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HALTING INFLATION IN ITALY AND FRANCE AFTER WORLD WAR II

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ABSTRACT

In the aftermath of World War II, Italy and France experienced high inflation. The two countries enacted remarkably similar economic policy measures, but stabilization came at different times: for Italy at the end of 1947, for France a year later. Traditional explanations for the regained price stability cannot account for the difference in timing. In this paper, we use the international comparison to shed light on the nature of the inflationary process and on the cause of its decline. We conclude that inflation was symptomatic of an unresolved distributional conflict, and came to an end when one political group, in both countries the Left, accepted its defeat. The Marshall plan helped to bring the stabilization about by reducing the costs to the group offering concessions. We argue that the French delay in stabilizing can be imputed to differences in the political climate and to the ambitious program of public investment.

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I. Introduction

In the aftermath of World War II, Italy and France like the other European belligerents experienced persistent, rapid, disruptive inflations. Within four years of the armistice, however, both countries had succeeded in bringing the era of postwar inflation to a close. This paper is an attempt to understand what made their stabilizations possible.

Doing so is no easy task. There is an abundance of potential explanations for the two stabilizations: fiscal correction (tax increases and expenditure reductions), monetary restriction (reserve requirements and credit controls), changes in domestic politics (the exclusion of the Communists from postwar governments), and foreign aid (notably the Marshall Plan).

The challenge is not to formulate hypotheses but to reject them. This is analogous to the problem faced by players of the board game "Clue," whose object is to determine who committed the murder in which room using what weapon. Players roll dice and cards to eliminate suspects until only one person, room and weapon remain.

In this paper we utilize international comparisons in place of dice and cards. Comparisons discipline the argument. Although many of the explanatory factors we consider appeared simultaneously in Italy and France, the two countries stabilized at very different times (Italy in the summer of 1947, France at the end of 1948). Given the difference in timing, either events that occurred simultaneously in the two countries cannot account for both stabilizations, or else other critically-important differences across countries determined the lag with which those events brought inflation to a halt.

For example, it is argued that the Italian stabilization was caused by a provision affecting banks' reserve requirements enacted in October 1947 which restricted bank advances to business. However, not only did the measure fail to reduce the growth of the Italian money supply, but a similar provision adopted simultaneously in France did not affect inflation there. Similarly, it is argued that the exclusion of the Communists from the Italian government in 1947 moderated inflationary expectations by promising to usher in a new era of fiscal discipline. But the Communists were excluded from the French government at the same time, and inflation there continued for another 18 months. Another popular argument in the Italian literature is that George Marshall's Harvard speech in June 1947 helped to halt the inflation by signalling that foreign finance would be made available in quantities sufficient to eliminate Italy's trade and budget deficits. Yet the same speech promised Marshall Plan aid for France but had no noticeable impact on French inflation, which continued for another 18 months.

To understand the nature and timing of the two stabilizations, it is first necessary to understand the inflations. We characterize inflation in both countries as symptomatic of a distributional conflict. In the aftermath of World War II, distributional disputes remained unresolved. The notional demands of government, households and firms summed to more than 100 percent of national income. Inflation, fueled by central- and commercial-bank credit, reconciled these incompatible claims. As in the model of Alesina and Drazen (1989), so long as distributional interests, uncertain about the patience of their adversaries, delayed offering concessions in the hope that others would give in first, inflation persisted. Eventually, the least patient groups offered concessions sufficient to bring the inflation to a halt.

This framework points to the Marshall Plan as a key element in the Italian and French stabilizations and to differences in political complexion and in national investment strategies as the explanation for differences in the timing of the stabilizations. The Marshall Plan increased the size of the pie to be shared out among distributional factions, reducing the sacrifices required to eliminate excess demand. By reducing the benefits of delay relative to the costs, it increased the likelihood of early stabilization.

In Italy, stabilization followed the announcement of the Marshall Plan almost immediately. In France, to the contrary, the conflict between interest groups was not speedily resolved. We discuss three possible explanations for the delay. First, politics may have been more polarized in France than in

Italy, so that a larger penalty would be suffered by the group that offered concessions. Second, even though the Left ultimately lost in both countries it was stronger in France than in Italy and was therefore willing and able to keep fighting longer. Finally, French governments were pursuing an ambitious program of investment motivated by international ambitions and perceived threats to domestic security. Since all social groups were committed to the program, the entire reduction in excess demand had to come from the share of national income that remained after the portion devoted to investment was removed. In terms of consumption shares, therefore, the sacrifices required to bring the inflation to a halt were larger in France than in Italy, and each distributional interest in France had a greater incentive to hold out. Hence stabilization took longer to complete.

The paper proceeds as follows. In the next section we sketch the development of inflation in the two countries. We then analyze evidence relevant to the competing explanations for the stabilizations: the monetary hypothesis (Section III), the fiscal hypothesis (Section IV), the change in government (Section V), and the Marshall Plan (Section VI). In Section VII we discuss the inflations as a reflection of distributional conflicts and present our interpretation of the timing of the two stabilizations. Section VIII concludes.

II. The Historical Background

Both Italy and France endured significant economic hardship in the aftermath of World War II. At the end of 1945, agricultural production in both countries had fallen to little more than 50 percent of prewar levels; industrial production was similarly impaired in Italy and declined to no more than 70-75 percent of its 1938 level in France. Despite extensive destruction of capital equipment, the subsequent recovery was rapid: by 1946, GDP in real

Table 1

National Income in constant 1938 prices
1938, 1945-50

Year	Italy (billions of lire)	% 1938	France (billions of francs)	% 1938
1938	165	100	380	100
1945	91.2	55	207	55
1946	133	81	315	83
1947	149	90	341	90
1948	157	95	366	96
1949	164	99	414	109
1950	175	106	445 (a)	117

(a) Taken from Maddison (1982), p. 174
Sources: Italy: Ercolani (1969), p. 422.
France: INSEE (1966), p. 556, except as otherwise noted.

terms was above 80 percent of the prewar level in both countries (see Table 1).

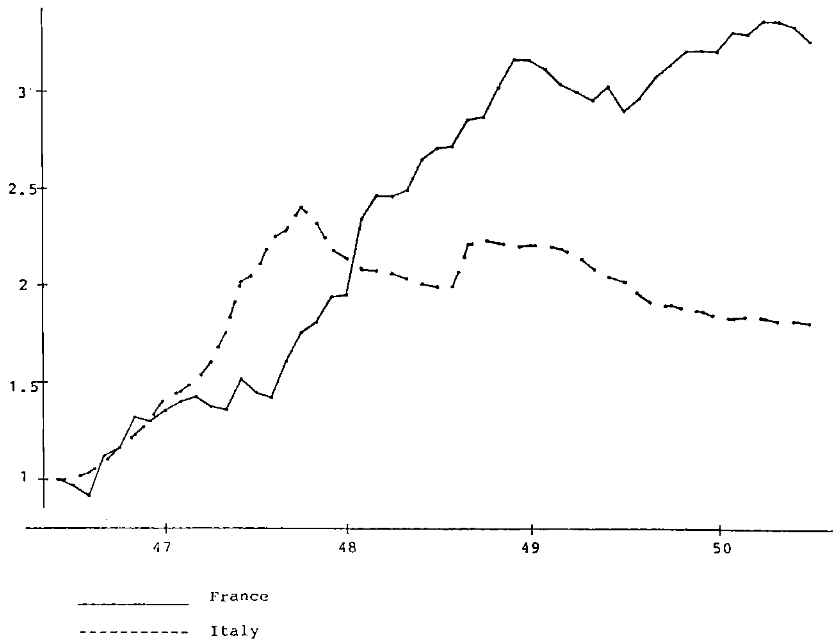
In both France and Italy, inflation proceeded rapidly through the beginning of 1947 (see Figure 1). Italian prices had declined in the months immediately following the armistice, but a change had taken place in the spring of 1946 as inconclusive debates over policy had led to worsening expectations. In the twelve months between May 1946 and May 1947, wholesale prices rose by 105 percent, and the free exchange rate rose by 250 percent.

A break in the pattern occurred at the beginning of the summer, coincident with the formation of the fourth De Gasperi Government, the first postwar coalition to exclude the Communists, and with Marshall's Harvard speech committing the United States to a program of financial support for European construction. Italy's free exchange rate strengthened substantially in June and appreciated steadily over the summer. Prices continued to rise but at a decelerating rate, while the gap between black market and legal prices narrowed. Imports of goods free of administrative controls (so-called "franco-valuta" imports), typically a vehicle for repatriating capital, increased substantially over the summer, reaching for the entire year a volume five times larger than in 1946. In October, new commercial bank reserve requirements were put in place, and prices began to fall. The quarterly rate of wholesale price inflation swung from 16 percent in 1947-II to -11 percent in 1947-III. At the beginning of 1948, prices stabilized, aside from a readjustment in the summer of 1948 when the subsidy on wheat was abolished. Overall, Italian wholesale prices rose by 3 percent in 1948, and declined slightly but continuously until June 1950.[1]

In France, prices rose by 80 percent over the year ending in December 1946. The interim Blum Government of late 1946 and the Ramadier Government that succeeded it in January 1947 attempted to impose a price freeze. A New Year's Day decree cut all retail prices by 5 percent. A second decree mandated another 5 percent cut in retail prices, effective March 1st.

Figure 1

Monthly Wholesale Price Index
May 1946 - June 1950
May 1946 = 1



Sources: Italy: ISTAT, Bollettino Mensile di Statistica, various issues.
France: INSEE (1966), p. 376.

Citizens' committees were formed to verify that the requisite reductions had taken place. Model shops were established to sell goods at official prices and make it easier for the public to identify cheating by retailers. This so-called Blum Experiment achieved a temporary pause in inflation. Retail prices in Paris fell by 2 percent between January and April 1947.

Shortages were quick to develop, however, encouraging transactions at black-market prices. The attempt to halt inflation by decree collapsed in the spring. Inflation accelerated from May through the end of 1947, with retail prices in Paris rising by 50 percent and prices in other urban areas rising even faster.

In the first half of 1948 the French government imposed a capital levy and impounded all 5,000 franc banknotes, producing a temporary cash surplus for the Treasury and reducing aggregate demand. Retail prices in Paris rose by less than 1 percent between January and July 1948. But in the second half of the year the budgetary problem reappeared, and inflation accelerated again. By December 1948 retail prices in Paris were up by 26 percent over July.

At this point the French stabilization finally took hold. With the help of good harvest in the summer of 1948, wholesale prices stabilized, rising by only 1.4 percent between the ends of 1948 and 1949. In 1950 wholesale prices increased by less than 2 percent over the first half of the year.

III. The Monetary Hypothesis

A first possible explanation for the two stabilizations is monetary correction. According to this view, excessive money and credit creation by the consolidated banking system fueled inflation in both countries. Central banks provided money finance not just for the government budget deficit but to businesses requiring credit for reconstruction. Commercial banks, unrestrained by reserve requirements, lent freely to the private sector.

Table 2

Bank Credit to Business in Italy
(billions of lire)

Period	Increase in deposits %	Increase in advances %	advances/deposits end of period %	new advances / new deposits %
Jan - March 47	11.8	18.8	63.6	94.8
April - June 47	11.9	24.1	70.6	129.1
July - Sept 47	8.3	14.7	74.7	124.9
Oct - Dec 47	7.2	2.3	71.3	24.0

Source: Bank of Italy: Annual Report (1948), p. 160

Restraint by the central bank plus the imposition of reserve requirements on the commercial banks were necessary and sufficient, according to this argument, to bring the inflation to a halt. This is the leading explanation for the Italian stabilization. Hence we analyze it in considerable detail.[2]

The new reserve requirements, designed by Luigi Einaudi, the Minister of the Budget, required banks to hold government bonds or blocked accounts at the Bank of Italy equal to as much as 15 percent of existing deposits and 40 percent of additional deposits.[3] Simultaneously with the enactment of these restrictions at the beginning of October 1947, the Bank of Italy's discount rate was raised from 4 to 5.5 percent. As mentioned above, the aggregate wholesale price index began to decline in October 1947, in perfect synchronization with the credit measure.[4] The credit institutions had been expanding advances to the private sector at a rapid rate. In the second and third quarters of 1947, credit extended had exceeded deposits collected by over 25 percent (Table 2). In the last quarter of 1947, advances continued to rise but at a much lower rate. By the end of December, banks were holding excess reserves of 44 billion (or 4.5 percent of deposits). In 1948, the growth rate of private credit remained low during the first semester but increased subsequently as economic activity recovered. Hence the argument that the imposition of the reserve requirements should be credited with the stabilization.

A difficulty with this argument is that the new regulations had been anticipated for months. In January, Einaudi, then Governor of the Central Bank, had written to the credit institutions urging them to limit the expansion of their advances to the private sector. The following month he had minuted the Treasury minister on the same topic, proposing the imposition of new reserve requirements. Both letters were examined in the Annual Report of the Bank of Italy, published at the end of March. By then, the reform of reserve requirements was already the subject of public debate: for example, Libero Lenti had discussed it in Corriere della Sera at the end of February.[5]

In April, the specific form of the provision was exposed to the government. In mid-June, while speaking before the Assemblea Costituente, Einaudi had once more analyzed the need to control bank credit and described his proposal. Finally, the new regulations were approved and discussed with the banks in August, more than thirty days before their application, and detailed in the major newspapers (see, for example, Einaudi's articles in Corriere della Sera on August 31st and September 7th). In Einaudi's words: "It is obvious that the restriction has neither been unexpected, nor sudden, nor draconian: it has been slow, foretold and discussed at great length." Hence it is difficult to see the reserve requirements as an abrupt change in regime that would have caused a break in price level trends at the moment of their imposition.[6]

The bank regulations had three purposes. First, they were intended to reduce the quantity of money. Second, they aimed at providing automatic financing to the Treasury through the banks' subscription of bonds. Finally, they were designed to break the vicious circle linking speculation against the currency to credit and inflation.

As shown in Table 3, in their first goal the new regulations failed. Although the rate of growth of deposits declined in 1947-IV (from 8 to 7 percent for all deposits, and from 7 to 4 percent for business deposits), this decrease was offset by a rise in the rate of growth of central bank credit. Currency circulation increased by 15.6 percent between June and September but by 18 percent from September to December. Circulation grew because of a seasonal effect but also because of the support the government granted to the industries hurt by the credit measure itself, support that the central bank financed. Firms found it hard to cope with credit stringency. As nominal interest rates rose in the last quarter of 1947, the real interest rate on bank credit jumped from something on the order of -90 percent to as much as +50 percent on an annual basis.[7] The government felt compelled to intervene in support of the mechanical and ship-building industries, among other sectors. In the financial year 1947-48, the increase in the endowment

Table 3

Italian Money Supply
(billions of lire)

	notes	business deposits	money supply	% change in money supply
June 1946	394.7	229.8	624.5	
December 1946	505.0	369.0	874.0	40.0
June 1947	577.6	455.0	1,032.6	18.1
December 1947	788.1	503.5	1,291.6	25.1
June 1948	816.0	628.0	1,444.0	11.8
December 1948	963.0	740.0	1,703.0	17.4

Business deposits ("conti di corrispondenza coi clienti") are used as proxy for checking deposits. Notes exclude treasury currency (which accounted for 1 - 1.5 per cent of notes in circulation) and circular checks. Circular checks accounted for 13 - 14 per cent of notes in circulation over the entire period.
Source: Bank of Italy (1949),

of the Istituto per la Ricostruzione Industriale (I.R.I.) and direct subsidies to industries amounted to 71.5 billion lire, up from 9 billion lire in 1938-39 (both in constant 1947 prices).[8] In the last three months of 1947 the Bank of Italy's credit to the government was 10 percent higher in constant prices than in the previous 15 months.[9] In effect, the reserve requirements diverted loans to business from the commercial banks to the central bank (which extended loans to enterprise via the public sector), without much net effect on overall rates of growth of money and credit. The rate of monetary growth slowed between the years ending September 1947 and September 1948, but only slightly.

In achieving their second objective, increasing commercial bank financing of the public deficit, the reserve requirements were more successful. Credit to the government rose from 10.5 percent of total private bank credit between July 1946 and September 1947 to 29.3 percent in the following 15 months. (Correspondingly, the banks financed 12.3 percent of the deficit in the first period and 20.4 percent in the second).[10] But since nominal bond yields did not fall after the stabilization, it is not clear that bond subscriptions by banks effectively reduced the debt burden of the Treasury.

The effect of the credit measure on prices is more difficult to assess. The standard story is that firms, anticipating further price increases, had been postponing sales and accumulating inventories, which only served to restrict supply and fuel additional inflation. They financed their current expenses and possibly also capital flight through bank advances. When credit was tightened, producers and retailers were forced to sell goods from their inventories to collect revenues sufficient to cover their costs. Prices declined dramatically as a result.

Inventory data appear in Table 4. Even if these estimates are not particularly precise, they point strongly to the accumulation of inventories in 1947, in conjunction to the large amounts of credit extended by banks to firms, supporting the interpretation summarized above. The decline in stocks

Table 4

Change in inventories in Italy
(billions of lire, 1938 prices)

1945	-3.2
1946	2.3
1947	8.6
1948	-0.7
1949	1.3

Source: Ercolani (1969), p. 441.

accompanying the stabilization is far from dramatic, but annual data may conceal more dramatic changes over shorter periods.

Ultimately, these data merely establish the existence of a correlation between inflation and inventory behavior. Additional evidence is required to evaluate the direction of causation. Disaggregated price indices are a possible source of useful information.[11] These show that the largest declines in prices were those for food, even though 1947 was a very poor harvest year. In contrast, prices of manufactures, which should most dramatically reflect the effects of inventory liquidation, declined less than the aggregate index. The price decline seems to have been negatively correlated with the labor content of the good: whereas the price of swine fell by 41 percent, for example, the price of pork fell by 19 percent; similarly, the price of the iron industry's goods fell by 6 percent, while the price of mechanical products actually rose.[12]

Thus, it is difficult to sustain the hypothesis that price declines were caused by firms in distress suddenly unable to borrow. In fact, the industry hurt most seriously by the credit crunch and the increase in wages, and which had to be rescued ultimately by the government, was the mechanical industry, whose output prices increased steadily. It is probable, however, that firms and stores did liquidate their inventories, and that they did so because of a combination of tighter credit and expectations of declining prices. How much the change in expectations owed to the credit restriction and how much to other developments remains an open question.

Another reason to question the role of the credit measure in halting the Italian inflation is that credit controls and reserve requirements were imposed almost simultaneously in France, without a concomitant effect on inflation.[13] In January 1947 French banks were instructed by the National Credit Council (NCC) to refuse credits that might have been used to finance commodity hoarding.[14] The banks were required to provide extensive documentation of all requests for advances of 2 million francs or more and to obtain approval from the Bank of France for advances of more than 30 million francs.[15] Two months later reserve requirements were imposed on all commercial banks. The Banking Control Commission required all commercial banks to maintain liquid assets equal to at least 60 percent of their demand deposits. In October the banks were instructed by the NCC to cut down or cancel existing credits to customers not engaged in the production of goods.

The reason for the ineffectiveness of this first round of French credit controls and reserve requirements is not difficult to ascertain. The 60 percent reserve requirement defined liquid assets to include not just cash and Treasury securities but commercial bills as well.[16] Moreover, commercial bills were exempted from NCC and Bank of France oversight on the grounds that self-liquidating credits provided in connection with normal business transactions were not inflationary. With advances controlled but discounts of commercial bills unrestricted, firms shifted toward the use of the latter.[17]

A second set of credit controls was imposed in September 1948 in response to resurgent inflation. The timing makes it tempting to credit them with having halted the inflation at the end of that same year. These controls required banks to hold Treasury paper equal to at least 95 percent of that in their possession on September 30th, 1948, and to invest 20 percent of new deposits in government securities. Commercial bills were made subject to the same oversight as other loans. Commercial banks were forced to justify to the central bank individual discounts that exceeded 5 million francs. Strict limits were placed on the amount of central bank credit commercial banks could obtain.[18] For the first time commercial bills were no longer perfectly liquid in the sense that they could be rediscounted at the Bank of France upon demand.

Importantly, however, exemptions from rediscount ceilings were extended to commercial bills arising out of transactions associated with agricultural production, with exports and with the provision of working capital to industry for re-equipment. Of the 147 million francs of credit provided to business by

Table 5

Sources of Increase in Money Supply in France
(billions of francs)

	1947	1948	1949
Gold	-30	-	-
Foreign Exchange	-	-	49
Postal Deposits with Treasury	23	58	44
Domestic Credit, Bank of France	34	27	41
and Commercial banks combined	287	484	460
(to government)	(143)	(104)	(111)
(to business)	(182)	(380)	(349)
Total	322	507	544

Source: Kriz (1951), p. 90

the Bank of France in 1949, 105 billion francs were rediscounts not subject to ceiling.[19]

Table 5 shows the rate of increase of the money supply in France and its proximate determinants. Monetary growth accelerated sharply in 1948 and failed to slow in 1949. Since reserve flows were small in both years, domestic credit creation was far and away the most important source of monetary growth.

Table 6 shows the composition of the increase in domestic credit. Again, there is little sign in the French data of change between 1948 and 1949. Loans, advances and discounts for business accounted for 79 percent of the increase in domestic credit in 1948, 76 percent in 1949. The commercial banks supplied 69 percent of the credit provided by the consolidated banking system in 1948, 52 percent in 1949. Direct advances by the Bank of France to the government declined abruptly in 1948, but rediscounts for commercial banks rose dramatically in 1948 and again in 1949, reflecting the exemption from credit ceilings of commercial bills generated in connection with re-equipment. Thus, insofar as Bank of France policy was less inflationary in 1948-49 than in 1947, this reflected a decline in the provision of direct advances to the Treasury. And since the government budget remained deep in deficit, the decline in direct advances reflected the Treasury's greater ability to place bonds with the public (as shown in Table 7). This surely was a consequence of the stabilization rather than an independent cause.

That the share of domestic credit provided by the commercial banks fell in 1949 suggests that the September 1948 commercial bank reserve requirements may have had some small effect. However, the ratio of new commercial bank loans to new commercial bank deposits showed no tendency to decline between 1948 and 1949: in fact it rose from 0.93 to 1.32.[20] Thus, it is hard to attach much importance to reserve requirements as a restraint on the lending activities of French commercial banks.

Table 6

Composition of Increase in Bank Credit in France
(billions of francs)

	1947	1948	1949
Credit to Government	143	104	111
By Bank of France	199	39	76
Direct Advances	116	43	5
Other	83	-4	71
By Commercial Banks (Treasury bill holdings)	-56	65	35
Credit to business	182	380	349
By Bank of France	34	113	147
Rediscounts	34	107	131
Open Market Purchases and Advances	0	6	16
By Commercial Banks	148	267	202
Commercial Bill Discounts	119	228	179
Loans and Advances	29	39	23

Source: Kriz (1951), p. 94

In summary, there is little evidence of a significant monetary correction in either Italy or France around the time of stabilization. Credit controls may have had a larger impact on the ratio of new commercial bank credit to new deposits in Italy, but due to the response of the central bank and public enterprise, that impact was insufficient in any case to slow the rate of monetary growth.

IV. <u>The Fiscal Hypothesis</u>

Although stabilization took place without a concomitant contraction in money supplies, it still may have reflected anticipated future changes in rates of money growth. This points to a change in the budgetary situation as a plausible explanation for stabilization. Even if current monetization was still large, a decrease in the accumulation of debt could signal a future decline in the rate of growth of money supply and, through the power of expectations, lead to immediate price stability.

In both Italy and France, postwar budget deficits were large. In the prevailing climate of political uncertainty, it was not clear whether taxes could be raised sufficiently to service existing debt, much less to pay the interest on new loans. As inflation accelerated, tax receipts lagged and budget deficits widened, requiring additional monetization. Only if legislators marshalled the resolve needed to raise taxes and reduce public spending would it be possible to bring this vicious spiral to a halt.[21]

In Italy, the public displayed a surprising willingness to subscribe government bonds at low interest rates immediately after the war. The first loan launched in the summer of 1945 took the form of a five-year bond at a 5 percent interest rate (the so-called the Soleri loan, after the name of the treasury minister). It was well received, and the government succeeded in financing its deficit of the first post-war financial year without resorting

Table 7

Budget Deficits, 1945-49

Italy
(billions of lire)

	1945-46	1946-47	1947-48	1948-49	1949-50
Budget deficit	458	564	897	547	332
percent of national income (a)	34	18	14	7	4

France
(billions of francs)

	1945	1946	1947	1948	1949
Budget deficit	308	353	292	570	611
percent of national income	40	17	8.1	9.6	8.2

Sources: Italy: Ercolani (1969), pp. 433, 423, p. 425; ISTAT (1957), p. 251
France: INSEE (1958), pp. 224, 228; INSEE (1966), p. 556.
(a) The deficit/income ratio for Italy is calculated with respect to the income of the calendar year in which the corresponding financial year began.

to credit from the central bank. While advances from the Bank of Italy became necessary in following years, nominal interest rates did not rise significantly despite the acceleration of inflation: the average government bond yield was 5.4 percent in 1946 and 6.2 percent in 1947.[22] This reflected not just the strong influence of the government on the credit institutions (partly through the direct control to which the largest banks were subject) and the lack of alternative assets but also public confidence. Commenting on the favorable outcome of the Reconstruction Loan issued the Winter 1946-47 (a 30-year bond yielding 5 percent), Einaudi wrote that its success should be attributed "not to predictable economic reasons, but to the patriotism of the lenders."[23]

The government's inability to face fundamental political choices gradually undermined public enthusiasm for bond issues. Contradictory measures fueled inflation. Two examples are the administration of wheat prices and the debate over monetary reform and the capital levy.

Until the summer of 1948, the price of wheat in Italy was controlled. The government collected the crop from farmers at a fixed price and sold it to mills at an artificially low price. Farmers naturally shifted into the production of other crops whose prices were free. In May 1946 the government therefore decided to increase the price it paid for wheat by 300 percent, restoring its real value to 1938 levels, but without raising the price it received from the mills. The banks that financed government wheat purchases rediscounted the bills issued in conjunction with this operation at the Bank of Italy. As a result, public wheat purchases were financed entirely by monetary expansion. The association of government policy and inflation was strengthened.

The possibility of a monetary reform, involving the substitution of a new currency and a tax on liquid wealth, had been debated since the German raid on the Bank of Italy and the feared theft of the plates with which the Italian currency was printed. With the end of the war the problem became less urgent, but arguments for substituting a new currency for the existing one were used to support the case for a capital levy (a special one-time tax on monetary assets). The Left favored reform and the capital levy while the Center-Right opposed them. Conflicting announcements followed on one another's heels: in January 1946 the issue of a new currency was officially postponed sine die by the Treasury minister, but the following April it was announced that enough new notes had been printed to make the conversion possible and that it was likely to take place soon. In June it was reported that the newly printed notes had to be destroyed because they had been produced illegally. In September 1946 the debate was reopened. Only in February 1947 was currency reform definitely rejected. The effect of the debate on the public's willingness to hold financial assets, and therefore on the velocity of money and inflation, was dramatic.[24] Risk-averse investors attempted to minimize their holdings of currency and other finance assets, and velocity rose. The capital levy that was supposed to accompany the currency change was approved in March 1947, but its revenue covered less than 4 percent of government spending for the fiscal year 1947-48.[25]

France too experienced a sequence of budgetary crises between the armistice and early 1949. Typically, the finance minister demanded some combination of tax increases and expenditure reductions, which was blocked by the Assembly. The government fell, to be replaced by another of slightly different political complexion, and the process repeated. The most serious crisis occurred in the first half of 1947. After an extended deadlock, in July the Assembly agreed to a package of expenditure reductions and tax increases. But increased wage demands by public sector employees quickly upset the budgetary equilibrium. As soon as this became apparent, the public allowed maturing treasury bills to run off, forcing the government to solicit credit from the Bank of France. The ceiling on advances from the Bank of France to the state was doubled, creating fears of renewed inflation.

In October 1947, the Ramadier government again attempted to reduce public spending and to increase revenues by reorganizing the tax system. Employment in the Veteran's Ministry and the military courts was cut.[26] But internal disorder, in part reflecting demands for higher wages, forced Ramadier to call up an additional 80,000 men into the armed forces. To forestall a threatened strike by government employees, public sector pay and benefits were increased by 100 billion francs. The budget deficit for 1947 was nearly 300 billion francs, more than 80 percent of 1946 levels. The crisis showed no sign of passing. The Schuman Cabinet that took office in November 1947 was greeted by another wave of strikes and sabotage, which it met by increasing all wages by 25 percent in January 1948.

In the first half of 1948, Finance Minister Rene Meyer imposed an exceptional capital levy, which raised FF 150 billion.[27] To punish speculators and black marketeers, all 5,000 franc notes (300 billion francs worth) were recalled. Some subsidies for nationalized industries were eliminated, and civil servants were laid off. The government received additional funds as Marshall Plan aid finally came on stream. Together these revenues were sufficient to balance the budget for the first half of 1948.[28]

Unfortunately, the budget deficit reemerged thereafter. The capital levy and the recall of large-denomination banknotes were one-time expedients. Wages were still rising and public enterprises were running large and growing deficits. The budget deficit for calendar year 1948 came to nearly 600 billion francs.

Tables 7 and 8 confirm that the fiscal situation in both countries remained in disarray. Table 7 shows the budget deficit, as a share of public spending and GNP, and its financing. Table 8 shows debt-to-income ratios. The Italian budget deficit as a share of GDP declined between the years ending June 1947 and in June 1948, from 18 to 14 percent. The decline was due to an increase in revenues, as income tax collection was reorganized; without substantial changes in tax rates, income tax revenues more than doubled.[29]

Table 8

Public Debt at the End of the Financial Year.

Italy. 1946-47 to 1949-50
(billions of lire)

	1946-47	1947-48	1948-49	1949-50
Domestic debt				
Long term	488.7	479.3	453.6	648.5
Short term	278.9	482.6	743.7	719.2
Other	188.0	295.0	479.0	628.3
Total	955.6	1257.0	1676.3	1996.0
(percent of national income)(a)	(29.8)	(20.0)	(22.5)	(25.3)
Debt towards the Bank of Italy (b)	365.9	473.4	470.5	561.6

France. 1945-1948
(billions of francs)

	1945	1946	1947	1948
Domestic debt				
Long term	600.5	641.7	638.9	754.5
Short term	746.0	754.2	724.5	951.6
Other	475.8	578.1	754.2	744.6
Total	1822.3	1974.0	2117.6	2450.7
(percent of national income)	(235)	(96.7)	(58.8)	(41.4)
Advances from the Bank of France	-14	73	115	43 (c)

(a) The debt/income ratio for Italy is calculated with respect to the income of the calendar year in which the corresponding financial year began.
(b) Changes in the official accounts with the Bank of Italy were only one of the possible sources of advances to the Treasury.
(c) Taken from Kriz (1951), p. 94
Sources: Italy: ISTAT (1949-50), p. 432; Ercolani (1969), p. 423
France: INSEE (1958), pp.93, 224, 228, INSEE (1966), pp. 376, 556, except as otherwise noted.

The French deficit as a share of NNP rose between 1947 and 1948 and was concentrated in the second half of the year. This hardly seems like the type of development that would lead to stabilization. As in Italy, there was a small decline in the deficit as a share of GDP in 1949.

Debt-to-income ratios show a more pronounced decline in each country in the year of stabilization. While this could have led to a positive revision of expectations, it may also have reflected the impact of inflation on the stock of debt and the increased difficulty encountered by the two governments in raising funds on financial markets. In the case of Italy, the decline is due entirely to the reduction in the stock of long term debt. (Short-term debt rose by almost 70 percent.) In the absence of a corresponding decrease in the deficit figures, the numbers show increased reliance on monetization.

In conclusion, there is only very weak evidence of fiscal correction in either country prior to or coincident with stabilization.

V. Changes in Government Composition

If inflation came to a halt, this must have been due to a change in expectations about future monetary and fiscal management rather than concurrent changes. In this section and the next, we analyze the two events most likely to have altered expectations in a favorable way.

Though the Italian price level started falling only in October 1947, coincident with the imposition of reserve requirements, already the previous June the free exchange rate had begun to strengthen, wholesale food prices had stabilized, and the change in the aggregate price level had slowed to the point where it was rising less quickly than the quantity of money. These events followed on the heels of dramatic political changes. Specifically, exclusion of the Communists from the government is said to have enhanced public confidence in the ability of the officials to implement anti-inflationary policies.

Previous Italian governments had featured protracted disputes over economic policy between the Center-Right and the Left. Treasury ministers had been Liberals or Christian Democrats who favored fiscal discipline and the abolition of subsidies and price controls. In contrast, finance ministers, overseeing taxation and social spending, had been Communists who possessed very different views of the responsibilities and priorities of the state. In February 1947, the two ministries had been merged as the Ministry of the Budget, under the Christian Democrat Corbino, who still lacked the power required to impose restrictive economic measures. The outlook changed in May 1947 when the Communists were expelled from the government. The new minister of the Budget and Vice Premier was Luigi Einaudi, whose commitment to economic orthodoxy and fiscal rectitude was beyond reproof. The formation of a government whose conservative budget minister was also vice premier may have sent an important signal: Italy was prepared to move to a free-market system without the hesitation of previous years. The political basis of the new coalition was the middle class, the principal source of private savings. Anti-inflationary policies would have to be implemented to guarantee its support.[30]

This argument has two limitations. First, the change in Italian government composition in 1947 did not reflect a shift in the underlying balance of political power. There was no decline in support for the Communist Party. Its support had risen steadily in the wake of the 1946 election, in which the party had received 19 percent of the vote (compared 35 percent for the Christian Democrats and 21 percent for the Socialists). In January 1947, the Socialist party split into two factions, rendering the Communists the second largest party in the country and the leading representative of the Left. In April 1947, immediately preceding their expulsion from the government, the Communists won important victories in local elections in Sicily.

It was not clear therefore why the new Center-Right government, comprised of parties that had previously garnered insufficient support to govern alone, could govern now. Since the Communists continued to control the trade unions, they could continue to press for improved living standards for the working class and foment public unrest. According to many commentators this was De Gasperi's fear: that strikes and disorder provoked by a Communist party freed from government responsibilities could lead to the political defeat of the Christian Democrats.[31] The moment was especially delicate because general elections were scheduled to take place in October 1947. (Ultimately, the elections were postponed to April 1948). Following the credit measure of October 1947, strikes and terrorism did take place, with massive demonstrations in Milan and Rome and bombings and assaults on political headquarters and newspapers. By the end of November, however, when the occupation of the Prefettura (the seat of the central government's representative) in Milan failed to yield concessions from the government, the authorities regained control. It was, as many called it, the "farewell to the revolution." The general strike called for December 10 failed; Repubblicani and members of the Center-Left joined the government, and social peace followed. The last U.S. troops, who had remained in the country a few extra days, finally departed. All through the time of unrest, prices continued their decline.

The second limitation of the argument is that the Communists were expelled from the government simultaneously in France, but the change had no impact on inflation. Like their Italian counterparts, the French Communists had done well in the 1946 elections. With 185 seats, they were the single largest party in the Assembly.[32] The Socialists, occupying the pivotal position between Left and Right, initially chose to form a Center-Left coalition with the Communists and Radicals. The occasion for the change was not any decline in Communist support or influence but rather a bitter dispute over wage policy, brought to a head in April 1947 by a strike in the Renault works. The Communist ministers objected to the government's attempt to stabilize wages and opposed it when a vote of confidence was called. Ramadier immediately replaced them with Socialists and members of the clerical party, the Mouvement Republicain Populaire.

The question, as in Italy, is why the new coalition was able to govern absent an obvious decline in support for the Communist opposition. The Communists were as capable of pressing for increased wages when in opposition as when in office. If anything, it was now easier to coordinate the Party's actions with those of the Communist trade unions. Strike activity intensified rather than diminishing after May 1947.[33] It began to decline only after October 1948, more than a year after the Communists had been expelled from the government. That October saw a great strike wave led by the miners and with the participation of railwaymen, dockers, seamen and steelworkers. Strikes were organized primarily by the Confédération Générale du Travail although the non-Communist unions did not disassociate themselves from them. Police and troops occupied the mines in order to keep them operating, and strikers responded with sabotage. The Queuille Government that had taken office the previous month refused to give in. Eventually the strikers began to drift back to work. The Queuille Government strengthened its grip over French politics, retaining office for nearly 13 months, the longest of any cabinet in the period.[34] The Communists lost ground in the March 1949 cantonal elections.

Clearly, something other than declining support for the Communists contributed to the permanent change in government complexion in France and Italy in the spring of 1947. That something else was the Marshall Plan.

VI. The Marshall Plan

It is impossible to understand political events in either country without reference to the Marshall Plan. The Americans made exclusion of the Communists from Western European governments a precondition for Marshall Plan aid. While this was publicly admitted by Marshall only in March of 1948 (during a speech at the University of California at Berkeley), the implicit link between American aid and local politics was understood previously. On May 7th, 1947 the U.S. Ambassador to Italy, James Dunn, had written Marshall to suggest that U.S. aid "should perhaps be based upon the quid pro quo of necessary changes in political orientation and policy." Only the previous day De Gasperi had told the Ambassador that it was "not wise to form a government without the Communists." Marshall's response indicated an awareness that U.S. aid could buttress a non-Communist government.[35] Rumors of U.S. pressure were widespread. As The Economist wrote, "It is universally believed in Italy...that American support encouraged the Prime Minister, and that further American economic aid was made conditional upon the construction of a 'purged' Cabinet." The Communists may have left the French government for independent reasons, namely the dispute over wage policy, but it is likely that their exclusion from all subsequent governments was not independent of U.S. influence.

Was the Marshall Plan responsible for bringing the two inflations to a halt? Even though shipments of goods only started in April of 1948, announcement of the plan the preceding June came at the same time as the break in inflationary expectations in Italy. Although it was not guaranteed in June of 1947 that the U.S. Congress would approve the plan, there is little evidence of uncertainty in the Italian newspapers or in Einaudi's description of the program before the Assemblea Costituente on June 18. The anticipated amounts were large: Einaudi mentioned a total transfer to Italy of between $2 billion and $3 billion, equivalent to 20-25 percent of Italian GNP. (Ultimately, the total transfer to Italy amounted to $1.5 billion).

Table 9 shows total Marshall Plan funds disbursed to Italy and France, in absolute amount, as a share of the entire Marshall Plan budget, and as a percentage of the two countries' GDP in 1948.

Could the announcement of the Marshall Plan have brought stabilization of Italy? One problem with this argument is that American aid to Europe had been generous since the end of the war. From 1945 to the end of 1947, Italy and France had received grants and loans roughly equivalent to the amounts that came later under the European Recovery Program (ERP). But U.S. aid had tailed off in 1947. Moreover, the Marshall Plan was a systematic program scheduled to last several years. It could therefore contribute not only to the two countries' immediate needs but also their requirements for long-term growth. It minimized uncertainty over future aid and freed European governments from the need to bargain constantly for new sources of assistance.

Marshall Plan funds might be expected to have relieved inflationary pressure through three channels. First, foreign grants could have narrowed the government budget deficit, allowing the authorities to reduce their dependence on advances from the central bank. Second, they could have relaxed the external constraint, eliminating incipient excess demand for imported wage and capital goods that otherwise would have forced a further devaluation of the lira and the franc and, by raising import prices, have fueled domestic inflation. Third, Marshall Plan aid could have eliminated the gap between domestic investment and domestic savings.[36]

ERP aid took the form of grants of goods and services, conditional on the presentation of programs and budgets by the countries involved. Recipient governments then sold the imported goods to domestic business in exchange for domestic currency. The revenues so generated ("counterpart funds") had to correspond to the going U.S. price for the goods transferred and were kept in

Table 9

ERP funds from April 1948 to March 1952, and 1948 GDP
(millions of dollars)

	Amount	1948 GDP	% 1948 GDP
Italy	1,466.8	12,980.4	11.3
France	2,444.8	22,230	11.0

Sources: Italy: CIR (1952), p. 100; Ercolani (1969), p. 422.
France: INSEE (1966), p. 528.

special accounts. Their utilization was to be agreed upon by the U.S. and the local government.[37]

Marshall Plan funds covered a large share of government budget deficits in France and Italy. Table 10 shows that foreign funds (principally Marshall Plan aid) financed almost a quarter of the French budget deficit in 1948 and nearly half in 1949. In Italy, where the funds were utilized with a lag, they played a negligible role in financing the deficit for the 1948/49 financial year, but they financed more than half of the deficit of the following twelve months. In the first years of the program the volume of funds approved, which was much larger than the volume effectively utilized, and is a better gauge of the impact of the Plan on expectations: in Italy funds approved for the period from April 1948 to June 1949 were equivalent to 70 percent of the deficit for the financial year 1948/49, and those approved for the following twelve months financed more than three quarters of the corresponding deficit.

ERP funds played an even more important role in financing current account deficits. Marshall Plan aid in relation to the components of the French and Italian balances of payments is shown in Table 11. The franc zone's 1948 current account deficit was $1.74 billion. American aid was $0.75 billion, leaving $1 billion to be financed by reserve losses and capital inflows. In 1949 the French current account deficit fell to $0.7 billion, and Marshall Plan aid financed it fully. In Italy, the current account deficit was $0.24 billion in 1948, and $0.2 billion in 1949. In both years aid received was approximately 30 percent larger than the deficit, leading to current account surpluses.

Table 11 makes clear that the main difference in the external positions of the two countries lay in the trade balance. In 1948, for example, the French trade deficit was four to five times as large as the Italian, even though French GNP was only twice Italian GNP. Clearly, domestic absorption behaved quite differently in the two countries. Since only part of the

Table 10

Italy and France. European Reconstruction Program Funds and Government Deficits
(millions of dollars)

Italy

Period	Assigned ERP funds	Utilized ERP funds	Government Deficit (a)
April 1948 - June 1948	158.0		
July 1948 - June 1949	510.0	23.9	951.3
July 1949 - June 1950	402.8	131.7	553.3
July 1950 - June 1951	236.0	255.4	918.4

France

Period	Assigned ERP funds	Utilized ERP funds	Government Deficit
1948 (b)	951.0	456.0	2,142
1949	746.4	840.5	1,751
1950	436.1	508.2	1.629
1951	267.5	244.0	1,440

(a) The Italian government deficit is translated in dollars using the exchange rate officially used in the calculation of the counterpart funds.
(b) Calendar years.
Sources: Italy: CIR (1962), p. 100; ISTAT (1949-50) p. 431; Ercolani (1969), p.433.
France: ERP data from Quarterly Reports of the Economic Cooperation Administration (various issues). Deficit data from INSEE (1966), p. 228.

discrepancy can be imputed to the government accounts, the behavior of private saving and investment was key.

The question of how ERP funds affected the French savings-investment balance directs attention to the Monnet Plan. The Monnet Plan guided the French reconstruction effort from the beginning of 1947. Highest priority was attached to reconstruction and modernization of the country's capital stock. Initially the plan was intended to speed the reconstruction and modernization of six key industries: coal, electric power, steel, cement, agricultural machinery and transport. It was expanded subsequently to include a variety of other sectors.[38]

Table 12 shows that finance for the Monnet Plan was provided initially by government borrowing and bank credit. The contribution of bank credit declined sharply in 1948. In part, the capacity of French industry to finance investment out of retained earnings increased in 1948 and again in 1949. But the single biggest difference between the three successive years lies in Marshall Plan funds. By 1949 they accounted for nearly half of Monnet Plan spending.

In Italy, on the other hand, no long-term national investment program was formulated until the creation in 1950 of the "Cassa del Mezzogiorno," the government agency supervising and coordinating investment plans in the South. The lack of a comprehensive public program and the timidity of private investment were considered the main obstacles to development by Marshall Plan administrators.[39] Especially during the first two years of the Marshall Plan, Italian economic policy was explicitly directed at rebuilding foreign reserves, which had been severely depleted in 1947. This involved a conscious effort to curb aggregate demand and increase private savings. The policy was controversial since in the short term at least it gave priority to financial stability over growth. Nonetheless, the Italian authorities persisted in their program, as reflected in the narrowing trade deficit.[40]

Table 11

Balance of Payments on Current Account, 1947-50
(millions of dollars)

Italy

	1947	1948	1949	1950
Commodity Imports	1,326.9	1,388.0	1,420.6	1,358.4
Commodity Exports	665.6	1,067.6	1,114.4	1,200.7
Balance	-661.3	-320.4	-306.2	-157.7
Services	-77.7	83.7	111.8	110.4
Current Account excluding aid	-739.0	-236.7	-194.4	-47.3
Government aid	254.2	312.4	306.4	238.8
Current Account	-484.8	76	112	191.5

Franc Zone

	1947	1948	1949	1950
Commodity Imports	2,491.7	2,510.3	2,034.7	1,958.2
Commodity Exports	1,040.0	1,081.9	1,567.1	1,879.9
Balance	-1,451.7	-1,428.4	- 467.6	- 78.3
Services	- 224.0	- 309.2	- 239.0	- 161.7
Current Account excluding aid	-1,675.7	-1,737.6	- 706.6	- 230.0
American aid	0	754.0	855.4	508.7
Current Account	-1,675.7	- 983.6	148.8	278.7

Sources: Italy: CIR (1952), p. 94; France: INSEE (1966), p. 366
Government aid corresponds to amounts actually received during the year.

Thus, by 1949 the Marshall Plan fully financed the current account deficit in France and Italy and substantially reduced both countries' budget deficits. It is tempting to conclude that announcement of the Marshall Plan, in June 1947, was the central event that reversed inflationary expectations in Italy and led to price stability. But why then did the same announcement not trigger stabilization in France? Why were the two stabilizations separated by a year and a half?

VII. Delay in Stabilization as a Distributional War of Attrition

The Marshall Plan reduced the need for fiscal retrenchment but did not eliminate it. For price stability to be sustained, the public had to be convinced that the government had adopted a policy of fiscal discipline leading to persistent declines in future money growth rates. Fiscal discipline was painful: the two countries were rebuilding their economies after the destruction wrought by the war while simultaneously striving to provide acceptable standards of living to the population. The pressure of demand clashed with a tight supply constraint, and the incompatible claims could only be reconciled by fiscal deficits, monetization and price increases. Stabilization required that some of these claims be abandoned.

It is natural to think of the inflationary process as reflecting a distributional struggle between political factions enjoying roughly equal popular support and locked in uncompromising positions. In both Italy and France the principal rivals in the distributional conflict were recipients of labor income on the one hand and recipients of profits, interest and rents on the other. Strikes for higher wages and lobbying for retail price controls and cheap public services (public transport, for example) were labor's way of fighting for a larger distributional share. Producers, to protect their share, attempted to pass along higher wages in the form of higher prices.

Table 12

Sources of Finance of the Monnet Plan
(billions of francs)

	1947	1948	1949
Tax Revenues and Domestic Government Borrowing	8	84	119
ECA Counterpart Funds	-	104	225
Self-Financing	30	80	104
Capital Issues	34	27	41
Bank Credit	88	33	45
Total	138	328	534

Source: Kriz (1951), p. 102

Insofar as they failed, profits were squeezed, and firms demanded subsidies and cheap credit from the government. The budget moved into deficit due to higher public sector pay, cheap provision of public services and subsidies to enterprise, combined with the resistance of different groups to higher taxes. The deficit was financed by central bank credit, and inflation was the result. This is an obvious interpretation of the repeated fiscal crises in France. Equally, it explains the most important episodes of accelerating inflation in Italy, as when for example the government increased the price paid to wheat farmers, but when that increase could not be carried forward to the consumers financed it with credit from the Bank of Italy.

As these examples make clear, fiscal imbalance and inflation represented an unsatisfactory solution to the conflict. They inflicted costs on the economy. Nevertheless, stabilization was delayed until one side -- in both countries the Left -- agreed to shoulder the burden of deflation.

If we accept this interpretation, we are left with three questions. First, could the delay in stabilization be the result of rational choice by political actors? Second, what role was played by the Marshall Plan? Finally, how can we explain the difference in the timing of stabilization in Italy and France?

An answer to the first question is provided by a recent paper by Alesina and Drazen (1989), who model the delay in stabilization as the outcome of a war of attrition between rational players. The idea is as follows. Suppose that the burden of stabilization, in the form of policies reducing some group's distributional share, is unevenly distributed. The group conceding first incurs the larger share of the costs. If rival factions differ in their ability to shoulder the costs of inflation yet are uncertain about the cost-bearing capacity of the others, each will refuse to concede, hoping to outlast the others. Over time, the costs of inflation rise and with them the perceived probability that the other factions are in fact more patient. Ultimately, the distributional interest least able to bear the costs concedes, and stabilization occurs. Delay is rational: even if inflation is finally halted through the adoption of policies identical to those deemed unacceptable initially, different groups still have an incentive to hold out as long as the costs of stabilization are borne unevenly and there is uncertainty about the staying power of their rivals. Until the moment they concede, the probability that others will concede first and bear the costs of stabilization is sufficient to justify the ongoing loss from inflation.

In both countries, stabilization was associated with a consolidation of power in the hands of the Center-Right, as if it was the Left the bore the costs. In Italy, stabilization coincided with the change in government in June 1947 and was confirmed by the outcome of the general elections in April 1948. The Christian Democrats received 48.5 percent of the vote (versus 35.2 percent in the 1946 elections), while the share of the Communists and Socialists together fell from 39.7 percent to 31 percent. In France, the end of social conflict in 1949 is clearly captured by the decline in the number of working days lost in labor disputes, which fell from 13 million in 1948 to 7 million in 1949.[41]

The unequal distribution of stabilization costs should be reflected in income shares. These are difficult to construct and evaluate because of data problems and concurrent changes in the structure of the economy. Tables 13 and 14 report estimates of unemployment rates and industrial salaries for France and Italy. In France, real wages fell continuously from 1946 to 1950. Unemployment was low but rising. There can be little doubt that the decline in labor disputes signalled the acceptance by labor of a smaller distributional share. In Italy, real wages rose, albeit at a declining rate, over the entire period. The large increase in 1947 reflects the backward indexation of nominal wages, coupled with the decline in prices during the final quarter of the year. Although wages continued to rise in the following years, Italian unemployment also rose from 1947 to 1948. This was a dramatic development, given that unemployment was already high and was generally regarded as the major threat to social peace. Overall, then, the Italian evidence on distribution is more ambiguous than the French. Nonetheless, the Italian literature is unanimous in describing a shift towards cautious, conservative policies, and the loss of politician influence of the Left is clearly reflected in the election results.[42]

The coincidence of the Italian stabilization with the announcement of the Marshall Plan complements the rest of the story. The Marshall Plan was not sufficient to eliminate the budget deficit, but it increased the size of the distributional "pie" to be shared out among rival factions, reducing the magnitude of the sacrifices required to eliminate aggregate excess demand and bring the inflation to a halt. By lowering the costs of conceding relative to the benefits, the Marshall Plan increased the likelihood of early stabilization.

There is no doubt that expectations of substantial American aid contributed to the Italian Communists' peaceful exit from the government. When De Gasperi met the Communist leader Togliatti to explain and justify the change in government, he is reported to have said: "You have to understand...it is a matter of bread."[43] On June 7th, 1947 the Communist newspaper L'Unita' appeared with the headline "Italy Needs the Solid Help of the Generous American Nation."

Announcement of the Marshall Plan was not sufficient to end the distributional conflict in France. Since the funds granted to the two countries were comparable, relative to income, the difference must lie in factors that made the costs of conceding and agreeing to shoulder a disproportionate share of the stabilization higher in France than in Italy. There exist three possible explanations for the contrast.

First, in France stabilization may have entailed a more asymmetric division of costs. With more at stake, the different groups would have been willing to hold out longer. This hypothesis can be tested with evidence on the shift in distributional shares following stabilization. In both countries, the Left ultimately conceded; if the cost of doing so was higher in France than in Italy, the income share of labor should have declined more dramatically in France. As mentioned above, this implication is difficult to verify. Tables 13 and 14 support it, but more data are required before a firm conclusion can be drawn.

A second possible explanation is that the Left was stronger in France than in Italy. Even though it still turned out to be the weaker faction, so long as there remained uncertainty over the staying power of the Right, postponing stabilization would have been rational. The stronger the Left, the greater the perceived likelihood that it would ultimately outlast the Right, and the longer the delay it would have been willing to tolerate. The French Left commanded a larger share of the vote than the Italian, and its influence on labor was not weakened by a high unemployment rate. On the other hand, the absence of wage indexation in France made inflation more costly for wage earners. Overall, the evidence on this hypothesis, while suggestive, is not definitive.

Finally, stabilization may have been delayed longer in France than in Italy because its absolute cost was higher. There may have been a larger disparity between desired income shares and feasible income shares or, equivalently, between notional demand and supply.

Unlike Italy, France was committed to an ambitious program of domestic investment, and all reductions in desired income required to achieve ex ante balance between demand and supply had to be taken from consumption. Insofar as social groups were fighting over immediate consumption shares, since neither group was willing to imperil the investment program, the distributional stakes would have been higher in France than in Italy. Table 15 shows gross investment net of inventories as a percent of GDP in the two countries. In Italy the investment share remained below prewar levels. Indeed it fell in the years following the stabilization, suggesting that part of the decline in expenditure required for stabilization took the form of a

Table 13

Unemploymemt rate, 1946-50.

Year	Italy	France
1946	n.a.	0.6
1947	8.5	0.5
1948	9.4	0.9
1949	8.7	1.2
1950	8.4	1.2

The unemployment rate is calculated as the ratio of unemployed to total labor force. For Italy, the labor force was obtained by multiplying the participation rate in 1951, the only year when the number is available, by the population. Sources: Italy: International Labor Office (1949-50), p. 85, ISTAT (1951), p. 23 and (1952) p. 29.

France: Carre' et al. (1975), p. 58, INSEE (1966), p. 117. When missing, the data were interpolated linearly.

decline in investment. In France, in contrast, the investment share was above prewar levels and rose strongly from 1946 through 1948.

The French investment program has been identified previously as playing a major role in the inflation. As Rosa described the French dilemma,

> There was not enough capacity available, even with the foreign assistance provided...to reconstruct and to raise living standards at the same time. Hesitating to accept this inevitability, the French permitted continued increased in their money supply--new money purchased the materials and labor needed for reconstruction and to a considerable extent new money met production costs in undamaged sectors of the economy as well... That is, instead of rationing their limited resources through direct controls, or of rationing in effect through heavy taxation which would divert purchasing power directly into payment for reconstruction, the French chose to do their rationing by means of rising prices.[44]

The different behavior of investment in the two countries reflected different international aspirations and threats. The Monnet Plan stemmed from the French desire "to reconstruct and modernize French heavy industry in order to increase its strength relative to that of Germany."[45] Heavy investment was required to insure that French exports would displace the products of German heavy industry at home and on international markets. The sectors favored by the Monnet Plan, notably coal, steel and transport, were those viewed as critical for France's national security and international political aspirations.

American influence reinforced France's commitment to the investment program. The U.S. State Department made clear that America opposed amputation of the Ruhr and Rhine and told Charles de Gaulle that "the best guarantee of French security lay in devoting all of France's energies to the reconstruction of the French economy."[46]

In Italy, on the other hand, political and economic realities rendered international ambitions out of the question. Successive Italian governments' first and only economic goal was to promote internal reconstruction. Living standards were too low to support an aggressive investment policy without creating financial instability. Policymakers believed that long-term

Table 14

Real industrial salary index. 1950=100
1946-50.

Year	Italy	France
1946	48.8	109.8
1947	74.8	100.4
1948	94.8	97.1
1949	99.2	96.7
1950	100	100

For Italy, the industrial salary index is deflated by the private consumption deflator. For France, it is deflated by the retail prices index.
Sources: Italy: Ercolani (1969), p. 425, p. 455.
France: INSEE (1966), p. 428, p. 328

Table 15

Gross investment net of inventory as share of GDP, 1938, 1945-50.

Year	Italy	France
1938	16	13.4
1945	6.1	--
1946	12.05	15.3
1947	14.2	17.1
1948	14.2	20.2
1949	13.1	18.8
1950	12.85	--

The investment share is calculated at current prices.
Sources: Italy: ISTAT (1957), p. 265, Ercolani (1969), p. 422.
France: Carre' et al. (1975), p. 106.

development would result from monetary discipline and investor confidence, and that immediate growth should be sacrificed for the sake of monetary stability. Unlike in France, in Italy investment did not absorb a high and rising share of national income, and its share could be compressed to moderate the sacrifices required of other claimants.

VIII. Conclusion

Inflation in Italy and France after World War II must be understood, we have argued in this paper, as the outcome of a distributional conflict. The Marshall Plan, while not sufficient to eliminate the imbalance between desired and feasible distributional shares, reduced the magnitude of the concessions required of domestic interest groups to bring inflation to a halt. It thereby increased the likelihood of an early stabilization, and indeed triggered it in Italy.

The transition to price stability occurred later in France because the conflict was more intense. This may have been reflected a stronger and more aggressive Left or higher distributional stakes. The last possibility arises from France's ambitious program of investment in heavy industry, which set aside a larger share of domestic income for uses that would translate into increased production and higher living standards only with a lag.

To some, our analysis would appear to have more in common with the historical literature in which inflation is viewed as a political phenomenon than with the literature in economics in which it is viewed as the outcome of economic processes. Our central message is that there is no incompatibility between the two views.[47]

Endnotes

1. Inflation accelerated in the second half of 1950, reflecting the rise in world commodity prices consequent on the Korean crisis.

2. Authors subscribing to this view include Baffi (1967), Castellino (1964), Foa (1949), Hildebrandt (1965), Hirschman (1948), Lenti (1966), and Lutz and Lutz (1950).

3. The ratio of reserves to deposits was not to exceed 25 percent overall.

4. While the primary objective of the regulation was to control the "multiplicative" role of the banks, at the same time the new reserve requirements were designed to avoid too severe a contraction of credit. Consulted at the end of August, the banks had agreed that the provision could be fulfilled with the funds currently at their disposal. Aggregating over all banks, it required them to immobilize Lit 112.2 billion. Free reserves at the end of September amounted to Lit 115.4 billion. Bank of Italy (1948), p. 160.

5. Corriere della Sera, February 27, 1947.

6. Einaudi, speech to the Assemblea Costituente, October 4, 1947, in Atti Parlamentari (1947), p. 861. The coincidence of timing is also noted skeptically by Dornbusch and Fischer (1986).

7. Nominal interest rates rose slightly between September and December 1947, falling thereafter to their previous levels. The yield on short term Treasury bonds was 7 percent in August, 7.96 percent in October, and 6 percent in January 1948 (Bank of Italy (1948), p. 275).

8. Bank of Italy (1948), pp. 126 and 127, adjusted to constant prices.

9. Disregarding the expense for the wheat subsidy (Lutz and Lutz, 1950, p. 6).

10. Baffi (1967), pp. 948-949.

11. ISTAT (1946), (1947), and (1948).

12. See Bank of Italy (1949).

13. Our analysis of credit controls in France draws primarily on Hirschman and Rosa (1949) and Kriz (1951).

14. The Bank of France and the four leading banks had been nationalized by legislation passed in December 1945. The National Credit Council, dominated by the Bank of France but including also representatives of the big banks, of government, of business and of consumer groups was created to coordinate the lending policies of the banks with the monetary policies of the government.

15. Supporting data had to include information on the financial situation of the applicant for credit and an explanation of why the borrower could not obtain the necessary funds by liquidating surplus assets or by discounting commercial bills.

16. Only long-term loans, nonmarketable securities, overdrafts and certain advances did not qualify. See Kriz (1951), p. 87.

17. The ratio of commercial bills to all bank loans increased from 45 percent at the end of 1945 to 60 percent at the end of 1948. Hirschman and Rosa (1949), p. 350.

18. Rediscount ceilings had already been applied to the smaller banks. The legislation of September 1948 made them universal.

19. Kriz (1951), p. 96.

20. Ratios are constructed from tables in Kriz (1951).

21. An influential statement of this theory of hyperinflations, as applied to post-World War I experience, is Sargent (1986).

22. Bank of Italy (1948), p. 275.

23. Corriere della Sera (January 19, 1947). In the same article, Einaudi also mentioned priests' sermons, during Sunday Masses, urging subscription of the loan.

24. The Reconstruction Loan issued in November 1946 was exempt from the still-to-be decided wealth tax.

25. ISTAT (1949-50), p. 425.

26. Snyder (1948), p. 323.

27. Lubell (1955), p.49; Pickles (1953), p. 87.

28. Lubell (1955), p. 49.

29. ISTAT (1949-50), p. 430.

30. For excellent overviews of the political developments of the period in Italy, see Gambino (1975) and Grindrod (1955).

31. See Montanelli and Cervi (1985).

32. In addition, the Socialists had 104 seats, the moderate Mouvement Republicain Populaire 164 seats, the Radicals 43, and the conservative parties a total of 119. See Pickles (1953), p. 71.

33. Pickles (1953, pp. 80-85) provides an account of strike activity and labor negotiations. She concludes on page 80, "wage negotiations and price increases followed each other with monotonous regularity, at intervals of only a few months."

34. See Jeanneney (1956), Chapter 2.

35. United States Department of State (1948), pp. 890-**; The Economist (June 7, 1947), p. 881.

36. The effects of a transfer in the presence of gaps between government revenues and spending, between domestic savings and investment, and between imports and exports are analyzed in Bacha (1989).

37. For a detailed description of the program, see Eichengreen and Uzan (1991).

38. Two accounts of the Monnet Plan are Uri (1950) and Lynch (1981).

39. Economic Cooperation Administration (1949), p. 35.

40. For a critical view of the Italian use of Marshall Plan funds, see De Cecco (1968).

41. International Labor Office (1949-50). No equivalent numbers are available for Italy.

42. Scholars all seem to agree on this point, independent of their political persuasion. See for example, Baffi (1967) and De Cecco (1968).

43. Montanelli and Cervi (1985), p. 150.

44. Rosa (1949), pp. 154-170. See also Lynch (1981), pp. 240-241 for a similar statement of this view.

45. Lynch (1981), p. 229.

46. Ibid.

47. An influential statement of the historian's view is Maier (1976), while the consensus view among economists is well stated by Sargent (1986). Another author who takes an eclectic view consonant with our own--and who like us stresses a foreign loan, although to a very different end--is Siklos (this volume).

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