argentina: 1880-1980.*



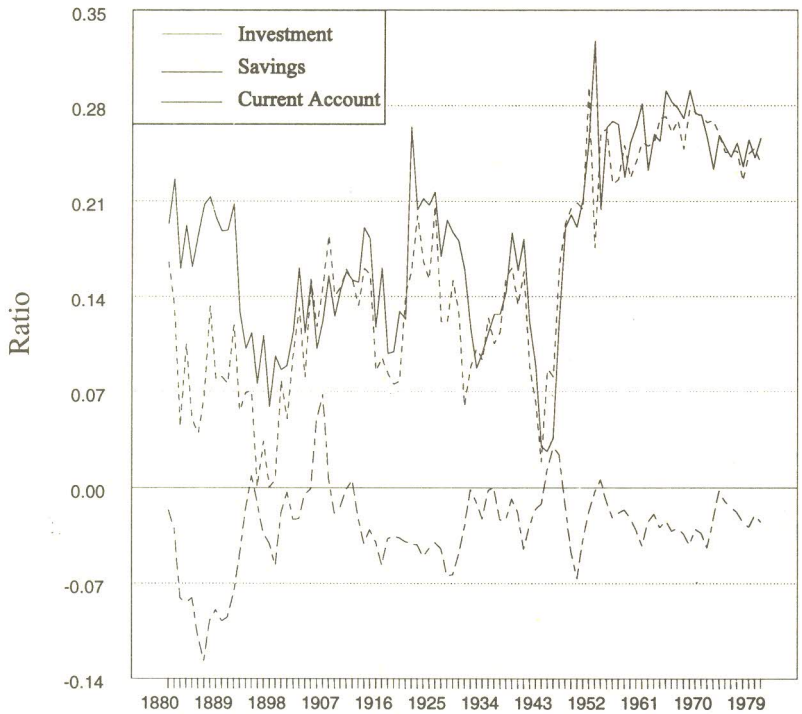
Source: Maddison (1995).

Figure 2. *Savings, Investment & Current Account. Relative to GDP: Canada, 1880-1980.*



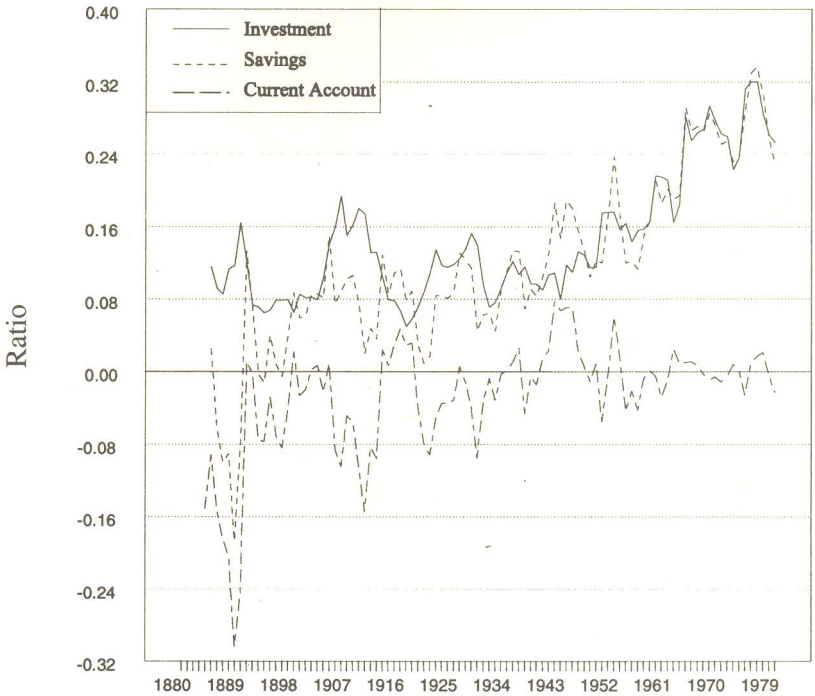
Source: Urquhar (1988, Tables 4, 4a, 4b)

Figure 3. *Savings, Investment & Current Account. Relative to GPD: Australia, 1880-1980.*



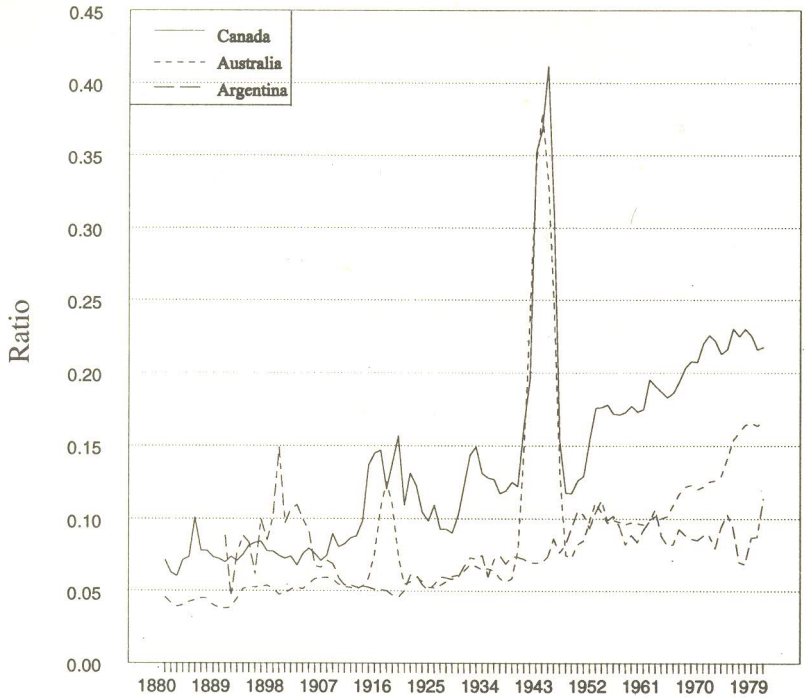
Source: Taylor (1996. Tables 1,2); McLean (1968); Buttin (1977)

Figure 4. *Savings, Investment & Current Account. Relative to GPD: Argentina, 1880-1980.*



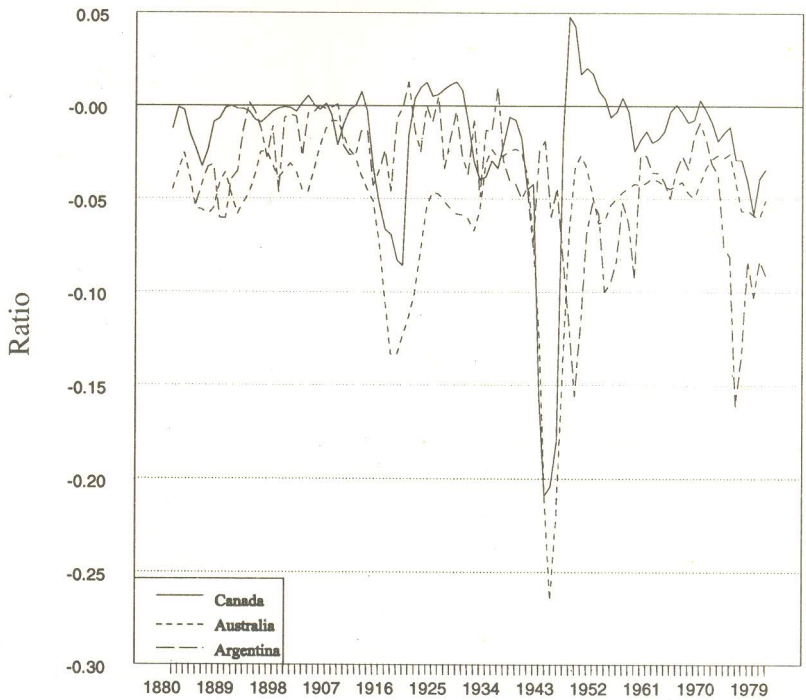
Source: Taylor (1996); della Paolera (1988); IEERAL (1986)

Figure 5. *Government Spending/GPD. Canada, Australia & Argentina: 1880-1980.*



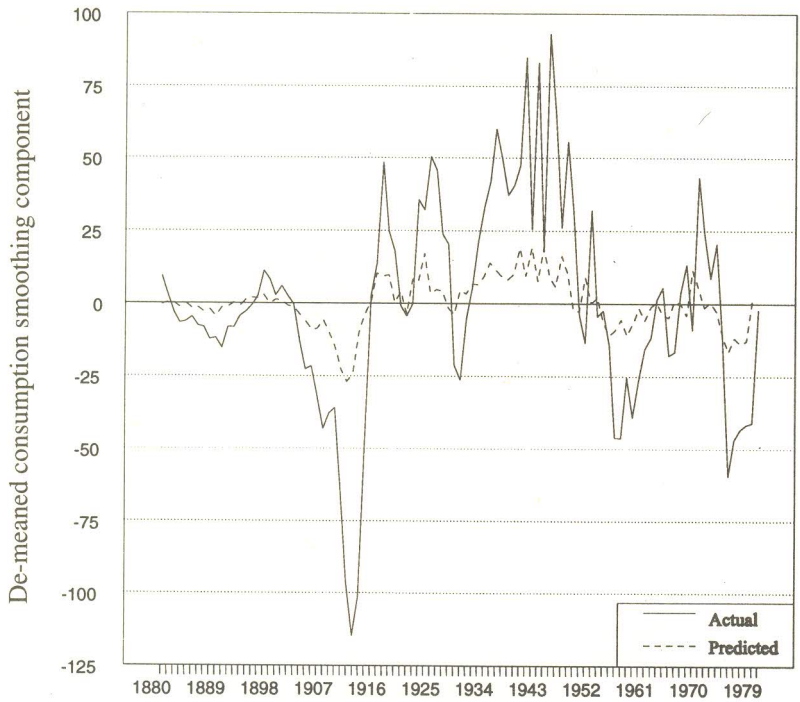
Source: Urquhart (1988); Butlin (1987); Cortes-Conde (1994), *et al.*

Figure 6. *Government Fiscal Deficit/GPD. Canada, Australia & Argentina: 1880-1980.*



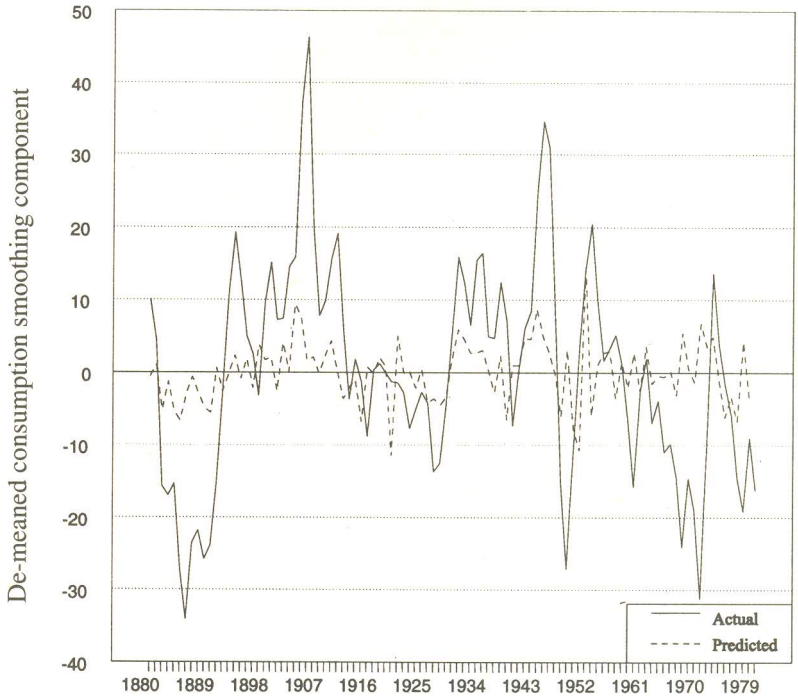
Sources: Gillespie (1991); Barnard (1987; della Paolera (1988); *et al.*

Figure 7. *Canadian Current Account. Actual vs. Predicted: 1880-1980.*



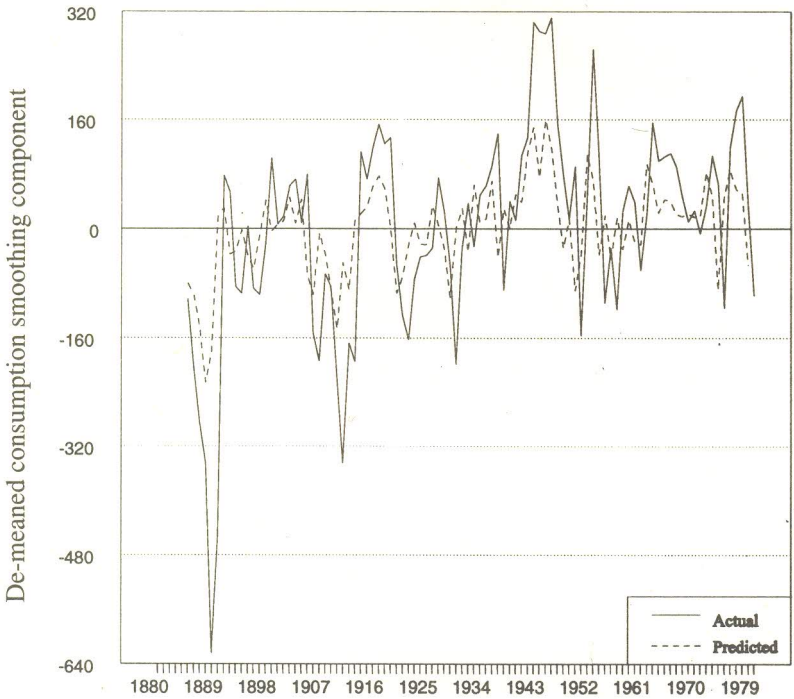
Source: Figure 2 sources & equation (4).

Figure 8. *Australian Current Account. Actual vs. Predicted: 1880-1980.*



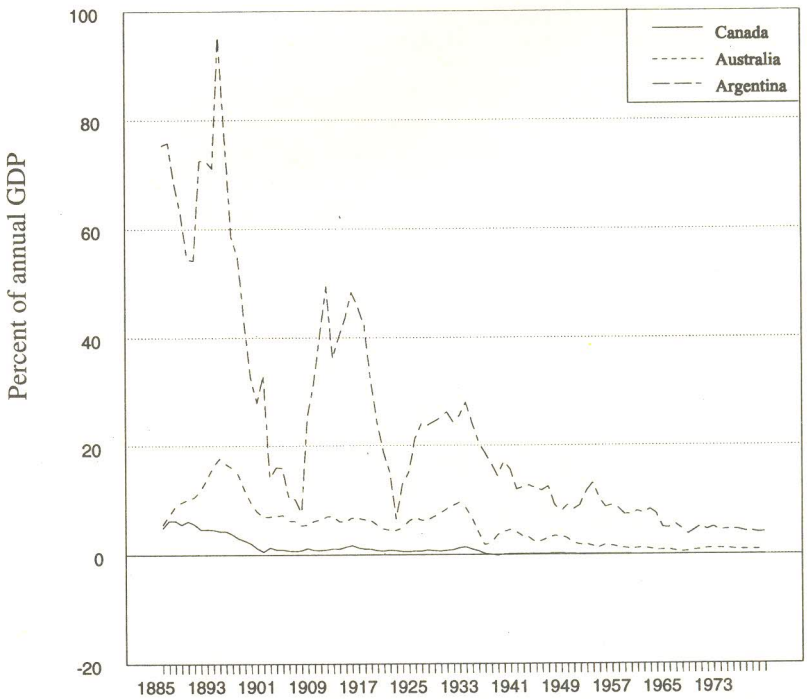
Source: Figure 3 sources & equation (4).

Figure 9. *Argentine Current Account. Actual vs. Predicted: 1880-1980.*



Source: Figure 4 sources & equation (4).

Figure 10: *Foreign Debt Burden. Canada, Australia & Argentina: 1885-1980.*



Sources: Figure 6 sources & text.

Table 1. *VAR Parameters.*

	Canada		Australia		Argentina	
	DZ(t)	CA(t)	DZ(t)	CA(t)	DZ(t)	CA(t)
1880-1980						
DZ(t-1)	0.069	-0.05	-0.176	-4	-0.07	-18
t	(0.67)	(-1.05)	(-1.76)	(-1.07)	(-0.69)	(-3.00)
CA(t-1)	0.062	0.80	0.15	798	0.129	0.67
t	(0.51)	(12.69)	(0.09)	(12.8)	(1.00)	(9.17)
RSQ	-0.001	0.620	0.021	0.62	0.004	0.49
DW	1.97	2.16	1.95	1.36	198	1.85

Key: DZ(t) = (z(t) - Z(t-1))/Z(t-1) etc.
Source: See text.

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ENDEUDAMIENTO, FINANZAS PUBLICAS Y BALANZA DE PAGOS EN LA ARGENTINA, 1880-1914

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Entre 1880 y 1914 la Argentina experimentó un rápido crecimiento económico, caracterizado por una fuerte integración a los mercados internacionales. Este crecimiento no estuvo exento de severas fluctuaciones, que afectaron duramente la situación de la balanza de pagos argentina. Una seguidilla de crisis jalonó todo el período, con especial repercusión en el sector externo, la circulación monetaria, y las finanzas públicas y privadas.

La explicación de estas crisis ha sido abordada por lo general desde dos ópticas contrapuestas, aquella que privilegia el factor monetario, y la que se interesa por aspectos estructurales, que atañen al funcionamiento del sistema del patrón oro internacional (Williams 1920; Ford 1966; Cortés Conde 1989).

El papel del sector público en este proceso ha tendido a ocupar un lugar marginal en esta discusión, no obstante su importancia en los análisis de los procesos de modernización económica (Tilly 1975; Bouvier 1978: y sobre el caso argentino Oszlak 1982). En la Argentina, después de algunos trabajos pioneros de contemporáneos, como Martínez (1890) y Terry (1893, 1910), el tema volvió a concitar el interés solo recientemente. Los análisis de Cortés Conde (1989), centrados en las cuentas fiscales, y los de Carlos Marichal (1988b), más orientados al aspecto institucional, son los principales exponentes. También se pueden mencionar los de Amaral (1984), Chiaramonte (1986) y Halperín Donghi (1982) para el período previo y las economías provinciales.

En este trabajo, nos proponemos indagar en el sector público, como ámbito o escenario donde se puede observar la gestación de los recurrentes desequilibrios que soportó la economía local, y evaluar, particularmente, la interacción entre la situación de las finanzas públicas, y los problemas de balanza de pagos y endeudamiento externo en la Argentina entre 1880 y 1914.

Nuestro enfoque apunta a trazar una medición de las cuentas públicas que permita delimitar los ciclos de crecimiento del gasto, y su correlacion con los ingresos, de manera de establecer las condiciones que hicieron posible, por el lado de la demanda, el recurso al endeudamiento externo. La composición del gasto público también será revisada, a fin de identificar los principales factores que motorizaron este proceso, asociado sin duda a la puesta en marcha

de una pujante economía exportadora, pero también a la creciente complejidad de la organización del Estado nacional en sus tramos finales.

LOS AÑOS OCHENTA: EXPANSION, EUFORIA Y CRISIS

La década de 1880 presenta, desde el ángulo de las finanzas, un carácter expansivo que contrasta con el curso titubeante y pleno de contramarchas de las dos décadas anteriores. Los ingresos fiscales habían experimentado ciertamente una progresión desde 1862. No obstante, la crisis económico-financiera de mediados de los setenta había hecho retroceder los guarismos a niveles inferiores a los del comienzo de la década, y paralizado casi todos los proyectos de inversiones.

El año 1880 marca en ese sentido un punto de inflexión. El acceso al poder de una nueva coalición política, encabezada por el general Roca, y la federalización de Buenos Aires culminaron un proceso de organización del estado que había comenzado casi treinta años antes. Si esto de por sí no alteró significativamente la marcha de las recaudaciones (los ingresos de aduana seguían aportando lo principal), sí implicó un cambio en las concepciones vigentes en materia de gasto y endeudamiento. La tibieza de los proyectos de inversión autorizados en los años previos, fue abandonada en pos de una política más audaz que apuntaba nuevamente a obtener una masiva financiación externa, con la convicción de que los ingresos futuros progresarían lo suficiente como para sustentarla.

Fue la crisis de progreso mencionada por la prensa local y extranjera, que se reflejó en una andanada de nuevos proyectos en los que la nueva coalición materializaba su concepción desarrollista del nuevo rol del estado. El empréstito de los ferrocarriles que inició en 1881 la nueva fase de endeudamiento externo, fue uno de los casos paradigmáticos. Se trataba de la prolongación de los ferrocarriles del Estado, hasta cubrir todas las capitales del norte argentino. Fue el ejemplo paradójico de un crédito destinado, no a cubrir un desfase previo de los gastos respecto de los ingresos, sino precisamente a generarlo.

A partir de 1881, pues, se sitúa la nueva etapa ascendente, que vino signada en principio por un ascenso tanto de los gastos como de los ingresos, superando rápidamente los guarismos máximos de la década anterior. El aumento acumulado 1880-89 llegó al 285% en el caso de los gastos y a nada menos que a 500% en los ingresos.

Las dos fases más importantes correspondieron a la primera parte de la presidencia de Roca, entre 1881 y 1884, y la de Juárez Celman. En la primera,

un rasgo muy notable fue el desfase entre los gastos e ingresos. En 1884 los primeros se ubicaban un 56% por encima de los segundos. Este enorme déficit fiscal puede considerarse una directa consecuencia de las primeros empréstitos externos. Es que la expansión del gasto público no fue solamente el resultado de una optimista apreciación del crecimiento de la recaudación, sino sobre todo, de las nuevas posibilidades de endeudamiento. Lo que sucedió fue que dicha expansión se adelantó mucho, no sólo a los ingresos, sino también a las nuevas operaciones de crédito con que se las pensaba financiar. Las dificultades para concretar dichas operaciones influyeron sin duda en el costado fiscal de la crisis de 1885. Más aún, pueden ubicarse en el origen del viraje de 1887.

Si al final de la presidencia de Juárez Celman encontramos un nuevo salto en el nivel del gasto público, éste no descansó en una apelación masiva al uso del crédito como en el caso anterior, sino en un extraordinario aumento de los ingresos. Ahora bien, lo que permitió este aumento en los años decisivos no fueron las rentas ordinarias, sino la enajenación de importantes activos estatales, los ferrocarriles Andino y Central Norte, a los que se añadió una venta de oro, procedente de los fondos de los bancos garantidos. Si descontamos esos recursos y consideramos solamente las rentas generales, el porcentaje de crecimiento sobre 1880 resulta bastante menor, aunque significativo: 260% en 1880-89. Lo más importante es que quedaba considerablemente por debajo de los egresos totales. La brecha llegó a representar en 1889 casi el 50 % de los ingresos, lo que nos está mostrando que fue la venta de los activos la que permitió sostener el exceso de gastos de esos años (1887-89) (Tabla 1).

Otro factor que impone un sesgo ascendente a las cuentas públicas a partir de 1885 es el hecho de la depreciación monetaria, que redujo el valor en oro del peso moneda nacional al 52% en 1889. El aumento de las rentas generales sería así de solo el 89%, para 1880-1889 (Tabla 2).

En realidad, los ingresos medidos en oro cayeron un 25% en 1885 y sólo volvieron a subir en 1887, antes de que el agudizamiento de la depreciación provocara un nuevo retroceso. El servicio de la deuda pública, que debía pagarse en oro, absorbió en 1885 una magnitud de rentas generales sin precedentes, del 40%. Solo una drástica reducción por efecto de las conversiones, permitirá en 1889 bajar esta proporción por debajo del 30%.

El efecto de la depreciación también se puede advertir en los egresos. Sus valores a pesos oro cayeron en 1885, y el ascenso de los años posteriores no alcanzó para equiparar los niveles de 1884. Ciertamente, esto no constituye una adecuada medición del valor real del gasto, pues los salarios y la mayoría

de los precios no acompañaron hasta 1889 la tasa de incremento del oro. Así pues, excepto en 1885, el adicional del 15% en los gravámenes aduaneros permitió cubrir las pérdidas de cambio, que se concentraron en el servicio de la deuda pública.

Las fuerzas motrices de esta expansión se pueden estudiar a través de la composición del gasto. Al comenzar la década los gastos militares absorbían casi la mitad del total, sin duda como resultado de la rebelión de 1880. En 1882 volvieron a un primer plano los gastos del ministerio de hacienda, debido a los pagos a la provincia de Buenos Aires por la federalización de la capital, casi todos mediante títulos públicos.

Fue a partir de 1883 que los gastos del Ministerio del Interior, responsable de la administración y ejecución de las obras públicas, pasaron a ser los más importantes. Su monto se quintuplicó hasta ubicarse en el 36% del gasto total hacia 1885. Las partidas por leyes especiales, concernientes principalmente a obras públicas, alcanzaron por sí solas el 25%, decuplicando el monto de 1880. Estas partidas explican la seguidilla de empréstitos que requirió el gobierno en esos años.

Los niveles de participación de Interior volvieron a subir fuertemente en 1888 y 1889. Este último año alcanzaron su mayor porcentaje histórico, del 46%, mientras que las leyes especiales por sí solas respondieron por el 32% del gasto público total. Estos datos ilustran sobre el carácter aún más desarrollista del gobierno de Juárez, y sobre el sentido que tenía su política de recursos extraordinarios y de reducción del servicio de la deuda Duncan (1983). La consecución de estos objetivos, en pos de maximizar los proyectos de inversión del Estado nacional en las regiones del interior, fue llegando a un clímax que encontraría su culminación, y su brusco fin, con el estallido de la crisis de 1890.

CRISIS, RECUPERACION Y EXPANSION ACELERADA: LAS FINANZAS PUBLICAS HASTA LAS VISPERAS DE LA PRIMERA GUERRA MUNDIAL

La crisis de 1890 impuso un corte en las pautas con que se manejaba la administración nacional. La profunda depreciación monetaria llevó al abandono de la ficción de una unidad de cuenta en pesos moneda nacional, y llevaron a restablecer la recaudación de una parte importante de los tributos sobre una base metálica. Igualmente se modificaron los normas de la contabilidad nacional, a fin de desglosar los asientos en papel y en oro.

El análisis de la década de 1890 excede los límites de este trabajo, y debe ser entendido solo como un preámbulo al estudio de la nueva fase expansiva abierta a partir de 1900. La liquidación de la crisis en las finanzas públicas fue un proceso penoso, tanto como lo fue el plano de la moneda y de la deuda pública (Cortés Conde 1994; Ferns 1960: 66; Marichal 1988a). Recién en 1895 los niveles de rentas generales, en oro, lograron equipararse a los de 1889. Los últimos años de la década asistieron a un acentuado repunte por un doble motivo: el mejoramiento de las recaudaciones y la fuerte recuperación del peso papel, que de un piso de 29 centavos oro pasó en 1899 a los 44 que fijó la ley de convertibilidad. Ese año los ingresos medidos en oro eran un 94% superiores a los de una década atrás. La sanción de la nueva ley monetaria que restablecía la convertibilidad, parecía mostrar la intención del gobierno, nuevamente encabezado por el general Roca, de dar por terminada la liquidación de la crisis.

La evolución fiscal pasó no obstante por algunas alternativas antes de continuar la ruta ascendente que se insinuaba. Hasta 1902 los resultados no fueron muy alentadores. El nivel de los ingresos corrientes retrocedió en alrededor del 10%, en consonancia con una evolución similar del comercio exterior y el valor del peso apenas lograba sostenerse cerca del nivel de la convertibilidad. A las circunstancias de la guerra anglo-boer se agregaba la perspectiva de otros eventos bélicos de carácter mucho más próximo (en la frontera con Chile). El gasto público, que se había visto contenido por las limitaciones para obtener financiación externa, experimentó una presión ascendente, bien por encima del nivel de ingresos. El nivel de los gastos de Guerra y Marina en 1902 duplicó el de los años precedentes y hubiera sido mayor si no se se hubieran detenido merced a los pactos de Mayo que se firmaron ese año con Chile. La descompresión de este conflicto, simultánea con una mejoría de la situación internacional, y con los nuevos progresos de las exportaciones, abrieron finalmente el paso a una nueva etapa expansiva (Soares 1916).

A partir de 1903 los ingresos fiscales iniciaron una secuencia ascendente que lograría sostenerse casi sin pausa hasta 1913. Ese último año las rentas generales fueron un 128% superiores a las de 1900-02, y cuatro veces mayores que los de 1889, siempre en pesos oro.

La correlación con los egresos fue remarcable hasta 1908. El mantenimiento del equilibrio fiscal constituía una de las premisas básicas para los hombres de la elite gobernante, después de haber sufrido los efectos de la crisis de 1890. Era manteniendo este equilibrio y sobre la base del

crecimiento de los ingresos, que se puso en marcha una nueva onda expansiva del gasto público.

Por el contrario, a partir de 1909 los avances en la expansión del gasto público fueron mayores, y provocaron un desbalance con los ingresos hasta 1912: la brecha llegó al 31% en 1910. Esta situación estuvo en el origen de los grandes empréstitos de obras públicas que se lanzaron en esta etapa, en 1909 y 1911. El primero alimentó el exceso de gastos realizados en 1909 y 1910. El segundo permitió cubrir los desfases más pequeños que continuó habiendo y sobre todo, recuperar el nivel de existencias previo

La composición del gasto es una variable crucial para entender este proceso, y la forma en que se gestaron las nuevas operaciones de crédito. Al comenzar el período los gastos del Ministerio de Hacienda eran los más importantes. En 1900 superaban holgadamente el 40 % del gasto público total. El servicio de la deuda pública y del crédito de corto plazo constituía desde ya el ítem más importante. Su inflexibilidad a la baja implicaba una afectación anticipada de las rentas generales. En 1895, cuando una parte de los servicios se hallaba suspendida, los pagos totalizaban 13,7 millones de pesos oro, un monto similar al máximo de los años ochenta, que representaba el 36% de las rentas generales. En 1900, retomado el pago íntegro de los intereses, el servicio de la deuda consolidada y flotante casi duplicaba el de 1895 en oro, y su participación en las rentas subía hasta cerca del 40%. De ahí el interés de las autoridades de comienzos de siglo por el diseño de proyectos de conversión (Peña 1907). En los años posteriores su nivel lograría ser estabilizado y su incidencia en las rentas bajaría sucesivamente al 30% (1905) y al 22% (1908 y 1911).

Respecto de los gastos militares, luego del brote de 1902 por las tensiones con Chile, se redujeron a la mitad durante varios años. A partir de 1909 volvieron a remontar aquellos guarismos, por efecto de la nueva rivalidad con Brasil. Aunque su financiación se efectuó formalmente con las rentas generales, de hecho se vio favorecida por la entrada de divisas de los empréstitos mencionados.

El mayor protagonismo en esta segunda parte del período correspondió sin duda a los gastos de obras públicas. Los de los tres ministerios en los que se fraccionó después de 1898 el del Interior crecieron su participación desde un 15% en los primeros años de este siglo, a un 33% en 1906, en un nivel muy próximo al de los gastos de Hacienda. Pero el salto más grande se dio en 1909 y 1910, cuando su aumento totalizó un 117% y su participación

en el total pasó al 39%, porcentaje que era ya ampliamente superior a los demás ministerios.

El Ministerio de Obras Públicas fue en esos años el que dio cuenta de la mayor parte del aumento registrado por el conjunto. Los gastos destinados específicamente a la ejecución de obras públicas se ubicaron en torno a los 90 millones entre 1909 y 1911, es decir un 21 o 22% del gasto publico total. Los ferrocarriles constituyeron nuevamente el rubro principal. En los primeros años (1903-08) fue sobre todo la prolongación de líneas de las empresas estatales que servían a las provincias del norte y el oeste, en un proceso que retomaba de algun modo la continuidad con lo ocurrido en los años ochenta. En 1910 y 1911 se trató en cambio de los nuevos ferrocarriles de los territorios nacionales, como parte de una nueva política tendiente a canalizar la acción estatal por senderos que no entraran en colisión con las grandes compañias de capital extranjero. Esta política tuvo su correlato en un menor efecto reproductivo de las inversiones, por el escaso impacto económico y poblacional de los nuevos ferrocarriles patagónicos, pese a las sumas ingentes que insumieron, en comparación con aquellos construídos en los años 80, que permitieron completar la integración de las provincias al mercado nacional y promover en algunas un singular boom productivo.

CONSIDERACIONES FINALES

En este trabajo hemos examinado algunas de las características del gasto público nacional en sus dos grandes fases de expansión antes de 1914, y su conexión con los cambios acaecidos en materia de endeudamiento y en lo que concierne a las condiciones político-institucionales. La primera etapa, signada en el plano político por el ascenso de una nueva coalición con una fuerte presencia provinciana, asistió a una expansión de los gastos encaminados expecialmente hacia las obras públicas y el crédito en el interior del país, así como de aquellos vinculados con la federalización de la Capital.

La evolución de las cuentas fiscales fue consistente con estas orientaciones, y se reflejó en una fuerte participación del Ministerio del Interior en el gasto total. Asimismo mostró desde los primeros años un notable desfase con los ingresos, motorizado por un excesivo optimismo que tendía a suponer inexorable el crecimiento de estos últimos, tanto como la permanente accesibilidad del crédito externo. Los últimos años de la década asistieron a una modificación de esa estrategia, donde el endeudamiento externo fue sustituido por otro recurso de vigencia igualmente efímera: la venta de los activos públicos.

La crisis de 1890 marcó el fracaso de esta política y su sustitución por otra más ortodoxa de equilibrio fiscal, penosamente sostenida en los primeros años ante las exigencias financieras y las de la paz armada. El mantenimiento de este equilibrio no impidió, ciertamente, que el gasto público reiniciara una tendencia ascendente desde 1903, nuevamente orientado a la consecución de obras públicas en el interior y en la Capital. Pero hasta 1908 este aumento estuvo acompañado de una progresión igualmente sostenida de los ingresos, que solo se quebró en los años en torno al Centenario. El recurso al endeudamiento externo, empleado hacia el final de la etapa para financiar inversiones en áreas cada vez más marginales, se articuló en este caso con una lógica del gasto público menos vinculada a las demandas de las elites locales. De esta manera culminaba el proceso de organización de un aparato estatal de dimensiones y complejidad crecientes, y en el que su papel dinamizador en la economía nacional resultó a todas luces emblemático.

En suma, creemos que esta línea de análisis de las finanzas públicas, vinculada en este caso a las operaciones de crédito externo, abre una perspectiva fructuosa para un reexamen más amplio de otros aspectos del papel del Estado en la formación de la Argentina moderna, que se deberá seguir ahondando.

APENDICE

Cuadro 1. *Ingresos, egresos, uso del crédito y variación de existencias del gobierno nacional, 1867-1913 (resultados de caja).*

	1	2	3	4	5	6	7	8
1867	1,00	12,04	12,04	15,95	2,90	-1,01		
1873	1,00	22,90	20,22	27,02	4,10	-0,01		
1876	1,00	13,58	13,58	26,33	12,71	-0,04		
1880	1,00	20,40	19,59	26,93	7,17	0,64	57,06	
1882	1,00	27,53	26,82	52,82	25,95	0,66	37,49	94.57
1884	1,00	37,83	37,72	59,02	22,85	1,66	65,50	122,6
1885	0,73	38,72	38,59	57,20	17,74	-0,74	48,52	105,6
1887	0,74	78,16	57,15	68,03	-0,72	9,42	74,24	131,3
1889	0,52	125,67	72,90	107,28	33,52	51,92	249,28	305,66
1900	0,43	163,22	147,52	162,19	28,93	31,49		447.46
1902	0,43	146,89	142,96	203,81	7,61	-49,13	-12,72	434,74
1904	0,44	199,46	188,42	194,23	4,84	10,24	-20,91	426,55
1905	0,44	213,60	194,41	231,33	49,80	32,07	-63,03	384,44
1908	0,44	256,51	252,28	256,70	-2,36	-2,54	-48,00	399,47
1909	0,44	312,95	272,39	363,10	128,43	78,29	50,24	449,71
1911	0,44	330,48	309,76	409,06	98,59	20,02	127,07	526,54
1913	0,44	410,03	344,64	423,87	12,32	-1,41	145,25	544,72

Fuente: Estado de los recursos y erogaciones, en MH (1867-89), passim.

NOTAS. 1867-1881: cifras en pesos fuertes. 1882-1913: en pesos moneda nacional, excepto columnas 6 y 7, en pesos oro. 1: Tipo de cambio, en pesos oro. 2: Ingreso Total (ingresos ordinarios y extraordinarios, incluída la venta de activos). 3: Renta General (ingresos ordinarios, tributarios o no; entre 1885 y 1889 incluye un adicional de 15% a la importación, calificado erróneamente como renta extraordinaria). 4: Egreso Total. 5: Uso del crédito (créditos internos y externos, libramientos y empréstitos). 6: Variación de existencias (diferencia entre el stock de valores, etc. al comienzo y fin del periodo). 7: Variación de la Deuda Pública. 8: Deuda Pública total (acumulada; las cifras de 1885 y 1889 son las de 1886 y 1890).

Cuadro 2. *Egresos del gobierno nacional según las cuentas de inversión, 1880-1911 (en millones de pesos fuertes y moneda nacional).*

	1880	1882	1884	1885	1887	1889	1900	1905	1911
Tipo de Cambio	1,03	1,00	1,00	0,73	0,74	0,52	0,43	0,44	0,44
1.RENTA GRAL	19,59	26,82	37,72	38,59	57,15	72,90	147,52	194,41	309,76
2. Idem a oro				28,17	42,33	38,17	63,86	85,54	136,29
3. EGRESOS	26,92	58,01	56,44	55,51	65,14	107,25	159,12	242,08	416,57
4. Idem a oro				40,52	48,25	56,15	68,88	106,51	183,29
5. MH	8,93	31,88	19,77	17,74	29,53	26,75	67,36	108,86	84,72
5/3 (en %)	33,2	55,0	35,0	32,0	45,3	24,9	42,3	45,0	20,3
5b,ServDP+CrVs,	6,74	9,08	10,68	15,28	17,20	12,68	56,23	59,96	66,85
5b/1 (en %)	34,4	33,9	28,3	39,6	30,1	17,4	38,1	30,8	21,6
6.GyM	12,69	9,63	11,33	11,07	11,46	16,78	35,76	32,76	95,40
6/3 (en %)	47,1	16,6	20,1	19,9	17,6	15,6	22,5	13,5	22,9
7. MI+MAgr+MOP	3,84	13,09	20,26	20,68	16,31	50,31	38,71	66,71	163,16
7/3 (en %)	14,3	22,6	35,9	37,2	25,0	46,9	24,3	27,6	39,2
7b. MOPublicas							20,70	37,30	104,85
7b/3 (en %)							13,0	15,4	25,2
7c.OP-Leyes	1,43	8,08	13,92	12,37	6,88	34,80	14,61	29,41	99,05
7c/3 (en %)	5,3	13,9	24,7	22,3	10,6	32,4	9,2	12,1	23,8

Fuente: cuentas de inversión del presupuesto y leyes especiales, en MH (1880-1911), passim.
NOTA. 5b: servicio de la deuda pública en pesos moneda nacional + diferencias de cambio (1885-1889) + servicio de la deuda flotante (créditos varios, 1900-1911).

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RESUMENES

DEUDA INTERNACIONAL, PAISES DEUDORES Y LA GRAN DEPRESION

D. ALDCROFT

Aunque la delincuencia y morosidad deudora no era desconocida en el siglo XIX, especialmente entre los países Latinoamericanos, la mayor parte de los préstamos internacionales en este periodo eran devueltos de manera satisfactoria principalmente porque una gran parte de ellos se orientaron hacia zonas de un gran potencial de crecimiento, por ejemplo Norte América y los dominios británicos. La experiencia del siglo XX ha sido mucho menos feliz. Aparte de las pérdidas provocadas por la I Guerra Mundial, especialmente para Francia como consecuencia del repudio bolchevique de las deudas de los Zares, las dos grandes crisis de la deuda comercial en la década de 1920 y en la de 1970/principios de los 80 fueron dos grandes desastres. La primera acabó en delincuencia y morosidad, mientras que la segunda originó una crisis global de deuda que resquebrajó la roca del mundo financiero occidental. Irónicamente, la más reciente crisis de deuda fue en gran medida una reedición de la de la década de 1920.

EL PRECIO DE LA CREDIBILIDAD: DEUDAS PUBLICAS Y ESTABILIDAD DEL PATRON ORO EN EUROPA, 1880-1914

M. FLANDREAU Y J. LE CACHEUX

En este artículo mostramos que, en la mayor parte de los países europeos, la estabilidad monetaria basada en el patrón oro ha sido compatible con una importante acumulación de deuda pública, y despejamos numerosas hipótesis relativas a los factores reales y monetarios que han permitido, a pesar de los niveles elevados de endeudamiento público, tanto la estabilidad de los tipos de cambio como cierta convergencia de los tipos de interés. En segundo lugar nos centramos en las "patologías" del patrón oro; insistimos sobre los motivos sistemáticos y nacionales que han facilitado la propagación o, por el contrario, la resolución de estas dificultades.

DEFICIT PUBLICO, DEUDA, POLITICA MONETARIA Y EQUILIBRIO EXTERNO. ESPAÑA, 1880-1930

A. CUBEL, J. PALAFOX Y C. SUDRIÀ

Este trabajo se centra en el análisis de los costes para la economía española de la decisión de permanecer fuera del Patrón Oro. Aunque la falta de información cuantitativa hace imposible contrastar econométricamente las distintas hipótesis, no se puede mantener que la no convertibilidad de la peseta llevara a altos diferenciales de tasas de interés. El trabajo también aporta una breve descripción de la evolución de la economía española entre 1880 y 1930.

EVOLUCION MONETARIA, FINANZAS PUBLICAS Y BALANZA DE PAGOS: PORTUGAL, 1891-1990

NUNO VALÉRIO

Este texto examina un siglo de experiencia monetaria portuguesa, y discute su relación con la evolución de las finanzas públicas y la balanza de pagos. Se han identificado tres tipos de situaciones: inflación interna y depreciación exterior, causadas por déficits del Estado, financiados (al menos parcialmente) por préstamos monetizados en el Banco de Portugal, acompañadas de problemas de pagos exteriores; inflación interna sin depreciación exterior, causada por superávits de pagos externos, que provocaron aumentos de la oferta monetaria mayores que el crecimiento real de la economía, acompañados de superávits de las cuentas del Estado, o con déficits públicos financiados por deuda pública suscrita en el mercado; y periodos sin inflación interna ni depreciación, causados por la ausencia de déficits significativos tanto de pagos exteriores como de las cuentas públicas.

CIRCULACION MONETARIA, DEUDA PUBLICA Y BALANZA DE PAGOS EN RUSIA, 1880-1914

YURI A. PETROV

Una de las más importantes prioridades de la política financiera rusa en el cambio de siglo era la introducción del Patrón Oro. Entre 1843 y 1853 el sistema monetario ruso estaba basado en el monometalismo de plata, pero fue abolido por el enorme incremento de los gastos del Estado provocado por la Guerra de Crimea de 1853-1856. En los siguientes 40 años Rusia tuvo un sistema basado en el papel moneda, con tendencia inflacionista, que fue reemplazado por el Patrón Oro durante la reforma monetaria de 1895-1897. Por lo tanto, el periodo estudiado (1880-1914) se puede dividir en dos subperiodos: 1880-1897, sistema basado en el papel moneda; y 1897-1914, circulación de moneda de oro.

Las ambiciones imperialistas de la Rusia zarista pusieron al país de vez en cuando en la situación de bancarrota, particularmente durante la guerra ruso-japonesa de 1904-1905 y durante la I Guerra Mundial. Así, la principal preocupación de los ministros de finanzas rusos de esta época era la consecución de superavits de balanza comercial y de cuenta corriente, que eran cruciales para conseguir establecer un sistema monetario fuerte y acceder a los créditos extranjeros.

La introducción del Patrón Oro en Rusia estimuló de hecho la integración del país en el mercado internacional de capitales. A comienzos de la I Guerra Mundial la deuda pública rusa era la segunda del mundo en cantidad (la primera era la francesa), y la deuda de la balanza de servicios era la mayor del mundo. Sin embargo, después de 1909 el crecimiento de la deuda pública se había interrumpido debido a los esfuerzos del gobierno ruso. La estructura de las obligaciones foráneas comenzó a cambiar hacia las inversiones directas, que contribuyeron al desarrollo económico más que los préstamos, ya que éstos se gastaban de manera improductiva para los fines de la política imperial en el exterior. Parece que el incremento de la proporción de inversiones

privadas y la disminución de la participación de las obligaciones estatales se habrían mantenido si la expansión económica hubiera continuado. Sin embargo, la I Guerra Mundial destruyó este sistema de relaciones económicas y financieras. El resultado fue la abolición del Patrón Oro en Rusia, como en todos los países europeos, y el enorme aumento de las deudas de guerra de este país.

MOVILIDAD INTERNACIONAL DEL CAPITAL

T.J.O. DICK

El desarrollo económico de Canadá, Argentina y Australia a lo largo de los últimos cien años ha estado fuertemente influido por su creciente participación en la economía internacional. Comenzando como regiones de nuevo asentamiento antes de 1900, estos países acumularon tanto deuda externa como capital exterior, así como deuda pública al interesarse sus gobiernos por promover el desarrollo. Hacia 1980, Canadá y Australia habían convergido hacia un nivel de renta *per capita* doble del argentino. Este trabajo comienza con el estudio de cómo el comportamiento de la balanza por cuenta corriente puede ayudar a explicar estas diferencias.

Las finanzas internacionales se han centrado recientemente en el análisis intertemporal de las balanzas por cuenta corriente cuyos cambios representan ajustes de los países para suavizar la tendencia hacia el consumo y explotar las ventajas comparativas en inversión. La maximización intertemporal de la utilidad hace que un déficit por cuenta corriente sea óptimo cuando se espera que aumenten los ingresos futuros, e incluso puede ser sostenible en un largo periodo cuando la producción está creciendo de manera suficientemente rápida. Los déficits presupuestarios públicos, por otro lado, tienen un efecto más problemático, dependiendo de cómo el modelo intertemporal permita la consecución de la Equivalencia Ricardiana.

Una exploración preliminar de estas ideas con las series temporales a largo plazo del PIB y de la balanza de pagos disponibles actualmente para los tres países citados revela que el modelo intertemporal parece explicar los grandes problemas de la balanza por cuenta corriente a lo largo del tiempo. A la vez, la balanza por cuenta corriente real es habitualmente más variable que la predicha por el modelo, lo que sugiere que el capital era generalmente movible y que el comportamiento de los posesores de la riqueza pudo estar motivado por algo más que por la suavización del consumo. A la vez, al

continuar el crecimiento, el tamaño de los desequilibrios de la balanza por cuenta corriente en relación con el PIB disminuyeron fuertemente, un hecho que no es necesariamente incoherente con la constante movilidad del capital, aunque es a menudo coincidente con la convergencia en las tasas de crecimiento y niveles del PIB.

ENDEUDAMIENTO, FINANZAS PUBLICAS Y BALANZA DE PAGOS EN LA ARGENTINA, 1880-1914

ANDRÉS M. REGALSKY

Entre 1880 y 1914 la Argentina experimentó un rápido crecimiento económico, caracterizado por una fuerte integración en los mercados internacionales. Este crecimiento no estuvo exento de severas fluctuaciones, que afectaron duramente a la situación de la balanza de pagos argentina. La explicación de estas fluctuaciones ha sido abordada por lo general desde dos ópticas contrapuestas: aquella que privilegia el factor monetario, y la que se interesa por aspectos estructurales, que atañen al sector externo de la economía. En este trabajo, nos proponemos hacer una contribución a esta discusión desde el punto de vista del sector público, un ámbito cuya importancia en el proceso de modernización es ampliamente reconocida, y desde donde se puede observar la gestación de los recurrentes desequilibrios que soportó la economía local, y evaluar, particularmente, la interacción con los problemas de endeudamiento externo en la Argentina entre 1880 y 1914. En este trabajo se ensaya una medición de las cuentas públicas, que permite delimitar los ciclos de crecimiento del gasto, y su correlación con los ingresos, de manera que se puedan establecer las condiciones que hicieron posible, por el lado de la demanda, el recurso al endeudamiento externo. La composición del gasto público también es revisada, a fin de identificar los principales factores que motorizaron este proceso, asociado sin duda a la puesta en marcha de una pujante economía exportadora, pero también a la creciente complejidad de la organización del Estado nacional en sus tramos finales.

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UNIVERSIDAD de SEVILLA

Fundación EL MONTE

Instituto de Estudios Fiscales

Ministerio de Economía y Hacienda
Secretaría de Estado de Hacienda

FUNDACIÓN FOMENTO DE LA HISTORIA ECONÓMICA

ISBN 84-472-0452-9