IMF WORKING PAPER

WP/90/37

INTERNATIONAL MONETARY FUND

European Department

The Current Account in Perspective: Lessons from the Italian Experience

Prepared by Lazaros Molho*

Authorized for Distribution by Erich Spitäller

April 1990

Abstract

This paper draws some lessons about policies toward the current account from Italy's balance of payments history between 1960 and 1988. The key role of speculative capital flows during every major episode of external imbalance brings out the limitations of exchange rate rules that focus exclusively on the current account. Simple saving-investment rules would also have failed to avert Italy's balance of payments crises. These arose in the context of widening current deficits due to a rising investment ratio and/or a widening private imbalance, which should have been self-correcting according to the commonly proposed saving-investment rules.

JEL Classification Numbers
431; 441

---

* This paper was prepared in the context of the 1989 Article IV consultation with Italy and benefitted from research assistance by Shahpassand Sheybani. Comments by Salvatore Rossi, of the Bank of Italy, and by Erich Spitäller and Horst Ungerer are gratefully acknowledged. The author is solely responsible for any remaining errors.

Contents

Tables

Charts

Summary

This paper examines Italy's balance of payments history since 1960 to draw some lessons for policies regarding the current account. It analyzes the current account from two alternative perspectives. The first is a balance of payments accounting framework that helps highlight the financial implications of current imbalances. The second is a national accounts framework, which is the basis of the increasingly popular saving-investment approach.

Viewing Italy's current account in the context of the overall balance of payments brings out the important interactions among current imbalances, speculative capital flows, and official reserve movements. Widening current account deficits have in the past tended to trigger speculation against the lira, leading to large losses of official reserves. To stem these losses, the Italian authorities had to implement strong adjustment measures, thereby leading to prompt correction of the deficit. This quasi-automatic adjustment mechanism explains why the current account averaged near balance over the 1960-88 period, despite the manifest mobility of capital over shorter time spans.

Examining the current account in the context of the saving-investment balance shows that widening fiscal deficits are neither necessary nor sufficient conditions for external disequilibrium. Despite Italy's large and persistent fiscal deficit--averaging 9 1/2 percent of GDP over the 1970-88 period--its external current account remained near balance on average, reflecting the offsetting effects of a large positive private sector balance. The fiscal deficit, moreover, could not account for Italy's balance of payments crises since 1970. Fluctuations of the private balance, largely on account of changes in inventory investment, explain most of the ups and downs of the current account deficit during the mid-1970s and early 1980s. Only in 1985-86 is there evidence of a significant fiscal contribution to the deterioration of the current account, but this is attributable to higher public investment rather than to lower public saving.

The role of capital and reserve flows helps place the current account in perspective as only one of the determinants of external stability. An exchange rate rule geared solely toward balancing the current account could generate expectations that destabilize the capital account. A firm exchange rate policy could be more conducive to the orderly financing of the current account, provided that it is backed by adequate financial resources. The Italian experience also suggests that simple saving-investment policy rules cannot always avert balance of payments crises and that cross-country saving-investment correlations are unreliable gauges of the degree of capital mobility.

I. Introduction

The saving-investment approach to the current account of the balance of payments has recently gained currency in both official and academic circles. The increasing emphasis on saving-investment gaps stems partly from the recognition of the shortcomings of the widely used partial-equilibrium elasticities framework. 1/ Further spurring interest in the saving-investment approach have been the empirical studies by Feldstein and Horioka (1980) and Feldstein (1983). These studies found that national investment and savings rates in industrial countries have been highly correlated over long periods of time, contrary to what might have been expected in a world of free capital mobility.

The new saving-investment framework raises some important questions. If saving and investment have so far been correlated because capital has been relatively immobile, should one expect current imbalances to widen as remaining capital controls are abolished? Are there any mechanisms that may produce highly correlated investment and savings series even in the presence of free capital mobility? Is there empirical support for the proposition that privately motivated or investment-led imbalances should be no cause for concern?

The paper addresses some of these questions in the context of Italy's balance of payments history between 1960 and 1988. Unlike the previously cited empirical studies that infer the degree of capital mobility from saving-investment correlations, the paper adopts a less formal but more direct approach. Section II places the current account in perspective, by examining its interactions with the capital account and the overall balance during each of the major episodes of external imbalance in Italy since 1960. This brings out the key role of speculative capital movements and helps explain why a high degree of capital mobility is compatible with a high correlation between saving and investment rates. Section III analyzes the current account in terms of saving and investment balances. This exposes some practical limitations of simple saving-investment rules for policies toward the current account and shows that these rules would have been unable to prevent Italy's past balance-of-payments crises. The lessons from the Italian experience are summarized in Section IV.

1/ See, for example, Krugman (1989) and McKinnon (1988). For a more detailed discussion of analytical issues relating to the elasticities and saving-investment frameworks, see Molho (1990).

II. The Current Account in the Context of the Overall Balance

1. The accounting framework

The Feldstein-Horioka approach focuses on the long-run, real sector determinants of the current account, which rules out any independent role of financial variables. In the long run, current account gaps are exactly offset by gaps of opposite sign in the capital account. Large and persistent current account deficits imply sustained net inflows of capital and, by consequence, a high degree of capital mobility. Current account balance, by contrast, implies no net imbalance on capital account and, thereby, a low degree of capital mobility. A principal shortcoming of this framework is that it leaves no room for such real-world phenomena as balance of payments crises. Large current account deficits are by definition financed by highly mobile capital, while immobile capital ensures the maintenance of current account balance. In either case, there can be no problems of balance of payments financing.

In the real world, problems of financing are at the center of balance of payments difficulties. National authorities typically hold substantial amounts of international reserves. A country's stock of reserves may be subject to wide fluctuations over relatively short time spans, especially when the authorities undertake to maintain a fixed exchange rate. The possibility of accumulating or decumulating reserves gives rise to a number of possible configurations of current account and capital account balances, which need no longer be mutually offsetting. A country with a current account deficit could temporarily finance it by running down its reserves without registering any capital inflow. By the same token, a country with current account balance could be running a capital account surplus, thereby adding to its international reserves. Most important from our point of view is the possible co-existence of a current account deficit with a deficit on capital account. Such a situation would imply rapid decumulation of official reserves and could not be sustained for extended periods of time. Balance of payments crises typically involve contemporaneous deficits on both the current and capital accounts.

To examine Italy's pattern of capital flows, it would seem useful to distinguish between the various forms of balance of payments financing. Equation (1) is the conventional balance of payments identity, with the overall balance (OB) identically equal to the sum of the balances on current account (CURR) and on capital account (CAP):

$$CURR + CAP \equiv OB \qquad (1)$$

The capital account includes all financing that is motivated independently of balance of payments concerns. Such financing is commonly

referred to as autonomous or above-the-line. 1/ The overall balance by contrast, is financed by accommodating or below-the-line transactions, which are basically intended to offset the combined imbalance in autonomous transactions. The conventional classification is to include only changes in net official reserves as an accommodating transaction. In the case of Italy, however, the official practice until recently has been to include both the commercial banks' and the monetary authorities' flows of net foreign assets below the line. 2/ Denoting the changes in the net foreign assets of the monetary authorities and of the rest of the banking system by $\Delta NFA_{OFFICIAL}$ and ΔNFA_{BANKS}, respectively,

we have:

$$OB \equiv \Delta NFA_{OFFICIAL} + \Delta NFA_{BANKS} \qquad (2)$$

2. The Italian balance of payments, 1960-88

Using the accounting framework of equations (1) and (2) above, we can view the evolution of Italy's current account between 1960 and 1988 in the broader context of the overall balance of payments. Such an exercise is worthwhile for several reasons. The explicit distinction between autonomous capital flows and official reserve movements allows us to appreciate the heretofore neglected financial dimension of the current account. The sample period, moreover, is sufficiently long for there to be several occurrences of larger-than-average current account deficits. Closer study of how each of these deficits arose and was eliminated provides valuable insights into the interactions between the current account, capital and reserve flows and economic policies.

Italy's performance over the 1960-88 period is prima facie consistent with the Feldstein-Horioka hypothesis of limited capital mobility, but that hypothesis must be rejected upon closer inspection of the figures. Over the whole period, Italy's current account registered an average annual surplus equivalent to a mere 0.4 percent of GDP (Table 1). The capital account registered an average deficit of about the same size, leaving the average overall position virtually

---

1/ For a more detailed discussion on the distinction between autonomous and accommodating transactions, see Yeager (1976, pp. 48-51).

2/ During the 1960s and 1970s, the Italian authorities often imposed discretionary administrative controls on commercial banks' net foreign asset position, with a view to accommodating other balance of payments flows. More recently, however, and especially since October 1, 1988, remaining controls have been used for prudential rather than balance of payments reasons and changes in the net foreign assets of banks are better classified as autonomous transactions. To account for this change, beginning in January 1990, the Italian authorities have reclassified banks' monetary operations above the line, consistent with the conventional approach supported by the IMF (see, Bank of Italy, Bollettino Economico, October 1989, p. 32).

Table 1. Italy: External Account Indicators, 1960-88

	Current balance	Capital account	Overall balance	Change in Net Foreign Assets: Official	Change in Net Foreign Assets: Banking system	Net official reserves	Gross domestic product	Current balance	Capital account	Overall balance	Change in Net Foreign Assets: Official	Change in Net Foreign Assets: Banking system	Net official reserves
	In billions of lire							In percent of GDP					
1960	176.9	97.1	274.0	106.0	168.0	2,000.0	24,726.0	0.7	0.4	1.1	0.4	0.7	8.1
1961	296.4	62.6	359.0	384.0	-25.0	2,329.0	27,500.0	1.1	0.2	1.3	1.4	-0.1	8.5
1962	1,283.8	-1,251.8	32.0	300.0	-268.0	2,361.0	30,896.0	4.2	-4.1	0.1	1.0	-0.9	7.6
1963	-466.4	-315.6	-782.0	-376.0	-406.0	2,112.0	35,389.0	-1.3	-0.9	-2.2	-1.1	-1.1	6.0
1964	386.4	97.6	484.0	207.0	277.0	2,346.0	38,740.0	1.0	0.3	1.2	0.5	0.7	6.1
1965	1,380.9	-384.9	996.0	600.0	396.0	2,851.0	41,685.0	3.3	-0.9	2.4	1.4	0.9	6.8
1966	1,323.2	-888.2	435.0	180.0	255.0	2,923.0	45,166.0	2.9	-2.0	1.0	0.4	0.6	6.5
1967	1,002.7	-800.7	202.0	324.0	-122.0	3,268.0	49,752.0	2.0	-1.6	0.4	0.7	-0.2	6.6
1968	1,642.0	-1,249.9	392.1	-38.0	430.1	3,041.0	53,927.0	3.0	-2.3	0.7	-0.1	0.8	5.6
1969	1,469.7	-2,339.2	-869.5	-440.0	-429.5	2,940.0	59,534.0	2.5	-3.9	-1.5	-0.7	-0.7	4.9
1970	483.3	-260.9	222.4	235.0	-12.6	3,297.0	67,178.0	0.7	-0.4	0.3	0.3	--	3.4
1971	975.2	-485.7	489.5	473.0	16.5	3,885.0	72,994.0	1.3	-0.7	0.7	0.6	--	5.3
1972	1,168.6	-1,892.6	-724.0	-494.0	-230.0	3,459.6	79,810.0	1.5	-2.4	-0.9	-0.6	-0.3	4.3
1973	-1,472.9	1,215.9	-257.0	-240.0	-17.0	3,291.5	96,738.0	-1.5	1.3	-0.3	-0.2	--	3.4
1974	-5,213.2	1,497.2	-3,716.0	-3,062.0	-654.0	3,970.8	122,190.0	-4.3	1.2	-3.0	-2.5	-0.5	3.2
1975	-379.4	-1,059.1	-1,438.5	-1,712.0	273.5	2,669.4	138,632.0	-0.3	-0.8	-1.0	-1.2	0.2	1.9
1976	-2,343.1	812.2	-1,530.9	1,116.0	-2,646.9	10,881.1	174,869.0	-1.3	0.5	-0.9	0.6	-1.5	6.2
1977	2,175.1	-445.4	1,729.7	5,154.0	-3,424.3	16,688.6	214,398.0	1.0	-0.2	0.8	2.4	-1.6	7.8
1978	5,260.5	1,736.1	6,996.6	5,930.0	1,066.6	20,959.8	253,536.0	2.1	0.7	2.8	2.3	0.4	8.3
1979	4,894.0	-3,069.9	1,824.1	2,878.0	-1,053.9	30,639.0	309,834.0	1.6	-1.0	0.6	0.9	-0.3	9.9
1980	-8,532.0	2,272.0	-6,260.0	675.0	-6,935.0	55,415.0	387,669.0	-2.2	0.6	-1.6	0.2	-1.8	14.3
1981	-10,301.0	11,834.0	1,533.0	12.0	1,521.0	58,770.0	464,030.0	-2.2	2.6	0.3	--	0.3	12.7
1982	-8,432.0	5,911.0	-2,521.0	-5,583.0	3,062.0	51,624.0	545,124.0	-1.5	1.1	-0.5	-1.0	0.6	9.5
1983	2,323.0	1,470.0	3,793.0	8,787.0	-4,994.0	76,520.0	633,441.0	0.4	0.2	0.6	1.4	-0.8	12.1
1984	-4,314.0	4,371.0	57.0	5,195.0	-5,138.0	82,002.0	727,225.0	-0.6	0.6	--	0.7	-0.7	11.3
1985	-7,102.0	-1,250.0	-8,352.0	-13,651.0	5,299.0	65,825.0	812,751.0	-0.9	-0.2	-1.0	-1.7	0.7	8.1
1986	3,802.0	-6,767.0	-2,965.0	3,489.0	-6,454.0	62,214.0	896,321.0	0.4	-0.8	-0.3	0.4	-0.7	6.9
1987	-1,940.0	3,142.0	1,202.0	6,775.0	-5,573.0	75,156.0	979,677.0	-0.2	0.3	0.1	0.7	-0.6	7.7
1988	-6,779.0	7,461.0	682.0	10,906.0	-10,224.0	82,438.0	1,078,863.0	-0.6	0.78	0.1	1.0	-0.9	7.6
Average	...	...	...	...	...	...	...	0.4	-0.4	--	0.3	-0.2	7.3
Standard Deviation	...	...	...	...	...	...	...	1.9	1.5	1.2	1.1	0.7	2.8

Source: Banca d'Italia, *Relazione Annuale* and *Bollettino Economico*, various issues.

balanced. This picture of overall stability, however, conceals large year-to-year movements, which could not have occurred in the absence of a high degree of capital mobility. The capital account shifted widely between deficits--as high as 4 percent of GDP in 1962--and surpluses--up to 2 1/2 percent of GDP in 1981--with a standard deviation of 1.5 percent of GDP. The current account registered even wider year-to-year fluctuations. In contrast to the average trend, the fluctuations in the current and capital accounts were not always of an offsetting nature and at times had a synergistic influence. As a result, the overall balance and the flow of official reserves also showed wide gyrations registering annual deficits or surpluses of up to 2 1/2 percent to 3 percent of GDP. These gyrations, together with the accompanying changes in the banking system's net foreign asset position, were in turn reflected in wide fluctuations in official reserves. The end-of-year stock of official reserves averaged 7.3 percent of GDP over the whole period, but it reached a low of 1.9 percent of GDP in 1975 and attained a high of 14.3 percent in 1980.

Tracing the evolution of the current account in relation to the overall balance provides some additional insights. Reflecting insufficient autonomous financing, in almost every single period that the current account registered a significant deficit--1 percent of GDP or more--the overall balance was also in deficit (Chart 1) 1/. Most intriguing are the capital account deficits of 1963, 1975, and 1985. These coincided with relatively modest current account deficits, thereby leading to sharp declines in official reserves (Table 1). If capital flows were flexible in general, what could account for their failure to be forthcoming when they were most needed to finance current account deficits? One possible explanation is that large current account deficits have generally tended to give rise to expectations of devaluation, thus fueling speculative capital outflows. These would tend to exacerbate the deficits and to make any continuing capital inflows insufficient to offset the current imbalance. In each instance, the resulting losses of official reserves would spur the adoption of strong adjustment measures. Balance would be restored on both the current account and the capital account, not because of capital immobility but because of the need to prevent its excessive mobility in the wrong direction.

A review of developments surrounding the four major episodes of current account deficits in Italy since 1960 supports the above interpretation. In all of these episodes, capital movements played a decisive role in harboring or averting foreign exchange crises. In all instances financial constraints necessitated the prompt implementation

---

1/ Large current account deficits were registered in 1963, in 1973-76, in 1980-82 and in 1985. The overall balance registered substantial deficits in every one of these years, except in 1981 when it was in small surplus. Over the whole 1960-88 period, although there was a high degree of negative correlation (-0.75) between the current account and the capital account, there was still substantial positive correlation (0.63) between the current account and the overall balance.

of adjustment measures. It was such measures rather than a lack of capital mobility that have ensured the maintenance of a small average current account surplus over the 1960-88 period.

a. The 1963-64 crisis

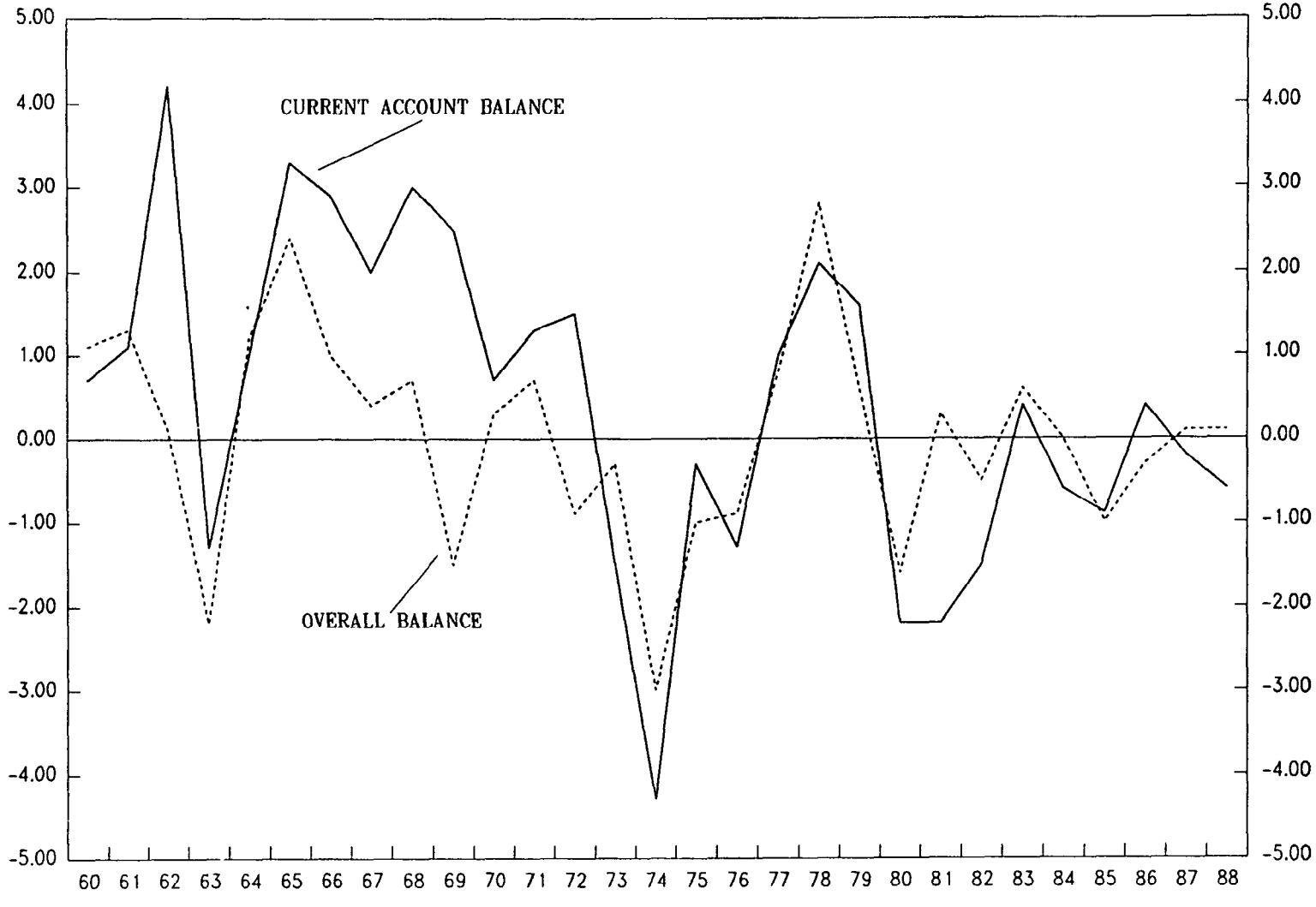
The 1963-64 crisis provides perhaps the clearest example of the destabilizing potential of capital flows in the face of a widening current deficit. The crisis is all the more remarkable because it occurred after a long period of current and overall surpluses and while exchange rates were still fixed under the Bretton-Woods system. 1/

Italy's current account shifted from a surplus of 4.2 percent of GDP in 1962 to a deficit of 1.3 percent of GDP in 1963 (Table 1). This sharp turnaround was partly due to a strong expansion in imports but it probably reflected to a considerable extent capital outflows in the form of over-invoicing of imports and under-invoicing of exports. Additional evidence of the capital outflows was provided by an almost doubling of the physical export of Italian bank notes between 1962 and 1963, to US$1.5 billion. Among the factors spurring the capital outflows were the expected nationalization of electricity on unknown terms for the shareholders and the expected introduction of a tax on dividends. At first the overall imbalance was accommodated by allowing commercial banks to borrow on the Eurodollar market, but following a cabinet crisis which ruled out any budgetary action the Bank of Italy resorted to a restrictive credit policy beginning in September 1963. Commercial banks were asked not to increase--and if possible to reduce--their foreign borrowing and the remaining overall imbalance was financed through losses of official reserves. Altogether the overall deficit amounted to 2.2 percent of GDP in 1963.

The credit squeeze, together with restrictions on consumer credit, were effective in slowing down monetary expansion. In addition, complementary fiscal measures were enacted in February 1964. These included a 30 percent increase in taxes on companies, an 8 percent tax on purchases of new cars, an increase in the gasoline tax, an obligatory 30 percent down payment on credit purchases and harsh penalties against capital exporters. Even so, devaluation of the lira seemed almost inevitable and it took massive international assistance--including credits of US$1 billion from the United States and US$225 million from the IMF in March 1964--before confidence was restored. Thereafter, the current account turned around, registering a surplus of 1 percent of GDP in 1964. The capital account also reverted into a small surplus and the overall balance registered a surplus of 1.2 percent of GDP in 1964. Devaluation had thus been averted, albeit at the expense of declines in production, investment and employment.

1/ The subsequent discussion is based on Yeager (1976, pp. 537-8), to which the reader is referred for further details.

CHART 1
ITALY
CURRENT AND OVERALL PAYMENTS BALANCES, 1960-88.
(IN PERCENT OF GDP)



Sources Bank of Italy, RELAZIONE ANNUALE and BOLLETTINO ECONOMICO, various issues.

b. The first oil shock

Italy's current account remained in substantial surplus through the rest of the 1960s, but large deficits resurfaced in the wake of the first oil shock, setting the stage for a new bout of destabilizing capital movements. The current account deficit widened from 1 1/2 percent of GDP in 1973 to 4.3 percent in 1974, raising the overall deficit to a record 3 percent of GDP in 1974, compared with a previous record of 2.2 percent of GDP during the crisis of 1963. This was already the period of generalized floating and the heightened uncertainties about future exchange rates, superimposed on the sharp deterioration of the current account, created a highly unstable financial environment. As it became evident that the stock of official reserves was insufficient to accommodate sustained capital outflows, speculative capital movements seemed to develop at times their own internal dynamic, independent of current account trends.

Despite substantial reserve losses by the Bank of Italy--equivalent to 2 1/2 percent of GDP in 1974--the lira depreciated markedly and remained under downward pressure throughout 1974. 1/ But the authorities were already disillusioned about the ability of the exchange rate to restore external balance. In the event, recourse was also made to monetary tightening and budgetary measures to restrain capital outflows and domestic demand. The monetary measures included both increases in base interest rates and administrative controls on banks' portfolio policies. 2/ On the budgetary front, the authorities imposed an extraordinary property tax on motor vehicles, higher indirect and social security taxes and increases in some public tariffs. In addition, administrative controls were imposed on the provision of foreign exchange for tourism and a compulsory deposit on imports was instituted.

These measures helped lower both domestic demand and imports in 1975--by 5.7 percent and 12.6 percent, respectively (Table 2)--and thereby allowed the current account deficit to narrow to 0.3 percent of GDP in 1975, but the capital account remained a source of instability. Autonomous capital outflows resumed in late-1975, keeping the overall balance and the loss in official reserves at around 1 percent of GDP over the full year. A significant part of this loss reflected net repayments on foreign debt and improvements in the banking system's net external position. Nevertheless, the perception of a precarious decline in the level of reserves--to less than 2 percent of GDP by year-end--together with a government crisis gave rise to a full-fledged crisis of confidence, which culminated in the suspension of official quotations and intervention on January 20, 1976. What was remarkable about this crisis was that it stemmed not from any alarming current imbalance but

---

1/ By the end of 1974, the weighted average rate of depreciation had reached 22 percent with respect to February 1973 (Banca d'Italia, Relazione Annuale 1974, p. 162-163).

2/ Banca d'Italia, Relazione Annuale 1974, pp. 245-250.

Table 2. Italy: Real GDP, Domestic Demand and Aggregate Demand, 1971-88

(Rates of growth in percent)

	Gross Domestic Product	Imports	Exports	Aggregate Demand	Domestic Demand	Implicit Import Elasticity with Respect to Aggregate Demand
1971	1.6	2.7	6.8	1.8	1.0	1.5
1972	2.7	9.8	9.3	4.0	3.1	2.4
1973	7.1	9.3	4.1	7.5	8.2	1.2
1974	5.4	2.2	7.0	4.8	4.4	0.5
1975	-2.7	-12.6	1.6	-4.6	-5.7	2.7
1976	6.6	14.1	10.5	7.9	7.4	1.8
1977	3.4	1.7	9.9	3.1	1.7	0.5
1978	3.7	4.8	9.0	3.9	2.8	1.2
1979	6.0	11.7	8.5	7.1	6.7	1.7
1980	4.2	2.9	-8.7	4.0	6.8	0.7
1981	1.0	-3.7	7.6	0.1	1.4	-67.3
1982	0.3	-0.7	-1.1	0.1	0.4	-5.9
1983	1.1	-1.8	2.4	0.6	0.2	-3.0
1984	3.0	11.3	7.3	4.5	3.9	2.5
1985	2.6	4.6	3.9	3.0	2.8	1.5
1986	2.5	4.6	3.8	2.9	2.8	1.6
1987	3.0	10.1	3.3	4.4	4.6	2.3
1988	3.9	7.2	5.9	4.6	4.3	1.6

Sources: Banca d'Italia, Relazione Annuale 1988; and IMF staff estimates.

rather from the country's low level of reserves and from its reduced creditworthiness in international capital markets. 1/

The official foreign exchange market was reopened on March 1, 1976. Reserves were shored up through recourse to external lines of credit and monetary policy was tightened, through an increase in reserve requirements, a 2-percentage point increase in the discount rate and a suspension of a special export-financing facility that had been introduced in 1975. Even so, the lira depreciated by 8 percent in the first three weeks of March. Together with the continuing loss of reserves, this spurred the adoption of a new wave of restrictive monetary, fiscal and exchange measures, which included an increase in the discount rate from 8 percent to 12 percent and a foreign financing requirement on leads in import payments. But the current account remained in substantial deficit throughout the first semester and tension in the foreign exchange market resurfaced in May 1976 upon the onset of a political crisis. This led to the reintroduction and extension of the compulsory deposit scheme to all purchases of foreign exchange, the imposition of a foreign financing requirement on export credits, the further increase in money market rates and the negotiation of new external credits to shore up official reserves. These measures helped stabilize the foreign exchange and money markets through the summer of 1976. After widening sharply in early-1976 on account of a rapid accumulation of inventories, the current account had turned into surplus in the third quarter of 1976, allowing the Bank of Italy to add to its official reserves for the first time since the onset of the crisis.

Despite this turnaround, there was a new speculative attack on the lira in late-September 1976. In response, the Government adopted a new package of measures. These included increases in taxes, tariffs and administered prices on the fiscal front, supplemented by a further tightening of monetary and exchange controls. Reserve requirements on bank deposits were raised effective October 15, 1976 and the discount rate was raised from 12 percent to 15 percent; a special tax of 10 percent was imposed on purchases of foreign exchange; and the compulsory deposit requirement which was to have expired on November 5 was extended until April 1977, albeit with progressively lower coefficients. 2/ The above package was strengthened in February 1977 with additional fiscal measures, which altogether helped turn the current account from a deficit of 1.3 percent of GDP in 1976 to a surplus of 1 percent of GDP in 1977. The overall balance, which had registered deficits every year since 1972, also turned into surplus in 1977.

c. The second oil shock

Both the current account and the overall balance remained in surplus through the late 1970s, but this trend was interrupted by the onset of the second oil shock. Italy was now a member of the EMS

1/ Banca d'Italia, Relazione Annuale 1975, pp. 421-426.
2/ Banca d'Italia, Relazione Annuale 1976, pp. 234-5.

exchange rate mechanism and was already embarked on a program of disinflation based on a nonaccommodating exchange rate policy. The credibility of this policy must have been enhanced by EMS membership, which was however insufficient to avert a renewed wave of speculative capital outflows as the current account deteriorated.

The current account turned into a deficit of 2.2 percent of GDP in 1980, shifting the overall balance into a deficit of 1.6 percent of GDP. The overall deficit was more than covered by an increase in net foreign borrowing of the banking system, allowing for a small increase in official reserves in 1980. Even so, the Italian authorities felt that the momentum of domestic demand--which had grown by 6 3/4 percent annually in both 1979 and 1980--together with a persistent inflation differential risked refueling the spiral between expectations of devaluation and inflationary expectations. This was thought to necessitate a rapid adjustment of the balance of payments, so as to avert the recurrence of a foreign exchange crisis. 1/

To help restore external balance, a number of measures were adopted beginning in early 1981. At end-January, quantitative ceilings were imposed on all credits in lira and on a part of credits in foreign currencies. In March, the discount rate was raised from 16 1/2 percent to 19 percent and the required reserve ratio for commercial banks was raised from 15 3/4 percent to 20 percent. At the same time, the central rate of the lira was devalued by 6 percent within the EMS and the Government unveiled a package of measures to contain the fiscal deficit through expenditure cuts. 2/

The measures had a strong impact on domestic demand, with the high cost of credit spurring a decumulation of inventories and an attendant decline in import demand, but the current account deficit remained at a high level. At the same time, delays by the Government in deciding about the expenditure cuts encouraged speculation in the foreign exchange market. Official foreign exchange reserves had declined from US$10.9 billion at end-1980 to US$6.6 billion by end-April 1981 and reserve losses picked up in May 1981. The need to arrest this trend spurred the reintroduction of the noninterest bearing deposit requirement on payments abroad at the end of May. This was followed by the passage of a series of decree-laws with a view to containing health expenditure, transfers to public entities and the Government's operating expenses as well as increasing social security contributions.

The measures of May accelerated the process of adjustment beginning in the third quarter of 1981. Over the full year, real domestic demand declined by 1.4 percent, imports of goods and services fell by 3.7 percent, and real GDP rose by 1 percent. This was the worst output performance since 1975, leading to a substantial increase in the rate of unemployment. In early October 1981, there was another EMS parity

---

1/ Banca d'Italia, Relazione Annuale, 1981, pp. 55 and 394.
2/ Ibid, p. 56.

realignment, leading to a nominal effective depreciation of the lira by 3.1 percent vis-à-vis its five major EEC partners. The resulting gains in competitiveness together with a revival in foreign demand helped increase real exports of goods and services by 7.6 percent in 1981. This allowed a further reduction of the current account deficit in the fourth quarter. 1/ Over 1981 as a whole, the current account deficit remained at the high level of 2.2 percent of GDP, but it was more than financed through nonmonetary capital inflows. The large autonomous inflow of private capital during 1981 reflected in part the stringency of domestic credit conditions, but it was also attributable to the administrative exchange control measures taken in early 1981. 2/

The economic recession deepened in 1982, with both domestic demand and real GDP rising by less than 0.5 percent and with overall employment declining for the first time since 1972. Nevertheless, the foreign exchange constraint and the need to control inflation in the face of a persistent fiscal deficit could not permit the easing of monetary policy. During the early months of 1982, the deceleration of inflation and the trends in international interest rates made it possible to lower somewhat domestic short-term interest rates and to lengthen the average maturity of public debt, but this movement was interrupted by exchange market pressures in March and April. A tightening of conditions on trade credits together with the ceiling on credits in lire helped normalize the situation in May, but tensions within the EMS re-emerged in June, leading to another realignment. Recognizing that the fiscal outturn was deviating from its target, the authorities adopted a set of fiscal measures in July 1982. These measures reinforced the decline in Treasury bill rates, which had already resumed in the spring, and the discount rate was lowered in end-August from 19 percent to 18 percent.

Exchange rate pressure re-emerged in the fall, spurred by the unfavorable seasonal pattern of the balance of payments, by uncertainties surrounding the reform of the wage indexation mechanism, and by political difficulties that frustrated parliamentary approval of the July measures and of the 1983 budget. In the two months of October and November, official reserves declined by Lit 4.5 trillion. As in the spring, the pressure was resisted. The authorities drained bank liquidity through open market operations and reintroduced the foreign financing requirement on export credits with a view to stabilizing bank financing at the levels of end-summer. 3/ Despite these measures the capital outflows of the fall had not been fully reversed by year-end. 4/

Reflecting these developments, official reserve losses over the full year amounted to Lit 5.6 trillion or the equivalent of 1 percent of

---

1/ Ibid, pp. 57-8.
2/ Ibid, p. 160.
3/ Banca d'Italia, Relazione Annuale, 1982, pp. 393-395.
4/ Even more persistent difficulties were encountered in the money market as interest rates seemed to be too low to attract the required nonmonetary financing for the budget deficit (Ibid, pp. 395-6).

GDP. The current account deficit had narrowed with respect to 1981, but net nonmonetary capital inflows had declined even more, thus shifting the overall balance into deficit. The overall deficit was exacerbated by the decline in net foreign borrowing through the banking system, thus giving rise to the first significant loss in foreign reserves since 1975.

d. The crisis of 1985-86

In 1983 and 1984, Italy registered official reserves surpluses equivalent to 1.4 percent of GDP and 0.7 percent of GDP, respectively, but the situation deteriorated again in 1985. The current account deficit widened from 0.6 percent of GDP in 1984 to almost 1 percent of GDP in 1985, which might normally seem manageable. At the same time, however, the balances on both monetary and nonmonetary capital shifted from surplus into deficit, exacerbating the current imbalance. Official reserves declined by the equivalent of 1.7 percent of GDP, culminating in the foreign exchange crisis that began in late-1985. 1/

This crisis again highlights the key role of capital flows, as it occurred in the context of an improving current account. The first semester of 1985 actually witnessed a widening of the current account deficit, which was nevertheless readily financed by autonomous inflows of nonmonetary and monetary capital. A part of these inflows was reversed in the third quarter, when the Bank of Italy admonished banks to lower their net debtor positions, because the designated limits had been overshot. Improvements in the trade balance together with seasonal inflows of receipts from tourism had meanwhile shifted the current account into surplus in the third quarter, thus facilitating the orderly reduction of banks' foreign liabilities.

In the fourth quarter, the current account shifted back into a small deficit of about Lit 0.5 trillion. This was much lower than the current account deficit in either of the first two quarters of 1985, both in seasonally adjusted and in unadjusted terms. Towards the end of the year, however, strong expectations arose of an imminent realignment of EMS parities. Leads and lags in trade-related payments led to a sharp, further decline--by Lit 5.3 trillion--of Italian banks' external liabilities during the fourth quarter. At the same time, the balance on nonmonetary capital movements (excluding errors and omissions) shifted from a surplus of Lit 2.4 trillion in the third quarter to a deficit of Lit 2.4 trillion in the fourth quarter. The excess demand for foreign exchange was almost fully satisfied by intervention by the Bank of Italy, so as to minimize the variation of the exchange rate within the EMS. Intervention was facilitated by agreements with other central banks and by drawings against Italy's ECU balances, consistent with the

---

1/ For more details on this crisis, see Banca d'Italia, Bollettino Economico, February 1986, p. 33 and Abridged Report for the Year 1985, p. 71.

agreements on the reinforcement of the EMS of June 1985. 1/ Altogether official reserve losses amounted to more than Lit 9 trillion in the fourth quarter of 1985, of which more than half took place in December. In the first half of January 1986, a further Lit 2 trillion of reserves was lost, spurring the adoption of restrictive credit and exchange policies. These included increases in treasury bill rates, the imposition of a ceiling on bank credit in lire over the first semester of 1986 and tighter controls on leads and lags. Orderly conditions were quickly restored in the foreign exchange market, spurring an inflow of Lit 5 trillion in bank funds during the first quarter of 1986. In April, there was a realignment of EMS central rates, which allowed the relaxation of the restrictive administrative measures thereafter.

III. The Current Account in the Context of the Saving-Investment Balance

An alternative accounting framework for analyzing current imbalances is the saving-investment approach. Unlike the already described balance of payments framework, the saving-investment approach focuses on real sector developments. The analysis is based on simple national account identities. The current account surplus (CURR) is identically equal to the gap between gross national income (Y) and gross domestic expenditure (C + I) or, equivalently, the gap between gross national saving (S) and gross domestic investment (I). We have:

$$CURR \equiv Y - (C + I) \equiv S-I \qquad (3)$$

Disaggregating between the private and government sectors yields:

$$CURR \equiv (S_p - I_p) + (S_G - I_G) \equiv B_p + B_G \qquad (4)$$

where S_p and I_p are private sector saving and investment, respectively, S_G is government saving, I_G is government capital expenditure, B_p is the net private sector balance and B_G is the net government balance (fiscal surplus).

As was already noted, the saving-investment approach raises important questions, on which the Italian experience may help cast some light. First, as regards the Feldstein-Horioka findings, it is interesting to ascertain to what extent the large-scale capital movements that were documented above facilitated or thwarted the emergence of saving-investment gaps. This could help determine whether saving-investment correlations can indeed provide information on the degree of capital mobility. Second, the Italian experience offers a unique opportunity to determine how a persistent fiscal imbalance might affect the external accounts in the presence of a high net private savings rate.

1/ See Ungerer et al. (1986, p.8), for a full description of the package of amendments to the EMS Agreement that became effective on July 1, 1985.

Italy registered fiscal deficits throughout the 1970s and 1980s, averaging the equivalent of 9 1/2 percent of GDP. The net private sector balance, by comparison, averaged 9 percent of GDP, leaving the average current account in small deficit. Finally, Italy's current account history may help assess the reliability of simple rules of thumb on the sustainability of current imbalances based on the saving-investment approach. According to these rules, a current account deficit is sustainable if it reflects increased investment, because such investment raises future productive capacity. The deficit needs to be corrected, however, if it is due to fiscal imbalances. 1/

1. Overall trends, 1970-88 2/

Comparing the movements of gross national saving and gross domestic investment brings to the fore several noteworthy features of Italy's current account. The saving and investment rates move closely together through much of the period and are highly correlated (with a correlation coefficient of 0.78), consistent with the cross-section findings of Feldstein and Horioka (1980) and Feldstein (1983) (top panel of Chart 2). 3/ Both series exhibit a downward trend, falling from 27 1/2 percent to 28 percent in 1970 to around 21 percent by 1988 (Table 3). Reflecting the co-movement of saving and investment, the current account shows no apparent trend, but it nevertheless shows significant short-term fluctuations, with a standard deviation equivalent to 1.6 percent of GDP compared with a mean of -0.4 percent of GDP. 4/ The short-term variations in the current account appear to reflect mainly variations of opposite sign in the investment ratio. This suggests that current account deficits have generally reflected higher investment rather than lower saving, which would have called for no adjustment according to the above-cited rules of thumb.

Looking at the evolution of the current account in relation to the public sector and private sector balances provides some further insights. Although there was a large fiscal deficit (i.e., a negative government balance) this deficit was more or less offset on average by a positive private sector balance, leaving the average current account in a relatively small deficit (bottom panel of Chart 2). Both the government deficit and the private sector's net saving position show a rising trend through most of the period, which is partially reversed beginning in 1985-86. Both sectors' balances, however, are also subject to sharp

---

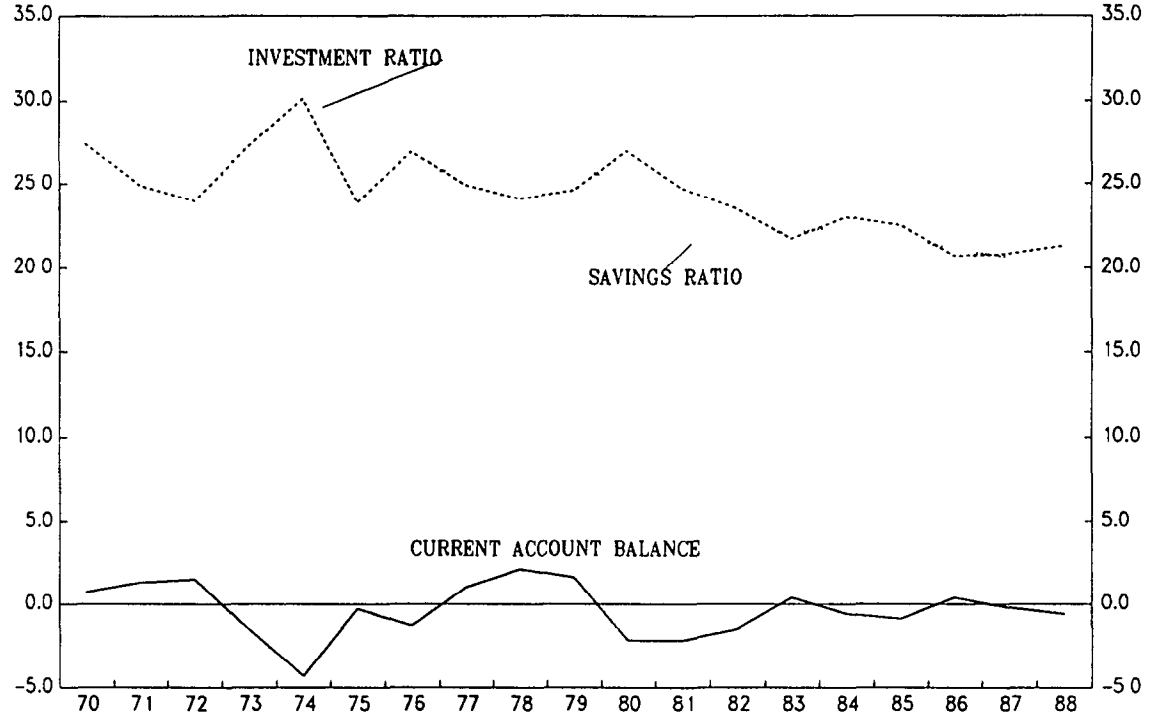
1/ See, IMF (1989), Lawson (1989) and Sachs (1981) for more detailed articulation of these rules. For an exposition of their analytical shortcomings, see Molho (1990).

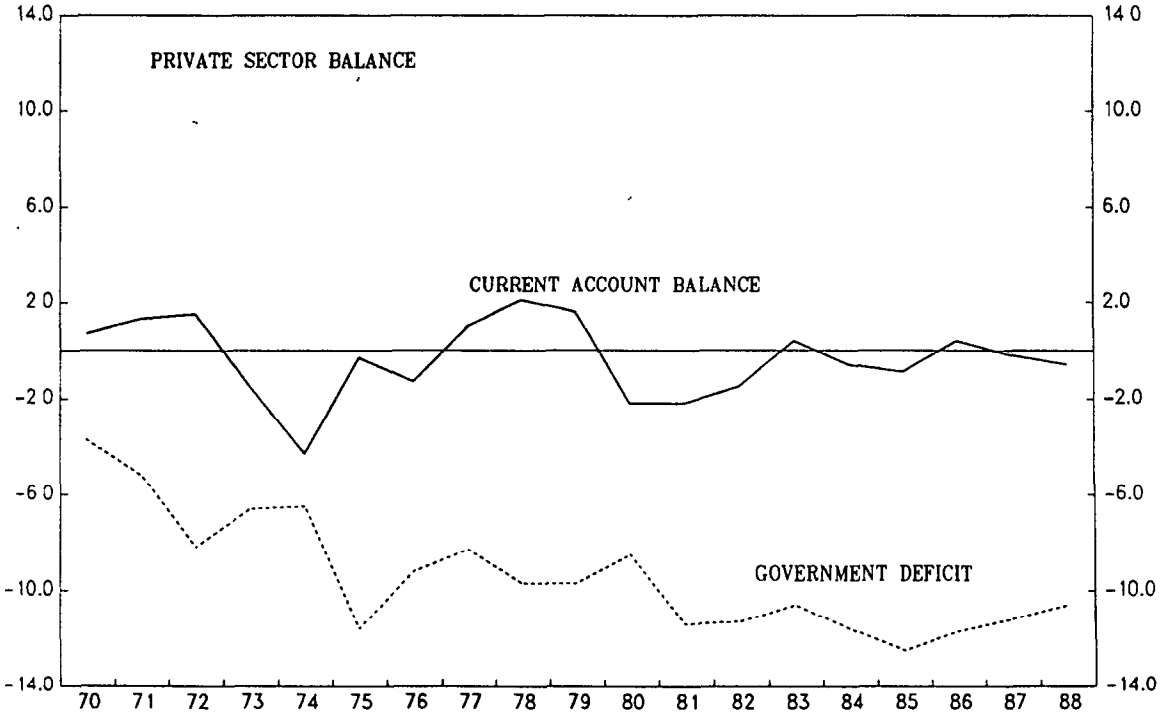
2/ The analysis is limited to the 1970-88 period because the recent revision of Italy's national accounts has not yet been extended to the pre-1970 period.

3/ The correlation coefficient between the first differences of the two series is somewhat lower but still significant (0.63).

4/ This is in contrast to a surplus averaging 0.4 percent of GDP over the longer 1960-88 period.

CHART 2
ITALY
SAVING-INVESTMENT BALANCES, 1970-88
(IN PERCENT OF GDP)





Source: Bank of Italy, RELAZIONE ANNUALE, various issues; and Fund staff estimates

Table 3. Italy: The Current Account and Saving-Investment Balances, 1970-88

(In percent of GDP)

	Current account	Government balance	Private balance	Total investment	Of which:		Total saving	Of which:		Inventory investment	Gross fixed investment
					Government	Private		Government	Private		
1970	0.7	-3.7	4.4	27.4	4.2	23.2	28.1	0.5	27.6	2.8	24.6
1971	1.3	-5.2	6.6	24.9	3.6	21.3	26.3	-1.6	27.9	1.0	23.9
1972	1.5	-8.2	9.6	24.0	3.7	20.3	25.5	-4.4	29.9	0.9	23.1
1973	-1.5	-6.6	5.0	27.2	3.4	23.8	25.6	-3.2	28.8	2.3	24.9
1974	-4.3	-6.5	2.2	30.1	3.6	26.5	25.9	-2.9	28.7	4.2	25.9
1975	-0.3	-11.6	11.4	23.9	4.6	19.3	23.7	-7.0	30.7	-1.0	24.9
1976	-1.3	-9.2	7.9	26.9	4.1	22.8	25.6	-5.1	30.7	3.0	23.9
1977	1.0	-8.3	9.3	24.9	4.1	20.8	25.9	-4.2	30.2	1.4	23.5
1978	2.1	-9.8	11.9	24.1	4.0	20.1	26.2	-5.9	32.1	1.4	22.7
1979	1.6	-9.7	11.2	24.7	4.0	20.6	26.2	-5.7	31.9	1.8	22.8
1980	-2.2	-8.5	6.3	27.0	4.3	22.7	24.8	-4.2	29.0	2.7	24.3
1981	-2.2	-11.4	9.2	24.7	4.8	19.9	22.5	-6.6	29.1	0.9	23.9
1982	-1.5	-11.3	9.7	23.5	5.1	18.4	22.0	-6.2	28.1	1.2	22.3
1983	0.4	-10.6	11.0	21.7	5.1	16.6	22.1	-5.6	27.6	0.5	21.2
1984	-0.6	-11.6	11.0	23.0	5.0	18.0	22.4	-6.6	29.0	1.9	21.1
1985	-0.9	-12.5	11.7	22.5	5.9	16.6	21.7	-6.6	28.3	1.8	20.7
1986	0.4	-11.7	12.1	20.7	5.2	15.5	21.1	-6.5	27.6	1.0	19.7
1987	-0.2	-11.2	11.0	20.8	5.1	15.7	20.6	-6.1	26.6	0.8	20.0
1988	-0.6	-10.6	10.0	21.3	5.0	16.3	20.7	-5.6	26.3	1.5	19.9
Average	-0.4	-9.4	9.0	24.4	4.5	19.9	24.0	-4.9	29.0	1.6	22.8
Standard deviation	1.6	2.4	2.8	2.4	0.7	3.0	2.2	1.9	1.6	1.1	1.8

Sources: Banca d'Italia, Relazione Annuale, 1988; and Fund staff estimates.

year-to-year fluctuations, which account for the short-run fluctuations of the current account. In this regard, the current account seems to move more closely in line with the private sector balance than with the fiscal deficit, as is further attested by a comparison of simple correlations. The correlation coefficient between the current account and the private balance is 0.51, whereas that between the current account and the government balance is 0.06 (Table 4).

Chart 3 views each of the private and public sector balances in relation to the respective sectoral saving and investment ratios. As regards the private sector (top panel), the chart is suggestive of a strong inverse relationship between private investment and the private balance. Both series show substantial short-run variability until 1981 and smooth opposite trends thereafter. The private saving ratio, by contrast, shows a smoother path, with a rising trend until 1979 and a declining one thereafter. Comparing correlation coefficients confirms the relatively closer association between the private balance and the private investment ratio. 1/

Turning to the decomposition of the Government deficit (bottom panel of Chart 3), the opposite tendency is apparent. Variations in the deficit seem to reflect predominantly variations in the public savings ratio. The public investment ratio shows a relatively smooth upward trend through 1985, which may account for part of the trend widening of the deficit, but cannot explain the sharp movements of the deficit in the shorter run. A comparison of correlation coefficients once again confirms the impression imparted by the chart. 2/

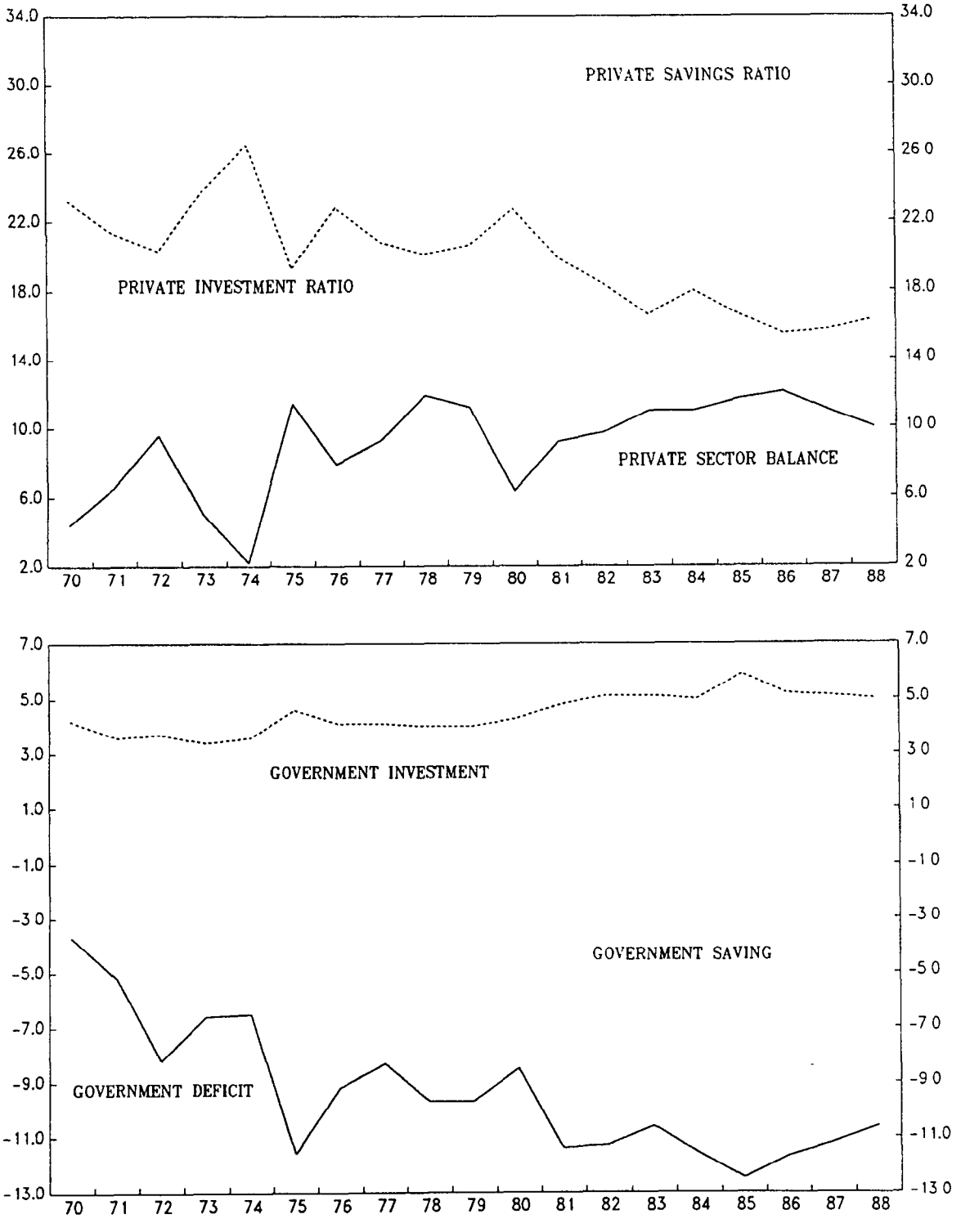
Finally, comparing the correlation coefficients between the current account and each separate component of saving and investment provides further confirmation of some of the patterns detected above. The current account is more highly correlated with investment than with saving; it is more highly correlated with private sector investment and saving than with the public sector counterparts; and it is more highly correlated with investment in inventories than with fixed investment (Table 4). These findings suggest that neither the fiscal deficit nor its investment and saving components account for much of the variation of the current account over the sample period, with their correlations to the current account remaining below 0.1. Within the private sector, investment seems more highly correlated with the current account than is saving. A breakdown of investment as between fixed capital and inventories, however, suggests that it was the latter component that was most closely related to the current account with a correlation coefficient of -0.49. This is contrary to the usual presumption that investment-driven

---

1/ The correlation coefficients between the private balance and the private investment and savings rates are -0.86 and 0.16, respectively.

2/ The correlation coefficients between the Government deficit and the public investment and savings rates are -0.79 and 0.97, respectively.

CHART 3
ITALY
COMPOSITION OF PRIVATE AND PUBLIC SETOR BALANCES, 1970-88.
(IN PERCENT OF GDP)



Source: Bank of Italy, RELAZIONE ANNUALE, various issues; and Fund staff estimates

Table 4. Italy: Saving-Investment Correlations and the Current Account, 1970-88

	Current Account	Government Balance	Private Balance	Government Investment	Government Saving	Private Investment	Private Saving	Total Investment	Total Saving	Fixed Investment	Investment in Inventories
Current account	1.00	0.06	0.51	-0.08	0.03	-0.35	0.27	-0.44	0.21	-0.30	-0.49
Government balance		1.00	-0.83	-0.79	0.97	0.77	-0.01	0.71	0.82	0.65	0.50
Private balance			1.00	0.63	-0.82	-0.86	0.16	-0.87	-0.59	-0.73	-0.71
Government investment				1.00	-0.63	-0.83	-0.44	-0.73	-0.85	-0.76	-0.36
Government saving					1.00	0.67	-0.18	0.64	0.72	0.55	0.51
Private investment						1.00	0.37	0.99	0.84	0.92	0.66
Private saving							1.00	0.33	0.55	0.44	-0.01
Total investment								1.00	0.79	0.91	0.71
Total saving									1.00	0.78	0.43
Fixed investment										1.00	0.34
Investment in inventories											1.00

Sources: Banca d'Italia, Relazione Annuale, 1988; and IMF staff estimates.

deficits help raise productive capacity and it may even suggest a speculative element in the linkage between a weakening current account and a spurt in stocks of imported goods.

The potential importance of inventories is quite revealing as it provides a natural link between the elasticities and saving-investment approaches to the current account. The accumulation of stocks of imported goods, which may show as an increase in the average propensity to import under the elasticities approach, is reflected in increased investment under the saving-investment approach. As is illustrated in Chart 4, this linkage has been significant in the case of Italy. The current account has exhibited a marked inverse relation to investment in stocks during the 1970-88 period, while at the same time the average propensity to import was positively related to investment in stocks.

The results of simple correlation analysis must of course be viewed with caution. Much of the co-movement between the current account and the saving and investment variables is likely to reflect other outside factors or exogenous disturbances. Moreover, there are important interrelationships among the saving and investment variables themselves as is evident from the correlation matrix. These make it very difficult to draw any firm conclusions about patterns of causation and significance in the absence of a well specified general equilibrium framework. Because the development of such a framework is beyond the scope of this paper, it is best to resist the temptation to theorize about the regularities apparent in the above charts and tables. Instead, the more informal approach of investigating the few episodes of large external imbalances is employed again, with a view to assessing the robustness of some of the patterns that were detected above.

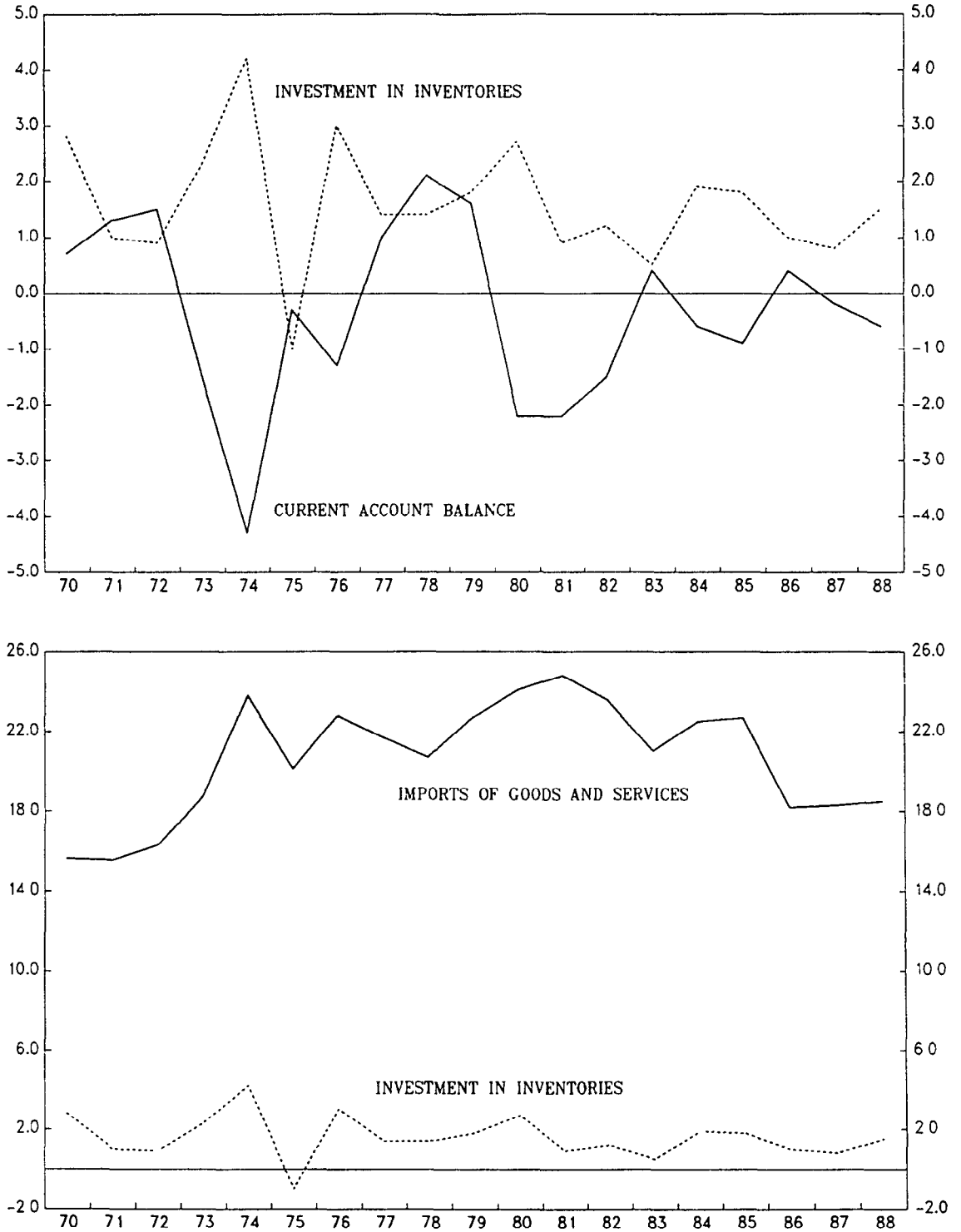
2. Major episodes of external imbalance, 1970-88

a. The first oil shock

The onset of the first oil shock set the stage for a prolonged period of external imbalance in Italy, as was already noted. The current account registered a sharp turnaround from a surplus of 1 1/2 percent of GDP in 1972 to a deficit of equal size in 1973. The deficit widened to 4.3 percent of GDP in 1974, before reverting to near balance in 1975. It then widened again in 1976 to 1.3 percent of GDP and finally turned into a surplus of 1 percent of GDP in 1977 (Table 3).

Through most of this period, the driving force behind the sharp fluctuations of the current account was the private balance, whose impact was only moderated by offsetting movements in the Government deficit. The private balance deteriorated by 4 1/2 percentage points of GDP in 1973 and by another 2 3/4 points in 1974; it rose by more than 9 points in 1975 and declined again by 3 1/2 points in 1976. The Government deficit, by contrast, declined by 1 1/2 percentage points of GDP in 1973, it remained unchanged in 1974 and then jumped by 5 percentage points in 1975 before declining again by 2 1/2 points in 1976 (Table 3

CHART 4
ITALY
THE CURRENT ACCOUNT AND INVESTMENT IN INVENTORIES, 1970-88.
(IN PERCENT OF GDP)



Source: Bank of Italy, RELAZIONE ANNUALE, various issues; and Fund staff estimates

and Chart 2). The opposing movements in the balances of the private and public sectors must have reflected in part the course of the business cycle. The reduction of the Government deficit during the boom years of 1973-74 and its subsequent rebound in the recession year of 1975 can be attributed to the operation of automatic stabilizers on both the revenue and the expenditure side. 1/ Movements in the private balance must also have been affected by the phases of the cycle, but a decomposition between saving and investment can shed more light on this issue.

During the 1973-77 period, private sector investment had by far the dominant influence on the private sector balance (Chart 3). The private investment ratio rose by 3 1/2 percentage points of GDP in 1973 and by another 2 3/4 points in 1974; it declined by more than 7 points in 1975 before rising again by 3 1/2 points in 1976. The private savings rate, by contrast, exhibited smaller variability, falling by 1 point in 1973, stabilizing in 1974 and rising by 2 points in 1975, before stabilizing again in 1976 (Table 3). The variations of private investment were almost fully reflected in total investment, as Government investment exhibited very little variability during this period. The only exception was in 1975 when Government investment rose by 1 percentage point of GDP, thereby exerting a small countercyclical influence.

The variations in the investment ratio reflected mainly variations in investment in inventories, even though fixed investment is by far a more important component. 2/ Fixed investment rose by 1.8 percentage points of GDP in 1973 and by another point in 1974; it then declined by 1 percentage point in 1975 and by another point in 1976. By comparison, investment in inventories rose by 1.4 percentage points of GDP in 1973 and by another 1.9 points in 1974; it declined by 5.2 points in 1975 and rose again by 4 points in 1976, before declining by 1.6 points in 1977. Fixed investment thus accounted for a larger share of the rise in the investment ratio only in 1973; thereafter, and until 1977, changes in fixed investment were swamped by changes in investment in inventories, which thereby became a leading determinant of the current account deficit (Chart 4).

b. The second oil shock

Upon the onset of the second oil shock, the current account turned again from a surplus of 1.6 percent of GDP in 1979 to a deficit of 2.2 percent in 1980; it stayed at that level in 1981 before narrowing to 1 1/2 percent of GDP in 1982 and it turned into a small surplus in 1983 (Table 3). Again the private balance was the dominant force behind these developments, with the Government deficit playing a partly

---

1/ Real GDP rose by 7.1 percent in 1973 and by 5.4 percent in 1974, but it declined by 2.7 percent in 1975, before rising again by 6.6 percent in 1976 (Table 2).

2/ Over the 1970-88 period, fixed investment amounted to the equivalent of 22.8 percent of GDP on average, compared with an average of 1.6 percent of GDP for investment in inventories (Table 2).

offsetting role, probably on account of automatic stabilizers. The private balance fell by 5 percentage points of GDP in 1980, but it rose steadily thereafter and it had almost fully recovered to its 1979 level by 1983. The government balance, by contrast, improved by more than 1 percentage point of GDP in 1980 in the wake of the 1979-80 boom, deteriorated by 3 points during the 1981-82 recession and then partially recovered in 1983.

The deterioration of the private balance in 1980 was again affected by a rise in the investment ratio but, unlike in 1973, there was also a sharp decline in the private savings rate by almost 3 percentage points. The savings rate stabilized in 1981, but it declined again by 1 point in 1982 and by another 1/2 point in 1983. The brunt of the adjustment was thus borne by the private investment rate, which declined by 6 percentage points in 1981-83, after having risen by 2 points in 1980. Investment in inventories again accounted for a significant portion of this adjustment, but to a lesser extent than fixed investment. In fact, after temporarily increasing by 1 1/2 point to 24.3 percent in 1980, the fixed investment ratio resumed its downward trend in evidence since the mid-1970s, falling to 21.2 percent in 1983 and to 20 percent by 1987-88.

c. The 1985-86 crisis

This episode is particularly interesting because it is the only instance in which the Government deficit seems to account for the current account deterioration. The private balance was in fact stable in 1984 and it rose by 0.7 percent of GDP in 1985. The government deficit, however, widened from 11.6 percent of GDP in 1984 to a record 12 1/2 percent of GDP in 1985. This more than accounted for the small deterioration of the current account in 1985.

A look at the composition of the Government deficit highlights the practical limitations of the simple rules of thumb often ascribed to the saving-investment approach. The public-versus-private-sector rule would dictate an immediate correction of the current account deficit, as this can be argued to have been due to the larger Government deficit. Government saving, however, remained stable in 1985 and the widening deficit was exclusively due to a rise in government investment. If public investment is in general productive, as recent studies suggest it is, 1/ the widening of the current account deficit in 1985 should have been no cause for concern. In fact, the public investment ratio was curtailed in 1986, which together with a basically flat Government savings rate, led to a decrease in the fiscal deficit. This decrease, superimposed on the downward trend in the private investment ratio, helped turn the current account into surplus in 1986.

1/ See, for example, Aschauer (1989) and Barro (1989).

IV. Lessons from Italy's Balance of Payments Experience

The retrospective analysis of the previous sections helps illuminate some important aspects of real-world balance of payments problems that tend to be disregarded by both theorists and policy analysts. These are as follows:

1. The importance of capital and reserve flows

The Italian experience shows that, although large current account deficits have in the past been associated with balance of payments problems, they are neither necessary nor sufficient conditions for the emergence of such problems. Capital and reserve flows are equally important determinants of balance of payments stability. A current account deficit that might normally be easy to finance can quickly overwhelm a country's stock of official reserves if it generates expectations of devaluation and speculative capital outflows. Capital flight could also be spurred by political or other extraneous factors, which may make the capital account an independent source of instability. The speed with which speculative capital outflows can erode the central bank's holdings of reserves may make devaluation inevitable, irrespective of the fundamentals affecting the current account. Decisive adjustment measures can help avert an undesirable devaluation, but these measures must also be backed by adequate financial resources for intervention. The availability of such resources was a principal difference between the crises of 1963-64 and 1985, on the one hand, when devaluation was successfully resisted, and those of 1975-76 when it was not. Another difference that may have been important is the existence of the fixed-exchange-rate arrangements of Bretton Woods in 1963-64 and of the EMS in 1985, which may have enhanced the credibility of the exchange rate during these periods. 1/

2. Implications for exchange rate policy

Italy's experience underscores the pitfalls of exchange rate rules that focus exclusively on the current account. If the markets perceive that the government will respond to current account deficits by depreciating the exchange rate, then the emergence of such deficits may cause destabilizing capital outflows that will make devaluation inevitable. A

1/ The progressive liberalization of capital flows and the strengthening of the EMS have recently increased the importance of the capital account. Through most of 1989 and early 1990, autonomous capital inflows have more than covered Italy's widening current account deficit, leading to an appreciation of the lira exchange rate despite record purchases of foreign exchange by the monetary authorities. A similar pattern has characterized the external accounts of other EC member countries (Molho (1990)). But even outside the EC, exchange market pressures on the major currencies have increasingly stemmed from the capital account in 1989-90 (see, for example, The Japanese Paradox, The Economist, April 7, 1990, p.77).

firm exchange rate policy, by contrast, is more conducive to the orderly financing of the current account deficit by autonomous capital flows. When devaluation is ruled out, it also takes a smaller interest rate differential to attract the private funds needed to finance the current deficit.

The credibility of the exchange rate hinges not only on economic fundamentals, but also on the monetary authorities' financial position. In determining the feasibility of maintaining any given parity, traditional indicators on competitiveness and the current account need to be complemented by financial indicators on the overall balance and the stock of official reserves. Even with the benefit of hindsight, it is often very difficult to establish which devaluations were justified by sound economic reasons and which were due to purely financial pressures. 1/

3. The interpretation of saving-investment correlations

Italy's balance of payments history over 1960-88 establishes beyond any reasonable doubt that Government policies went to great lengths to re-establish external balance whenever the current account deficit rose to 1 percent of GDP or more. This finding carries important implications about the nature of cross-country saving-investment correlations detected by Feldstein and Horioka (1980) and Feldstein (1983). One common interpretation is that these correlations are indicative of a limited degree of capital mobility. This paper supports the alternative interpretation that countries generally implemented policies aimed at balancing the current account (Tobin (1983) and Bayoumi (1989)). Support for this view has also been provided by econometric estimates of policy reaction functions by Artis and Bayoumi (1989). The historical approach of this paper is informal, but it provides a good flavor of the urgency with which external deficits had to be tackled. A look at other countries' balance of payments history is likely to reveal similar patterns. 2/

The Italian experience also illustrates how misleading it may be to make inferences about the current account and the degree of capital mobility based on average performance over long time periods. Italy's current account surplus was on average equivalent to less than 1/2 percent of GDP over the 1960-88 period, while the capital account had on average a surplus of equal size. Nonetheless, these figures conceal a

---

1/ This statement applies not only for Italy but also for other countries. See, for example, Yeager (1976, p. 470) on the United Kingdom's postwar balance of payments crises, some of which were "of a more speculative than fundamental nature."

2/ During the 1950s and 1960s the balance of payments was an overriding concern of policy in the United Kingdom and, to a lesser extent, in Canada, France and the United States. For a historical discussion documenting each country's efforts to correct external deficits, see Yeager (1976).

tumultuous history of large speculative capital flows and liquidity crises, which developed over much shorter time spans. The coming to existence of these crises attests to the fact that capital was quite mobile. In terms of investment return differentials, the Feldstein-Horioka findings may simply reflect that the annualized returns from correctly anticipating a devaluation can readily exceed any cross-country differentials in the productivity of capital. To the extent that current account deficits have in the past generated expectations of devaluation, there may thus have been a market mechanism that made autonomous capital movements to any one country self-limiting.

4. Implications for saving-investment criteria of sustainability

The Italian experience underscores the practical limitations of simple saving-investment rules for policies toward the current account. As regards the government balance, despite its conspicuous and unrelenting deterioration since 1970, no prima facie case can be made that it accounted for any significant portion of the current account deficits that emerged following the first and second oil shocks. A small deterioration of the current account in 1985 is attributable exclusively to the widening of the public deficit; here again, however, one cannot draw any obvious implications about sustainability because the increase in the public deficit reflected an increase in public investment rather than a reduction in public saving.

As regards the composition of the private balance, investment increases accounted fully for the deterioration in 1974 and 1976 and, to a lesser extent, for the deterioration in 1980. A significant part of the higher investment was in each case channeled into inventory accumulation, possibly suggesting an element of speculation. Even so, economic considerations would suggest that any buildup of inventories is bound to be self-limiting and, as such, should pose no problem of sustainability. Reliance on the simple saving-investment rules would thus have dictated a much more muted policy response to the current deficits of 1974, 1976 and 1980 than the policies that were actually implemented. But the discussion of Section II above made it clear that financial considerations left policy makers with little choice during these incidents. This raises questions about the reliability of saving-investment criteria alone in guiding policies toward the external account.

References

Artis, Michael and Tamim Bayoumi, "Saving, Investment, Financial Integration and the Balance of Payments," WP/89/102, December 14, 1989.

Aschauer, David Alan, "Is Public Expenditure Productive," Journal of Monetary Economics, 23 (1989), pp. 177-200.

Banca d'Italia, Bollettino Economico, various issues.

Banca d'Italia, Relazione Annuale, various issues.

Barro, Robert, "A Cross-Country Study of Growth, Saving and Government," NBER Working Paper No. 2855, 1989.

Bayoumi, Tamim, "Saving-Investment Correlations: Immobile Capital, Government Policy or Endogenous Behavior," IMF Working Paper, WP/89/66, August 1989.

Feldstein, M., "Domestic Saving and International Capital Movements in the Long Run and Short Run," European Economic Review, Vol. 21 (1983), pp. 129-51.

Feldstein, M. and C. Horioka, "Domestic Saving and International Capital Flows," Economic Journal, Vol. 90 (June 1980) pp. 314-29.

IMF, World Economic Outlook, October 1989.

Krugman, Paul, "Differences in Income Elasticities and Trends in Real Exchange Rates," European Economic Review, 33 (1989), pp. 1031-54.

Lawson, Nigel, Statement before the 1989 IMF-World Bank Annual Meetings Washington, September 1989).

McKinnon, Ronald I., "Monetary and Exchange Rate Policies for International Financial Stability: A Proposal," Journal of Economic Perspectives, Vol. 2, No. 1, Winter 1988, pp. 83-103.

Molho, Lazaros, "The Significance of the Current Account: Implications of European Financial Integration," unpublished, IMF, 1990.

Sachs, Jeffrey D., "The Current Account and Macroeconomic Adjustment in the 1970s," Brookings Papers on Economic Activity, 1981:1, pp. 201-268.

The Japanese Paradox, The Economist, April 7, 1990, p.77.

Tobin, James, "Comment on Domestic Saving and International Capital Movements in the Long Run and the Short Run," by M. Feldstein, European Economic Review, 21, (1983) pp. 153-6.

Ungerer, Horst, Owen Evans, Thomas Mayer and Phillip Young, "The European Monetary System: Recent Developments," Occasional Paper No. 48, IMF, Washington, D.C., December 1986.

Yeager, Leland B., International Monetary Relations: Theory, History, and Policy, (New York: Harper and Row), 1976.