

**CAPITAL FLOWS AND INVESTMENT
PERFORMANCE:
THE CASE OF PERU**

Stephany Griffith-Jones with Ana Marr

ABSTRACT

This paper analyses capital flows to Peru in the early 1990s, in the context of the radical stabilisation and reform programme undertaken by the Fujimori government. The needs of reducing inflation, combined with the surge of capital inflows led to a rapid overvaluation of the currency. Together with rapidly rising output, this led to a large increase in the current account deficit. This implied an important source of Balance of Payments vulnerability, especially as a relatively large share of capital flows were potentially volatile. This potential vulnerability of the Peruvian economy was clearly perceived as it occurred just after the Mexican peso crisis. Adjustment took place emphasising expenditure reducing policies, which implied a significant reduction of growth. The alternative of relying -at least in part- on expenditure switching policies, which would have been less costly in terms of reduced growth, was not used.

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INTRODUCTION

The Peruvian economy had performed very badly from the mid 1970s to 1990, in most aspects. Since 1990, the Fujimori government embarked on a radical programme of stabilisation and market reforms. This programme has contributed to significant improvements in many aspects, particularly in reducing inflation, raising the investment ratio and increase in growth. However, the rapid growth of the current account deficit became a potential Achilles' heel, particularly as a fairly important part of it was financed by relatively short-term capital flows. The adjustment carried out by the economic authorities has been successful in reducing the current account deficit, but has implied a significant reduction in output growth. This is, to an important extent, because the measures taken have emphasised expenditure reducing policies (via tighter monetary and fiscal policy) and not used expenditure switching policies, such as taking measures to encourage a depreciation of the currency; the latter could have achieved a similar reduction in the current account deficit, with a smaller decline in output. These expenditure switching measures would have been particularly effective in the Peruvian economy, as the large current account deficit emerged at a time when the economy was still well below its production frontier.

In section 1, the overall context of the Peruvian economy is analysed, with a focus on the macroeconomic policies pursued. Emphasis is also placed on the recent increase in the level of investment. Section 2 examines the sources and composition of foreign capital inflows between 1990-95; foreign direct investment flows are analysed carefully, evaluating the extent to which

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they are likely to contribute to increased output in tradables; the fact that portfolio flows account for a far smaller share of flows than those going to many Latin American countries is also noted, as is the rapid growth of short-term capital flows. The importance of the old debt overhang is also stressed, again a feature rather specific to Peru within the Latin American context. Section 3 analyses in depth the use of capital inflows, emphasising the increase in the investment ratio, and the fact that the current account deficit is explained by the gap between private investment and savings. Section 4 concludes, and draws policy lessons.

1. The overall context

The overall performance of the Peruvian economy in the 1970-90 period was very poor in terms of growth. Per capita GDP in 1990 was well below its 1970 level. Indeed, even though there has been important GDP growth since 1993, its level in 1995 was still below the 1970 level.

The 1980s were also characterised by serious macroeconomic problems, which led to hyper inflation at the end of that decade. As a result of these problems characterising the Peruvian economy, investment (and particularly private investment) fell. In fact, according to Paredes (1995), private investment (as percentage of GDP) fell from a 20.2% average during the 1960-75 period to 16.3% during the 1976-89 period.

As regards the efficiency of investment, the ICOR grew from a level of around three in the 1950-75 period to a level above eight during 1975-89, which implied that the efficiency of investment declined significantly during this period. To an important extent, this is related to the low level of capacity utilisation during this period. This lower efficiency of investment was accompanied by a sharp decline in total factor productivity, which was particularly marked in the industrial sector, and had especially negative effect on exports.

Indeed, according to the World Bank's 1993 World Development Report, the growth of Peruvian exports during the 1980-91 period reached only one fifth of the average growth of exports during that period of lower middle income countries (category to which Peru belongs). Furthermore, if one compares Peruvian exports per capita in 1989, these were 30% below their level in the first half of the seventies.

The poor performance of the Peruvian economy worsened further the situation of serious poverty. By 1990, more than a third of Peru's population lived in a situation of extreme poverty.

Taking a longer view, that is looking at the 1950-95 period, the Peruvian economy had two different phases, from a growth perspective. Between 1950 and the mid-1970s, Peru grew at a stable rate, with a growth rate of 5.4% and an annual inflation of 9.5%. During the second phase, from 1976 to 1995, GDP grew by a mere 0.8% annually which implied that GDP per capita fell on average by 1.4% annually during this period; inflation reached an incredibly high level, as it averaged 705% for the whole period.

(insert Table 1)

This evolution can in part be explained by different trends in the growth of savings and investment, which were high (at 7.8% and 8.8% annual growth rates) during the phase when the Peruvian economy grew rapidly, and were so much lower during the phase of declining GDP per capita (1976-95). As González et al. 1996 emphasise, the variability rate of GDP, of savings and of investment increased significantly between the 1950-75 and the 1976-95 period.

In 1990, the election of President Fujimori led to a sharp change in economic policy, as a very stringent programme of stabilisation, a strategy for re-establishing relations with the international financial community, and a programme of radical and simultaneous structural reforms were adopted. The latter included practically simultaneous liberalisation of foreign trade (which rapidly reduced both tariff and non-tariff barriers), the capital account, domestic capital markets, a massive process of privatisation and establishment of clear rules for domestic and foreign investment and the deregulation of the labour market, amongst others.

Since the beginning, the Fujimori programme included the return of Peru to the international financial community. As a result, the programme was supported from the start by the World Bank and the IDB, with important loans. Furthermore, Peru successfully finished a Rights Accumulation Programme (1991-92) with the IMF (which required Peru to clear up arrears with the IMF., World Bank and the IDB, while observing IMF quarterly performance criteria), followed by two Extended Fund Facilities (1993-95) and (1996-98). Furthermore, Peru has reached two agreements with the Paris Club, and an agreement with commercial banks

(Brady). We will look at the more detailed implications for the Balance of Payments in Section 2 below.

The programme of stabilisation led to a sharp fall in inflation, which had peaked at a monthly rate of 60 % in July 1990 (it reached 400% a month during the first month of the stabilisation plan). Then inflation fell sharply; by 1995, inflation had an annual rate just over 10% (see Table 2).

(insert Table 2)

One important element in the anti-inflationary strategy was the reduction of the combined public sector deficit, which according to IMF figures, was reduced significantly from 7.6% of GDP in 1990 to 2.7% in 1993. Public finances remained tight during the first half of 1994, but weakened somewhat from then till the end of 1995, reflecting increased social and capital spending, as well as wage increases. Part of this deterioration was linked to the political cycle.

A tight monetary policy was also adopted. This policy, as well as the increasingly large capital inflows, caused the exchange rate to strengthen. Machado (1997) has estimated, via a simulation based on the results of co-integration regressions, that capital inflows were the main cause of exchange rate appreciation. The estimates of Machado (1997) show that, if one defines as sustainable a deficit on current account of 3% of GDP (instead of the 5.2% actual deficit in 1990-95), the exchange rate would have appreciated only half of actual appreciation. This excess appreciation is totally explained by short-run inflows (including errors and omissions) in 1990-95.

The exchange rate policy pursued by the economic authorities throughout the period has been one of a floating exchange rate, with interventions by the Central Bank. The stronger exchange rate seems to have been broadly welcomed by the economic authorities as a valuable instrument for lowering inflation in Peru. However, during periods when there were strong pressures towards additional overvaluation, due to the large capital inflows, (as in the first quarter of 1992 and the second half of 1993 as well as part of 1994), the Central Bank intervened actively. The authorities were, however, not entirely successful in resisting the strengthening of the new sol by their intervention; thus, between December 1991 and March 1992, the new sol appreciated by 19%. The measurement of the extent of overvaluation that has taken place

depends crucially on the base period taken. It seems reasonable that the basic period is the average for 1990 (year when the stabilisation programme started), with average 1990 as 100 for the real exchange rate; the real exchange rate strengthened to 67.6 average for 1991, 65.6 average for 1992, weakened somewhat for 1993, when it averaged 72.2, but strengthened again in 1994, when it averaged 66.5, and in 1995 - when it averaged 64.8 (own calculations, based on Central Bank data for multilateral real exchange rate). As a consequence, by 1995, the average real exchange rate was 35% stronger than it had been on average in 1990.

Furthermore, a recent estimate of the real equilibrium exchange rate of Peru (Moguillansky, 1995) concludes that by 1994, the Peruvian exchange rate was 30% overvalued in relation to an "equilibrium" exchange rate; this study provides a useful benchmark, as it is based on a model of inter temporal equilibrium, as developed by Edwards (1988), but incorporating the impact of external capital flows and trade liberalisation. The high level of overvaluation of the sol can to an important extent be attributed to the large capital inflows (for detailed discussion see Section 2 below).

Indeed, the strong capital inflows between end of 1990 and early 1992 resulted in an appreciation of the new sol, which as pointed out above was 35% stronger in 1992 than it had been in 1990; furthermore, particularly during this period, the economic authorities gave greater priority to reducing inflation than to defending a competitive exchange rate, which contributed to this revaluation. This policy pattern is fairly common to other stabilisation programmes, whose initial aim is rapid reduction of prices from a context in which there is hyper-inflation (Cardoso, 1996). As Agosin and Ffrench-Davis (1995) have currently pointed out, an appreciation of the exchange rate undermines one of the key aims of import liberalisation, which is to eliminate the anti-export bias linked to import protection. Simultaneously, it may weaken domestic producers' ability to compete with foreign goods, which become cheaper, both due to tariff reductions and exchange rate overvaluation. Thus, an overvalued exchange rate - which is harmful under any circumstances - is particularly so if it occurs during or immediately after import liberalisation, as was the case in Peru in the 1990s. In this sense, the Peruvian economic authorities - similarly to the Argentinean and Brazilian ones - have faced a particularly difficult task in the 1990s in that their trade liberalisation occurred at the same time as a large surge in capital inflows. This is in contrast with Chile (Agosin, 1996, in this volume) where the economic authorities in the 1990s

did not have to deal with undertaking reforms and coping with a capital surge at the same time; however, Chile had experienced - and seriously mishandled - both rapid reforms and a surge in capital inflows in the late 1970s and early 1980s

During 1993-95, the Central Bank increased its intervention in the foreign exchange market in an attempt to diminish the pressures on the currency to appreciate due to the large capital inflows; it also increased its sterilisation efforts to compensate for monetary effects, via open market operations. The stock of Central Reserve Bank Certificates of Deposit rose from \$12 million in December 1993 (0.7% of base money) to \$1085 million in September 1995 (35% of base money). The Central Bank also established non-remunerated reserve requirements on both domestic and foreign currency deposits in November 1993.

Though there are different estimates about the exact extent of the overvaluation of the new sol, the fact that the current account deficit grew so rapidly till 1995, and became so large in that year, was an important indicator that the exchange rate was overvalued.

Indeed, rapidly growing current account deficits, which reached between 7.5% and 9.5% of GDP in 1995 (depending on the measurement used of GDP, matter on which there is currently debate amongst Peruvian economists, particularly as the National Accounts are being revised), indicate clearly that the exchange rate is overvalued and/or that current levels of absorption of the Peruvian economy are inconsistent with the balance of payments restriction. The high level of the current account deficit, as well as its increasing trend until late 1995, were widely seen as a potential Achilles' heel of what on the whole has been a rather successful economic programme since 1990, which has led to sharp falls in inflation and (until mid 1995) very rapid economic growth, albeit from very depressed levels.

The government responded to the growing current account deficit mainly by attempting to slow down the economy, via measures such as cutting government spending and tightening monetary policy, in the context of IMF programmes. This led to a reduction in the current account deficit, trend for which there are some preliminary figures at the time of writing. Indeed, according to preliminary figures in ECLAC (1996), Peru's current account deficit fell from \$4.2 billion in 1995 to \$3.5 billion in 1996.

However, the economic authorities have not taken measures to restrict short-term capital inflows, measure which could have reduced the pressure towards such an overvalued exchange rate.

In this context, it seems asymmetrical that the Central Bank has rightly put reserve requirements of 45% on deposits in foreign currency for both prudential and other reasons, but not done so for short-term credit in foreign exchange; furthermore, this gives room for some 'round-tripping' to avoid the reserve requirement on dollar deposits. The reason why reserve requirements on dollar deposits are so important is because the Peruvian economy is heavily dollarised (mainly as an after-effect of the hyper-inflation, even though inflation was in 1995 only 10%). As a result, over two-thirds of both deposits and loans of the banking sector are in dollars.

The dollarisation of the economy restricts, more than in other countries, the effectiveness of monetary policy, particularly as a weapon to reduce the current account deficit. Thus, the tightening of monetary policy does lead to slower growth of domestic credit. However, banks respond by increasing their borrowing in foreign currency, which they can then on-lend also in foreign currency to the private sector; as we shall see below, this is exactly what happened, especially in 1995, when foreign credit shot up. Furthermore (as Dancourt and Mendoza, 1996, argue), there will be an increased demand for deposits in soles, as deposits in soles become relatively more attractive than deposits in dollars, due to the increase in soles' interest rate; this pushes the exchange rate towards further revaluation.

Thus, the net effect of the monetary tightening seems to be a trend towards further strengthening of the currency and a substitution of domestic credit expansion by foreign credit expansion, which can then continue to finance imports.

As a result, given the policy stance of openness with respect to financial inflows, monetary tightening is not particularly effective in the Peruvian context to reduce the current account deficit. If the intention is to reduce the current account deficit by a reduction of aggregate demand, a far more effective way is to tighten fiscal policy. Indeed, in the new Extended Fund Facility that the government agreed with the IMF it has committed itself to reduce the consolidated public sector deficit from 2.6% of GDP in 1995 to zero in 1998. Even though a certain tightening of the fiscal stance can play a positive role in these circumstances,

excessive tightening of fiscal policy could have problematic effects in that, on the one hand, it may imply a crucial reduction of essential government spending (e.g. in education) and on the other, it can slow down growth significantly.

As regards output, the evolution between 1991 and 1995 has been both very favourable, and far better than in the previous 15 years (though as pointed out above, per capita GDP has not yet recovered the 1970 level). Growth was particularly high in the 1993-95 period; it peaked in 1994 when it reached 13%. However, as a result of the restrictive monetary and fiscal policies applied by the economic authorities during 1995 to slow down aggregate demand, so as to reduce the current account deficit, growth not only slowed down, but became negative in December 1995 (when GDP fell by 1.9%) and in January-March 1996, when it fell by 1.6% (see again Table 2).

A crucial element for understanding the impact of capital inflows on the recipient economy in the medium term is to assess the extent to which it has resulted in an increase in investment, whether this investment is efficient, and - especially - what proportion of that additional investment goes into tradables (Griffith-Jones, et al, 1992). Particularly noteworthy in the context has been the increase in investment, which grew by 12.9% in 1991, fell slightly in 1992 (by 2.6%), increased by 11.8% in 1993, by 29.2% in 1994, and by 20.1% in 1995.

As a result, the investment to GDP ratio (at current prices), which had only averaged 16.3% in the 1976-89 period, grew systematically from 16.7% in 1991 to reach 22% of GDP in 1994 and 24.2% in 1995 (see Table 3). Most of the increase in investment has been private sector investment, which grew from 12.2% in 1990 to 19.3% of GDP in 1995 (see again Table 3). This rapid increase in private investment can be explained by the rapid growth of the economy, increased credibility of policy and also to the success of sharply curbing Shining Path guerrilla activity. Public investment also grew during this period, reaching 4.1% of GDP in 1995. Though the increase in private investment has been very large, most of it has been in investment in building, which grew very rapidly from 9.2% in 1991 to 15.4% of GDP in 1995.

(insert Table 3)

As can be seen in Table 3, the increase in the share of GDP going to private investment in machinery and equipment, has been somewhat smaller, growing from 2.7% in 1990 to 3.9% in 1995; all the growth in private investment in machinery and equipment takes place in 1994 and 1995. From these figures we can conclude that: a) gross domestic investment has grown very sharply during the 1990s from 16.7% of GDP in 1991 to 24.2% of GDP in 1995, that is by 7.5% of GDP. This is the main reason for the rapid growth of the current account deficit, as domestic savings - though they increased, between 1991 and 1995 by an estimated 2.8%, see again Table 2 - grew significantly less than gross domestic investment. b) Most of the growth of investment has been private investment. c) The largest part of the growth of private investment has been in building, which grew by an estimated 6.2% of GDP between 1991 and 1995. d) Though the growth rate of investment in machinery and equipment has been rather high during this period, as it started from such a low base, the increase between 1991 and 1995 only corresponds to an estimated 1.4% of GDP (see again Table 3). The conclusion to be drawn from these trends would indicate a positive development - the increase in investment - explaining the increasing and large current account deficit; this is far more positive than the Mexican experience in the early 1990s of rapidly growing consumption causing the growing current account deficit; however, the fact that such a high proportion of the increase in private investment in Peru is in building would seem to indicate that the output it will generate would tend to go more into production of non-tradables, which would be a rather worrying trend (see Griffith-Jones et al, 1992; and Devlin, French-Davis and Griffith-Jones 1995). A related problem is that investment in building, mainly in local currency, tends to lead to higher real exchange rate appreciation than investment in machinery and equipment (as the latter has a far higher foreign exchange component). Furthermore there is clear empirical evidence (De Long and Summers, 1991) that growth is much more strongly associated with investment in machinery and equipment than with other components of investment, such as building, implying that the increase in productivity generated by investment in machinery is higher than that in building. As regards impact on employment, building is fairly intensive during the first stage, but fairly limited in generating jobs once the building is finished (with the reverse being true for machinery and equipment).

A somewhat more positive evaluation of trends in investment in machinery in the first part of the 1990s emerges if focus is placed on the evolution of imports. (Data on imports are reportedly somewhat more reliable than the national accounts data reported above.)¹ As can be clearly seen in Table 4 (as well as in Figure 1), imports of capital goods have increased at a fairly high rate, reaching an average annual growth rate of 23% for the 1990-95 period. Particularly in 1994 and 1995, there was a very rapid growth of capital goods' imports, with increases of 50% in 1994 and 40% in 1995. This would seem to indicate a relatively important increase in investment in machinery and equipment (even though these are still a very low proportion of GDP, as discussed above); a fairly important part of machinery and equipment investment could be going into tradables. (We will return to this latter point - the share of investment going into tradables - when we examine foreign direct investment in mining, in the next section.) It is, however, interesting that the highest growth rate of capital goods is that geared to the building sector - see again Table 4. Furthermore, it should be emphasised that the highest annual growth rate of imports for the 1990-95 period, was in consumption goods, which on average grew by 44.6%; an important part of this increase was concentrated in 1991, when consumption goods imports grew by 123%; however, consumption goods imports also grew significantly in 1994 (50%) and in 1995 (33%). We can conclude that though consumption as a share of GDP has fallen somewhat, the share of imported consumption goods in total consumption increased rather sharply. Furthermore, consumption goods' imports grew significantly faster than imports of capital goods.

(insert Table 4 and Figure 1)

Finally, as regards total imports it is important to stress their very rapid growth in the 1990-95 period, when their average growth rate was 22 %; moreover, in 1994 and 1995, total imports rose by 38% each year (see again Table 4). This is a result of the rapid appreciation of the real exchange rate discussed above, as well as fairly rapid trade liberalisation.

¹ Interview material.

2. Sources and composition of foreign capital inflows, 1990-95

Table 5 reflects the main features of the evolution of the Balance of Payments, based on recent Central Bank estimates.

We can highlight the following features:

a) There has been a rapid rise of the current account deficit, increasing to a level of US\$4.3 billion in 1995 from \$1.2 billion in 1991. Even though the increase in exports of goods and services has been quite impressive, as discussed in detail above, imports of goods and services have grown far more rapidly.

b) Because capital inflows have been even larger than the current account deficit, net foreign exchange reserves have continued to increase throughout the period, growing from US\$-105 million in July 1990 to US\$2 billion in December 1992 and to US\$6.6 billion in December 1995. These are equivalent to around ten months of total imports. It should be mentioned that about one third of these reserves correspond to the proceeds of the 45% of reserve requirements on dollar deposits.²

c) A crucial element for understanding the potential sustainability of current account deficits relates to the nature of the capital inflows. Many of the features of capital flows to Peru are different from those going to the rest of Latin America in the first half of the 1990s.

An apparently positive feature of capital flows to Peru is the high proportion of FDI. As can be seen in Table 5, a very high share of capital inflows in 1994 and 1995 (but not in the earlier 1991-1993 period) came as FDI. Given that FDI is motivated by long-term considerations, it is traditionally considered as a more stable - and less volatile - source of financing. Indeed, for example, Turner (1991) carried out empirical tests for volatility of capital flows, for industrial countries for the 1975-89 period. His empirical results allow him to draw a clear 'hierarchy of volatility' of different categories of flows, which starts with the most stable and finishes with the least stable. The ranking is: 1) long-term bank flows; 2) direct investment; 3) investment in bonds; 4) investment in equities; and 5) short-term bank lending. It should be mentioned that Claessens, Dooley and Warner, (1995) have somewhat surprisingly found some

² Interview material.

evidence that holding periods of foreign direct investors are not longer than investors in short-term capital; however, their paper seems to have methodological shortcomings (see Reisen, 1996). Furthermore, Chuhan, Pérez-Quirós and Popper (1996) provide econometric evidence that short-term flows respond more than foreign direct investment to disturbances in other capital flows and in other countries, thus providing empirical support for the view that direct investment is less volatile than other flows. Another recent study (Frankel and Rose, 1995) provides empirical evidence that the higher the share of investment in total capital flows, the lower the likelihood of a foreign exchange crisis in a developing country. Therefore, the international evidence does offer some comfort from the fact that a high share of capital inflows to Peru is via FDI. It should, however, be stressed that domestic political shocks can also affect FDI.

(insert Table 5)

Furthermore, a very high proportion of FDI to Peru (particularly in 1994, and to a lesser extent in 1995) were flows for purchase of companies that were being privatised (see Table 5, last line). Thus, in 1994 there is \$2.3 billion of FDI, of which practically all, \$2.1 billion was for privatisation; for 1995 we have \$1.7 billion of FDI, of which \$0.6 billion is for privatisation. This is a source of concern for the future in that there is an important 'once for all effect' as the massive privatisation programme is projected to slow down in 1996, and probably to finish by 1997. Another somewhat problematic feature of the income of foreign capital for privatisation is that this does not by itself lead to an increase in productive capacity as basically it refers to purchase of existing capacity, even though several of the privatisation deals in the case of Peru have implied important commitments of future expansion of productive capacity; indeed, the Government estimates that these additional commitments reached \$4 billion, much of which has been carried out. Also the privatisation process may imply productivity and production gains even if new investment is not carried out. Another source of possible concern about these capital inflows for privatisation and their likely impact on the future current account is that a large share of the companies privatised are mainly in the non-tradable sector. Thus, of the large foreign inflow for privatisation in 1994 (US\$2.1 billion), a very large proportion went to the privatisation of the telephone company, which was sold for US\$1.4 billion (CONITE, 1995), and where there are estimated commitments for additional investment of US\$1.8 billion investment which were

largely carried out. Even though some of the impact of those transactions relating to telecommunications will either directly, or indirectly, generate foreign exchange via greater production of tradables, the main effect of these operations will be to increase the scale and productivity of non-tradable services.

However, it should be highlighted that in 1995, FDI (excluding privatisation) did increase to just above US\$1 billion, from around US\$200 million in 1993 and 1994(see again Table 5).

A detailed breakdown of total FDI stocks (including privatisation's) can be seen in Table 6. As pointed out above, the largest increase is in telecommunications. There is also a rapid increase in FDI stocks in mining, which more than doubles from \$420 million in 1990 to \$960 million in 1995; in energy, which increases very much from \$564 thousand in 1990 to \$850 million in 1995; in industry, which grows from \$440 million in 1990 to \$640 million in 1995 and in finance, (which grows from \$110 million in 1990 to \$470 million in 1995).

(insert Table 6)

Of these sectors, additional output generated by the investment in mining will be mainly devoted to exports; additional output generated by the investment in energy and industry will be devoted either to increases in domestic absorption or to import substitution; additional output in telecommunications and in finance will be mainly devoted to the production of non-tradables services, though they may have some - mainly indirect - impact on the production of tradables. Therefore, we can conclude that around half the FDI entering Peru in 1990-95 would have generated investment in tradables.

One sector where a very high share of output will go into exports is mining. In this sector, there seem to be also important new mining projects planned, which if they materialise should have a large impact on FDI. and future exports. As a consequence, we will examine in quite a bit of detail planned investment in mining and its likely impact on output and exports. This approach seems valuable in this case; given the predominance of very large projects in mining, it is more useful to analyse these large projects, rather than using econometric or other projections, based on past trends.

A useful base from which to start is the December 1994 Plan Referencial de Minería, 1994-2003, which was prepared jointly by the Ministry of Mining and the World Bank. As can be seen in Table 7, this document projects \$5.7 billion of investment in mining for the 1996-2000

period, and \$7.4 billion for the period 1996-2003. This assumes large investments in projects like Quellaueco, Toromocho, La Granja and Michiquillay, as well as expansion of existing mines like Cerro Verde, Centromin, SPCC and Yanacocha.

(insert Table 7)

Based on the projections of output which arise from these investment plans should they all materialise, and what seemed fairly realistic projections of prices at the time, the 'Plan Referencial' projects a rather rapid increase in mining exports, from \$2 billion in 1995 to \$4.8 billion in the year 2000.

However, some of the investment projected is reportedly too optimistic, as several of the projects that are assumed will take place in the 1996-2000 years may not do so in this period, for reasons such as lack of sufficient feasibility studies, difficult geological conditions, and other features which may make the project unattractive.³ However, it seems that an important part of the investment projected will take place, particularly if the investment environment in Peru remains favourable. (This assumes that there will be no major political or economic shocks.) According to expert estimates, a more likely maximum figure for investment in mining in the 1996-2003 period is \$5.6 billion, that is a figure 25 % lower than the 'Plan Referencial' projections. Of this, a fairly large proportion, \$1.2 billion is assumed to go to investment in exploration, and \$4.4 billion for expansion of existing projects and development of new ones, with most of it going into new projects. However, long-term optimism on Peruvian mining exports is supported by the high bid made by a Canadian consortium for the huge Antamina copper deposit. If completed, this would be by far the largest single mining investment ever made in Peru. Optimism on the future of Peruvian mining is also boosted by developments in the gold sector, Peru's most visible success story over the past three years. In particular, continuous expansion of the Yanacocha mines is expected to continue boosting output and exports.

Maintaining the same assumptions of prices as the Plan Referencial, this would imply an expansion of mining exports to around \$3.7 billion in the year 2000. Given the total level of exports of the Peruvian economy, this is a fairly significant increase, and one which could help

³ Interview material.

reduce the current account deficit and compensate for declining inflows due to end of privatisations and higher debt servicing as projected (see below).

As regards FDI in energy, the agreement between the Peruvian government and the Shell/Mobil consortium on an investment estimated at over \$2.5 billion to develop the natural gas and hydrocarbon deposits in Camisea is also very significant. Development of Camisea would - according to official forecasts - allow Peru to become a net exporter of oil and hydrocarbons from around 2001; currently, the country imports fuel for \$300 million a year.⁴ Again this would contribute to reducing the current account deficit and to helping compensate for declining inflows linked to privatisation, as well as increased debt servicing obligations.

d) Within capital flows, a relatively small share is accounted for by portfolio flows (see Table 5). This is in contrast with many Latin American countries, where portfolio flows have been a large share of capital inflows in the 1990s (Ffrench-Davis and Griffith-Jones, 1995).

It is also interesting that these portfolio flows are secondary purchases by foreigners of already issued Peruvian shares on the Lima stock exchange market. There are no primary issues of shares purchased by foreigners on the Lima stock exchange; furthermore, primary ADRs are very limited, as are bonds placed on the international markets.

There is no tradition by Peruvian entrepreneurs to fund increases in their companies' capital by primary issues of shares.⁵ A further obstacle for primary equity issues, especially on the international markets, is insufficient effort to meet the strict accounting and other requirements needed for issuing, for example, ADRs. Reportedly also (De la Puente, 1995) the level of analysis of Peruvian companies, made not just by local banks and brokers but also by foreign ones, is rather poor, especially if compared with bigger markets in Latin America, such as Mexico, Argentina or Brazil.

However, the role of foreign investors in secondary purchases is very large on the Peruvian Stock Exchange. Indeed, in December 1995, 60% of securities registered in CAVAL (the Lima Stock Exchange service for securities' depository and settlement) were foreign holdings of shares. The value of foreign holdings of Peruvian shares reached \$1.6 billion in December 1995, which is a large increase over the \$27 million held in December 1992; the largest investors in December 1995 were by far US ones (\$880 million) and UK ones (\$330

⁴ Interview material.

million), with all others (such as Luxembourg and Panama) far less important (Bolsa de Valores de Lima, 1995 and Piazzon, 1995)⁶.

The large stock - and flows - of foreign purchases of Peruvian shares is an important factor (though clearly not the only one, and possibly not the main one), in explaining the rapid rise in the price of Peruvian shares. Indeed, in nominal terms, the general index of the Lima Stock Exchange increased by 1300 % between December 1991 and December 1994 (Banco Central, mayo, 1995). If deflated by the consumer price index, the stock exchange index increase for the same period is 460 %; in dollar terms, the increase was even higher due to the appreciation of the currency.

We can conclude that as in the Peruvian case portfolio flows go practically all into the secondary market, they do not have the positive effect of contributing to funding increases in productive capacity and lowering the cost of capital (which is a major beneficial effect achieved by primary issues). Their main effect is to contribute to push up the price of stocks; this has a positive wealth effect, which will tend to increase consumption and decrease savings; as a consequence, productive investment may even fall. Furthermore, large flows into secondary purchases of shares may exacerbate volatility of share prices. This was illustrated by the impact of the Mexican peso crisis on prices in the Lima Stock Exchange.

(see Figure 2)

Indeed, similarly like in other Latin American countries, the price index of the Lima Stock Exchange fell in the aftermath of the Mexican peso crisis. However, it should be stressed that Peruvian shares started falling slightly later than in other Latin America markets. This seems to be caused by the fact that at the time there was a very positive perceptions by foreign investors of the Peruvian economy, by the fact that Peru was a 'recently emerging market', where recovery was more recent, by the fact that the Peruvian market is shallow and illiquid, which made it harder for foreign investors to sell there, as well as the existence of lower price/earnings ratios than in other Latin American countries⁷.

⁵ Interview material.

⁶ The figures are at market prices

⁷ Interview material

e) One important and rapidly growing category of flows is short-term capital inflows and errors and omissions. According to the figures in Table 5, this category reached US\$1.8 billion in 1995, and had averaged around US\$1.3 billion in the 1991-94 period.

It was unfortunate that till recently short-term capital inflows and errors and omissions were not separated in the statistics published by the Central Bank, as this made analysis and policy-making based on such analysis very difficult. In this sense, it is to be welcomed that the Central Bank has just started separating short-term capital inflows from errors and omissions in its weekly publication, *Nota Semanal*.⁸ However, the figures estimated for total short-term capital flows (of \$238 million in 1994 and \$690 million in 1995, Banco Central, May 1996) seem somewhat low and somewhat inconsistent with other Central Bank data, as well as with recent IMF estimates which are higher.

The items errors and omissions in the older statistics (see Table 5) include categories like illegal income from exports of cocaine and poppy seeds (estimated to be at least around US\$500 million for 1995, though they were probably higher in previous years).⁹ Also, some workers' remittances are reportedly included in the errors and omissions category.

One source of imprecision must be that for several categories of capital flows in Peru, there is no recording at the moment when capital crosses the borders. As a result, the Central Bank and other economic authorities rely on methods such as bi-annual surveys, and registry of custodian arrangements at the Lima Stock Exchange. Even in the case of FDI, there is no obligation nor deadline to declare the inflow. The information gathered is therefore somewhat imprecise, and has to be complemented by information from newspapers. This in sharp contrast with a country like Chile, where all capital inflows and outflows are systematically recorded. It is interesting to mention that the economic authorities in Peru give this lack of information as a reason why it would be more difficult to apply reserve requirements on short-term capital inflows as is done in Chile and Colombia.

Nevertheless, even when items such as coca exports and workers' remittances are subtracted, short-term capital flows are an important share within total capital inflows. This implies a potential source of vulnerability of the Peruvian Balance of Payments. The fact that a significant share of these short-term flows are reportedly geared towards financing trade

⁸ Interview material.

probably makes them potentially less volatile. Nevertheless, the Mexican peso crisis (Griffith-Jones, 1996) showed again that short-term credit lines, particularly to banks, are very vulnerable to non-renewal, if the Balance of Payments situation becomes critical. In this context it is important to stress that during the Mexican peso crisis, it was not just Tesobonos (Treasury Bills) that were difficult to place, but that all short-term credit (particularly to banks) was very difficult to roll-over, which accentuated the crisis significantly.

The fact that short-term credit has grown relatively rapidly in recent years has implied that the share of short-term debt in total debt has grown. Thus, total short-term credit (public and private) has grown from US\$1.6 billion in 1990 (Ugarteche, 1996, based on Central Bank data), which is less than 10 % of total external debt,¹⁰ to US\$4.7 billion in September 1995 (which is over 20% of total external debt). This was a rather worrying trend. Of this short-term debt, \$1.8 billion in 1995, corresponded to short-term inter-bank credit, which had increased from a mere \$69 million in 1990. Another part, which corresponds to trade credit increase, is largely welcome.

f) An important point to bear in mind, when analysing the Peruvian Balance of Payments, is that this country - unlike most in Latin America - has not yet fully regularised its debt servicing situation, though very important progress has been made by the Fujimori administration to normalise relations with creditors. Progress was made first with multilateral creditors, followed by several deals with the Paris Club.

As regards commercial bank debt, there is an agreement for a Brady deal. The choices of options by banks within the Brady package are estimated¹¹ to imply that additional cash flow debt servicing, as a result of the deal, would reach annually around US\$400 million in the 1997-2001 period, and increase further in the 2002-2007 period to an estimated \$640 million.

In what relates to the official bilateral debt, this represents also a very significant amount (reaching US\$9.6 billion in mid-1995), due to the fact that such significant arrears had accumulated in previous periods. The level of future debt servicing of Paris Club debt, will also increase somewhat. Both these and the increases in servicing of the commercial bank debt once the Brady deal is finalised will put additional pressure on the Balance of Payments.

⁹ Estimates based on interview material.

¹⁰ Central Bank, *Nota Semanal*.

¹¹ Interview material

Increases in debt servicing also puts additional pressure on the fiscal accounts as the government has to find additional soles to service the increased dollar debt service. This is particularly so, because a very high proportion of Peru's external debt is public; indeed, over 90 % of Peru's medium and long-term debt is public or publicly guaranteed.

As regards Paris Club debt, Peru has arranged with its creditors (particularly Switzerland, Canada and Germany, with similar transactions with Finland, Holland and others) interesting debt for development and debt for environment deals, which have implied some (though not a very significant amount of) debt reduction. It would be desirable to continue implementing such schemes particularly for large creditors such as the US. To the extent this is feasible, it would provide valuable additional debt relief to the government to help fund increased social and/or environmental spending, both sectors in which increased spending is urgently needed.

Particularly because of large borrowing in the past and a prolonged period of arrears, but also due to new borrowing in recent years (see above and Table 5) the debt burden of Peru is high by international standards. Thus according to IMF estimates, Peru's debt/GDP ratio in 1995 was 55%, above the level of 40% considered internationally as a prudent maximum ratio (Williamson, 1995); also, Peru's debt to exports ratio is well above the 200% ratio considered prudent. It should,, furthermore, be recalled that Peru has also a high level of potentially volatile non-debt liabilities, which makes the country even more vulnerable.

3. Use of capital inflows

GDP level and its composition are debated figures in Peru. Currently Peru's national accounts are being re-based and re-estimated.

Available figures show an important increase in investment in recent years as proportion of GDP to an estimated level of 21.5% in 1994 and 23.7% in 1995 (from 16.4% in 1992). Domestic savings ratio has also grown from 11.6% in 1992 to an estimated level of 16.3% in 1995, but has grown less than investment.

(insert Table 8)

As can be seen clearly in Table 8, the growing gap in the 1992-95 period between investment and domestic savings (which is equal to external savings) is increasingly due to the growing private sector savings deficit. Thus, by 1995, the gap between investment and domestic saving reached 7.5% of GDP, of which 6.1% of GDP (that is over 80%) was explained by private sector investment in excess of savings.

It should be emphasised, that at one level, trends in Peru in the 1990s are rather different from much of Latin America, and in particular from Mexico, in the early 1990s, in that in Peru the growing private sector savings deficit was caused by a very sharp increase in private investment, not sufficiently covered by a fairly important, but significantly smaller increase in private savings. In contrast, in Mexico and in much of Latin America (except Chile) private savings actually fell in the early 1990s, which was one of the main counterparts of growing current account deficits (Uthoff and Titelman, 1997).

Somewhat less benign in the Peruvian case is the fact -discussed in detail above, see Table 3 - that most of the increase in private investment seems, at least according to National Accounts figures, have gone into building, rather than machinery and equipment. As there is evidence that investment in machinery and equipment seems to contribute more to expansion of output (and particularly of growth of output in tradables) this seems a source of concern. However, an analysis of import figures, see above, indicates a somewhat higher growth of investment in machinery.

Furthermore, the fact that such a large proportion of the growing current account deficit in Peru was explained by private sector savings deficit does draw a partial, somewhat worrying parallel with the Mexican situation in the early 1990s, where the large current account deficit was entirely explained by private sector dissavings. One of the lessons learned (or rather re-learned) from the Mexican peso crisis is that it is the scale of the current account deficit and the way the deficit is funded (short vs. long term flows) that matters and not - as so many have wrongly thought, in what became called the 'Lawson doctrine' - whether the current account deficit originates in the public or private sector (see Begg and Griffith-Jones 1996).

4. Conclusions

As regards the future, one important question is how much and how fast will the increase in investment described above will generate increased production in tradables, which will help lower the high current account deficit and compensate for higher debt servicing as the Brady deal on commercial debt is finalised and for declines in FDI related to privatisation as that process is finished.

As discussed above in quite a bit of detail, an analysis of recent trends and likely future investment in mining, gives a fairly optimistic picture about likely future increases in exports, resulting from those investments. (Incidentally, unlike countries like Chile, local entrepreneurs in Peru also play a relatively important role in mining investments; this is partly due to the fact that geological conditions imply that there are more relatively small mining projects.)

Though there is ground for quite a bit of optimism as regards increases in mining output and exports, supported also by likely large projects in sectors like energy, where an important scale of import substitution can take place once Camisea becomes operational, there must be some concern about timing. The issue is not just how much exports and import substitutes will have grown, but how soon? This is particularly true because investment in sectors like mining takes a long time to be finalised (with a number of pre-investment phases, such as feasibility studies, also being very time-consuming), and that unexpected delays (due to geological or other factors) are quite common. As a result, export projections must be treated with caution, not just as regards their level but also their timing.

There is, of course, the more immediate issue of how much and how the very high 1995 current account deficit needs/needed to be cut. As regards by how much the current account deficit needed to be reduced, the analysis is a somewhat complex one. The key aim is to avoid a current account deficit that could become unsustainable, that is to maintain a deficit which will be externally financed; in particular, it is essential to avoid any major Balance of Payments crisis, that would disrupt growth and confidence as well as damage employment, real wages, etc.

If, for example, we define that a country should aim for an external debt to GDP ratio of 40%, and we note that currently Peru's external debt to GDP ratio is fairly significantly above those levels, and if we assume that the Peruvian economy will on average grow at around 5%, this would mean that a sustainable current account deficit for Peru would be not much above 3%

of GDP.¹³ However, allowing for the fact that Peruvian exports are likely to grow quite fast, a deficit in the current account deficit of around 4% would seem 'safe'. This figure is very close to that estimated by Reisen, *op. cit.*, of 3.8% GDP, as the steady state current account deficit that can be sustained by Peru over the long-term if the debt ratio remains constant and desired reserves are raised in proportion to import growth; if it were wished that the external debt to GDP ratio-fell to 40%, according to Reisen, *op. cit.*, the current account deficit as proportion of GDP should be lower than 4%. It is encouraging that these figures are not too much lower than the aim agreed with the IMF in the context of a new EFF programme for 1996-98, of a current account deficit of less than 5% for 1998. It may be a source of some concern that this 'safe' level of current account deficit would only be achieved in 1998, thus making the economy more vulnerable during the transition, though the fact that the economic authorities are following policies to reduce the deficit systematically should bring quite a lot of comfort.

As regards the modality of how the Peruvian current account deficit should be reduced, it would seem that relatively greater emphasis should be placed, than is currently done by the economic authorities, on pursuing policies that will weaken the overvalued exchange rate, and not just on a reduction of aggregate demand (though clearly the latter has to play some role). Such a strategy would allow lowering the current account deficit with a smaller decline in growth than a strategy just based on reducing aggregate demand. Maintaining relatively high growth levels is essential not just for enhancing investors' (domestic and foreign) confidence and commitment, but is also very important for keeping popular support for the structural reforms programme. Furthermore, historical experience (for example in Chile in the 1980s) shows that the fruit of economic reforms can only be obtained if key macro-economic variables (and particularly the exchange rate) are not too far from their 'medium-term equilibrium' levels.

One policy measure that may be helpful to depreciate the exchange rate is to discourage any excessive surge of short-term capital inflows (such as occurred particularly strongly in 1995) with measures such as reserve requirements, as applied in Chile and Colombia, or taxes, as applied in Brazil. In fact such a measure would seem particularly appropriate for Peru as it

¹³ This calculation of a 'sustainable current account deficit' is based on Williamson's (1995) 'rule of thumb' that the steady state current account deficit (as a percentage of GDP) cannot exceed the rate of growth of nominal income in foreign currency multiplied by the maximum 'safe' debt-income ratio; the latter is normally defined to be around 40 %; Cline (1995) justifies the choice of 40 % of GDP for external debt by the tendency in the historical record for countries that go beyond this level to get into serious debt difficulties.

would imply symmetry with the existing 45% reserve requirements on foreign exchange deposits which have been implemented mainly for prudential considerations, but which can be circumvented by Peruvians borrowing from abroad against their own assets.¹⁴ As in other countries (including the successful East Asian ones), discouraging excessive short-term inflows also has the additional virtue that it lowers the stock of short-term flows in the country, thus reducing the danger of large outflows if the perceptions of the sustainability of the Balance of Payments deteriorates. The Peruvian economic authorities are reluctant to use this policy measure, and have reportedly even resisted suggestions by the IMF to implement such measures¹⁵ for two reasons. The first is a practical one, that such measure would be difficult to implement in Peru because not all capital flows are recorded. However, it would seem very useful, for other important reasons - such as precise monitoring of trends on capital flows, as a basis for the design of the overall macro-economic programmes - to record capital flow transactions. Therefore, it would seem appropriate to do such recording, even if reserve requirements were not applied. In this sense, it is interesting to mention that within the European Union, and at the request of the emerging European Central Bank (the European Monetary Institute), more detailed recording of capital flows is being discussed with several European countries like the UK, so as to fall into line with the more detailed recording done by countries like Germany and France. A second reason why Peruvian economic authorities seem unwilling to consider reserve requirements on excessive surges of short-term capital flows is their fear that this could be associated, particularly by the Peruvian private sector, with a return to past interventionist policies. However, this is not correct, as reserve requirements are a classical policy instrument of Central Banks; their extension to certain types of capital inflows basically implies a small tax on those inflows. Tax policy is of course an integral part of the package of policy instruments that are normally used in a market economy.

Another source of concern, in Peru as elsewhere, is the interaction between large capital inflows - an important part of which is intermediated through the banking system - and potential fragility of this banking system, particularly if the direction of such flows were to change abruptly and/or there were to be a large devaluation. A positive trend in the case of Peru is that the solvency of the banking system seems to have improved in recent years and that the

¹⁴ Interview material

Superintendency of Banks and Insurance has a continuing programme for assuring that financial institutions have adequate levels of provisioning, and that risks are properly evaluated. It is particularly positive that the ratio of non-performing loans to total outstanding loans has reportedly declined from 11.7% in 1993 to 6.1% in mid-1995; simultaneously, the ratio of bank provisioning to total outstanding non-performing loans increased from 60% at end-1993 to close to 80% in mid-1995.¹⁶ However, a source of concern must be the high level of dollarisation of credit by the banking system, and the extent to which the risks arising from this are fully accounted for. Indeed, should a large devaluation occur, significant difficulties could arise on payments of credit granted by banks based in Peru in foreign currency to domestic users. This is not strictly exchange rate risk, but credit or default risk, which is often not fully accounted for in typical risk assessment (e.g. this was a serious problem in the Mexican case). Therefore, it is important that both banks and regulatory authorities appropriately take account of such potential risks in the design of their risk evaluation and regulatory systems.

A final question relates to the existing level of investment and its sustainability, as the current account deficit diminishes, particularly if this is achieved mainly by restrictive policies. The risk to be avoided is that constraints originating in the Balance of Payments restrict growth of investment, which will become increasingly crucial to sustain rapid growth of output, particularly if existing capacity is exhausted. Till 1995, this risk did not seem great, as the average rate of capacity utilisation in industry was still not very high (at 66.5%), with a ratio of 66 % for consumption goods, 73% for intermediate inputs and of only 34% for capital goods (Banco Central, February 1996). This would seem to give a clear indication that Peru was still in the mid-1990s below its production frontier, even though far closer to it than it had been in 1990 (Universidad Católica, July 1995). To the extent that foreign direct investment will continue to play a large role after privatisation finishes, it would contribute to overcome risks that existing capacity will be exhausted. However, foreign direct investment will also require increased levels of complementary investment in physical infrastructure, training, education, etc., most of which need to be provided by public investment.

The Peruvian case differs from the Mexican and Argentinean experience in the early 1990s, as in those countries there was little spare capacity, and the reduction in the current

¹⁵ Interview material.

account deficit needed to be to an important extent via reduction of aggregate demand. In contrast, in Peru -with still a high level of existing spare capacity- there was far more room (than was used) for expenditure switching policies, and in particular for exchange rate policy. As a consequence, the outcome could have implied a change in the structure of aggregate demand, and a smaller fall in aggregate demand, with the same fall in the current account deficit. As a consequence, growth could have been higher.

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TABLE 1
PERU: ECONOMIC EVOLUTION
 (average annual % changes)

	GDP	Savings	Investment	Inflation
1950-95	3.4	5.8	6.0	309.5
1950-75	5.4	7.8	8.8	9.5
1976-95	0.8	3.1	2.3	704.9

Source: INEI Compendio Estadístico, several years; González, Levano and Llontop (1996).

TABLE 2
PERU: SELECTED ECONOMIC INDICATORS

	1990	1991	1992	1993	1994	1995	Jan-March 1996
	Annual percentage changes						
Real GDP	-3.8	2.9	-1.8	5.6	13.0	6.9	-1.6
Consumer prices (end of period)	7.650	139.0	57.0	40.0	15.0	10.0	5.0
	% of GDP						
Domestic savings	13.4	14.7	12.5	14.5	17.2	17.5	

Source: Nota Semanal, various issues. Banco Central de Reserva.

TABLE 3
GDP BY TYPE OF SPENDING, 1986-95
 (current prices)

	1989	1990	1991	1992	1993	1994 ^a	1995 ^a
Private consumption	72.1	76.7	79.3	79.0	77.7	73.6	72.4
Public consumption	7.0	6.1	5.8	6.6	6.6	7.3	8.3
Government	5.7	4.9	3.8	4.6	4.4	5.1	5.9
Others	1.9	1.2	2.0	2.1	2.2	2.3	2.4
Gross domestic investment	17.8	15.7	16.7	16.5	18.5	22.0	24.2
Fixed investment	16.8	14.9	14.5	15.2	16.8	21.0	23.4
Public	3.6	2.7	2.7	3.1	3.4	3.9	4.1
Central government	1.9	1.3	1.3	1.6	1.7	2.3	2.5
Others ^b	1.9	1.4	1.4	1.5	1.7	1.7	1.6
Private	13.2	12.2	11.7	12.0	13.4	17.1	19.3
Building	10.7	9.5	9.2	9.4	10.7	13.9	15.4
Machinery and equipment	2.5	2.7	2.5	2.6	2.7	3.2	3.9
Changes in stocks	1.0	0.8	2.3	1.3	1.8	1.0	0.8
Exports	14.4	13.2	10.0	10.8	10.7	11.4	11.6
Imports	11.3	11.7	11.8	13.0	13.5	14.3	16.5
GDP	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Banco Central de Reserva.

^a Preliminary.

^b Includes state companies.

TABLE 4
FOB IMPORTS ACCORDING TO USE AND ECONOMIC DESTINATION^a
 (US\$ Millions)

	1990	1991	1992	1993	1994	1995	Average annual growth rate 1990-95
I CONSUMER GOODS	338.3	754.6	903.8	879.3	1315.5	1755.0	44.6%
Non-durable consumer goods	300.1	454.4	492.1	498.8	653.8	910.6	
Durable consumer goods	38.2	300.2	411.7	380.5	661.7	844.4	
II INPUTS	1333.4	1514.1	1781.0	1846.7	2331.2	3225.6	19.9%
Fuels, lubricants and others	305.0	367.9	395.7	321.4	321.4	593.7	
Raw materials (Agriculture)	83.9	78.9	107.0	114.2	134.1	162.2	
Raw materials (Industry)	944.5	1067.3	1278.3	1411.1	1875.7	2469.7	
III CAPITAL GOODS	885.8	934.8	1062.7	1130.5	1691.8	2363.2	23.0%
Construction materials	36.2	46.0	59.3	68.1	113.7	205.9	
Capital goods for agriculture	40.1	10.8	13.5	37.2	31.5	35.7	
Capital goods for industry	567.8	560.8	569.9	695.8	1005.9	1466.4	
Transport equipment	241.7	317.2	420.0	329.4	540.7	655.2	
IV OTHER GOODS^b	364.3	392.0	253.9	193.1	236.8	344.4	3.3%
V TOTAL IMPORTS (FOB)	2921.8	3595.5	4001.4	4049.6	5575.3	7688.2	22.2%

Source: BCRP; own calculations. Thanks go to Teresa Lamas and Renzo Rossini, who kindly provided up-dated and disaggregated information.

^a Preliminary.

^b Includes the donation of goods, inflows of goods under Financial leasing and other goods not classified.

Table 5
SUMMARY OF THE BALANCE OF PAYMENTS^a
(Millions of US dollars)

CONCEPT	1991	1992	1993	1994	1995
I. CURRENT ACCOUNT BALANCE	<u>1,215</u>	<u>-2,038</u>	<u>-2,128</u>	<u>-2,698</u>	<u>-4,348</u>
A. Goods (Trade Balance)	-139	-556	-570	1,107	-2,117
1 FOB Exports	3,391	3,534	3,515	4,555	5,482
2 FOB Imports	3,529	-4,090	4,084	5,661	-7,600
B. Services	-314	-598	-586	-519	-813
3 Exports	870	868	895	1,125	1,284
4 Imports	1,184	-1,466	1,481	1,644	-2,097
C. Factor Payments	1,208	-1,366	1,455	1,575	-1,853
5 Public	1,152	-1,244	1,301	1,337	-1,410
6 Private	-56	-122	-154	-238	-443
D. Current Transfers	446	482	484	502	435
II FINANCIAL AND CAPITAL ACCOUNT	<u>-78</u>	<u>949</u>	<u>1,413</u>	<u>3,109</u>	<u>3,092</u>
II.1 <u>Financial Account</u>	<u>-26</u>	<u>979</u>	<u>1,492</u>	<u>3,126</u>	<u>3,056</u>
E. Public Sector	-154	-404	546	-379	-75
7 Long term loan	-154	-404	546	-379	-75
• Disbursement	872	387	1,509	630	780
• Amortisation	1,026	-791	-963	1,009	-855
8 Bonds	0	0	0	0	0
F. Private Sector	108	253	639	3,205	2,398
9 Long term loans	115	108	46	329	177
10 Direct investment	-7	945	371	2,326	1,617
11 Portfolio investment	0	0	222	550	604
G. Short term capital	20	1,130	202	364	683
II.2 <u>CAPITAL ACCOUNT^b</u>	<u>-52</u>	<u>-30</u>	<u>-79</u>	<u>-17</u>	<u>36</u>
III. NET ERRORS AND OMISSIONS	1,028	411	579	321	1,014
IV BALANCE FINANCING	<u>-379</u>	<u>-691</u>	<u>197</u>	<u>1,468</u>	<u>-173</u>
H. Net reserves flows of BCRP (12-13) ^c	-837	-695	-747	-3,037	<u>1,209</u>
12 Variation in the balance of net reserves ^c	-773	-697	-741	-2,975	-1,141
13 Price effect and gold monetisation	64	-2	6	62	68
I. Exceptional financing	1,216	1,386	550	1,569	1,382
14 Re-financing	5,529	672	1,313	705	679
15 Debt forgiveness	12	53	7	138	20
16 Net arrears	-4,325	661	-770	726	683
MEMORANDUM					
Net external financing of the public sector	1,062	982	1,096	1,190	1,307
Privatisation incomes (Direct investment)	0	6	160	2,086	691

Source: BCRP, MEF, ADUANAS and enterprises; Banco Central de Reserva del Perú, Memoria Anual, for short-term capital flows (II.I.G.) and net errors and omissions (III).

^a Financial cost of the public debt service in arrears is included.

^b Unrequited private transfers are included.

^c Minus sign indicates increases in net reserves.

Table 6
STOCK OF FOREIGN DIRECT INVESTMENT REGISTERED
ACCORDING TO SECTOR, 1988-95
(in US\$ million)

SECTOR	1988	1989	1990	1991	1992	1993	1994	1995
Agriculture	3.2	3.2	4.2	4.2	4.8	4.8	4.8	4.8
Trade	187.2	190.6	192.4	193.6	196.9	206.9	227.7	241.3
Communications	0.0	0.0	0.0	0.0	0.0	0.1	2,002.3	2,002.3
Construction	1.9	1.9	2.1	1.6	1.9	3.4	3.5	7.0
Energy	0.6	0.6	0.6	0.6	0.5	0.6	361.9	850.5
Finance	82.9	87.2	110.5	115.5	143.5	200.3	244.3	470.3
Industry	419.9	423.3	439.6	454.7	468.1	499.7	548.3	639.1
Mining	413.9	422.5	419.8	427.8	547.2	556.0	867.3	960.9
Fishing	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Petroleum	58.5	58.6	58.8	58.8	58.8	58.8	58.8	59.1
Services	35.9	37.0	37.7	38.8	38.7	41.2	42.0	43.3
Forestry	0.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Transport	4.5	4.5	5.2	5.4	4.8	30.6	30.9	30.9
Tourism	10.3	10.3	10.3	10.3	12.4	12.4	17.5	19.5
Housing	15.4	15.9	17.7	18.7	19.7	19.8	20.1	20.1
TOTAL	1,234.7	1,257.3	1,300.6	1,331.7	1,499.0	1,636.3	4,431.1	5,350.8

Source: CONITE (1995).

Table 7
PROBABLE EVOLUTION IN THE PERUVIAN MINING INVESTMENT
(Millions of US Dollars)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	TOTAL
PROSPECTION-EXPLORATION	150	250	300	300	200	150	150	100	100	100	1,800
ADDITION TO EXISTING CAPACITY	259	389	513	457	161	131	60	60	60	60	2,150
PROJECTS AND PROSPECTING	36	121	535	722	717	755	546	650	350	300	4,732
TOTAL	445	760	1,348	1,479	1,078	1,036	756	810	510	460	8,682
ACCUMULATED	445	1,205	2,553	4,032	5,110	6,146	6,902				

Source: Plan Referencial de Minería, 1994-2003, 1994.

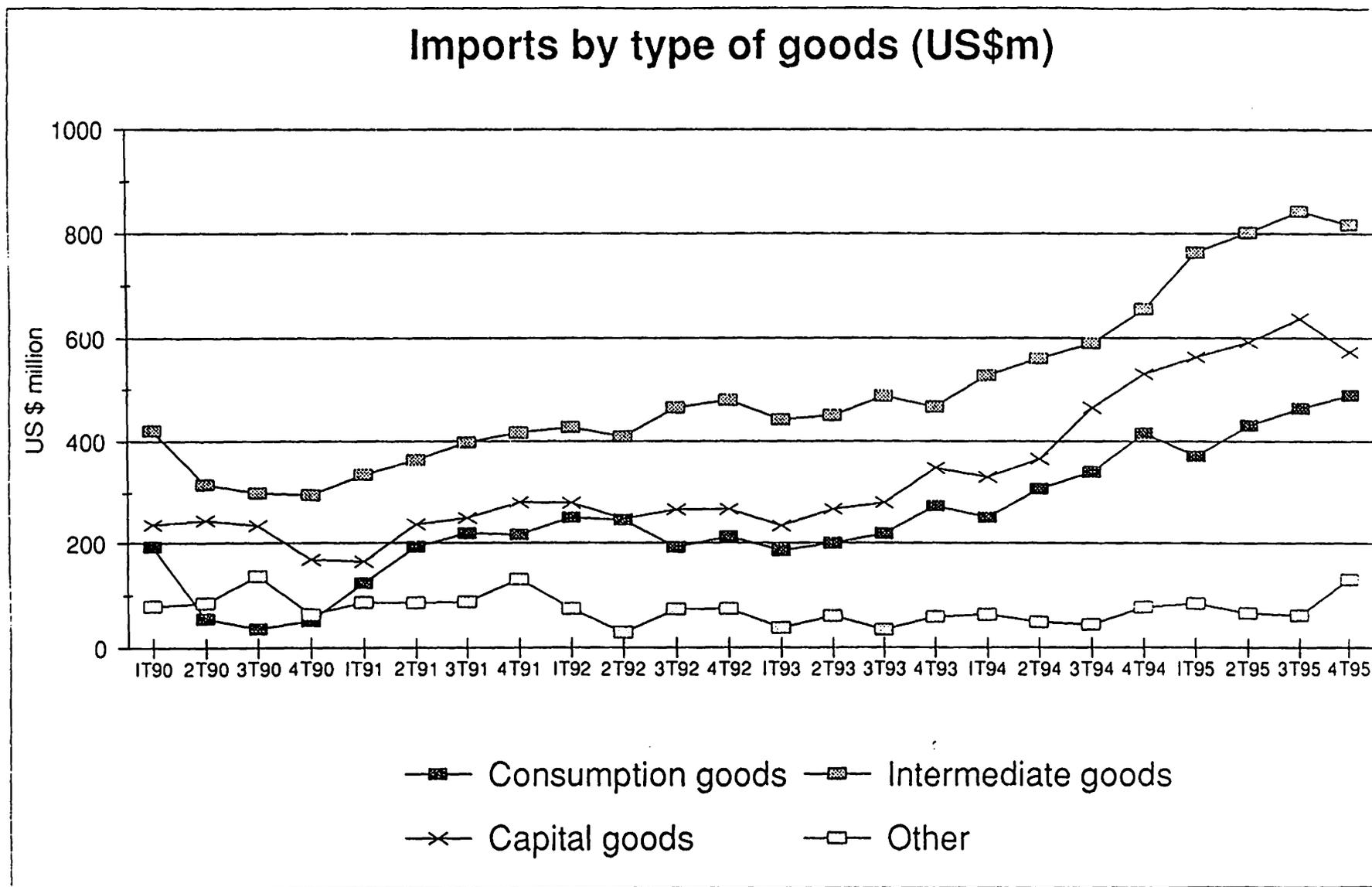
TABLE 8
INVESTMENT AND SAVINGS (current prices)
(% of GDP)

	1992	1993	1994	1995
1 Investment	16.4	18.6	21.5	23.7
2 Domestic saving	11.6	13.3	16.2	16.3
3 External saving	4.8	5.2	5.2	7.5
4 Private investment	13.3	15.2	18.1	20.1
5 Private domestic savings	10.3	11.5	13.6	14.0
6 Private sector savings deficit	3.0	3.7	4.5	6.1

Source: Banco Central de Reserva; several publications; interview material. Own calculations. Thanks go to Renzo Rossini who provided the information for lines 1, 2 and 3.

Note: Some of the figures are slightly different from previous tables, due to methodological differences.

FIGURE 1



Source: Own elaboration, based on Banco Central de Reserva, Notas Semanales, several issues; Banco Central de Reserva, Annual Reports.

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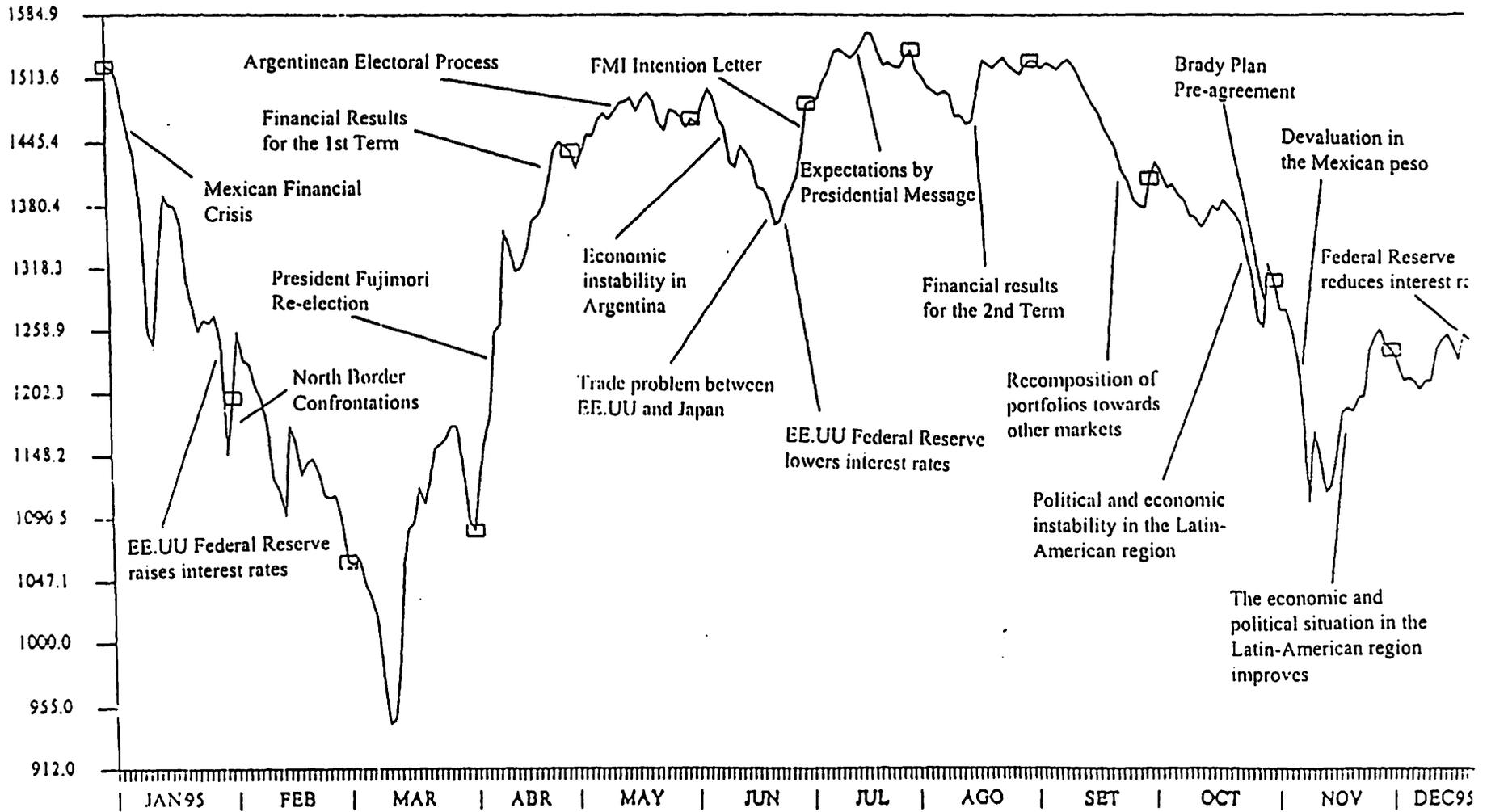
FIGURE 2

IGBVL DEFLECTED GENERAL INDEX

Base 29-12-95 = 1243.37

STOCK PRICE INDEX Inflation Adj

Base 29-12-95 = 1243.37



Source: Bolsa de Valores de Lima. 1995. Informe Anual