

DOCUMENT OF INTERNATIONAL MONETARY FUND
AND NOT FOR PUBLIC USE

**FOR
AGENDA**

MASTER FILES
ROOM C-525

0450

SM/92/183

CONTAINS CONFIDENTIAL
INFORMATION

September 23, 1992

To: Members of the Executive Board
From: The Secretary
Subject: France - Selected Background Issues

This paper provides background information to the staff report on the 1992 Article IV consultation discussions with France which was circulated as SM/92/151 on August 4, 1992 and is now proposed to be scheduled for discussion on Friday, October 9, 1992.

Mr. Caramazza (ext. 34547) or Mr. O'Callaghan (ext. 38219) is available to answer technical or factual questions relating to this paper prior to the Board discussion.

Att: (1)

Other Distribution:
Department Heads



INTERNATIONAL MONETARY FUND

FRANCE

Selected Background Issues

Prepared by F. Caramazza and M. G. O'Callaghan (EUI)

Approved by the European I Department

September 18, 1992

	<u>Contents</u>	<u>Page</u>
I.	Overview and Summary	1
II.	Fiscal Policy in France	4
	1. Introduction	4
	2. Three approaches to the debt issue	5
	a. The Keynesian and new-classical approaches	6
	b. The classical approach	8
	c. Empirical evidence	10
	3. Public choice and rule formation	11
	4. A French tradition of classical analysis?	12
	a. A French classical precursor	12
	b. Current French policy	14
	5. Fiscal rules in France	15
	6. Medium-term rules and the dynamics of deficit rules and debt levels	15
	7. Conclusion	18
III.	French-German Interest Rate Differentials and Time-Varying Devaluation Risk	19
	1. Introduction	19
	2. Interest rate differentials, exchange rate bands, and credibility	20
	3. A model of the expected rate of realignment	21
	4. Estimation of the expected rate of depreciation within the band	23
	5. Explaining the expected rate of realignment	25
	6. Conclusions	30

IV.	Labor Market Policy in France	31
	1. Introduction	31
	2. Characteristics of unemployment	31
	3. Principal objectives of labor market policies	36
	4. Participation in labor market policies	39
	5. Structure of labor market programs	39
	6. Expenditure on labor market programs	40
	7. Effect of labor market programs on unemployment	48
	8. Concluding remarks	51

Text Tables

1.	Estimated Expected Change in the Franc/Deutsche Mark Exchange Rate Within the Band	24
2.	Estimated Expected Rate of Realignment of the Franc/Deutsche Mark Exchange Rate Within the Band	27
3.	Long-Term Interest Rate Differential with Germany	29
4.	Characteristics of Unemployment	32
5.	Unemployment Trends Across Countries	33
6.	Participation Rates by Age Group	35
7.	Beneficiaries of Labor Market Programs by Major Category	41
8.	Evolution of the Structure of Labor Market Programs, Beneficiaries by Major Category as a Proportion of Total Beneficiaries	42
9.	Total Expenditure on Labor Market Programs	43
10.	Evolution of the Structure of Expenditure on Labor Market Programs	45
11.	Budgetary Cost of Labor Market Programs	45
12.	Public Expenditure on Labor Market Programs: by Objectives	47

Charts

1.	The Relationship Between Budget Deficits and the Private Savings Rate	12a
2.	General Government Debt	16a
3.	Cyclical Debt Simulation I	16b
4.	Cyclical Debt Simulation II	16c
5.	Cyclical Debt Simulation III	16d
6.	Cyclical Debt Simulation IV	16e
7.	Parity Deviations of Franc/DM Exchange Rate	20a
8.	Euro-Franc Interest Rates and "Credibility Bounds"	22a
9.	Expected Rate of Depreciation of Franc/DM Exchange Rate Within the Intervention Band	24a
10.	Bounds for Expected Rate of Realignment of Franc/DM Exchange Rate	24b

Appendix:	Statistical Appendix	53
	(for a list of appendix tables see p. 53)	

I. Overview and Summary

This background paper to the Staff Report for the 1992 Article IV consultation with France explores in greater depth some issues especially germane to the consultation. They include an analysis of budgetary rules in France from the perspective of alternative approaches to the design of fiscal policy, an empirical examination of expected rates of change of the franc/deutsche mark exchange rate implied by interest rate differentials, and a review of the evolution of labor market policy in France. A full Recent Economic Developments report was prepared for the 1991 Article IV consultation, and it is expected that another such report will be produced for the next Article IV consultation. 1/

Fiscal policy in France for a number of years has centered on the adoption of an unconditional nominal deficit target on a year-ahead basis. Such a budgetary rule has been criticized on the grounds that it is inherently pro-cyclical as it requires expenditure reductions in line with falling revenues in an economic downswing and, if the rule is applied symmetrically, increases in expenditure (or tax cuts) during an upswing. This fiscal rule contrasts with that of targeting expenditures and allowing tax revenues to act as an "automatic stabilizer." While there is evidence that the French authorities have recently utilized a more flexible approach, they appear to remain committed to the general principle of a short-term fixed deficit rule. Chapter I argues that the French authorities' pursuit of a deficit target as a means of controlling the debt ratio falls within the "classical" approach to public finance. That approach recommends the implementation of a fixed rule as a way of ensuring that deficit financing does not give rise to a spiraling level of national indebtedness, and the paper presents the main arguments used by both classical and modern adherents of this view. It is noted that an essential condition of the classical approach is that the budgetary rule be inviolable; that it not be abandoned or adopted at will. If this condition is not satisfied, it is desirable to have a medium-term criterion against which to assess the short-term rule on an ongoing basis. The chapter goes on to note that a debt ceiling may be a more appropriate criterion in this regard than an average debt level over the cycle. From this perspective, it could be argued that in France the fixed rule has been infringed at a time when the rule should have been established and that there has been a corresponding step increase in the projected debt level. Any description of future policy would be more credible if it were accompanied by a clearly defined medium-term criterion.

1/ Recent economic and financial developments in France are outlined in the Staff Report for the 1992 Article IV consultation (SM/92/151). More comprehensive reviews of these developments are provided, *inter alia*, in INSEE, "Rapport sur les Comptes de la Nation de l'Année 1991," the Annual Report for 1991 of the Banque de France, and the OECD 1991/92 Economic Survey of France.

Moreover, if the principles of a fixed deficit have not been abandoned, it might be better to express this criterion in terms of a debt ceiling.

Since the realignment of currencies in the Exchange Rate Mechanism of the EMS in January 1987, the differential between French and German interest rates has narrowed considerably. Nevertheless, the persistence of a positive interest rate differential in favor of Germany suggests that market participants have continued to perceive a risk of devaluation of the franc/deutsche mark exchange rate. Chapter II examines expectations of realignment of the franc/deutsche mark central parity during the 1987-1991 period. Time-varying expected rates of devaluation of the franc are first estimated; subsequently, the relative importance of various macroeconomic variables that are believed to influence market participants' expectations of exchange rate changes is examined. The analysis suggests that expectations of realignments of the central parity are influenced by the evolution of fundamental economic factors such as inflation differentials, competitiveness, unemployment, government financing requirements, and foreign reserves. France's favorable economic performance, especially as regards inflation, the external position and fiscal situation has allowed the implicit expected rate of devaluation to decrease considerably. The analysis further suggests that the exchange risk premium on franc interest rates could be further reduced and differentials with respect to Germany additionally narrowed by an improved labor market performance and, in the case of short-term rates, by a strengthened position of the franc in the ERM intervention band.

Expenditures on labor market programs in France have more than tripled since the mid-1970s as the authorities responded to the rising rate of unemployment with additional or more extensive measures. The policy response has also undergone various shifts of emphasis as the nature of the unemployment problem changed or priorities altered. Chapter III examines these developments. After describing the characteristics of unemployment in France, the chapter goes on to delineate the principal objectives of labor market policies and the major programs established to meet these objectives, the extent of participation and expenditure on labor market programs and their structure, and the effect on unemployment. The analysis indicates that since the mid-1970s labor market policy has evolved considerably and in a positive direction towards the provision of skills and work experience. But the positive shift from a focus on reduction of the labor force to direct job creation and promotion of employment dates only since the mid-1980s and particularly since 1989. In recent years labor market programs have centered on three main objectives: the training and guidance of the long-term unemployed and the least skilled, with greater attention being paid than in the past to the quality of course and to individual training needs; the creation of jobs in the nonmarket sector; and the direct creation of jobs in the market sector by reducing the cost of labor through the provision of exemptions from social charges, recruitment bonuses, and other financial incentives. These programs have resulted in significant reductions of unemployment. Static analyses of the various programs, however, overestimate the permanent effects of nonmarket sector and early-

retirement programs while underestimating the effects of training, apprenticeship and direct job creation schemes. Basing labor market policy even more firmly on the employment principle, as opposed to the benefit principle, should further increase its effectiveness.

II. Fiscal Policy in France ^{1/}

1. Introduction

The design of fiscal policy in France has been the object of discussion for a number of years. ^{2/} In particular, this discussion has centered on the adoption by the French authorities of a simple budgetary rule, which had defined a nominal deficit target on a year-ahead basis, independently of the subsequent performance of the economy and, therefore, independently of revenues. ^{3/} This rule required, in effect, expenditures to be reduced in line with falling revenues in a downswing, while there would be greater room for increased expenditure (or tax cuts) during an upswing of the economy. According to one view, a policy of targeting expenditures while allowing tax revenues to act as an "automatic stabilizer" would be preferable to the official policy, which was inherently pro-cyclical. While there is evidence of increasing flexibility in the conduct of policy in the recent past, ^{4/} the French authorities appear to remain committed to the general principle implied by a deficit rule, emphasizing that deviations from it have become necessary only because of large unanticipated revenue shortfalls.

Rather than proceed to analyze budgetary rules in France from the perspective of some preordained economic theory it is useful to first consider the theoretical underpinnings of the policy. This is particularly so because it appears that fiscal policy in France is predicated upon an approach to public finance which is somewhat at variance with mainstream Anglo/American theory. It could be argued that France's traditional fiscal conservatism is more "classical" in nature than some more recent approaches and, if this is the case, any attempt to reconcile opposing views on the subject needs first of all to consider this aspect of the debate. ^{5/} Furthermore, such an investigation might discover any "general principle" that is involved in French policy formation, and thereby permit an assessment of the importance of recent deviations from it.

^{1/} Prepared by Gary O'Callaghan.

^{2/} Last year's Article IV consultation report discussed at some length issues related to the design and efficacy of France's fiscal policy. See Staff Report for the 1991 Article IV Consultation, SM/91/153, August 5, 1991.

^{3/} The central government's budget targets for 1989 and 1990 were set at F 100 billion and F 90 billion, respectively, and were broadly met.

^{4/} In early 1990, the central government deficit target for 1991 was set at F 80 billion, but the outturn is estimated at F 132 billion (2 percent of GDP). Also, in early 1990, the deficit target for 1992 was tentatively set at F 70 billion (1.3 percent of GDP). (See Graham, 1990.) This has subsequently been eased to almost F 150 billion (2.1 percent of GDP).

^{5/} The term "classical" will be used here to describe a general approach to budget financing that preceded the Keynesian revolution and that has been most closely associated with the writings of James Buchanan and the Virginia School of Political Economy since then. See Rowley (1987).

Having presented and discussed the reasoning behind the classical approach to fiscal policy, and compared its basic tenets with the more familiar Keynesian and new-classical approaches, section 4 of the paper turns more directly to the issue of fiscal policy in France and an argument is offered that the classical approach has had some antecedents in France which might be viewed as the precursors of current policy. The budgetary rules that have been associated with the classical approach--and in particular the balanced budget rule that has been advocated by economists in this tradition--are similar to the French authorities' recent pursuit of a relatively constant (and sustainable) budget deficit as a means of controlling the debt ratio. However, an integral part of the classical approach was that a rule be, somehow, established as inviolable. If, on the other hand, a noncyclical rule can be adopted or abandoned at will--as is clearly the case in France--there will be some points during a cycle when its adoption will actually lead to a higher average debt. The later sections of the paper suggest that, because of this possibility, the value of a short-term rule should be assessed in a medium-term context. Furthermore, the nature of the short-term rule may itself dictate a medium-term criterion against which it should be judged, and, in the case of a fixed rule, an appropriate criterion may be a ceiling on the debt ratio.

2. Three approaches to the debt issue

The postwar literature on public debt has been characterized by three quite different approaches. These could be labeled Keynesian, new-classical, and classical, 1/ and they differ principally in their approaches to the burden of debt. The Keynesian and new-classical approaches contend for the adherence of most Anglo/American economists and the debate over debt is usually conducted in these terms. However, they both agree that the existence of government debt, at least internal debt, does not impose a burden on future generations. The classical perspective, on the other hand, does regard debt as imposing a burden. Furthermore, it probably better characterizes the French approach to the debt issue, as will be argued in section 4.

The debate on whether to conduct stabilization policy with deficit financing, when viewed from the perspective of comparative theory, raises three central issues: (i) does stabilization policy work (in the sense of providing an economic stimulus) in the present; (ii) does the resulting debt impose a burden on future generations; and (iii) how will the decision to equate the marginal benefits from (i) with the marginal costs from (ii) be performed. In this section, each of the three approaches to the burden and the efficacy of a stabilization policy is outlined and differentiated. Clearly, however, if debt is not thought to impose a burden, the third issue loses its importance. Because the classical approach does recognize the existence of a burden, it does raise the third issue, and its analysis of this is presented in section 3.

1/ Vaughn and Wagner (1992) label them so.

a. The Keynesian and new-classical approaches

The early Keynesian position, which advocated the value of a debt financed fiscal policy in stabilizing the economy, also adopted the view that it was impossible to shift the burden of debt forward because "we owe the debt to ourselves" (Lerner, 1948)--the government merely borrowed resources from a section of the economy which would, in the future, be repaid at the expense of other sections. Therefore, on the aggregate, no net debt was owed by the economy. This resource-based argument was, of course, valid for internal debt, and its conclusions were extended to external debt in the new classical position as expounded by Barro (1974). The new classical approach reasserted the equivalence between current taxes and debt financing (i.e., future taxes), and argued that rational individuals would compensate for any attempt to shift the burden to a future time period by saving in order to meet debt repayments. While this extended the argument that "debt did not matter," in the sense of imposing a burden, it also denied any stabilizing value of a fiscal policy since it would be offset by private actions.

The basic difference between the Keynesian and new classical positions, and the reason behind the new classical denial of the utility of fiscal policy, lies in their respective views of how agents in an economy regard the economic relationships between one another. These views are summarized in Figure 1, where X_i represents an economic agent (in the present or the future), and the perceived economic relationships between these agents and their future selves are drawn. The Keynesian presupposition is that individuals, in the present, act and perceive themselves as individuals. They are not linked to one another in an economic sense because the decisions of one regarding the intertemporal allocation of consumption do not directly effect another. However, insofar as they consider future debt repayments and their future selves, these individuals perceive themselves as part of a social unit and are linked economically: if no net (external) debt was owed by the economy (i.e., by the social unit) no individual debt existed either. Therefore, debt financed government spending was regarded as net wealth creation--government expended resources that accrued to individuals (qua individuals) in the present but would eventually be repaid to one section of the economic community (and therefore to all individuals as members of that community). This resulted from the fact that, in the Keynesian paradigm, there are no individual linkages between agents and their future selves.

Figure 1

The Relationship Between Economic Agents

Theoretical Approach:	Present	Future
Keynesian	X ₁ X ₂ X ₃	X ₁ | X ₂ | X ₃
New-Classical	X ₁ ----- X ₁ X ₂ ----- X ₂ X ₃ ----- X ₃	| | |
Classical	X ₁ ----- X ₁ X ₂ ----- X ₂ X ₃ ----- X ₃	| | |

Clearly, the original Keynesian argument could not apply in the case of external debt because the debt was owed to outsiders. Therefore, later Keynesian arguments concentrated on other forms of differentiation between the manner in which economic agents regarded themselves in the present and the future. In general, these involve arguments as to why individuals' planning horizons are limited (i.e., why the link between agents and their future selves are weakened). Tobin (1980, pp. 55-58), for example, suggests that this would be the case for: (a) members of society who do not care about, or have no, children; (b) those who expect later generations to be wealthier in any case; and (c) those who are constrained by liquidity considerations from transferring wealth intertemporally. Other arguments in this tradition rely on the fact that government can borrow more cheaply and can therefore increase net wealth by undertaking debt financed expenditure. ^{1/} In either case, because debt financed expenditures are regarded as creating net wealth, fiscal policy is effective and private saving does not (fully) increase to offset it.

^{1/} Wagner (1987, pp. 209-211) points out that this argument relies on the notion that governments will allocate that expenditure efficiently.

New-classical agents, on the other hand, perceive themselves as individuals in the future as well as the present and act as if they have been assigned an individual role in the economic society. Moreover, there is a direct link between each agent and its future self. Therefore, while debt-financed government expenditure is regarded as a current receipt, it implies a burden which will have to be repaid in the form of future taxes. Furthermore, individuals will relieve that burden by saving in order to meet future repayments. With internal debt, even those individuals who are to be repaid will reassert their time preferences by saving in order to repay themselves, via the government.

b. The classical approach

While the preceding approaches are well known, it was worth restating them fully in order to clearly distinguish them from a third approach, which is not as familiar. This "classical position," as reasserted by Buchanan (1958), takes a different view of the public debt and does regard it as a burden. It embraces the same notion of individuality across time as the new-classical approach, whereby agents do perceive a link between their own actions in either timeframe (future and present). However, there is also a link between individuals in the future, because any attempt by one individual to evade (or avoid) his share of future taxes will directly affect the amount which will be allocated to the others. The existence of these two sets of linkages--between the individual and his future self and between individuals in the future--in turn creates a set of incentives which impinge on individuals in the present; because the burden of public debt is typically not individually assigned, it will benefit individuals to try to minimize their future burden by spending more in the current period before taxes are raised on any remaining wealth. According to the classical view, a private debt might indeed prompt an individual to save in order to offset a future burden, but the reactions of individual members of an economy to the advent of a communal debt should not be construed as if the debt were private.

The classical perspective, which is more game-theoretic in nature, entertains the possibility that individuals will act strategically so as to minimize individual responsibility. In such a scenario, and notwithstanding the mathematical equivalence between aggregate current and future resources (current spending and future taxes), debt does constitute a burden because

it creates an incentive to redistribute consumption intertemporally. 1/ Saving will decline (rather than increase) in the present, in response to debt financing and the implied necessity of higher future taxes, and aggregate debt will increase. 2/ Barro (1989, pp. 214-216) concedes that his debt-neutrality proposition will be violated when there is uncertainty about the incidence of future taxes across individuals or when taxation takes the form of an income tax. On the other hand, a lump-sum poll-tax will remove the incentive for individuals to act strategically, and negate the classical result, but such taxes are typically not observed in practice. 3/

Moreover, there is a curious lack of consistency in the application of strategic analysis by the new classical and Keynesian approaches. This is because agents do act strategically according to both views when the possibility of monetary financing of debt is introduced: each money holder minimizes money balances, in an attempt to avoid an imminent inflation tax, notwithstanding the fact that the actions of each will minimize the aggregate potential to raise such a tax. Thus, if inflation is the likely method of future taxation, 4/ the demand for real money balances will fall and, in this sense, a burden is introduced by the existence of debt. 5/ Under the Keynesian and new classical approaches, the likelihood of future

1/ It is worth noting (see O'Driscoll, 1977, and Musgrave, 1988, pp. 133-135) that Ricardo, despite his exposition of this mathematical equivalence, did not consider that it should be used to describe behavior in the real world. Ricardo, while he demonstrated that debt and taxes were equivalent "in point of economy," held that they were not equivalent "in point of fact." His reasoning was clearly based on the strategic elements of the individual decision-making process, as the following quotation demonstrates:

A country which has accumulated a large debt, is placed in a most artificial situation; ... it becomes the interest of every contributor to withdraw his shoulder from the burthen, and to shift this payment from himself to another; and the temptation to remove himself and his capital to another country, where he will be exempted from such burthens, becomes at last irresistible,...

- Ricardo, 1951, Vol. 1, pp. 247-8, as quoted in Levy, 1987, p. 99.

2/ See Brennan and Buchanan (1987) for a more formal demonstration of this result.

3/ Bernheim and Bagwell (1988) examine a series of linkages suggested by Barro's notion of a "dynastic family" and conclude that the results suggested by such a concept are not at all descriptive of the real world. The Journal of Political Economy, 1976, Vol. 84, No. 2, provides an interesting debate between Barro, Feldstein, and Buchanan.

4/ This view is usually espoused by those in the classical tradition. See, for example, Buchanan (1987).

5/ According to the "unpleasant monetarist arithmetic" of Sargent and Wallace ([1981], 1985) inflation will be likely to result immediately.

taxation generates incentives to avoid an individual share in this case only, and their general arguments with regard to the burden of debt would, at the very least, appear to require some qualification. The classical approach, on the other hand, makes a consistent argument based on strategic behavior whether debt is projected to be financed via taxes or inflation.

c. Empirical evidence

The difference between the three approaches, insofar as they apply to behavioral relationships, can be summarized as follows: consider a simple Keynesian macroeconomic equilibrium equation of the form

$$(1) \quad C + I + G + (X-M) = C + S + T.$$

where C is private consumption,
I is private and public investment,
G is government current expenditure,
T is (current) taxation,
X represents exports,
M represents imports, and
S are private savings.

By rearranging, this yields

$$(1)' \quad (X-M) + I = S - (G-T).$$

Because this is a one period non-monetary (i.e. real) framework, it is legitimate to refer to the components $(X-M)+I$ as the in-period accumulation of real wealth by the economic society (either in the form of accumulated capital abroad or domestic investment); call this $W = (X-M)+I$. The government's deficit is $D = (G-T)$. Therefore

$$(2) \quad W = S - D.$$

If a relationship of the form $S = a_0 + a_1 D$ exists between private saving and the public deficit, then

$$(3) \quad W = a_0 - (1-a_1) D.$$

The three approaches then can be differentiated on the basis of the values of a_1 that they would suggest and the consequent relationship that they indicate between changes in the wealth of the economy and in the level of the deficit ($\delta W/\delta D$):

Keynesian:	$0 < a_1 < 1,$	and $-1 < \delta W/\delta D < 0.$
New-classical:	$a_1 = 1,$	and $\delta W/\delta D = 0.$
Classical:	$a_1 < 0,$	and $\delta W/\delta D < -1.$

While the classical position has been somewhat neglected in mainstream Anglo/American thought since the advent of the Keynesian argument, the empirical evidence in support of the mainstream approaches is at best

contradictory, and does not support the exclusion of the classical view. Barro (1989, pp. 220-223) provides a brief summary of the available evidence, which falls into one of three categories: (1) evidence from studies of the effect of budget deficits on interest rates, while inconclusive, appears on balance to support his position (i.e., that deficits do not affect interest rates and that $a_1 = 1$); (2) studies on the direct effect of deficits on consumption and savings: these have also yielded conflicting results but many have found strong support for the classical position; 1/ (3) studies based on data for the U.S. from 1983 to 1989: these reveal a positive association between budget deficits and current account deficits (thereby lending support to the Keynesian or classical theses) but the relationship is more dubious over a longer period.

These empirical tests are more than usually complicated by the requirements of *ceteris paribus*. It is worth noting, however, that a simple attempt to explain the (gross) private savings rate for France (expressed as a proportion of GDP), in terms of the budget balance, yields results that are consistent with the classical position. Chart 1 plots the savings rate and the budget balance for the period 1970-1991 and reproduces a fitted equation for the savings rate. The estimated equation was obtained from an OLS regression which included a constant term (estimated at 25.5, and indicated in Chart 1), and explained 75 percent of the variance in the savings rates (as measured by the corrected R statistic), with the (highly significant) coefficient on the budget balance estimated at +2.09 (indicating that $a_1 = -2.09$).

3. Public choice and rule formation

The classical view is also somewhat at variance with the other approaches in terms of policy prescriptions because it recognizes the danger of imposing a debt burden by entertaining the possibility of pursuing a stabilization policy; it considers the tradeoff between the potential costs and benefits of a stabilization policy. Classical economists were, however, generally "suspicious of government activity, believing it to be partisan, corrupt and inefficient" (Rowley, 1987, p. 58), and sought to inculcate some principles of sound economic management which would not be violated through the political process. In other words, they considered that the dangers of running a stabilization policy outweighed any potential benefits. The public choice approach to economic decision making, which emphasizes the inherent pressures in the political system to incur budget deficits, is probably the modern equivalent of this approach. In general, it regards any

1/ See Feldstein (1982) and Modigliani and Sterling (1986). In a more recent study, McCallum (1989) found that in 18 OECD countries over a 20-year period lower taxes and higher government consumption were both associated with lower levels of national saving. These results were obtained on pooled data as well as in each individual case. McCallum's expression of puzzlement (1989, p. 1) at his findings attests to the fact that the classical position is no longer well known in mainstream Anglo/American thought.

attempt to pursue a stabilization policy as inherently dangerous because there will be a constant temptation to err on the side of incurring current deficits.

The classical general principle took the form of a balanced budget rule which would only be broken at times of national crisis. Normal day-to-day economic management would have to be undertaken within its confines. This rule was regarded as inviolable by strong tradition in many countries and in this form it could succeed in stabilizing debt levels. Buchanan (see, for example, 1987) has argued that constitutional rules will have to be used to replace the Victorian norms which effectively enforced the classical rule prior to the Keynesian revolution.

Policy prescription in the Keynesian and new classical approaches is somewhat more lax. The new classical approach should not be much concerned with deficits, at least if they are not likely to be monetized, but has advocated the use of a stabilization policy on the basis that deficits would allow tax rates to be smoothed over time, despite fluctuations in government expenditures and the tax base (Barro, 1989, pp. 216 et seq.). This would avoid the introduction of distortionary taxes. The Keynesian prescription sees obvious advantages in a stabilization policy as a means toward rejuvenating an otherwise stagnant economy and is clearly less worried than the classical view about the potential for the national wealth to be eroded by deficit spending.

4. A French tradition of classical analysis?

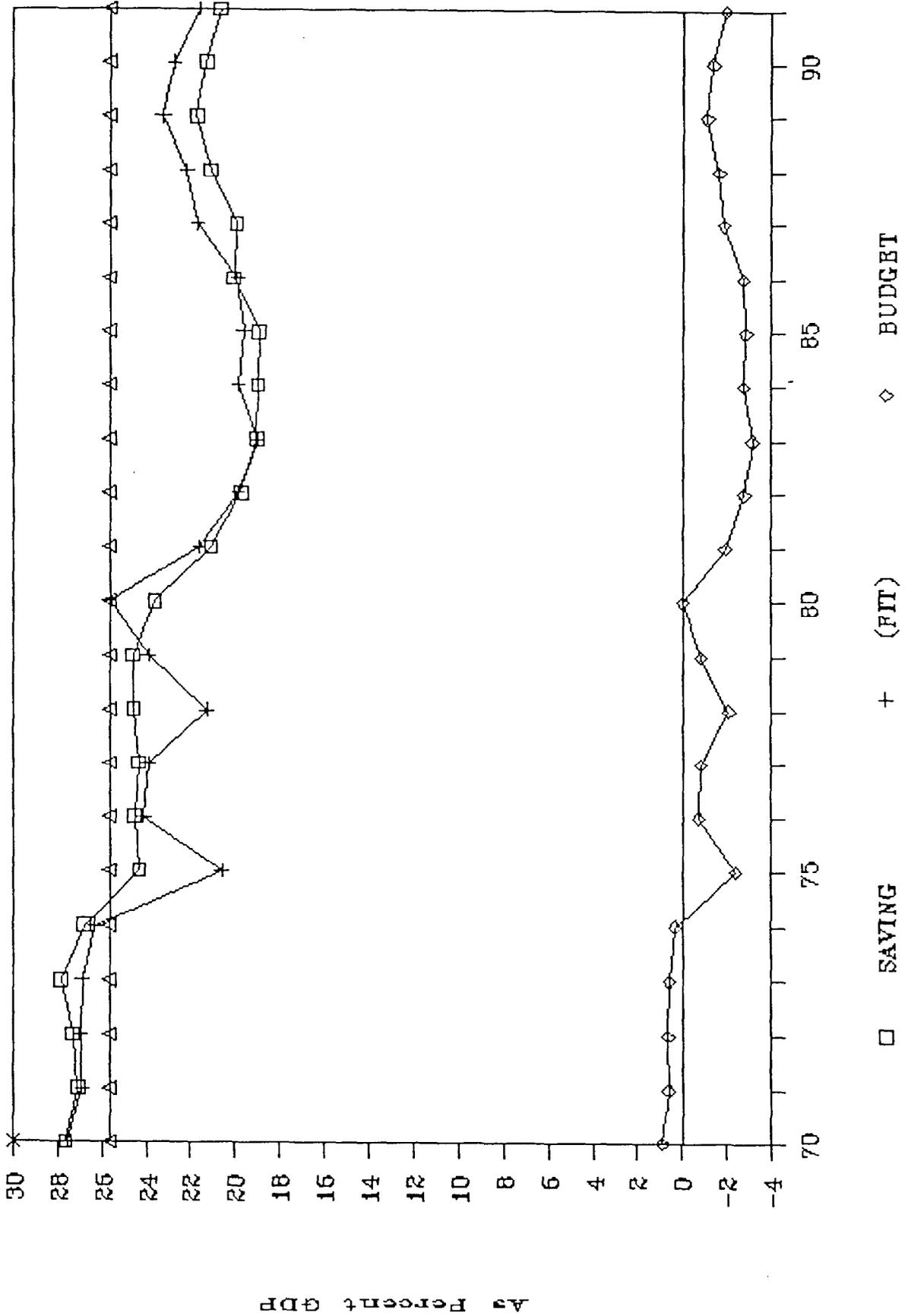
This section investigates a previous example of the imposition of French fiscal rectitude and compares it with the more recent attempt to introduce a fixed deficit rule. In this way, it might be argued that a classical tradition does exist in the French approach to fiscal policy. 1/

a. A French classical precursor

The classical tradition survived in France long after the Keynesian revolution and was an integral part of public policy. In fact, the notion of a "deficit" had a continental usage which was far different from its Anglo/American equivalent: it referred to the expenditure of the government in excess of total taxation and "the loan resources available to cover it" (Rueff, [1956] 1964, p. 19 fn.). This clearly implied that when the government's budget was being considered, the effect that this would have on the public's saving would also be considered--the link between public and private saving was recognized. Furthermore, the nature of this link was such that it could create a spiraling "deficit." In 1958, for example, the state's finances were viewed as having been imperiled, and an

1/ Recently, Michel Herland presented the classical view in la Revue Française d'Économie of Spring 1992. Herland notes Ricardo's opposition to debt financing and a relevant passage from Ricardo is reprinted in the same issue.

Chart 1
FRANCE
The Relationship Between Budget Deficits and the Private Savings Rate
(1970 - 1991)





economic commission, which was chaired by Jacques Rueff, advised President De Gaulle on how the situation had arisen:

We have inflation because there are not enough savings on the market; and there are not enough savings on the market because there is inflation. The problem is to get out of this vicious circle.

- Rueff et al. [1958], in Rueff, 1964, p. 150.

The implication here is that deficits were expected to be monetized, and that this reduced the incentive to save, which in turn aggravated the deficit.

It is also instructive to investigate the perceived cause of this problem in 1958 and the recommended (and implemented) solution. The difficulties were attributed to introduction of the notion of the "impasse" into French finance in 1952. The impasse was "the amount of money which had to be borrowed every year for the payment of public expenditures, including investments financed by the state" (op cit., p. 139 fn.). The Commission argued (op cit., pp. 137-141) that the introduction of this notion had driven a wedge between the "unconditional expenditures" 1/ of the Treasury and its "unconditional receipts" 2/ by planning to finance the difference in terms of an amount that had to be estimated, i.e., loan receipts. This, the Commission contended, was dangerous because it greatly weakened "the respect for financial equilibrium in the mind of government agencies" (op cit., p. 140). Therefore, the ...

Elimination of inflation requires two conditions: that the whole of the Treasury's unconditional expenditures be met by unconditional receipts. That the amount of any expenditures not covered by unconditional receipts be at all times geared to receipts realized from savings during the same period.

- Rueff et al. [1958], in Rueff, 1964, p. 150 (emphasis added).

Also "as soon as any fiscal deficiency is found, as soon as any additional expenditure is decided upon, new levies or economies must ensue" (op cit., p. 161).

The argument for contemporaneous financing of government expenditure is clearly in the classical tradition and dates as far back as Ricardo (notwithstanding his exposition on the equivalence between current and future resources). 3/ It is interesting to note the argument that was

1/ "Firm expenditures" or committed expenditures (op cit., p. 138).

2/ "Resources absolutely sure to be collected within the same period" (op cit., p. 138).

3/ The argument was recently espoused in this form by a French official (see Mattret, 1991).

used by the Commission, however. This revolves on asserting that, as soon as a budgetary policy is conditioned upon estimates of the future, budgetary discipline evaporates somewhat and there will be a tendency to avoid (politically) difficult decisions which, in these conditions, are taken on the basis of an estimate. With regard to the impasse system, the Commission argued that the impasse (or deficit) was invariably created by irresistible pressure on expenditure, rather than as the result of an unbiased estimate of the available finance. 1/

b. Current French policy

In a preface to the Livre Blanc on financial reform of the French economy in 1986, the Minister for Economy, Finance and the Budget, Mr. Pierre Bérégovoy, was quite clear on the issue which was at stake; whether the economy should be financed by appealing to taxes or savings:

Le financement de l'économie doit-il faire appel à l'impôt ou à l'épargne? Faut-il préférer la subvention, payée par le contribuable, ou le marché financier, alimenté par les épargnants? Lors-que les taux d'intérêt permettent d'offrir des crédits à bon compte, faut-il que l'Etat les bonifie? Ces questions ne sont pas nouvelles.

- Pierre Bérégovoy, 1986, p. 5.

The Livre Blanc proposed a reform of French capital markets in combination with a new policy of dirigisme in the state's finances which would lead to a lowering of interest rates and, ultimately, renewed growth. In order to achieve the latter objective, a new budgetary procedure would be introduced whereby the financial source of any expenditures would be clearly identified. 2/ This system, described as a "degree zero," would directly associate costs and expenditures. 3/ Mr. Bérégovoy, during his earlier tenure as Minister of Social Affairs, had reformed the Social Security by insisting that revenues and expenditures had to meet and that "it wasn't possible to construct good social policies with economic deficits." 4/

Mr. Balladur replaced Mr. Bérégovoy as Minister for Finance from late 1986 to 1988. During this period, he advocated the notion that the nominal

1/ "Though in certain exceptional situations the impasse was accomplished, with no less political courage than technical skill, in most cases the impasse manifested itself as a consequence of the demands of an investment policy, and the limitations of a fiscal policy, in which we were unable or unwilling to make any change" (op cit., pp. 138-139).

2/ Le Livre Blanc, 1986, pp. 94-98.

3/ This is the same expression used by President Carter to describe his proposed budgetary reform, and is now advocated by Senator Gramm as a solution to the United States' budgetary impasse.

4/ This is a quotation from André Gauron, a close advisor to Bérégovoy, in Resener (1991, p.61).

budget deficit be reduced to under F 90 billion by 1990, and thereafter maintained at that level, in order to arrest the growth in the debt/GDP ratio. ^{1/} Nominal deficit targets of F 100 billion in 1989 and F 90 billion in 1990 were subsequently strictly adhered to. The French authorities acknowledged that their approach to fiscal policy was at variance with the views of those who favored an "automatic stabilizers" approach--that they were contrary to Keynesian prescriptions--but insisted that it was inherent in the policy of the "franc fort" that savings be released for investment (Le Gendre, 1989, p. 143). Moreover, Mr. Bérégovoy insisted that a reduction in interest rates to spur investment required a reduction in budget deficits (Hazera, 1989, p. 30).

5. Fiscal rules in France

The attempt to introduce a fixed deficit rule in France is clearly in the classical tradition. The classical position is quite rigid, as regards the inter-temporal substitution of the financing of government expenditure, and appears to reject any tradeoff between the costs of breaking the in-period rule and any potential benefits from allowing the government the latitude to attempt to stabilize the economy. However, the reason for this rigidity is that it relieves the pressure to deviate from the rule when political pressures increase as, for example, in an economic downturn. Furthermore, as was argued by the Commission of 1958, it removes a dependency on estimates, and subjects fiscal policy to a clearly identifiable benchmark. In this way, it removes an inherent bias in the system, whereby policymakers would underestimate the potential for deviations from policy rather than undertake difficult corrective decisions on the basis of more accurate estimates.

However, it is clear that in the current French context the classical rule is not inviolable--it is not enshrined in a constitution or as a societal norm--and one therefore needs to be circumspect about the conditions in which it was introduced. Chart 2 presents general government (gross) debt levels in France from 1970-1991. It is evident that attempts to re-institute fiscal rectitude in the mid-1980s followed some years of fiscal profligacy and that the debt level has virtually stabilized since 1987. However, the initial period of debt stabilization, and the introduction of a notion that budget deficits ought to be invariant to economic cycles, occurred at a time of rapid economic growth (1987-89), ^{2/} and because the rule was not permanently enshrined, it is necessary to assess the relationship between the rule and debt levels in the context of these cyclical developments.

6. Medium-term rules and the dynamics of deficit rules and debt levels

When a rule is introduced, but is not enforceable, the economic circumstances of its introduction need to be more closely examined. This is

^{1/} See Vernholes (1991).

^{2/} Real GDP growth exceeded 4 percent in 1988 and 1989.

because the timing of its introduction will affect its contribution to debt reduction. Also, because of the possibility that the rule may be abandoned, its contribution to debt reduction cannot be presupposed upon its continuation. A medium-term criterion with which to constantly assess the value of the short-run policy is required and this applies to both fixed and cyclical rules.

When a fixed deficit rule is introduced in the upswing it will obviously lead to a higher average level of debt than if a cyclical deficit rule had been adopted (see Chart 3). Conversely, a cyclical rule introduced in the downswing leads to a higher average debt than if a fixed rule were introduced (see Chart 4). 1/ Thus the value of any rule in reducing debt levels, even if it is defined independently of cyclical variations, is dependent on the stage of the cycle at which it is introduced--average debt levels over the cycle (or, the medium term) vary accordingly. Furthermore, when the rules can be switched, then a policy of adopting a fixed rule in the upswing, followed by a cyclical rule in the downswing, holds the obvious danger of a "ratcheting" of debt levels. Such a scenario is depicted in Chart 5, where the upswing (and the fixed rule) is first encountered (introduced), followed by a cyclical rule prior to the downswing. It could be argued that this is what has happened in France.

Because the "classical" rule, as applied in France, has not been accompanied by some medium-term enforcement mechanism (which is the second aspect of a classical policy) the value of a classical posture may be undermined. In fact, if there is no enforcement mechanism, and the fixed rule lacks credibility in the downswing, 2/ it may be better to abandon the fixed rule permanently, rather than allow a once-off deviation from it prior to its reinstatement (see Chart 6). For this reason, i.e., if the fixed rule lacks credibility, it is preferable to abide by a cyclical rule in the downswing as well as in the upswing: it is actually better to

1/ The basic structure of the simulations in Charts 3 and 4 is that real GDP growth has a cyclical component (the cycle lasts five years), with an average growth of 3.5 percent over each cycle, and real interest accumulates on debt at a rate of 1 percent per annum. There are two possible deficit rules, but each is constrained such that the level of debt is "stabilized" (i.e. returns to its original level) after the cycle. The first rule (denoted as "fixed") is that the deficit (excluding interest payments on debt) is fixed as a proportion of GDP. In such a scenario, a deficit amounting to 1 percent of GDP is sustainable in each period. The "cyclical" rule allows the deficit to vary counter-cyclically. In fact, in each year, the deficit (as a percentage of GDP) exceeds the 1 percent fixed rule by an amount equal to the deviation of actual from average growth (over the cycle). In Chart 3, the rise is experienced before the slump; in Chart 4, the slump is experienced before the rise; while in each case the cycle returns to the average growth rate at the end of the cycle.

2/ Drazen and Masson (1992) have recently argued that the credibility of policymakers to undertake tough decisions will be greater when economic circumstances are less adverse (i.e., in this case, in the upswing).

Chart 2
FRANCE
General Government Debt
(1970 - 1991)

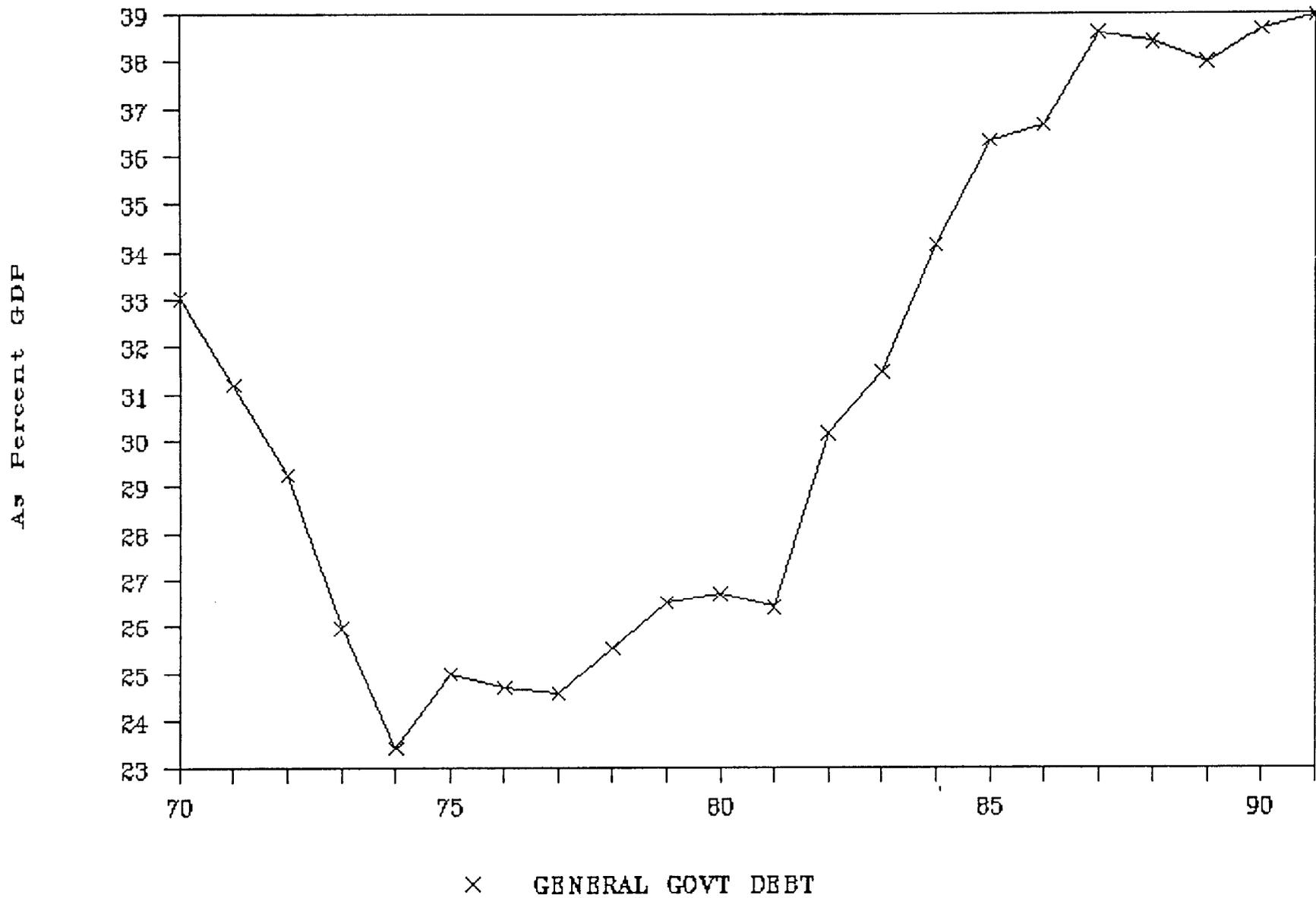




Chart 3

FRANCE

Cyclical Debt Simulation I

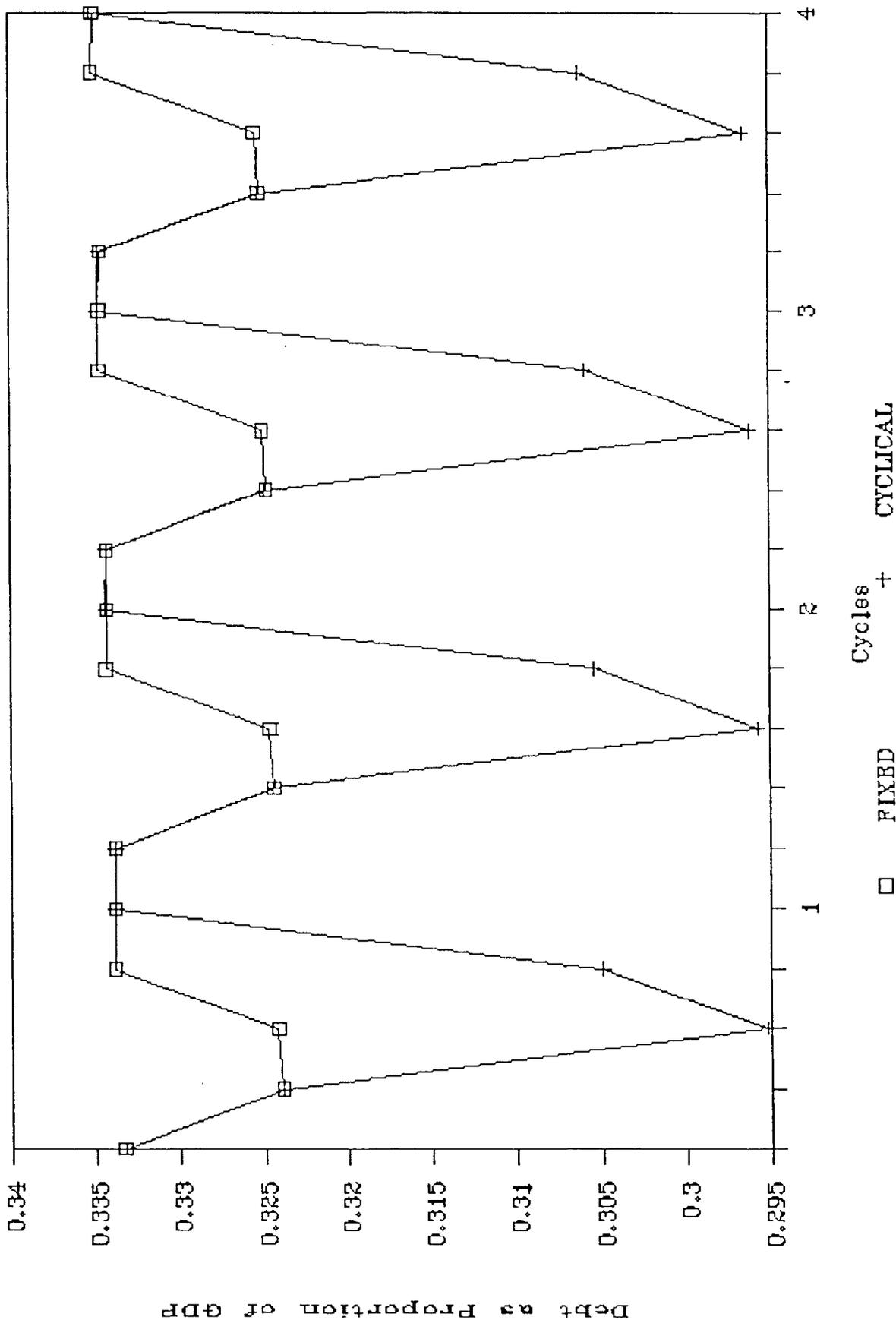




Chart 4

FRANCE

Cyclical Debt Simulation II

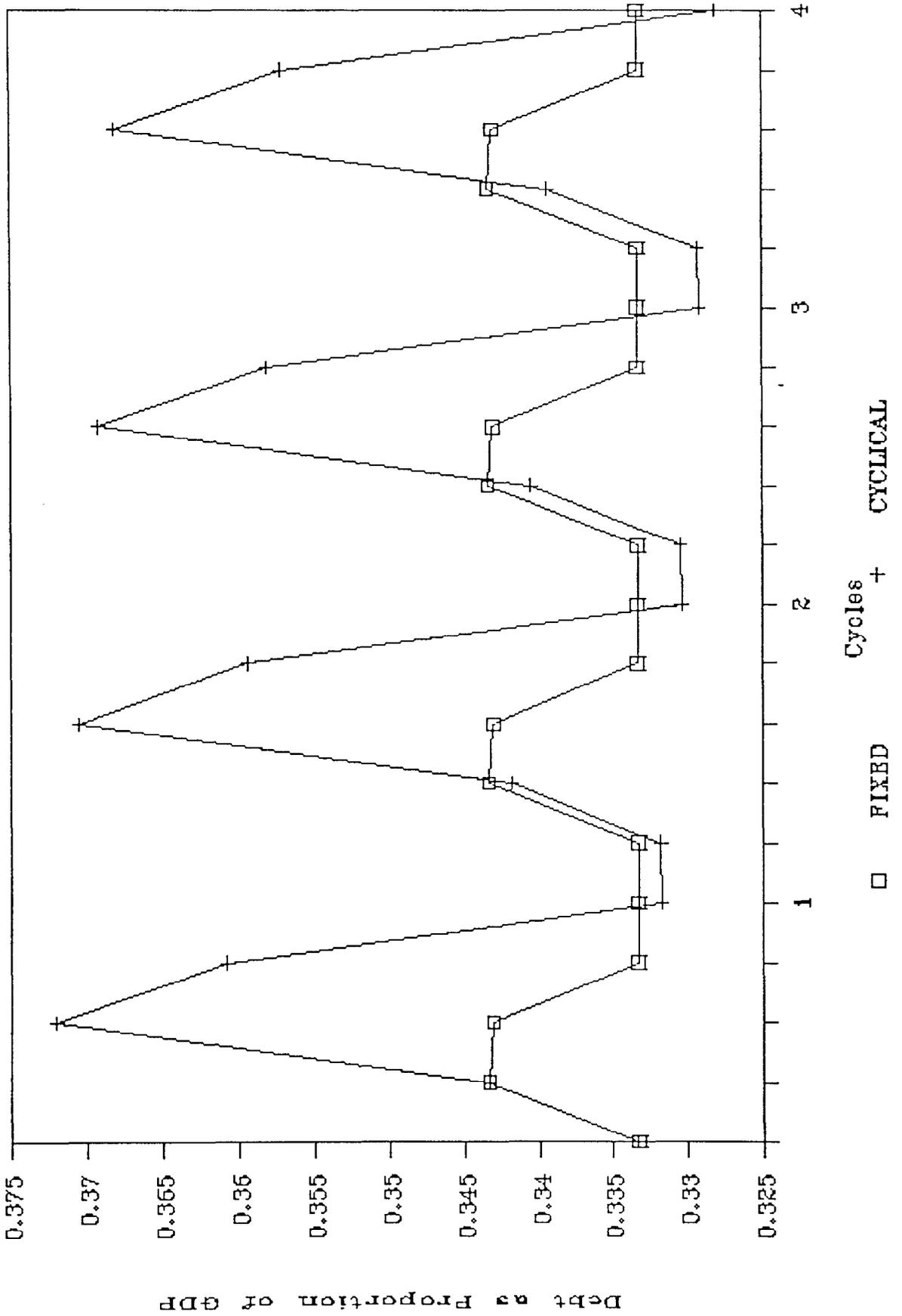


Chart 5

FRANCE

Cyclical Debt Simulation III

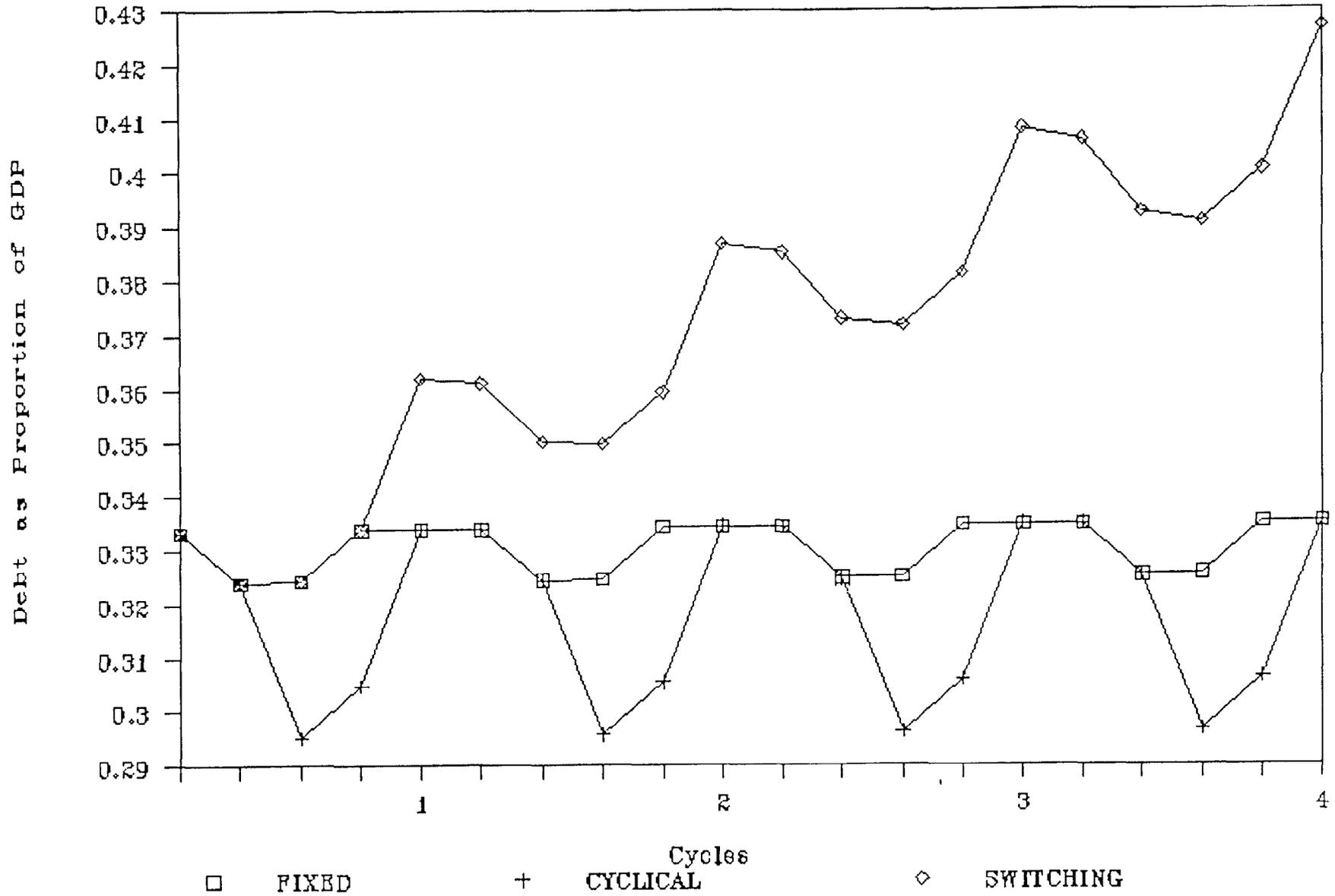
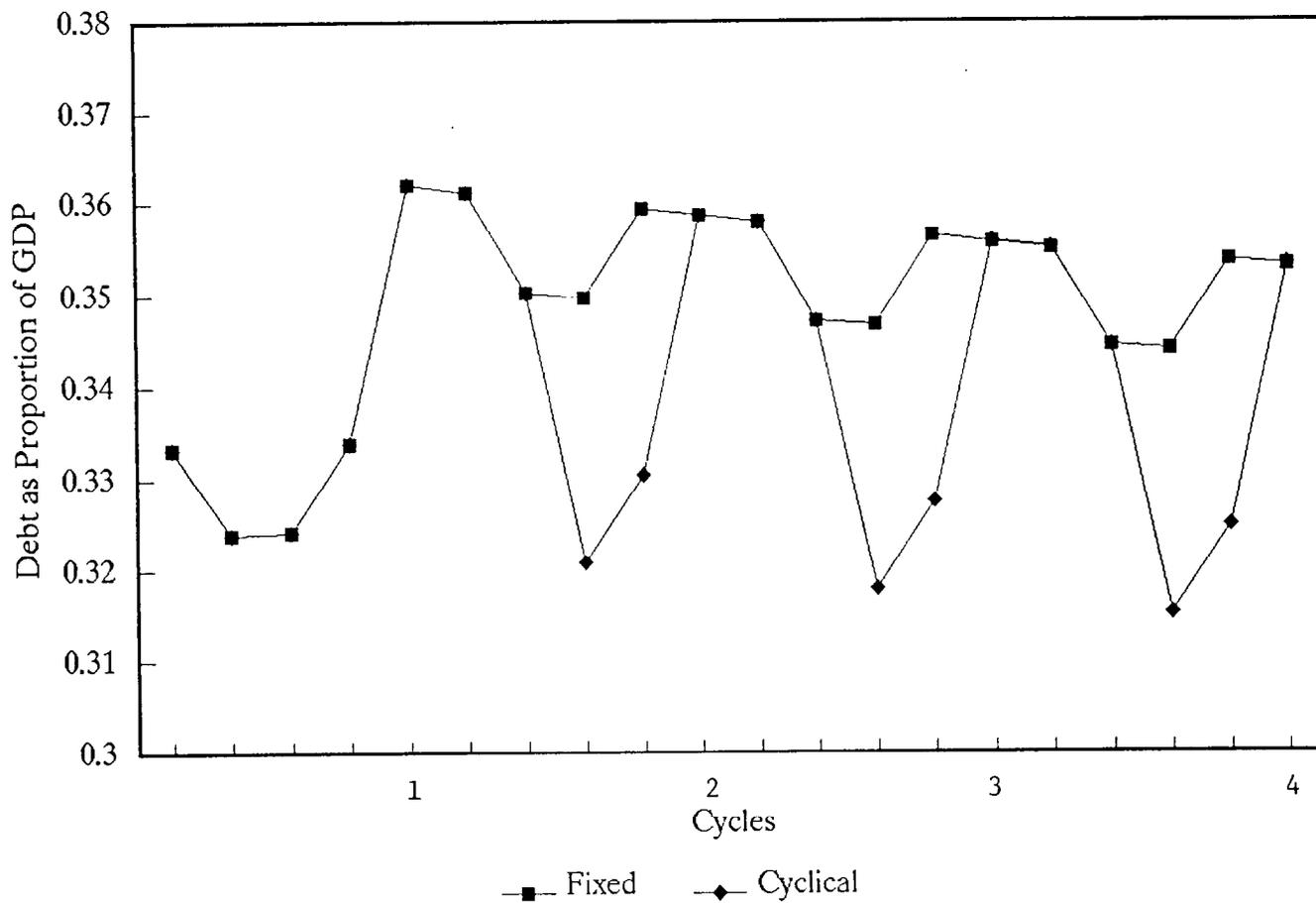


Chart 6

FRANCE

Cyclical Debt Simulation IV



introduce a cyclical rule if there is a better chance that it will be maintained.

Clearly, it is necessary to establish some standard against which to monitor the progress of policy and assess the seriousness of any deviations from it. In attempting to formulate a medium-term rule or, more correctly, a medium-term standard against which to assess a policy stance, a strong argument can be made that the principles which describe the short-term rule should also describe the medium-term criterion. A rule is adopted because there are perceived dangers of short-term deviations from an overall policy. Therefore, the medium-term criterion should identify the deviations that the rule was intended to preclude: it should hold the expressed short-term policy to its (the short-term policy's) own standard. In the case of a classical rule, which is both (a) rigid, and (b) not dependant on any estimated variables, the rule is clearly intended to preclude the temptation to relax the overall policy based on (possibly biased) estimates of the future. Therefore, the medium-term criterion should not be based on estimates either, and should be clearly measurable in any given period. This argument lends itself to the adoption of a debt ceiling as a medium-term criterion rather than an average debt criterion (i.e., an averaging of the debt ratio over the cycle). An average medium-term debt criterion is open to reinterpretation and manipulation (according to professed estimates of future growth over the cycle), and is therefore not in tune with the principles of a classical fixed rule. A short-term stabilization rule, on the other hand, is intended to smooth deficits over the cycle, and is properly monitored by constantly assessing the implied average debt level over the cycle.

There is a more concrete argument, however, for associating a fixed short-term rule with the criterion of a debt ceiling. This is because it clearly identifies the extent to which any deviation from the short-term rule has occurred and the importance of the timing of this deviation. With regard to timing, the credibility of a fixed deficit rule is gleaned in the downswing, when the decision to adhere to the rule is more difficult. A medium-term debt ceiling identifies more rigidly whether the decision has been taken at the difficult juncture. Examine two possible situations: first, the fixed rule is introduced in the upswing. If, for some reason, the deficit is smaller than is "allowed," the debt level falls below that envisaged. An average medium-term debt criterion, in these circumstances, would then "permit" a corresponding deviation in excess of the originally projected debt level for the downturn. A debt ceiling, on the other hand, would only allow the debt to return to the originally projected ceiling. Thus, a debt ceiling is more rigid when the difficult, and credibility enhancing decision, has to be made. Second, and conversely, if a fixed rule is introduced in the downswing, and is not adhered to, the ceiling is clearly (and immediately) infringed. If an average debt level were the criterion for the medium-term, it would be possible to argue that the average debt could be rectified in the upswing, but this is contrary to the underlying reasoning for a fixed rule. The debt-ceiling criterion identifies the fact that the short-term rule, as expressed, has been infringed; an average debt criterion, if it is used to argue that

"situation" can be rectified, is clearly not identifying the fact that there has been a deviation from policy.

Thus, a debt ceiling has that advantage that it: (a) precludes the use of the very excuses which the fixed rule is intended to ignore; and (b) clearly identifies when a fixed rule has been infringed and the extent to which it has been. In the second example above, it would be inconsistent to argue that the fixed rule is still in effect, but that the deviation could (with an average debt criterion) be rectified during the impending upswing. This would be tantamount to an admission that the fixed rule has been replaced with a stabilization rule and the debt ceiling enforces a recognition of this fact. Alternatively, it enforces a recognition of the fact that the fixed rule, if reintroduced, will be at a higher debt ceiling. A medium-term criterion, if it is to have any value, should enforce the recognition of a deviation from policy. In this sense, one can argue that, if a classical rule is adopted but is not ultimately enforceable, a debt ceiling is a more relevant criterion with which to assess the extent to which there has been a deviation from the professed policy.

7. Conclusion

This paper has argued that a fixed deficit rule is predicated upon a classical approach to the issue of public debt which highlights the dangers of a spiraling level of national indebtedness when deficit financing is employed. The classical approach, having recognized this danger, argued for the implementation of a fixed rule on the basis that this ensured that the issue of deficit financing would be removed from the political arena, and that difficult budgetary decisions would be made on the basis of clearly identified guidelines rather than on projections.

When adherence to a classical rule is not ensured, however, it is necessary to have a medium-term criterion with which to identify the extent to which it has been infringed. In this regard, a debt ceiling would appear to be more compatible with a classical fixed rule than an average debt level over the cycle. From this perspective (i.e., using the criterion of a debt ceiling) it could be argued that the fixed rule in France has been infringed at the time when the rule should have been established and that there has been a corresponding step increase in the projected debt level. Any description of future policy would be more credible if it is accompanied by a clearly defined medium-term criterion. Moreover, if the principles of a fixed deficit have not been abandoned, it might be better to express this criterion in terms of a debt ceiling.

III. French-German Interest Rate Differentials and Time-Varying Devaluation Risk 1/

1. Introduction

Since the realignment of currencies in the EMS in January 1987, the differential between French and German interest rates has narrowed considerably. Nevertheless, the continuing existence of a differential suggests that market participants do not rule out a realignment of central parities in the ERM before exchange rates are irrevocably fixed in the final stage of EMU. Specifically, the positive interest rate differential in favor of Germany across the maturity spectrum implies that there is still a perceived risk of devaluation of the franc/deutsche mark exchange rate. Indeed, attempts to quantify the various factors that might explain the French-German interest rate differential find that these account for only part of the differential. 2/

The persistence of a positive interest rate differential suggests that an announced commitment to a fixed exchange rate may not be sufficient to completely eliminate devaluation risk. Economic performance and the authorities' policy approach also influence investors' expectations. Thus, exchange rate policy may not be fully credible if, for instance, problems of unemployment, a weak external position, or other perceived weaknesses cast doubt on the authorities' ability to maintain their commitment. In the same vein, a policy of keeping the exchange rate close to the lower margin of the intervention band may also help establish credibility.

This chapter examines expectations of realignment of the franc/deutsche mark (henceforth FF/DM) central parity during the period January 1987 to March 1992. The aim is to estimate the expected rate of devaluation of the franc and to examine the role in explaining that devaluation of various macroeconomic variables that are believed to influence market participants' expectations of exchange rate changes.

A commonly used measure of the expected devaluation of a currency is the differential between interest rates on domestic currency-denominated assets and foreign currency-denominated assets. This measure is imprecise, however, especially for interest rates at the short end of the maturity spectrum, because interest rate differentials are affected by expected changes in the exchange rate within the intervention band. In what follows, estimates of the time-varying expected rate of realignment are first constructed by adjusting interest rate differentials on three, six, and twelve-month Eurofranc and Euro-deutsche mark deposits for the expected rate of change of the franc/deutsche mark exchange rate within the ERM band. The latter is, in turn, arrived at by assuming that the exchange rate inside the band follows a mean-reversion process. The calculated expected rates of

1/ Prepared by Francesco Caramazza.

2/ For a recent such attempt see Artus (1991).

devaluation are then regressed on a number of macroeconomic variables that agents are thought to consider in forming expectations of a currency's possible realignment. A similar analysis is also conducted with long-term government bond yields. Inflation, competitiveness, labor market, and fiscal variables are found to play an important role in the formation of exchange rate expectations.

2. Interest rate differentials, exchange rate bands, and credibility

Under current EMS arrangements, risk premia in interest rates on financial assets which differ only in the currency of denomination can arise from two sources of exchange rate uncertainty: the day-to-day fluctuations in exchange rates within the intervention bands, and the possibility of realignments of central rates. It is widely accepted that since the January 1987 realignment the EMS target zones have become much more credible. This has allowed exchange rate risk premia to decline and interest rate differentials to narrow considerably. For example the differential on 12-month Eurofranc and Euro-deutsche mark interest rates (Chart 7) declined from a mean differential of 4.7 percentage points in 1987 to 0.25 percentage points in 1991.

A simple way to test the credibility of the EMS target zones is to suppose that investors at time t expect with certainty that there will be no realignment (or change in the width of the exchange rate band) up to time $t+m$, the time of maturity of a given asset. Then at time $t+m$ the spot exchange rate is expected with certainty to be bounded by:

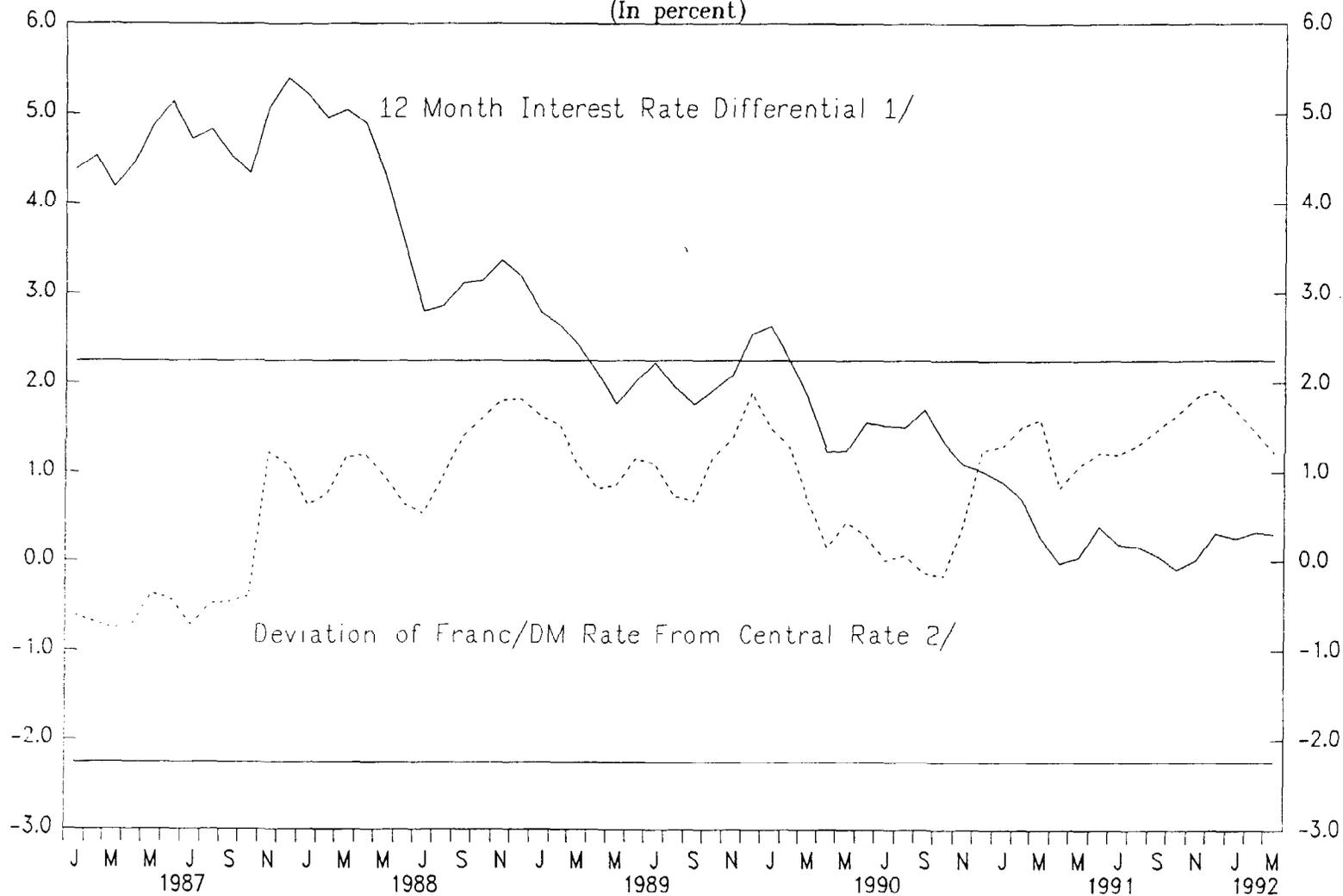
$$S_t^L \leq S_{t+m} \leq S_t^U \quad (1)$$

where S is the domestic currency price of foreign exchange (FF/DM), and S^L and S^U are the lower and upper margins of the exchange rate band. Hence, the net profit from a forward sale of one unit of foreign currency is bounded by:

$$F_t^m - S_t^U \leq F_t^m - S_{t+m} \leq F_t^m - S_t^L \quad (2)$$

where F_t^m is the forward exchange rate at time t for maturity m (measured in years). Further assuming that arbitrage eliminates certain positive minimum profits, it follows that if the forward exchange rate lies outside the exchange rate bands, then the target zone is not credible. If the forward exchange rate lies within the exchange rate band, then the test is

CHART 7
 FRANCE
 Parity Deviations of Franc/DM Exchange Rate
 and Twelve Month Interest Rate Differential
 (In percent)



Source: IMF, staff calculations.
 1/ Eurofranc rate minus eurodeutsche mark rate.
 2/ Percent deviation.

inconclusive. 1/ Alternatively, invoking covered interest parity, the domestic interest rate under full credibility is bounded by:

$$\left[(1+i_t^{*m}) \left(\frac{S_t^L}{S_t} \right)^{\frac{1}{m}} - 1 \right] \leq i_t \leq \left[(1+i_t^{*m}) \left(\frac{S_t^U}{S_t} \right)^{\frac{1}{m}} - 1 \right] \quad (3)$$

where i_t^m and i_t^{*m} are the domestic currency (franc) and foreign currency (DM) interest rates on assets of the same default risk and maturity m , expressed as annualized rates of return. If at any time t the domestic interest rate is outside these "credibility bounds," then agents expect with positive probability that over the time to maturity $t+m$ the exchange rate band will shift either by way of a realignment or an increase in the bandwidth.

Eurofranc interest rates for three, six, and twelve months maturity and their corresponding "credibility bounds" are shown in Chart 8. The three-month interest rate was almost always within its credibility bounds; hence, the exchange rate band may or may not have been credible. The one-year interest rate, however, was consistently above the upper bound from January 1987 to March 1990 and subsequently consistently inside the bounds. Thus, it may be inferred that until March 1990 agents expected with positive probability a devaluation of the FF/DM exchange rate. In the case of one year interest rates the test is less inconclusive as the credibility bounds are significantly narrower than for three-month interest rates. The next section outlines a more precise empirical method, due to Bertola and Svensson (1990), to extract the implicit expected rate of realignment from exchange rates and interest rate differentials.

3. A model of the expected rate of realignment

Let s , s^L and s^U denote the natural logarithms of S , S^L and S^U , the FF/DM spot exchange rate and its lower and upper intervention rates, respectively. By definition, the exchange rate can be decomposed as:

$$s_t = c_t + \bar{s}_t \quad (4)$$

1/ This test of target zone credibility was first applied by Svensson (1990) to the Swedish krona and has since been applied to a number of currencies *inter alia* by Giovannini (1990), Koen (1991) and Geadah, Saavalainen and Svensson (1992).

where $c_t \equiv (s_t^L + s_t^U)/2$ is the (log of the) central parity of the FF/DM exchange rate and \bar{s}_t is the deviation of the franc from the central parity. Taking first differences of equation (4), the total expected rate of change of the franc from time t to $t+m$, conditional on information available at time t , is equal to the expected rate of realignment (i.e., the change in the central parity) plus the expected rate of change of the franc within the band:

$$E_t \Delta s_{t+m}/m \equiv E_t \Delta c_{t+m}/m + E_t \Delta \bar{s}_{t+m}/m \quad (5)$$

Assuming uncovered interest parity (UIP)

$$i_t^m - i_t^{*m} = E_t \Delta s_{t+m}/m \quad (6)$$

it follows that

$$E_t \Delta c_{t+m}/m = (i_t^m - i_t^{*m}) - E_t \Delta \bar{s}_{t+m}/m \quad (7)$$

UIP is an appropriate assumption if the foreign exchange risk premium is small. Theoretical support is provided by Svensson (1990), who argues that the risk premium is likely to be small in exchange rate target zones, even in the presence of devaluation risk. Empirical support of UIP for the FF/DM rate is provided by Rose and Svensson (1991), Andersen and Sorensen (1991) and, indirectly, Frankel and Phillips (1991).

From (1) and the definition of \bar{s}_t it can be shown that the rate of change of the exchange rate within the band is bounded by:

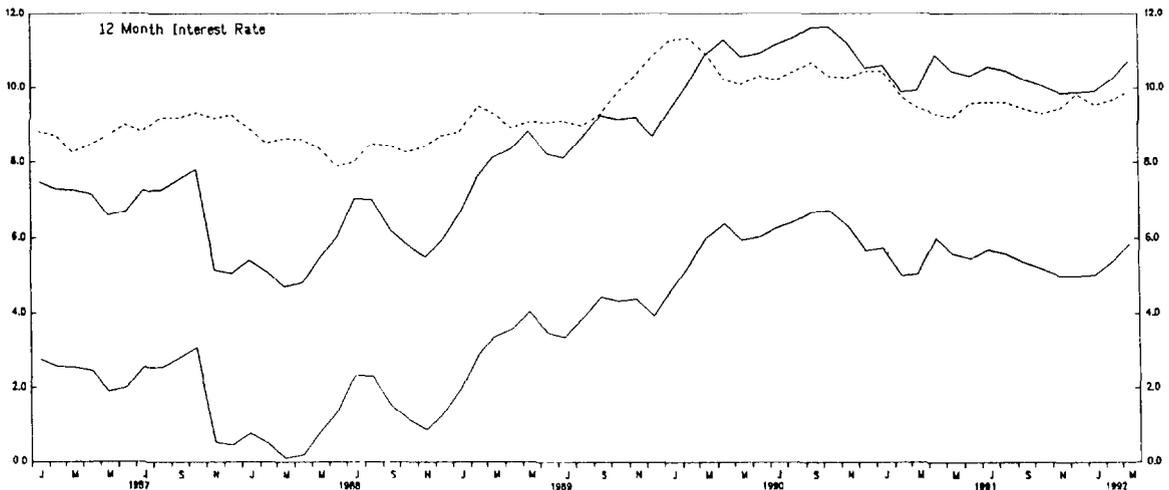
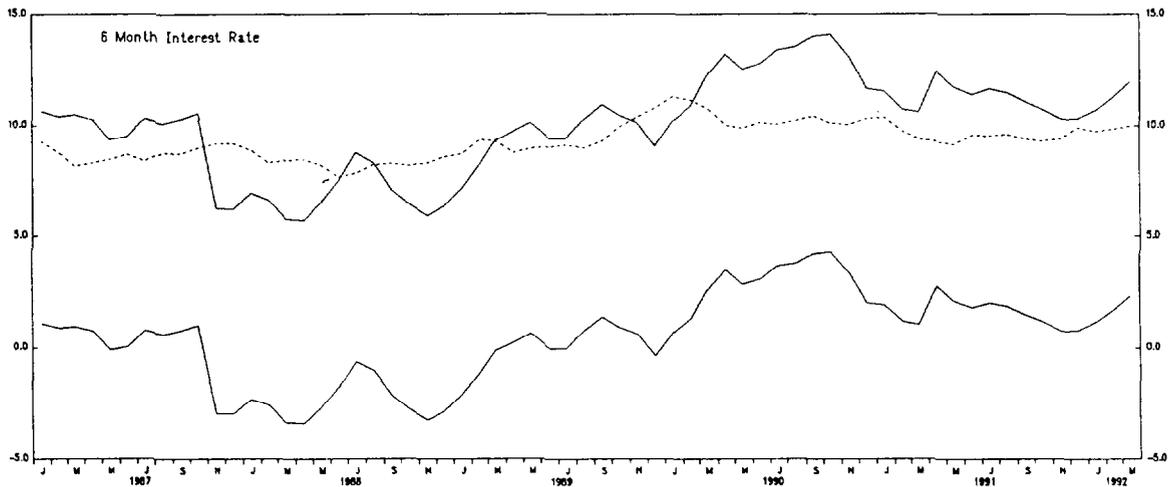
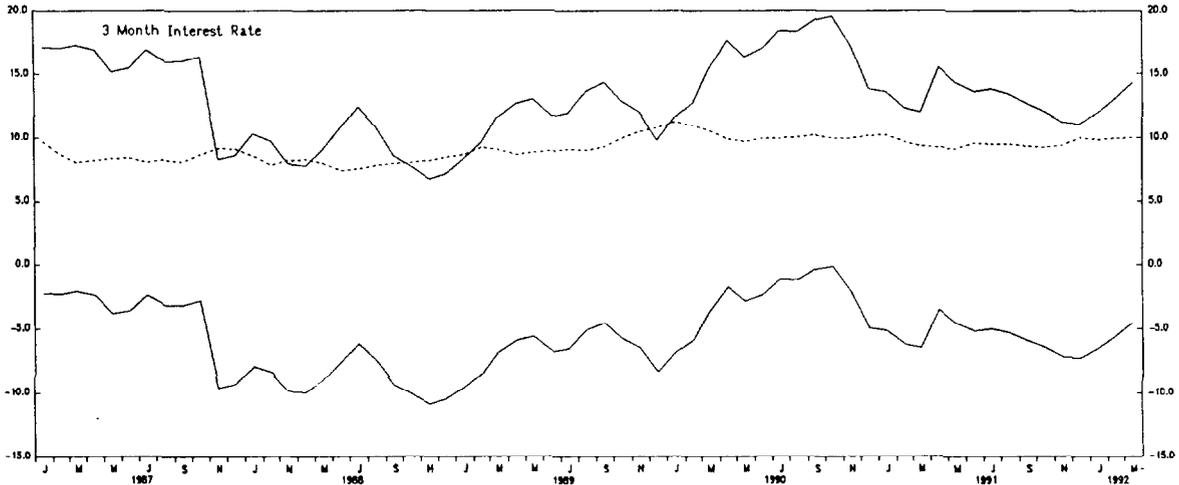
$$(s^L - s)/m \leq \Delta \bar{s}_{t+m}/m \leq (s^U - s)/m \quad (8)$$

which combined with (7) gives the following maximal bounds for the expected rate of realignment:

$$(i_t^m - i_t^{*m}) - (s_t^U - s_t)/m \leq E_t \Delta c_{t+m}/m \leq (i_t^m - i_t^{*m}) - (s_t^L - s_t)/m \quad (9)$$

CHART 8
FRANCE

Euro-Franc Interest Rates and "Credibility Bounds"
(In percent)



Source: IMF, staff calculations.

These bounds are shown as the solid lines in Charts 9 and 10. As can be seen, the bounds for the expected rate of realignment are wider the shorter the maturity. This reflects the fact that the maximal bounds for the expected rate of depreciation within the band are wider for shorter maturities.

4. Estimation of the expected rate of depreciation within the band

To calculate the expected rate of realignment from (7) it is necessary to estimate the expected rate of depreciation within the band. As noted in section 1 above, the simplest procedure is to assume that the expected rate of depreciation within the band is zero, that is, $E_t \Delta \bar{s}_{t+m}/m=0$, in which case the expected rate of devaluation is simply equal to the interest rate differential. This case can be ruled out *a priori*, however, since the exchange rate within the band cannot follow a random walk. Indeed, an *Augmented Dickey-Fuller* test rejected the hypothesis that \bar{s} has a unit root. 1/ An alternative procedure, following Bertola and Svensson (1990), Svensson (1990, 1991), and Rose and Svensson (1991), assumes initially that the future exchange rate within the band may be well approximated by the current exchange rate. 2/ The change in the exchange rate within the band, conditional upon no realignment, may thus be estimated from:

$$(\bar{s}_{t+m} - \bar{s}_t) = \beta_0 + \beta_1 \bar{s}_t + \epsilon_t \quad (10)$$

Estimates of the above equation are presented in Table 1 and plotted in Chart 9.

Two points about the estimation of equation (10) should be noted. One, a consequence of the target zone model is that the conditional distribution of the exchange rate within the band is heteroskedastic. Two, the projection horizons employed, $m = 3, 6,$ and 12 months, are longer than the sampling interval of the data (monthly). The use of overlapping observations implies that the error terms will follow a moving average process of order $m-1$. OLS will give consistent estimates of the coefficients, but their standard errors will be inappropriate. Consequently, Generalized Method of Moment (GMM) estimates have been used for the standard errors which are robust to heteroskedasticity and serial correlation as in Newey and West (1987).

1/ The regression of $\Delta \bar{s}_t$ on \bar{s}_{t-1} , three lags of $\Delta \bar{s}$ and a constant yields a D-F statistic of -2.312 with a corresponding p-value of 0.46, so that the null of cointegration is accepted.

2/ Supporting evidence is also reported by Chen and Giovannini (1992).

Table 1. France: Estimated Expected Change in the Franc/Deutsche Mark Exchange Rate Within the Band

(January 1987 - December 1991)

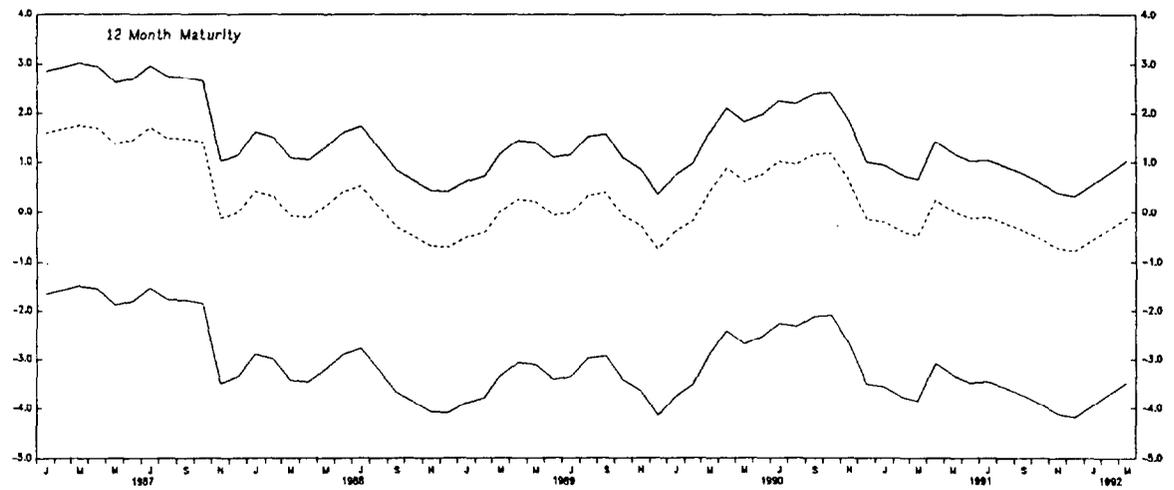
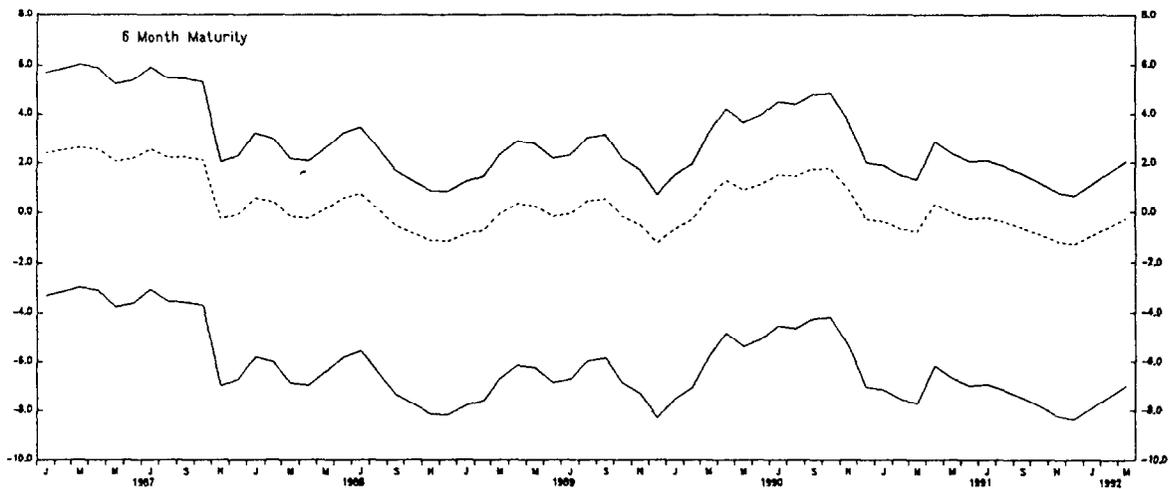
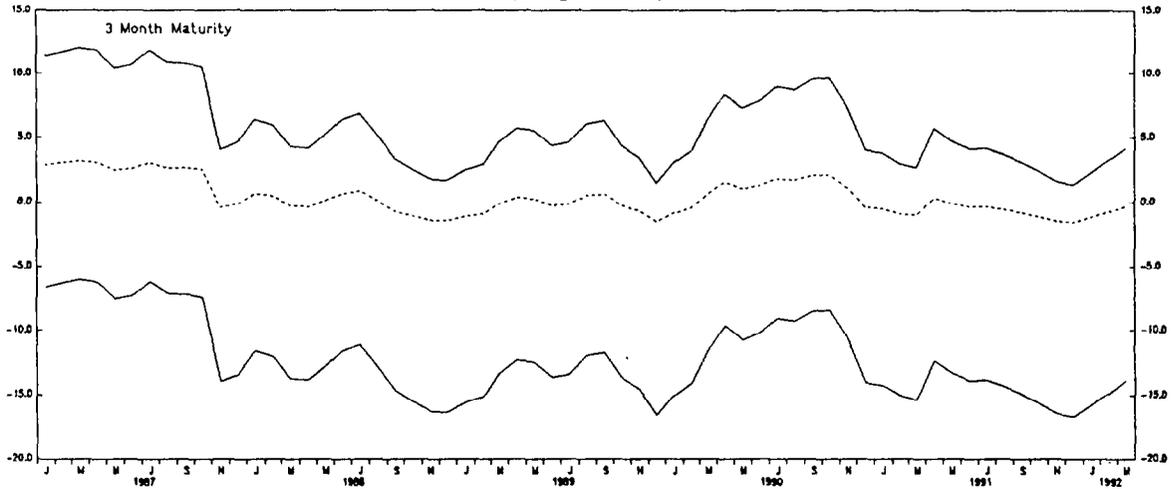
$$(\bar{s}_{t+m} - \bar{s}_t) = \beta_0 + \beta_1 \bar{s}_t + \epsilon_t$$

Coefficient	Maturity		
	m = 3 months	m = 6 months	m = 12 months
β_0	0.454 (2.553)	0.768 (3.756)	1.033 (7.628)
β_1	-0.443 (-3.073)	-0.732 (-3.792)	-0.943 (-15.541)
<u>Summary Statistics</u>			
Standard error	0.577	0.633	0.550
R-squared	0.269	0.444	0.652
F-stat ($\beta_1=0$)	21.34	43.93	91.64
Number of observations	60	57	51

Source: Staff estimates.

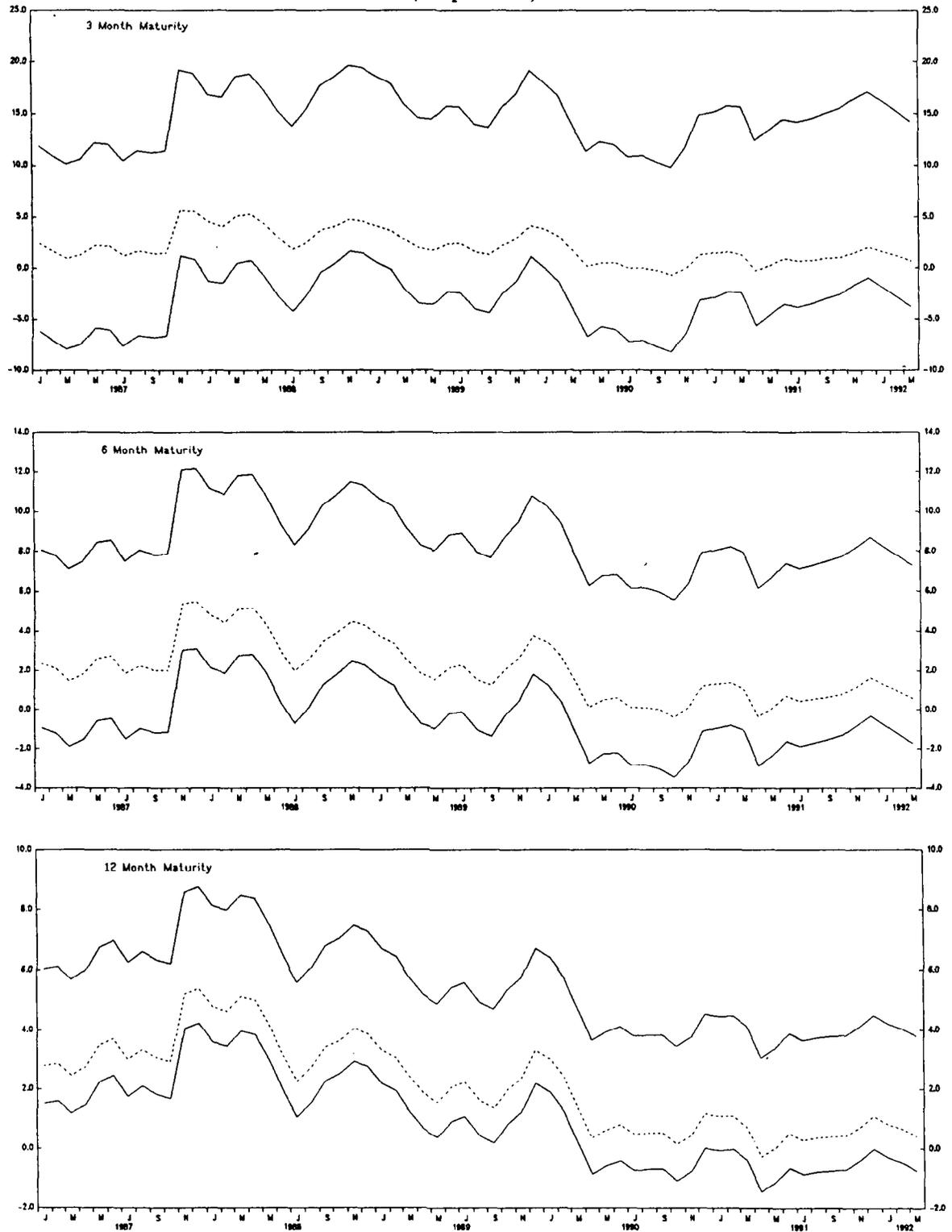
Note: The franc/deutsche mark rate within the Band (\bar{s}) is measured in percent log deviations from the franc/deutsche mark central parity. The standard errors of the coefficients are GMM estimates allowing for heteroskedastic and serially correlated error terms using the method of Newey and West (1987).

CHART 9
FRANCE
Expected Rate of Depreciation of Franc/DM
Exchange Rate Within the Intervention Band
(In percent)



Source: IMF, staff calculations.

CHART 10
FRANCE
Bounds for Expected Rate of Realignment
of Franc/DM Exchange Rate
(In percent)



Source: IMF, staff calculations.



The results indicate that the exchange rate within the band tends to revert to the middle of the band. The estimated slopes are negative for all maturities, as expected, and are large relative to their standard errors. Moreover, also as expected, the estimated slope is larger in absolute value the longer the maturity. The estimates also show that the expected change of the FF/DM exchange rate within the band has narrowed over the period January 1987 to March 1992 and has gradually turned from an expected depreciation in the early part of the period to an expected appreciation in the final part of the period (Chart 9).

An attempt was made to refine the estimates in Table 1 by the inclusion of additional explanatory variables in equation (9). First, \bar{s}^2 and \bar{s}^3 were included so as to capture possible nonlinearities in the relationship. These were found to be insignificant. Second, the mark-dollar interest differential for the corresponding maturity was included on the assumption that movements in it may affect the FF/DM exchange rate (Artus et al. (1991)). This too proved insignificant. The estimates in Table 1 are thus used to calculate the expected rate of realignment of the FF/DM exchange rate. These are shown in Chart 10.

5. Explaining the expected rate of realignment

This section examines whether the calculated expected rate of realignment can be explained by generally observed macroeconomic variables. 1/ It is assumed that in forming expectations of a currency's possible realignment, agents consider a number of factors, at home and abroad, that may induce a country to devalue. These include such factors as inflation differentials, changes in foreign exchange reserves, fiscal

1/ The two-step estimation procedure used in this chapter, namely first estimating the expected change in the exchange rate within the intervention band and, subsequently, estimating the determinants of the expected rate of realignment (constructed by adjusting interest rate differentials for the estimates from the first step), is not the only possible estimation strategy. For instance, one could estimate simultaneously the expected change in the exchange rate within the band and the determinants of the expected rate of realignment by estimating:

$$(i_t^m - i_t^{*m}) - (\bar{s}_{t+m} - \bar{s}_t)/m$$

on the rational expectations assumption that $E_t(\bar{s}_{t+m} - \bar{s}_t)$, conditional on no realignment, is equal to $(\bar{s}_{t+m} - \bar{s}_t)$. In this case, the disturbance of the estimated equation would include the expectations error $\bar{s}_{t+m} - E_t(\bar{s}_{t+m})$. The point to note is that whether in two steps or simultaneously, estimation of the expected rate of realignment requires an estimate of the expected change in the exchange rate within the band. Tests of hypotheses of the determinants of expected changes in the central parity are thus joint tests of the expected changes in the exchange rate within the band.

developments, unemployment rates, relative money supply growth, and other macroeconomic variables. They may also include other factors which influence market sentiment, such as the authorities' perceived policy behavior or commitment.

The results of regressing the calculated expected rates of realignment on a selected set of macroeconomic variables are shown in Table 2. For all three maturities the results are quite similar. Over 70 percent of the variation in the expected rate of devaluation is explained by the change in foreign exchange reserves, the government financing requirement (as a ratio to GDP) of France relative to Germany, the inflation differential, France's export price competitiveness relative to Germany's, the unemployment rate and, the (lagged) deviation of the franc/deutsche mark rate from the lower band. Relative money supply growth rates and the trade balance were also included, but they were found to have no additional explanatory power.

The government financing requirement and inflation variables are found to be positively related, and the competitiveness variable negatively related, to the expected rate of realignment. Thus, decreases in France's government financing requirement and in the inflation rate relative to Germany's decrease the expected rate of devaluation of the franc, as does an improvement in France's export price competitiveness relative to Germany's. The change in foreign exchange reserves enters the equations for the expected rate of realignment with the expected negative sign: an increase in reserves decreases the expected rate of devaluation. Its statistical significance, however, depends on the specification of the equation. In particular, when the unemployment rate is also included its statistical significance declines considerably. The unemployment rate itself, however, is highly significant. This raises an interesting point. In a recent paper, Drazen and Masson (1992) extend the notion of policy credibility to encompass not only the role of government policies in signaling the "type" of government (e.g., "tough," to use their terminology), but also the situation in which a government finds itself--since in very adverse circumstances even a policymaker with a reputation for being "tough" may renege on a commitment. Applied to the EMS, this suggests that the increased credibility of the EMS reflects the dominance of the signalling motive for setting policies as governments maintained their commitment not to realign. However, under the Drazen-Masson notion of credibility, expectations of realignment will also reflect pressures to increase employment and growth after a period of restrictive policies. The expected rate of devaluation will, therefore, be positively correlated with the rate of unemployment.

Table 2. France: Estimated Expected Rate of Realignment
of the Franc/Deutsche Mark Exchange Rate 1/

(February 1987 - November 1991)

Variable <u>2/</u>	Maturity		
	m = 3 months	m = 6 months	m = 12 months
Change in foreign exchange reserves	-0.118 (-1.42)	-0.097 (-1.29)	-0.088 (-1.23)
Government financing requirement <u>3/</u>	0.939 (2.86)	0.853 (2.38)	0.733 (2.18)
Inflation differential <u>4/</u>	0.744 (5.36)	0.794 (7.70)	0.842 (10.21)
Export price competitiveness <u>5/</u>	-0.245 (-5.10)	-0.249 (-5.58)	-0.243 (-7.79)
Unemployment rate	1.284 (4.31)	1.376 (5.34)	1.400 (6.75)
Deviation of franc/deutsche mark rate from lower ERM band	1.502 (6.63)	1.256 (6.41)	0.800 (4.61)
<u>Summary Statistics</u>			
Standard error	0.91	0.83	0.71
R-squared	0.73	0.76	0.81
F-statistic (6,51)	22.75	26.32	36.41
Number of observations	58	58	58

Source: Staff estimates.

1/ The expected rate of realignment is defined as the France-Germany interest rate differential minus the expected rate of depreciation within the band. The standard errors of the coefficients are GMM estimates allowing for heteroskedastic and serially correlated error terms using the method of Newey and West (1987).

2/ All variables enter the estimated equations with a one period lag, except the government borrowing requirement variable which enters with a two period lag. The coefficient for the constant term is omitted.

3/ The percent ratio in government borrowing requirement to GDP in France relative to Germany.

4/ Differential in the annual rates of change of consumer prices.

5/ Annual rate of change of real exchange rate, in terms of export prices. An increase represents an improvement in France's competitiveness relative to that of Germany.

The lagged deviation of the FF/DM rate from the lower band may be interpreted as capturing unquantifiable market sentiment. Its statistical significance suggests that when the franc trades close to the lower intervention band, market expectations of a realignment intensify and a risk premium is built into franc interest rates. As an alternative way of capturing intangible market sentiment, the deviation of the FF/DM rate from the lower band was replaced in the regression equations by a dummy variable which takes increasing values as the exchange rate approaches the lower intervention margin. 1/ The results were not qualitatively different. 2/ The statistical significance of these variables suggests that the recent policy of allowing the franc to strengthen in the ERM may pay off by way of a reduction of the risk premia on French short-term interest rates.

The analysis thus far has been conducted using short-term Euromarket deposit rates. Euromarket rates have the advantage over domestic money market rates in not being affected by the existence of capital controls. Since capital controls were being phased out over the sample period, it seemed preferable to use Euromarket rates. 3/ Euromarket rates are not available for long maturities, however, and the latter have the advantage that the expected rate of mean reversion of the exchange rate within the band becomes very small at long horizons. 4/ Since $E_t \Delta \bar{s}$ is bounded, the term $E_t \Delta \bar{s}_{t+m}/m$ in equation (7) becomes progressively smaller as the forecast horizon lengthens, so that the expected rate of devaluation is well approximated by the interest differential.

Table 3 reports the results of regressing the differential in the yield on long-term government bonds on the same set of macroeconomic variables used in the equations for the expected rate of realignment derived from Euromarket rates. The results are broadly similar. The inflation rate, competitiveness and the unemployment rate are again the major factors influencing devaluation expectations. The relative government financing requirement is not as significant as in the regression equations based on

1/ Specifically, the dummy variable was defined to take values of one when the FF/DM rate is in the bottom half of the intervention band, two when it is in the bottom quarter, and three when it is in the bottom eighth.

2/ The estimated coefficients on the dummy variable (with t-statistics in parantheses) in the equations using the three, six, and twelve month interest rates, respectively, are 1.205 (6.89), 1.00 (6.41) and 0.66 (5.33).

3/ Regulations other than capital controls, political and default risk, information and transaction costs and other factors may also introduce a wedge between domestic market and Euromarket rates. Changes in domestic market rates may, therefore, be due to actual or anticipated changes in these characteristics rather than in exchange risk. Empirically, however, capital controls have been found to constitute the major explainable component of spreads between Euromarket and domestic market rates.

4/ The results in section 4 above, indicate that the expected rate of mean reversion decreases as the horizon lengthens.

Table 3. France: Long-Term Interest Rate Differential
with Germany

(February 1987 - November 1991)

Variable	(1)	(2)
Change in foreign exchange reserves	-0.123 (-2.21)	-0.055 (-1.37)
Government financing requirement	0.562 (1.73)	0.179 (1.25)
Inflation differential	0.967 (8.17)	0.538 (9.55)
Export price competitiveness	-0.150 (-2.90)	-0.169 (-8.44)
Unemployment rate		1.065 (8.52)
Deviation of franc/deutsche mark rate from lower ERM band	0.086 (0.61)	
<u>Summary Statistics</u>		
Standard error	0.52	0.34
R-squared	0.80	0.92
F-statistic (5,52)	41.49	116.41
Number of observations	58	58

Source: Staff estimates.

Note: Interest rates are yields on 7-10 year government bonds. Method of estimation is OLS; robust standard errors are estimated using a spectral density kernel. The coefficient for the constant term is omitted.

short-term rates, however, and the market sentiment variables are insignificant. This last result is not surprising, as the current position of the franc in the intervention band should be of little relevance in forming exchange rate expectations several years hence: views of the long-term viability of the central rate are shaped by the unfolding of more fundamental economic factors.

6. Conclusions

The analysis in this chapter suggest that the the franc/deutsche mark exchange rate band has become increasingly credible since the last EMS realignment in January 1987. Expectations of realignments of the central parity have been found to be influenced by the evolution of fundamental economic factors such as inflation differentials, competitiveness, unemployment, government financing requirements, and foreign reserves. France's favorable economic performance, especially as regards inflation, the external position, and fiscal situation has allowed the implicit expected rate of devaluation to decrease considerably. The results further suggest that the devaluation risk premium on franc interest rates could be further reduced and differentials with respect to Germany additionally narrowed by an improved labor market performance and, in the case of short-term rates, by a strengthened position of the franc in the intervention band.

IV. Labor Market Policy in France 1/

1. Introduction

Labor market policy in France has a long history, going back at least to the establishment of the unemployment compensation system in 1958 and the establishment in the early to mid-1960s of institutions to treat the social consequences of industrial restructuring, to assist the unemployed to find jobs and re-integrate into the labor market, and to provide training. 2/ The extensive development of labor market policy, however, only began in the mid-1970s with the inexorable rise in unemployment. Expenditures on labor market programs have more than tripled since the mid-1970s as the authorities responded to the high and rising level of unemployment with additional or more extensive measures. The policy response also has undergone various shifts of emphasis as the nature of the unemployment problem changed or priorities altered. This chapter describes the evolution of labor market policies, their scope, objectives and effectiveness. The description of policies is restricted to the various programs aimed at reducing unemployment and does not cover aspects such as minimum wage laws, the unemployment benefits system and regulations which may influence the wage formation process or the functioning of the labor market more generally.

2. Characteristics of unemployment

Unemployment rose every year between 1974 and 1987, from 2.8 percent of the labor force to 10.5 percent. It subsequently declined by about one-half of a percentage point for the next three years but rose again in 1991 (Table 4). In June 1992 it stood at 10.3 percent. The uninterrupted rise of unemployment from the early 1970s to the late 1980s was not a development unique to France: rather, it was characteristic of other central and western European countries (Table 5).

One of the important features of the rise in unemployment is that it was associated with an increase in long-term unemployment. The ratio of long-term unemployed (that is, those unemployed for over one year) to total unemployed rose from 17 percent in 1975 to 44 percent in 1987. Since 1987 that proportion has declined, but remains very high: more than double that in 1975. Reflecting this development, the average duration of unemployment has risen from 7.6 months in 1975 to 14.5 months in 1991. Currently, the

1/ Prepared by Francesco Caramazza.

2/ The institutions responsible for administering these aspects of employment policy, UNEDIC (Union National Interprofessionnelle pour l'Emploi dans l'Industrie et le Commerce) for unemployment compensation, FNE (Fonds National de l'Emploi) for the treatment of the social consequences of industrial restructuring, ANPE (Agence National pour l'Emploi) for help in finding employment, and AFPA (Association pour la Formation Professionnelle des Adultes) for manpower training have remained the same, but their functions have evolved over the years.

Table 4. France: Characteristics of Unemployment

(In percent)

	1975	1980	1986	1987	1988	1989	1990	1991
Unemployment rate	4.0	6.3	10.4	10.5	10.0	9.4	8.9	9.3
Male	2.8	4.2	8.4	8.3	7.7	7.0	6.7	7.2
Female	6.1	9.4	13.1	13.6	13.1	12.6	11.9	12.2
By age group								
15-24 years	8.9	15.0	22.8	22.0	20.4	18.4	17.5	18.6
25-49 years	2.9	4.3	8.2	8.6	8.4	8.2	7.8	8.2
50-64 years	2.7	4.6	7.1	7.7	7.5	7.0	6.5	6.8
By duration (in percent of total)								
Less than 3 months	36.6	25.4	16.7	16.9	17.6	18.4	22.3	20.9
3-12 months	46.5	42.2	37.1	36.9	35.4	35.3	34.9	36.5
More than 1 year	16.9	32.4	42.7	44.0	43.0	42.0	37.8	37.0
Average duration (months)	7.6	11.6	15.7	16.6	16.6	16.3	14.6	14.5

Sources: INSEE, Rapport sur les Comptes de la Nation.

Table 5. France: Unemployment Trends Across Countries

(In percent)

	Standardised unemployment rate						Long-term unemployment share ¹					
	1973	1979	1987	1989	1990	1991	1973	1979	1987	1989	1990	1991
United States	4.8	5.8	6.1	5.2	5.4	6.6	3.3	4.2	8.1	5.7	5.6	
Japan	1.3	2.1	2.8	2.3	2.1	2.1	..	16.8	20.2	18.7	19.1	
Germany	0.8	3.2	6.2	5.6	4.9	4.3	8.5	28.7	48.2	49.0	..	
France	2.7	5.9	10.5	9.4	8.9	9.4	21.6	30.3	45.5	43.9	..	
United Kingdom	3.0	5.0	10.3	7.1	6.8	8.9	26.9	29.5	45.9	40.8	..	
Italy	6.2	7.6	10.9	10.9	10.3	9.9	..	51.2	66.4	70.4	..	
Canada	5.5	7.4	8.8	7.5	8.1	10.2	..	3.4	9.4	6.8	5.7	
Belgium	2.7	8.2	11.0	8.0	7.3	7.7	51.0	61.5	74.9	76.3	..	
Netherlands	2.2	5.4	9.6	8.3	7.5	6.9	12.8	35.9	45.6	49.9	..	

	Unemployment rate											
	1973	1979	Youth ²		1990	1991	1973	1979	Female		1990	1991
			1987	1989					1987	1989		
United States	9.9	11.3	11.7	10.5	10.7	12.9	6.0	6.8	6.2	5.3	5.4	6.3
Japan	2.3	3.4	5.2	4.5	4.3	..	1.2	2.0	2.8	2.3	2.2	2.2
Germany	0.9	3.4	8.1	..	..	..	1.2	4.5	8.8	8.1	7.4	6.3
France	4.0	13.3	23.0	19.1	19.3	..	4.6	8.5	13.5	12.6	12.0	12.3
United Kingdom	3.1	10.3	17.3	8.3	8.1	..	0.9	3.3	7.6	4.0	3.3	4.4
Italy	12.6	25.6	35.5	33.6	31.4	..	11.4	13.1	18.5	18.6	17.4	16.7
Canada	10.1	12.9	13.7	11.3	12.8	16.2	6.7	8.7	9.3	7.8	8.1	9.7
Belgium	..	..	..	..	..	..	3.4	12.8	16.4	13.7	12.8	..
Netherlands	..	..	..	..	..	..	1.8	6.7	13.6	11.5	10.7	..

1. Proportion of those unemployed for more than one year in total unemployment.

2. 15-16 to 25 age group.

Sources: OECD, *Economic Outlook, Employment Outlook and Labour Force Statistics*, Part III.

long-term unemployed are mostly workers between 25 and 44 years of age. The proportion of long-term unemployed accounted for by this age group rose steadily from about 40 percent in the mid-1970s and 60 percent in the late 1980s. In comparison, the share of long-term unemployed made up by youths (less than 25 years of age) followed an inverted V: it increased until the mid-1980s and then declined; it is now at about the same level as it was in the mid-1970s, approximately 20 percent. The incidence of long-term unemployment is higher for the least skilled and for women.

Two other characteristics of unemployment should be noted. One, the incidence of unemployment has increased more for men than for women. This reflects the fact that employment in industry and agriculture has declined steadily, whereas employment in services--which employs relatively more women than the other sectors--has increased. But the unemployment rate is still much higher for women. Two, unemployment has risen for all age groups in roughly equal proportions. These characteristics mask some important developments, however. Specifically, the participation rates of youths and of older workers (50 years of age and over) has declined substantially since the mid-1970s, largely in response to policies aimed at delaying the entry of youths in the labor market and advancing the effective retirement age. In contrast, the participation rate of women in the 25-49 years age group has increased markedly, from 59 percent in 1975 to 75 percent in 1991 (Table 6). 1/ Nevertheless, because of their high rates, unemployment of youths and women is a particularly acute problem.

The reasons for the persistently high rate of unemployment are multiple and complex. In an accounting sense, aggregate output and employment have not grown fast enough given the increase in population of working age. More fundamentally, the insufficient growth of output and employment has been ascribed to a number of factors (not necessarily mutually independent): too high real wages; a too low rate of growth of the capital stock, in turn related to a decline in the profitability of investment; skill mismatches; minimum wage laws; aspects of the unemployment compensation system; lagging product innovation and nonprice competitiveness of firms; and insufficient demand. (A description of unemployment in France in terms of classical, compositional and Keynesian components may be found in last year's staff report.) 2/ Whatever the relative contribution of these factors, it is widely recognized that the labor market is operating less efficiently in

1/ The increase in the participation rate of females of all age groups taken together has been much smaller, however, and less than half as large as the decline in the participation rate of males, so that the participation rate as a whole has declined--a development unique to France amongst the major industrial countries (OECD (1991)).

2/ The Rapport sur le Comptes de la Nation de l'Année 1991 provides a description of the evolution of unemployment in the 1980s, the role of demand and supply factors and of rigidities in the functioning of the labor market.

Table 6. France: Participation Rates by Age Group

(In percent)

	1975	1980	1987	1988	1989	1990	1991
15-24 years							
Male	55.7	52.7	46.3	43.5	42.3	40.8	38.6
Female	45.7	43.1	38.7	36.1	35.2	33.6	31.6
25-49 years							
Male	97.0	97.2	96.7	96.5	96.4	96.2	96.1
Female	58.9	65.2	72.2	72.9	73.4	74.0	74.9
50 years and over							
Male	50.9	48.0	38.6	38.0	37.4	36.0	34.8
Female	23.8	24.0	21.5	21.3	21.3	20.7	20.4
60 years and over							
Male	26.2	17.3	11.2	10.9	10.4	9.4	8.3
Female	11.5	7.8	6.0	5.8	5.8	5.3	5.0
Total							
Male	72.6	71.0	66.5	65.7	65.5	64.8	64.2
Female	42.3	44.4	45.8	45.6	45.8	45.8	45.9

Source: INSEE, Rapport sur le Comptes de la Nation.

matching the unemployed to the available vacancies and that this loss of efficiency results in higher unemployment. ^{1/} Labor market policies may thus be viewed as a way of improving market efficiency and consequently of reducing the equilibrium rate of unemployment.

3. Principal objectives of labor market policies

Labor market policy in France has been organized around three principal objectives:

- (a) the integration or reintegration into the labor market of youths, the long-term unemployed and other hard-to-place groups;
- (b) direct assistance to job creation and employment promotion; and
- (c) the treatment of the social consequences of industrial restructuring and modernization.

To facilitate the employment (integration or reintegration) of various focus groups, policy has resorted to numerous guidance and training schemes and diverse employment contracts in the market and nonmarket sector. All of these measures have been based on subsidies that reduce the cost of employment so as to compensate for the lower productivity of the beneficiaries. The measures adopted have been too numerous and modified too frequently to be enumerated. In fact, their complexity and the continual changes have hampered their effectiveness. Since 1990, however, they have been consolidated and simplified considerably. Their number has been cut in half, but they still amount to over a dozen. The main measures are the Integration and Training Actions (actions d'insertion et de formation--AIF) for the long-term unemployed and the related Individualized Training Credit (crédit-formation individualisé--CFI) for youths; the Employment-Solidarity Contract (contrats emploi-solidarité--CES) directed at all groups difficult to integrate; and the Return to Employment Contract (contrat de retour à l'emploi--CRE) for the long-term unemployed.

- The AIF and CFI are diversified training courses in training centers lasting less than six months. They are meant to be very flexible so as to better respond to the individual needs and occupational aspirations of the trainees. In 1991, 183,000 long-term unemployed entered the AIFs and 171,000 youths made use of the CFIs for a total 354,000 beneficiaries (23 percent of total entrants in labor market programs).

- The CES is a fixed-term contract for part-time work in the nonmarket sector (local authorities, associations, public establishments). The recipient is paid on the basis of the minimum wage, with the State covering most of the wage bill. The average duration of contracts is eight months--a maximum duration of 24 months is reserved for the long-term unemployed.

^{1/} The relationship between the unemployment rate and job vacancies in equilibrium has worsened as the Beveridge curve has shifted outward. Hence, a given supply of vacancies is associated with a higher unemployment rate (Bourdet and Persson (1991), Jackman, Pissarides and Savouri (1990)).

In 1991, 405,000 contracts were concluded (26 percent of total entrants in labor market programs). The beneficiaries of the programs which the CES replaced in 1990 were predominantly youths, and although youths still accounted for 61 percent of the beneficiaries in 1991, the number of adults who concluded contracts in 1991 doubled. Two-thirds of CES recipients are women. 1/

- The CRE is an employment contract in the market sector of at least six months duration (but of no maximum duration), typically for full-time work and which may pay more than the minimum wage. The State reduces the employment cost to the enterprise by giving a grant of F 10,000 and by covering the full cost of the employer's social security contributions for a relatively long period (at least nine months) depending on the type of recipient. Ninety-nine thousand return-to-employment contracts were entered into in 1991 (6 1/2 percent of total entrants in labor market programs).

Direct assistance to job creation and employment promotion have relied on work sharing and reductions of the cost of labor. Work sharing was relied on mainly in the early 1980s and took the form of reductions in the work week. In 1990 a tax credit was introduced to induce negotiated reductions in work time and more recently the authorities have been encouraging part-time work. The main programs of direct assistance to job creation, however, are the measures which reduce the cost of labor in the market sector via exemptions 2/ from payment, or reductions, of social security charges and derogations from the minimum wage for youths. These include measures which provide:

- exemption from employer social security contributions for the first employee hired;

- exemption (partial or full depending on the conditions) from payment of payroll taxes for 18 months when hiring youths without qualifications for regular employment paying up to 120 percent of the minimum wage (SMIC); 3/

1/ Since the CES are employment contracts, recipients become eligible for unemployment benefits at the end of the contract. This feature has tended to draw into the labor force some who would have otherwise stayed out.

2/ For the most part these are temporary exemptions not extending beyond two years.

3/ This scheme does not provide any obligation for training.

- exemption from employer social security contributions when hiring unqualified youths for fixed-term "orientation contracts" (*contrat d'orientation*) of three to six months duration at 30 to 65 percent of the SMIC and which provide training; 1/

- exemption from employer contributions when hiring youths for apprenticeship contracts of one to three years duration at 15 to 75 percent of the SMIC and which provide at least 400 hours of training per year in apprenticeship centers;

- exemption from social security charges plus a tax exemption when hiring youths for (professional) qualification contracts of six months to two years duration at 17 percent to 75 percent of the SMIC and in which at least 1/4 of the time is spent in a training center;

- tax exemption when hiring qualified youths for adaptation contracts (*contrat d'adaptation*) of at least six months duration paid at the SMIC and which provide 200 hours of in-house training.

All of these schemes together resulted in 440,000 contracts being entered into in 1991 (approximately 30 percent of total entrants in labor market programs). In addition to these schemes, last year the authorities began granting households an income tax credit of 50 percent when hiring someone to work in the home. 2/

Policies to deal with the consequences of industrial restructuring until the mid-1980s centered on providing income support, notably through extensive recourse to early retirement measures. Since 1985 and especially since 1989, the emphasis on incentives to accelerated exit from the labor force has been gradually replaced by programs, essentially administered by the social partners, to rehabilitate laid-off workers and avoid lay-offs by fostering mobility within enterprises through training and guidance. In 1991, there were 67,000 entrants into these programs, more than double the number in 1989, compared to 44,000 new entrants into early retirement, the same number as in 1989. In addition to these programs, since 1985, dispensation from job search for the unemployed close to retirement age, while allowing them to continue to receive unemployment benefits, has considerably reduced the number of registered unemployed. 3/

Labor market policy has undergone various shifts of emphasis in the course of time, and so has the balance between the various kinds of

1/ The contracts provide for 32 hours of training per month and the proportion of the minimum wage paid depends on the employees age. Sixty-five percent of the SMIC is paid for those over 21 years of age. The *contrat d'orientation* replaced the *stage d'initiation a la vie professionnelle* (SIVP) in January 1992.

2/ The tax credit has a limit of F 12,500.

3/ This is reflected in the decline in the participation rate for the over 55 years of age.

programs. Policy initially focused on youth training schemes as a way of reducing, if only temporarily, the labor force. Subsequently early retirement became the favored tool; but this proved too costly for the public finances and since the mid-1980s has been steadily de-emphasized. The accent was then placed once again on the insertion of youths and more recently on the reinsertion of the long-term unemployed. But in the last couple of years the distinction between youths and long-term unemployed adults has tended to be superseded by a general priority to unemployed particularly hard to place--that is, measures partitioned by categories of targeted groups have been progressively replaced by programs open to all of the least employable of the unemployed. The following three sections describe in broad detail participation in labor market policies, the evolution of the structure of labor market programs, and expenditures on labor market programs.

4. Participation in labor market policies

Labor market policy in France involves the participation of the central government, the social partners, regional and local authorities, and private enterprises. Of the total expenditures on labor market policies, including unemployment compensation and enterprise-related training, the central government accounts for 37 percent, the social partners for 42 percent, the regional and local authorities for 2 percent and enterprises for 18 percent. The central government's involvement is the most pervasive, covering legislation, fiscal measures, and participation via various institutions in training and apprenticeship schemes and employment contracts. The social partners participate mainly through their management of the unemployment compensation system and, to a lesser extent, through training and placement assistance schemes for the unemployed. The regional and local authorities participate in various training and apprenticeship schemes, reintegration of the long-term unemployed, and local initiatives. As their relative financial contribution insinuates, however, their role is mainly administrative. Private enterprises are essentially involved in the training of their employees. France has had a national training tax since 1971. At present the tax is 1.2 percent of the wage bill. Firms can avoid paying the levy by spending it on legally prescribed training activities. In fact, enterprises on average spend much more than the legally prescribed amount: currently 3 percent of the wage bill. Expenditure on labor market programs is discussed in greater detail in section 6.

5. Structure of labor market programs

In response to an excess supply of labor, policy could either aim to stimulate demand for labor by subsidizing employment in particular sectors or of particular groups, or aim to reduce labor supply by providing incentives to withdraw from the labor force. Policy in France has done both, to varying degrees. Until the mid-1980s the emphasis was on reduction of the labor force; subsequently, especially in the past few years, the emphasis was on the promotion of employment.

Policy measures designed to reduce the labor force, either temporarily or permanently, include training programs for youths, the long-term unemployed or other categories of unemployed, and early retirement and dispensation from job search. ^{1/} Measures to promote employment and job creation may be grouped into two broad categories: assistance to employment in the market sector, and assistance to employment in the nonmarket sector. The former set of measures encompasses training and apprenticeship schemes in enterprises and exemptions or reductions of social security charges. The latter set of measures (now) consist of fixed-term contracts for part-time work in the nonmarket sector (communities, hospitals, public bodies and associations). The number of beneficiaries of labor market programs based on the above classification is reported in Table 7, while the evolution of the structure of the programs is shown in Table 8.

As Table 7 reveals, the scope of labor market programs has expanded considerably since the mid-1970s. The average annual stock of beneficiaries has increased eleven fold from 1975 to 1991, that is from 138,000 to 1,558,000. Since over the same period unemployment also increased--from 901,000 to 2,297,000--a more meaningful measure of the increased scope of labor market programs is given by the ratio of beneficiaries to unemployed. This ratio rose from 15 percent and 68 percent. Excluding early retirement, that is, considering only so-called "active" labor market policies, the number of beneficiaries increased from 63,000 to 1,269,000, or from 7 percent to 55 percent of unemployment.

Labor market policy has evolved from a focus on reduction of the labor force to direct job creation and promotion of employment. This shift in focus has been particularly evident since the mid-1980s. For instance, of the total number of beneficiaries of labor market programs in 1985, only one third benefited from assistance to employment, but in 1991, two thirds benefited from such schemes. Participation in professional training schemes has remained fairly constant over the past decade. The major changes have been a shift away from heavy emphasis on early retirement and dispensation from job search to greater reliance on direct, temporary job creation in the nonmarket sector and the provision of fiscal incentives to the private sector to hire or train specified demographic groups or hard-to-place unemployed.

6. Expenditure on labor market programs

Total expenditure on labor market programs, that is, including unemployment compensation, increased from 0.9 percent of GDP in 1973 to 3.3 percent in 1990 (Table 9). From an international perspective, France is among the countries which devote the most resources to employment policy. Indeed, France spends more (as a proportion of GDP) on labor market programs than any other major industrial country. Only some of the smaller industrial countries such as Belgium, Denmark and the Netherlands spend more.

^{1/} Each of these categories embraces several schemes targeted at various types of beneficiaries.

Table 7. France: Beneficiaries of Labor Market Programs by Major Category

(Average number of beneficiaries in thousands)

	1975	1977	1979	1981	1983	1985	1986	1987	1988	1989	1990	1991	1992 <u>1/</u>
Assistance to employment in market sector	1	94	331	467	289	277	458	782	563	679	761	813	899
Assistance to employment in nonmarket sector	--	--	--	--	8	123	195	202	204	189	180	246	273
Professional training	62	79	89	83	112	135	145	149	198	171	192	210	185
Early retirement	75	102	158	280	650	637	561	470	394	400	337	289	230
Total	138	275	578	830	1,059	1,172	1,359	1,603	1,359	1,439	1,470	1,558	1,587
Memorandum item: Unemployed	901	1,134	1,361	1,750	1,974	2,442	2,490	2,532	2,410	2,285	2,181	2,297	2,472
Ratio of beneficiaries of employment and training programs to unemployed (in percent)	7	15	31	31	21	22	32	45	40	43	52	55	55

Sources: Cornilleau, Marioni and Roguet (1990); INSEE, Rapport sur les Comptes de la Nation; and data provided by the authorities.1/ Projections.

Table 8. France: Evolution of the Structure of Labor Market Programs,
Beneficiaries by Major Category as a Proportion of Total Beneficiaries

(In percent)

	1975	1977	1979	1981	1983	1985	1986	1987	1988	1989	1990	1991	1992 ^{1/}
Assistance to employment in market sector (Of which measures for adults)	1	34	57	56	27	24	34	49	41	47 (10)	52 (14)	52 (18)	57 (18)
Assistance to employment in nonmarket sector	--	--	--	--	--	10	14	13	15	13	12	16	17
Professional training	45	29	15	10	11	12	11	9	15	12	13	13	12
Early retirement	54	37	27	34	61	54	41	29	29	28	23	19	15
Memorandum item: Assistance to employment and training	46	63	72	66	38	46	59	71	71	72	77	81	86

Source: Table 4.

^{1/} Projections.

Table 9. France: Total Expenditure on Labor Market Programs

	1973	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Expenditure in current prices FF billions	10.2	64.8	89.4	117.2	140.7	153.0	170.1	183.3	192.3	200.4	201.7	217.1
Expenditure in constant 1980 prices (percent change)	32.6 --	64.8 (4.9)	78.9 (21.7)	92.4 (17.2)	101.2 (9.5)	102.5 (1.3)	107.6 (5.0)	113.0 (5.0)	115.0 (1.7)	116.7 (1.5)	113.3 (-2.9)	117.9 (4.1)
Expenditure as a percent of GDP	0.9	2.3	2.8	3.2	3.5	3.5	3.6	3.6	3.6	3.5	3.3	3.3
Expenditure per person 15-59 years FF	0.3	2.0	2.7	3.6	4.3	4.6	5.1	5.5	5.7	5.9	5.9	6.3
In constant 1980 prices	1.1	2.0	2.4	2.8	3.1	3.1	3.2	3.4	3.4	3.4	3.3	3.4
Expenditure per unemployed FF thousands	17.2	44.2	51.1	61.0	71.3	65.9	69.7	73.6	76.0	83.1	83.7	99.6
In constant 1980 prices	55.0	44.2	45.1	48.1	51.3	44.1	44.1	45.4	45.4	48.4	47.0	54.1
Memorandum item: Change in unemployment rate (percentage)	--	0.4	1.1	0.7	0.2	1.4	0.5	0.2	0.1	-0.5	-0.6	-0.5

Sources: Ministère du Travail, de l'Emploi et de la Formation professionnelle; INSEE, Rapport sur les Comptes de la Nation; and staff calculations.

The upward shift in expenditures noted above occurred mainly in the late 1970s and early 1980s. Total expenditures as a proportion of GDP reached 3.2 percent in 1982, stabilized at the 3.5 percent to 3.6 percent level from 1983 to 1988, and then declined to 3.3 percent in 1989 and 1990. In constant prices, expenditures declined only in one year, 1989. As a ratio of the population of working age (15 through 59 years), expenditure in constant prices has also tripled since the mid-1970s. Again, the increase took place mainly in the late 1970s and early 1980s--since 1986 the ratio has remained at about 3.4 percent. As a ratio of unemployment, expenditure in constant prices has exhibited more variation, increasing as the change in the unemployment rate declined and decreasing as unemployment accelerated. The structure of expenditures, in particular the distinction between active and passive expenditures, at the beginning of the 1990s was not much different from what it was at the start of the 1980s (Table 10). In 1990, expenditures on unemployment compensation made up 40 percent of total expenditures, essentially the same as in 1980. Expenditures on early retirement composed 17.5 percent of total expenditures, again essentially the same proportion as in 1980. Passive labor market expenditures (i.e., spending on early retirement and unemployment compensation) thus formed 58 percent of total expenditures, while active expenditures constituted only 42 percent in both 1980 and 1990. ^{1/} In the intervening years, however, the proportion of expenditures on active labor market policies was even lower as the rapid growth of spending on early retirement measures in the early to mid-1980s raised the share of passive expenditures. Between 1980 and 1985, active expenditures rose, on average, at an annual rate of 15.3 percent per year, whereas passive expenditures rose at an annual rate of 25.1 percent. In 1985, two-thirds of all expenditures were for unemployment compensation and early retirement schemes. Since the mid-1980s, however, the share of active measures has risen as policy de-emphasized early retirement as a way of combatting unemployment and devoted more resources to manpower training and employment assistance. Thus, between 1985 and 1990 active expenditures increased at an annual rate of 10.5 percent, whereas passive expenditures rose at an annual rate of only 1.8 percent. ^{2/} In terms of the budgetary cost of labor market programs, the shift in focus in recent years is even more apparent: the budgetary cost of early retirement fell from F 26.3 billion (or 73 percent) in 1985 to F 15 billion (or 28 percent) in 1991, whereas the cost of assistance to employment rose from F 6.1 billion (or 17 percent) to F 28.1 billion (or 53 percent), most of it devoted to the market sector (Table 11).

^{1/} By international standards, the share of active measures in public spending on labor market programs has been low in France. In 1990 it was 30 percent compared to 41 percent for the OECD countries on average (OECD, Employment Outlook, 1992).

^{2/} The evolution of active and passive expenditures in the latter half of the 1980s is described in greater detail in Roguet and Salzberg (1991).

Table 10. France: Evolution of the Structure of Expenditure on Labor Market Programs

(In percent)

	1973	1980	1987	1988	1989	1990
Active	65.9	42.4	37.2	39.1	40.3	42.4
Employment promotion and job creation	4.9	4.1	7.6	6.2	5.6	6.7
Employment maintenance	1.4	3.9	1.5	1.4	1.3	1.4
Incentives to labor force participation	0.8	2.1	2.0	1.9	2.1	2.1
Functioning of labor market	12.6	1.6	1.4	1.4	1.5	1.8
Professional training	56.2	30.6	24.8	28.2	29.8	30.5
Passive	34.1	57.6	62.8	60.9	59.7	57.6
Early retirement	15.5	17.3	25.7	22.5	20.4	17.5
Unemployment compensation	18.6	40.4	37.1	38.3	39.3	40.1

Source: Ministère du Travail, de l'Emploi et de la Formation Professionnelle.

Table 11. France: Budgetary Cost of Labor Market Programs

(In billions of francs)

	1985	1986	1987	1988	1989	1990	1991
Total budgetary cost	36.1	39.6	42.9	46.5	45.7	49.2	52.8
Of which:							
Assistance to employment (In market sector)	6.1	10.3 (6.4)	16.2 (12.0)	16.2 (11.8)	16.3 (12.6)	19.1 (16.0)	28.1 (21.2)
Professional training	3.7	4.9	5.5	11.5	11.7	13.0	9.8
Early retirement	26.3	24.5	21.2	18.9	17.7	17.1	15.0

Sources: Direction de la Prévision; and staff calculations.

The structure of expenditures makes clear that the "social treatment" of unemployment has been the dominant approach to labor market policy in France. This approach emphasizes the equity objectives of policy--the provision of financial support for the unemployed and disadvantaged groups--in contrast to the "economic treatment" of unemployment, where labor market policy concentrates on efficiency objectives--the facilitation of labor market clearance by selective demand and supply side measures aimed at improving the functioning of the labor market. ^{1/2/} A gauge of the "social treatment" of unemployment is obtained by comparing public spending on socially motivated programs for unemployment reduction to public spending on targeted programs to help the unemployed (and those at risk of becoming unemployed) to find regular jobs. ^{3/} Since the mid-1980s, the ratio of public expenditure on targeted programs for the unemployed to that on "social programs" has ranged from 13 to 18 percent. This is a rather low ratio not only in absolute terms, but also relative to that of most other major industrialized countries. As can be seen from Table 12, the "social treatment" of unemployment is dominant in all countries, but particularly so in Belgium, the Netherlands, and France among European countries.

In the past few years, labor market programs and income support systems in France have been revised to emphasize reintegration in the labor market. In 1989, a new minimum guaranteed income scheme, (*revenu minimum d'insertion*--RMI) was introduced whose novelty compared to foreign schemes is supposed to rest on its "integration" aspect. The RMI is intended not only to provide financial support for the most needy (largely long-term unemployed), but to do so in a way which links income support with measures designed to combat social marginalization and to foster the reintegration of recipients into employment. Except for some training courses financed by the territorial bodies no specific employment programs for the recipients of the RMI were established. Rather, the plan was to make the RMI users priority beneficiaries of existing measures for the unemployed, especially the more recent programs aimed at the long-term unemployed. These include help with job search techniques, occupational guidance, lengthy training

^{1/} A description of the evolution of the concepts underlying labor market policies in OECD countries may be found in Schwanse, Scherer and Reutersward (1991).

^{2/} The distinction is sometimes also made between the "employment principle," where the focus is finding jobs for the unemployed, and the "benefit principle," where the goal is to provide financial support for the unemployed (Jackman, Pissarides and Savouri (1990)).

^{3/} Expenditure on socially motivated programs includes unemployment compensation and spending on early retirement for labor market reasons, direct job creation in the public or non-profit sector and sheltered work for the disabled. Expenditure on targeted programs includes training for unemployed adults (and those at risk of becoming unemployed), measures for unemployed and disadvantaged youths, subsidies to regular employment in the private sector, support of unemployed persons starting enterprises, and rehabilitation and recruitment subsidies for the disabled.

Table 12. France: Public Expenditure on Labor Market Programs: by Objectives 1/

(Percent of GDP)

Country	Programs to help unemployed and disadvantaged to find regular jobs <u>2/</u> (1)	Non-targeted programs aimed at regular jobs <u>3/</u> (2)	Socially motivated programs <u>4/</u> (3)	Ratio of (1) to (3) in percent (4)
France	0.36	0.19	1.97	14
Belgium	0.22	0.04	3.48	6
Netherlands	0.20	0.07	2.95	7
Italy	0.29	0.43	0.72	40
Germany	0.51	0.09	1.36	38
United Kingdom	0.22	0.21	0.92	24
Denmark	1.07	0.07	4.62	23
Norway	0.49	0.03	1.48	33
Sweden	0.61	0.02	1.40	44
Japan	0.01	0.10	0.32	3
Canada	0.23	0.05	1.59	14
United States	0.16	--	0.61	26

Sources: OECD (1991); and Fund staff estimates.

1/ Excludes expenditure on public employment services and administration. Data refer to the most recent year for which they are available, either 1990 or 1989.

2/ Includes training for unemployed adults and "those at risk," measures for unemployed and disadvantaged youth, subsidies to regular employment in the private sector, support of unemployed persons starting enterprises, and rehabilitation and recruitment subsidies for the disabled.

3/ Includes training for employed adults, support of apprenticeships and related forms of general youth training, and subsidies to regular employment in the private sector.

4/ Includes unemployment compensation, early retirement for labor market reasons, direct job creation in the public or non-profit sector, and sheltered work for the disabled.

courses, and some form of nonregular employment contract (*contrat emploi-solidarité--CES*, *contrat de retour à l'emploi--CRE*). Moreover, to prevent the RMI from being a disincentive to work, the structure and level of allowances was set so that the recipient household, irrespective of its composition, would benefit significantly if at least one of its members worked full-time, even at the minimum wage. On the basis of the low RMI exit rate, the integration component of the RMI must be judged a limited success. ^{1/} Nevertheless, a national commission charged with evaluating the scheme judged it to be sufficiently successful to recommend, in March 1992, that it be maintained with minor modifications.

7. Effect of labor market programs on unemployment

The evolution of unemployment, and the form it takes, depends on the amplitude of labor market policies as well as their composition and the groups targeted. To evaluate the effect of labor market programs on (the stock of) unemployment one needs to know the programs' effect on the rate of outflow from unemployment and on the rate of inflow, all else remaining unchanged. A full assessment requires not only an estimate of the direct effect on unemployment, but also of the budgetary consequences and of the indirect (or secondary) effects of the reduction on unemployment on inflation, competitiveness, and growth. In any event, it is necessary to know not merely the programs' impact on employment but also that on the labor force, since the programs (apart from any direct effect they may have on labor supply through early retirement, training schemes, etc.) will tend to encourage entry into the labor force of discouraged workers, youths who may have stayed in school, or other potential labor force members not previously active. Evaluations of the programs' impact on unemployment will thus depend on the assumptions, or estimates, made concerning the various measures' impact on net job creation, i.e., taking into account job displacement and substitution, and of the labor supply response to the situation of the labor market.

Before presenting the results of evaluations of labor market programs, two points should be noted. One, all of the studies examined do not take into account the possible effects of unemployment compensation. Rather, the analysis is restricted to the impact of "active" policies. ^{2/} To the extent that unemployment benefit levels, influence the flow into or out of unemployment, then these studies do not provide a full picture of the effect of labor market policies on unemployment. Nevertheless, for a given system of unemployment compensation this omission should not be significant. The second point to note is that these studies do not estimate the welfare effects of the various programs: they do not consider factors such as social costs or distributional incidences of unemployment.

^{1/} On the labor market features of the RMI see Legros and Simonin (1991), Afsa (1992), and Maurin and Torelli (1992).

^{2/} Defined more broadly to include early retirement and dispensation for job search.

Available evidence indicates that the labor market programs described in the previous sections have, in the short run, reduced unemployment considerably from what it would have been in the absence of such programs. Ermakoff and Tresmontant (1990), and subsequent updates, estimate that the number of jobs created by labor market programs increased from about 280,000 in 1985 to 465,000 in 1988 and then declined to 409,000 in 1990 before rising again to 442,000 in 1991. The reduction at the close of the 1980s reflects the decreased emphasis on labor market programs at a time of strong economic expansion. 1/ The level of unemployment was reduced by about 750,000 in 1985, 1,100,000 in 1988 and 945,000 in 1991; corresponding to reductions in the unemployment rate of approximately 3 1/4, 3 1/2 and 3 3/4 percentage points, respectively. 2/ These estimates indicate a rather high level of effectiveness: for each beneficiary there are about 0.6 fewer unemployed. The number of jobs created in 1991 came at a unitary public financing cost of about F 80,000, while the reduction in unemployed came at a unitary public financing cost of about F 45,000. 3/

These aggregate figures mask some important differences in the effect of the various programs. First, in 1991 over one-half of the reduction in the number of unemployed was due to exits from the labor force, in turn largely due to early retirements and dispensation from job search. Second, the ratio of unemployment reduction to beneficiaries varies much across programs. Predictably, the ratio is high (0.7 and higher) for schemes which withdraw people from the labor market, such as early retirement and training and apprenticeship programs, and measures which represent an "exogenous" demand for labor, such as the solidarity employment contracts. In contrast the ratio is low (0.1-0.3) for schemes which tend to induce substitution of one type of labor for another, such as the schemes which provide exemptions from payment of social security contributions.

The above noted reductions in unemployment attributed to labor market programs is in the upper range of available estimates. The Observatoire Français des Conjonctures Economiques (OFCE (1991, 1992)) estimates that the level of unemployment in 1991 was on the order of 800,000 lower on account of labor market programs. The relative effectiveness of the various programs, however, is quite similar.

Both the Ermakoff and Tresmontant and OFCE studies consider only the direct effects of labor market programs. Since they do not allow for the secondary (negative) effects on employment of the upward pressure on wages, prices and costs exercised by the initial reduction in unemployment, they tend to overestimate the labor market programs' impact on unemployment over the medium term. In a detailed study which allowed for the indirect effects

1/ It is recalled that the unemployment rate declined in 1988, 1989 and 1990, after having risen continuously since the early 1970s.

2/ The reduction in unemployment is the sum of jobs created and exits from the labor force.

3/ Approximately \$14,000 per job created and \$8,000 per unemployed avoided at the average 1991 exchange rate.

of policies, Cornilleau, Marioni and Roguet (1990) estimated the cumulative effect of labor market programs to have been a reduction in the unemployment level of 250,000 in 1988, the last year in their data sample. They regard this as a lower bound; the upper bound being a 500,000 reduction in unemployment, which would be obtained if the evolution of the labor force is assumed to be independent of labor market conditions--an unrealistic assumption. On the basis of these results, the medium-term effects of policies are significantly lower than the short-term effects: the ratio of unemployed avoided to beneficiaries is between one-quarter and one-half, but closer to one-quarter.

Although the impact of labor market policies is found to be reduced when indirect effects are taken into account, the relative impact of policies is qualitatively unchanged: most of the reduction in unemployment is attributed to exits from the labor force rather than to net job creation; the effectiveness of programs, in terms of unemployed avoided per beneficiary, is highest for early retirement and dispensation from job search, 1/ followed by nonmarket sector employment schemes and training, and lastly by assistance to job creation and employment promotion in the market sector. In terms of the distinction between the "social" and the "economic" treatment of unemployment, Cornilleau, Marioni and Roguet find that if all of the expenditures on labor market programs had gone into the economic treatment of unemployment, the cumulative reduction in the level of unemployment would have been less than half of that reported above. This, of course, is simply a reflection of the relative effectiveness of the various programs in the short to medium term.

From the above results it emerges that two sets of measures clearly dominate in terms of their effect on unemployment in the short run: (i) early retirement and dispensation from job search, and (ii) nonmarket sector job creation. Training schemes have a moderate impact, while the impact of other measures is generally weak. It is not surprising, therefore, that in periods of rapidly rising unemployment, such as the early 1980s and during the recent cyclical downturn, the initial reaction of the authorities has been to rely on the dominant measures. Hence in the first half of the 1980s the emphasis was on early retirement and dispensation from job search, while in the recent past the emphasis has been on nonmarket sector employment.

In recent years, particularly since 1989, there has been a marked shift away from early retirement measures and from the distinction between measures for youths versus measures for adults toward emphasis on training, recruitment subsidies for the hard-to-place and nonmarket sector employment. This is a welcome shift, especially the move away from early retirement measures which are in essence a prescription for impoverishment. As Layard, Nickell and Jackman (1991) argue, the case for early retirement

1/ It should be noted, however, that the impact of these programs wanes over time and the effect on employment turns negative toward the end of Cornilleau, Marioni and Roguet's sample period. This point is discussed further below.

(and work-sharing) rests on the "lump-of-output fallacy," that is, the assumption that output remains unchanged. If output remains the same, the number of jobs is unchanged so that a reduction in the labor force reduces unemployment. But when unemployment falls, inflation will rise more than it would otherwise. If the higher inflation is not acceptable, then actions to reduce it to its former level will result in higher unemployment. Thus, for a given inflation rate, early retirement will result in fewer jobs and lower output. Indeed, evidence for OECD countries shows a positive correlation between increases in early retirement and increases in unemployment: countries which have experienced more early retirement, such as France and the Netherlands, have also experienced the biggest increase in unemployment. Of course, correlation does not necessarily imply causation.

The results on the effects of labor market programs are partial in another sense. Training schemes, for instance, are found to have a smaller effect on unemployment than some other schemes. But the value of training is often more of a structural one. To the extent that training raises productivity, it will, for a given level of wages, exert downward pressure on inflation. Thus for a given level of inflation, employment and output will be higher. Finally, it should be noted that the recent policy emphasis on integrating or reintegrating into the labor market the long-term unemployed should also prove beneficial in the longer run. The empirical evidence indicates that people who have been unemployed longer have longer expected durations of unemployment than the average newly unemployed. Hence, for a given inflow into unemployment, concentrating assistance on those who have been unemployed for some time will reduce unemployment more. In this regard, in comparing labor market policy and unemployment duration in France and Sweden, Bourdet and Persson (1991) concluded that if France had adopted active policies toward all the labor force, and not just youths, as Sweden did, then the unemployment rate in 1989 would have been 1.8 percentage points lower.

8. Concluding remarks

Since the mid-1970s labor market policy in France has evolved considerably and in a positive direction toward the provision of skills and work experience. But the positive shift from a focus on reduction of the labor force to direct job creation and formation of employment dates only from the mid-1980s and particularly since 1989. In recent years, labor market programs have centered on three main objectives: the training and guidance of the long-term unemployed and the least skilled, with greater attention being paid to the quality of course and to individual training needs; the creation of jobs or activities in the nonmarket sector; and the direct creation of jobs in the market sector by lowering the cost of labor through the provision of exemptions from social charges, recruitment bonuses, and other financial incentives. These programs have resulted in a significant reduction in unemployment and by avoiding the social marginalization of a large section of the population no longer accustomed to regular work should yield additional economic and social benefits. However, static analyses of the various programs, by disregarding the long-run effects on output and productivity, greatly overestimate the permanent

effects of nonmarket sector and early-retirement programs, while underestimating the effects of training, apprenticeship and direct job creation schemes. Basing labor market policy even more firmly on the employment principle, as opposed to the benefit principle, should further increase its effectiveness.

Statistical Appendix

<u>Tables</u>	<u>Page</u>
 Output, Demand, and Prices	
A1. Macroeconomic Performance in Comparison with Germany and G-7 Countries	55
A2. Aggregate Demand in Constant Prices	56
A3. Aggregate Demand in Constant Prices	57
A4. Household Income and Spending	58
A5. Real Incomes and Selected Ratios of Household Sector	59
A6. Gross Fixed Investment by Products	60
A7. Gross Fixed Investment by Sector	61
A8. Income and Expenditure of Nonfinancial Corporate Enterprises	62
A9. Principal Ratios for Enterprises	63
A10. Structure of Output	64
A11. Saving-Investment Balance	65
A12. Labor Force and Employment	66
A13. Level and Characteristics of Unemployment	67
A14. Price Developments	68
A15. Indicators of Costs and Productivity	69
A16. Distribution of Income	70
 Financial Policies	
A17. Indicators of Fiscal Developments	71
A18. International Comparison of Fiscal Impulses	72
A19. Structure of General Government Expenditure	73
A20. International Comparison of Tax Revenue	74
A21. Public Sector Financial Balances	75
A22. Consolidated General Government Accounts	76
A23. Principal Tax Measures	77
A24. Central Government Budget	78
A25. Central Government Revenue and Expenditure	79
A26. Simplified Accounts of the Social Security System	80
A27. Simplified Accounts of the Local Authorities	81
A28. Level and Structure of Government Debt	82
A29. Decomposition of Central Government Debt Accumulation	83
A30. Monetary Targets and Underlying Assumptions	84
A31. Main Monetary Aggregates	85
A32. Credit Aggregates	86
A33. Financial Institutions' Claims on the Economy	87
A34. M3 and its Counterparts	88
A35. Monetary Base and its Sources	89
A36. Financing of the Treasury's Cash Deficit	90
A37. Key Interest Rates	91

<u>Tables</u>	<u>Page</u>
External Trade and Payments	
A38. Exchange Rate Developments	92
A39. Balance of Payments Summary	93
A40. Current Account Developments	94
A41. Services Balance	95
A42. Merchandise Trade	96
A43. Commodity Composition of Trade	97
A44. Import Cover Ratios and Terms of Trade	98
A45. International Competitiveness	99
A46. Regional Market Shares and Import Penetration	100
A47. Export Performance and Export Pricing	101
A48. Geographical Distribution of Trade	102
A49. Capital Account	103
A50. Banking Sector External Position	104
A51. Developments in Aid to Industry	105

Table A1. France: Macroeconomic Performance in Comparison with Germany and G-7 Countries

(In percent)

	<u>1971-80</u>	<u>1981-85</u>	1988	1989	1990	1991
	Averages					
Real GDP						
France	3.3	1.6	4.5	4.1	2.2	1.2
Germany	2.8	1.4	3.7	3.8	4.5	0.9
G-7	3.2	2.7	4.5	3.3	2.4	0.6
Real total domestic demand						
France	3.1	1.4	4.7	3.7	2.6	0.9
Germany	2.8	0.7	3.6	2.6	4.5	3.8
G-7	3.0	2.9	4.6	3.2	2.2	0.4
Inflation <u>1/</u>						
France	9.7	8.7	2.7	3.5	3.4	3.1
Germany	5.1	3.3	1.3	3.1	2.6	4.5
G-7	8.6	5.0	3.1	4.3	4.7	4.3
Employment						
France	0.5	-0.3	0.8	1.1	1.2	-0.1
Germany	0.2	-0.4	0.8	1.4	2.9	-3.9
G-7	1.5	0.9	1.9	1.8	1.2	-0.5
Unemployment rate						
France	4.2	9.1	10.0	9.4	9.0	9.6
Germany	2.7	7.6	7.6	6.8	6.2	6.7
G-7	4.6	7.6	6.3	5.8	5.7	6.6
Current account including official transfers <u>2/</u>						
France	0.3	-0.8	-0.5	-0.5	-0.8	-0.5
Germany	0.2	0.5	2.4	2.6	1.8	-0.7
G-7	0.1	-0.4	-0.4	-0.4	-0.6	-0.1
General government overall balance <u>2/</u>						
France	-0.5	-2.9	-1.7	-1.1	-1.4	-2.1
Germany	-2.0	-2.2	-2.1	0.2	-1.7	-2.8
G-7	-0.0	-0.1	-0.0	-0.0	-0.0	-0.0

Sources: INSEE, Rapport sur Les Comptes de la Nation; and International Monetary Fund, World Economic Outlook.

1/ Consumer prices.

2/ As a percentage of GDP.

Table A2. France: Aggregate Demand in Constant Prices 1/

	Changes in percent					Shares in GDP		
	1988	1989	1990	1991	1992 <u>2/</u>	1980	1990	1991
Private consumption	3.3	3.3	2.9	1.5	2.2	58.6	60.3	60.5
Public consumption	3.4	0.3	1.9	2.9	2.5	18.4	18.3	18.6
Gross fixed investment	9.6	7.0	2.9	-1.3	-1.1	23.0	22.7	22.1
Public	13.8	4.1	3.9	3.6	3.3	3.1	3.7	3.8
Private								
Residential	7.1	7.2	-0.6	-2.5	1.9	7.5	5.9	5.7
Non-residential	9.6	7.8	4.3	-2.1	-3.7	12.4	13.1	12.7
Final domestic demand	4.6	3.5	2.7	1.1	1.6	100.0	101.3	101.2
Stockbuilding <u>3/</u>	0.1	0.2	-0.1	-0.2	-0.4	1.2	1.0	0.7
Total domestic demand	4.7	3.7	2.6	0.9	1.1	101.2	102.2	102.0
Exports of goods and nonfactor services	8.1	10.2	5.5	4.2	9.2	21.5	25.2	26.0
Imports of goods and nonfactor services	8.6	8.2	6.5	3.0	2.9	22.7	27.4	27.9
Foreign balance <u>3/</u>	-0.3	0.3	-0.4	0.2	1.5	-1.2	-2.2	-2.0
GDP	4.5	4.1	2.2	1.2	2.7	100.0	100.0	100.0

Source: INSEE, Rapport sur les Comptes de la Nation.

1/ Constant 1980 prices; data are based on quarterly national accounts.

2/ First quarter of 1992 over same period of 1991.

3/ Contributions to growth in percent.

Table A3. France: Aggregate Demand in Constant Prices
 (Percentage contributions to the growth of GDP at 1980 prices) 1/

	1986	1987	1988	1989	1990	1991
Private consumption	2.3	1.7	2.0	2.0	1.7	0.9
Government consumption	0.3	0.5	0.7	0.1	0.3	0.5
Gross fixed investment	0.9	1.0	2.0	1.5	0.6	-0.3
Public	0.1	0.1	0.5	0.1	0.1	0.1
Private						
Residential	0.1	0.2	0.4	0.4	-0.0	-0.2
Nonresidential	0.7	0.7	1.1	1.0	0.5	-0.3
Final domestic demand	3.6	3.3	4.7	3.6	2.7	1.2
Stockbuilding	0.9	0.1	0.1	0.2	-0.1	-0.2
Total domestic demand	4.4	3.4	4.8	3.8	2.6	0.9
Exports of goods and services	-0.3	0.7	1.8	2.4	1.4	1.1
Imports of goods and services	1.6	1.8	2.1	2.1	1.7	0.8
Foreign balance	-1.9	-1.1	-0.3	0.3	-0.4	0.2
GDP	2.5	2.3	4.5	4.1	2.2	1.2

Source: INSEE, Rapport sur les Comptes de la Nation.

1/ Data are based on quarterly national accounts.

Table A4. France: Household Income and Spending

	<u>1991</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
	In billions of francs <u>1/</u>					Annual percentage change
Compensation of employees <u>2/</u>	3,544.2	5.5	6.5	6.6	5.0
Of which:					
Gross wages	2,558.5	5.6	6.5	6.9	5.1
Wages, net <u>3/</u>	2,127.2	5.1	5.5	6.8	5.5
Profit income	1,212.9	6.1	11.0	5.6	3.5
Net property income	237.6	-4.7	27.5	20.4	15.0
Social security receipts	1,593.9	6.8	5.8	6.3	6.9
Other transfers (net)	54.0	30.7	6.0	-27.3	53.6
Personal income	6,642.5	5.8	7.7	6.5	5.8
Tax on income and property	461.1	0.4	5.7	6.1	18.0
Social security contributions <u>4/</u>	1,530.3	6.3	8.2	6.2	4.3
Disposable income	4,651.1	6.2	7.7	6.6	5.2
Private consumption	4,064.4	6.0	6.9	6.0	4.7
Savings of households	586.7	7.6	14.5	11.4	8.7
Gross capital formation	369.1	11.0	10.1	3.2	1.4

Sources: INSEE, Rapport sur les Comptes de la Nation; and Quarterly National Accounts.

1/ Data are based on quarterly national accounts.

2/ Including all actual and imputed social security contributions.

3/ Gross wages minus social security contributions of employees.

4/ Contributions of employees and employers.

Table A5. France: Real Incomes and Selected Ratios of Household Sector

(In percent) 1/

	Averages					1987	1988	1989	1990	1991
	1970-74	1975-79	1980-84	1985-89						
	(Changes in percent)									
Real incomes 2/										
Disposable income	...	3.3	0.6	2.5	0.4	3.4	4.1	3.1	2.0	
Compensation of employees	...	4.4	1.0	1.9	1.0	2.8	2.9	3.1	1.9	
Hourly wages	...	4.2	1.8	1.5	0.7	2.3	0.6	1.9	1.2	
Social security receipts	...	6.9	3.8	2.9	0.4	4.0	2.2	2.8	3.6	
	(In percent of gross disposable income)									
Savings ratio	18.9	19.3	16.7	12.1	10.8	11.0	11.7	12.2	12.6	
Financial savings ratio	5.2	6.7	5.7	2.8	1.6	2.0	2.1	2.8	3.8	
Tax burden	28.5	33.7	38.4	41.2	41.8	41.5	41.5	41.3	42.0	
Fiscal pressure	6.0	7.1	8.2	8.5	8.7	8.3	8.2	8.1	9.1	
Social security contributions	22.5	26.6	30.2	32.7	33.1	33.1	33.3	33.2	32.9	
Net wages and salaries	50.0	51.5	49.9	46.8	46.9	46.5	45.5	45.6	45.7	
	(In percent of GDP)									
Gross disposable income	70.7	71.8	72.0	68.5	68.0	67.2	67.4	68.1	68.9	
Compensation of employees	50.3	54.9	56.2	52.8	52.8	51.8	51.4	52.0	52.5	
Net wages and salaries	35.4	37.0	36.0	32.0	31.9	31.2	30.7	31.1	31.5	

Source: INSEE, Rapport sur les Comptes de la Nation.

1/ Data based on quarterly national accounts.

2/ Deflated by consumer price index.

Table A6. France: Gross Fixed Investment by Products

(Annual growth rates at 1980 prices)

	<u>Annual averages</u>		<u>Annual rates</u>				<u>Shares in total</u>		
	1971-80	1981-90	1988	1989	1990	1991	1970	1980	1991
Industrial products	3.8	3.8	10.4	8.8	4.2	-4.3	30.8	34.2	38.3
Nonindustrial products	2.1	1.4	9.1	6.0	2.0	0.6	69.2	65.8	61.7
Of which:									
Productive investment <u>1/</u>	3.0	2.9	9.9	8.8	4.2	-3.1	47.3	48.9	50.9
Of which (percent):									
Construction	1.7	1.2	8.0	5.5	2.3	0.6	66.5	61.0	56.1
Investment goods	4.4	4.3	10.3	8.4	4.3	-4.8	18.9	22.4	26.3
Vehicles	3.2	3.4	10.4	10.6	3.3	-4.5	6.3	6.5	7.0
Memorandum item:									
Enterprises	2.5	2.9	10.2	7.9	4.1	-2.8	52.7	51.8	53.9
Of which: GEN <u>2/</u>	7.3	-2.5	3.2	-1.4	7.2	...	7.5	11.8	...

Source: INSEE, Rapport sur les Comptes de la Nation.1/ Enterprises, quasi-enterprises, and individual firms.2/ Grandes entreprises nationales.

Table A7. France: Gross Fixed Investment By Sector

(Annual growth rates at 1980 prices)

	<u>1981-84</u>	<u>1985-89</u>				
	Averages		1988	1989	1990	1991
Intermediate goods	-6.1	12.2	10.3	7.5	13.3	-9.7
Investment goods	-1.1	8.2	11.5	8.6	12.3	-16.9
Consumption goods	-1.7	8.6	21.4	8.4	7.4	-9.7
Vehicles	-10.5	14.1	9.4	15.8	13.3	-2.3
Energy <u>1/</u>	-4.3	-4.9	-1.9	-4.7	-4.0	0.4
Market services	3.1	12.6	12.9	5.4	3.4	0.8
Other <u>2/</u>	-2.6	5.3	11.3	8.9	0.9	-0.9
Total <u>3/</u>	-2.5	6.7	10.8	7.1	3.8	-2.8

Sources: INSEE, Rapport sur Les Comptes de la Nation.1/ Coal and coke, petroleum, electricity, gas, and water.2/ Mostly agriculture and food, transport, and telecommunications.3/ Nonfinancial companies.

Table A8. France: Income and Expenditure of Nonfinancial Corporate Enterprises 1/

	1991 In billions of francs	Annual percentage change				
		1987	1988	1989	1990	1991
Resources	3,751.0	6.3	8.6	7.2	6.2	4.0
Gross value added	3,659.1	6.0	9.5	7.5	6.4	3.9
Subsidies	91.9	16.8	-14.0	-4.1	-1.6	7.9
Uses	2,580.6	5.1	6.2	6.8	7.3	5.0
Wages and salaries	1,618.4	4.6	6.6	6.8	7.6	5.0
Social security contributions	612.6	6.1	5.5	7.3	7.0	4.5
Production taxes	349.6	6.0	6.0	5.9	6.3	6.3
Gross operating surplus (GOS)	1,168.4	9.2	14.0	8.2	3.9	1.6
Net expenditure out of GOS	576.2	7.0	2.2	16.4	8.5	4.2
Of which:						
Interest	377.2	0.5	3.4	17.1	10.3	10.1
Dividends	232.3	17.7	14.9	19.3	12.7	8.0
Taxes on income and property	122.3	14.0	10.9	12.2	0.9	-8.2
Gross savings (disposable income)	592.2	11.3	24.8	2.0	-0.1	-0.7
Fixed investment	661.6	10.6	13.1	11.7	7.1	-1.5
Stockbuilding <u>2/</u>	21.4	0.3	0.2	-0.1	-0.2	-0.1

Source: INSEE, Rapport sur les Comptes de la Nation.

1/ Enterprises and quasi-enterprises (SQS); data are based on quarterly national accounts.

2/ Contribution to growth of GDP.

Table A9. France: Principal Ratios for Enterprises

(In percent of value added)

	1970	1980	1987	1988	1989	1990	1991
Corporate nonfinancial enterprises							
Wages and salaries	63.7	68.2	62.0	60.2	59.8	60.4	61.0
Production taxes	8.5	9.0	9.8	9.5	9.3	9.4	9.6
Gross profits	30.8	25.8	31.9	33.2	33.4	32.6	31.9
Gross savings	16.7	12.0	16.7	19.0	18.1	16.9	16.2
Investment ratio	22.1	19.4	17.7	18.2	18.8	18.8	17.8
Self-financing ratio ^{1/}	75.4	61.8	94.4	104.2	96.1	90.1	90.8
Grandes entreprises nationales ^{2/}							
Wages and salaries	64.8	66.6	53.8	54.7	54.9	54.5	53.1
Gross profits	42.6	39.9	50.7	48.6	48.3	47.5	48.0
Gross savings	29.8	25.0	27.2	25.9	25.4	24.9	26.0
Investment ratio	34.4	50.7	26.5	28.4	27.7	28.1	29.5
Self-financing ratio ^{1/}	91.5	48.8	102.5	90.9	81.7	88.7	88.7
Unincorporated enterprises							
Wages and salaries	20.3	22.2	20.2	20.2	19.4	19.7	20.3
Production taxes	2.4	3.6	3.9	4.4	4.0	4.2	4.1
Gross profits	77.7	75.2	77.9	77.4	78.4	78.1	77.5
Investment ratio	10.0	11.1	9.9	10.1	10.3	10.3	10.0

Source: INSEE, Rapport sur les Comptes de la Nation.

^{1/} Gross savings and capital transfers in percent of gross investment and net acquisition of land and nontangible goods.

^{2/} SNCF, RATP, EDF, GDF, Charbonnage de France, Air France, Air Inter, PTT.

Table A10. France: Structure of Output

(Value added in constant 1980 prices; in percent)

	Shares in GDP			Annual percentage change			
	1980	1990	1991	1988	1989	1990	1991
Market GDP	84.0	84.7	84.4	4.8	4.7	2.3	0.9
Agriculture, etc.	4.2	4.1	4.0	-0.4	3.6	0.4	-1.7
Industry	26.8	24.1	23.9	5.3	4.5	1.5	0.2
Foodstuffs	3.2	2.8	2.9	3.6	9.5	0.1	3.7
Energy	3.9	3.8	3.9	3.0	-1.3	0.4	4.2
Manufacturing	19.8	17.5	17.1	6.1	5.0	2.0	-1.2
Of which:							
Intermediate goods	6.9	6.0	5.7	7.8	6.0	1.1	-3.2
Current consumption	5.2	4.5	4.5	4.4	3.8	1.6	0.5
Investment goods	5.4	5.2	5.1	5.9	5.0	4.6	-0.6
Household equipment	0.3	0.4	0.4	7.4	10.6	2.7	7.3
Transportation equipment	1.9	1.5	1.4	4.8	3.6	-2.2	-3.1
Nonindustrial	48.4	51.3	51.5	4.3	4.9	2.6	1.7
Of which:							
Construction	6.9	5.9	6.0	8.0	1.6	1.9	2.3
Commerce	10.4	10.4	10.2	1.8	4.4	3.3	-0.1
Transportation and telecommunication	5.8	7.2	7.4	9.3	7.0	4.5	3.3
Market services (nonfinancial)	20.4	24.1	24.3	5.4	6.7	4.0	1.9
Insurance and financial services	3.2	2.8	2.9	3.6	9.5	0.1	3.7

Source: INSEE, Rapport sur les Comptes de la Nation.

Table All. France: Saving-Investment Balance

(In percent of GDP)

	1980	1986	1987	1988	1989	1990	1991
Gross savings	23.6	20.1	20.0	21.1	21.8	21.3	20.5
Households	12.5	8.9	7.4	7.4	7.9	8.3	8.7
Enterprises	6.2	8.3	8.8	10.2	9.7	9.2	8.8
General government	3.8	0.6	1.5	1.9	2.4	2.6	1.5
Rest of economy <u>1/</u>	1.2	2.3	2.3	1.6	1.7	1.3	1.5
Gross investment <u>2/</u>	-24.3	-19.7	-20.4	-21.4	-22.2	-22.5	-21.0
Households	-8.9	-6.5	-6.3	-6.0	-6.5	-6.4	-6.1
Enterprises	-11.2	-9.0	-10.0	-11.0	-11.3	-11.2	-10.1
General government	-3.8	-3.3	-3.3	-3.6	-3.6	-4.0	-3.4
Rest of economy <u>1/</u>	-0.4	-0.8	-0.7	-0.8	-0.9	-0.9	-1.3
Financial balances (current account balance) <u>3/</u>	-0.7	0.4	-0.4	-0.3	-0.4	-1.1	-0.5
Households	3.6	2.4	1.1	1.4	1.4	1.9	2.6
Enterprise sector	-5.0	-0.7	-1.2	-0.8	-1.6	-2.0	-1.4
General government	-0.0	-2.7	-1.9	-1.7	-1.1	-1.4	-1.9
Rest of economy <u>1/</u>	0.7	1.5	1.6	0.8	0.9	0.3	0.2

Source: INSEE, Rapport sur les Comptes de la Nation.1/ Financial sector and private administration2/ Stockbuilding included.3/ National accounts basis.

Table A12. France: Labor Force and Employment

	In percent of total				Changes in percent			
	1970	1980	1990	1991	1988	1989	1990	1991
Labor force	100.0	100.0	100.0	100.0	0.2	0.5	0.7	0.9
Male	64.3	60.2	57.1	57.0	-0.1	0.2	0.6	0.7
Female	35.7	39.8	42.9	43.0	0.6	1.0	1.0	1.1
Total employment	97.5	93.7	91.0	90.1	0.8	1.1	1.2	-0.1
Employment, domestic	100.0	100.0	100.0	100.0	0.8	1.1	1.2	-0.1
Salaried	79.3	83.4	85.2	86.0	1.0	1.5	1.6	0.8
Market sectors	60.7	61.8	60.7	61.0	1.2	2.2	1.9	0.4
Industrial	27.0	25.4	21.0	20.8	-1.5	0.4	0.6	-1.3
Manufacturing	23.0	21.6	17.5	17.2	-1.6	0.7	1.0	-1.4
Nonindustrial	33.8	36.4	39.7	40.2	2.7	3.2	2.6	1.3
Commerce	7.8	9.0	9.6	9.6	1.5	1.8	1.6	0.7
Transport and communication	5.5	5.8	6.0	6.1	0.5	0.8	0.9	0.5
Market services	7.6	10.6	14.5	15.0	6.1	7.0	5.4	3.0
Nonmarket sectors	18.6	21.7	24.5	25.0	0.6	-0.2	1.1	1.7
Self-employed	20.7	16.6	14.8	14.0	-0.5	-0.8	-1.1	-5.2
			(In percent)			(In thousands)		
Memorandum items:								
Participation rates								
Male	73.0	71.0	64.8	64.2	...	...	...	...
Female	40.0	44.4	45.8	45.9	...	...	...	...
Changes in labor force ^{1/}	...	...	...	...	15.8	173.2	76.1	...
Due to:								
Demographic factors	...	...	...	...	152.1	170.9	199.9	...
Participation	...	...	...	...
Male	...	...	...	...	-148.0	-69.5	-158.0	...
Female	...	...	...	...	12.2	71.9	34.3	...
Official employment schemes ^{2/}	...	...	...	...	1,771.9	1,688.4	...	...
(in percent) ^{3/}	...	...	...	...	8.2	7.8	...	...
Of which:								
TUC ^{4/}	...	...	...	...	183.7	155.8	74.7	--
SIVP ^{5/}	...	...	...	...	111.0	41.7	19.4	12.2
CES ^{6/}	...	...	...	...	...	...	72.0	210.7

Source: INSEE, Rapport sur les Comptes de la Nation.

^{1/} During calendar year.

^{2/} Including early retirement and retraining schemes.

^{3/} In percent of labor force.

^{4/} Travaux d'utilite collective (Community work scheme).

^{5/} Stage d'insertion dans la vie professionnelle (stage for school-leavers).

^{6/} Contrats Emploi-Solidarité.

Table A13. France: Level and Characteristics of Unemployment

(In percent)

	1975	1980	1987	1988	1989	1990	1991	1992 ^{1/}
Unemployment rate	4.0	6.3	10.5	10.0	9.4	9.0	9.6	10.0
Male	2.8	4.2	8.3	7.7	7.0	6.7	7.2	...
Female	6.1	9.4	13.6	13.1	12.6	11.9	12.2	...
By age group								
15-24 years	8.9	15.0	22.0	20.4	18.4	17.5	18.6	...
25-49 years	2.9	4.3	8.6	8.4	8.2	7.8	8.2	...
50-64 years	2.7	4.6	7.7	7.5	7.0	6.5	6.8	...
By duration								
(in percent of total)								
Less than 3 months	36.6	25.4	16.9	17.6	18.4	23.3	20.9	20.0
3-12 months	46.5	42.2	36.9	35.4	35.3	34.3	36.6	38.4
More than 1 year	16.9	32.4	44.0	43.0	42.0	37.6	37.0	35.2
Average duration (months)	7.6	11.6	16.6	16.6	16.3	14.5	14.5	13.7
Memorandum item:								
Registered unemployed	836.2	1,449.9	2,620.7	2,563.4	2,532.1	2,505.0	2,709.1	...
Unfilled vacancies ('000)	109.0	89.0	54.0	63.0	76.2	79.5	61.7	...

Sources: INSEE, Rapport sur les Comptes de la Nation; and OECD, Main Economic Indicators.^{1/} First quarter, not seasonally adjusted.

Table A14. France: Price Developments
(Changes in percent from same period of preceding year)

	1988	1989	1990	1991	1991				1992
					Q1	Q2	Q3	Q4	Q1
GDP deflator	2.8	3.2	3.1	2.8	3.1	2.3	2.4	3.2	2.9
Total domestic demand deflator	2.7	3.5	2.9	2.6	2.8	2.6	2.3	2.8	2.9
Consumer price index	2.7	3.5	3.4	3.1	3.4	3.2	3.0	2.8	3.1
Food	2.4	4.3	4.4	3.2	3.2	3.0	3.1	3.3	3.5
Nonfood	2.8	3.2	2.9	3.1	3.5	3.3	3.0	2.7	2.9
Goods (excl. food)	1.7	2.8	2.4	2.4	2.9	2.8	2.3	1.8	2.1
Energy	-1.0	4.8	4.6	2.1	5.2	4.7	1.4	-2.6	-1.2
Rent	6.0	5.3	4.9	5.0	4.7	4.9	5.1	5.3	5.2
Services	4.2	3.0	3.2	3.6	4.1	3.6	3.5	3.4	3.6
Value added deflators									
Market GDP	3.1	2.8	3.0	2.8	2.9	2.5	2.5	3.2	2.9
Industry	2.2	1.9	3.1	0.4	1.6	0.4	-0.7	0.4	0.7
Manufacturing	2.7	1.8	2.8	-0.6	0.8	-0.6	-1.6	-1.1	-0.4
Nonindustrial sectors	4.0	3.7	3.5	4.0	3.7	3.9	3.8	4.4	3.7
Memorandum items:									
Import unit value ^{1/}	2.5	6.9	-2.4	-0.7	-2.3	1.1	0.5	-2.2	-1.7
CPI/import unit value	0.2	-3.2	5.9	3.9	5.8	2.1	2.5	5.1	4.9

Sources: International Monetary Fund, International Financial Statistics; OECD, Main Economic Indicators; and INSEE, Rapport sur les Comptes de la Nation.

^{1/} National accounts definition.

Table A15. France: Indicators of Costs and Productivity

(Changes in percent from same period of preceding year)

	1988	1989	1990	1991	1991				1992
					q1	q2	q3	q4	q1
Hourly wages ^{1/}	5.1	4.2	5.4	4.4	4.9	4.5	4.3	3.9	4.2
Industry	3.9	4.6	4.8	4.5	4.7	4.5	4.4	4.4	4.2
Manufacturing	4.0	4.6	4.9	4.5	4.7	4.5	4.4	4.4	4.2
Nonindustrial sectors	5.7	4.1	5.7	4.5	5.2	4.6	4.4	3.9	4.1
Hourly productivity ^{1/}	4.0	3.4	1.5	1.7	0.2	1.5	2.2	2.9	4.1
Industry	6.5	4.1	1.7	1.9	0.3	1.7	2.5	3.2	4.6
Manufacturing	7.4	4.8	1.2	0.8	-2.1	0.2	2.2	2.7	5.4
Nonindustrial sectors	2.7	3.3	1.7	1.9	0.4	1.8	2.3	3.0	4.1
Unit labor costs ^{1/}	1.0	0.7	3.7	2.7	4.7	2.8	2.1	1.1	0.1
Industry	-2.4	0.4	3.0	2.5	4.3	2.8	1.9	1.1	-0.3
Manufacturing	-3.3	-0.2	3.8	3.8	6.9	4.4	2.2	1.6	-1.2
Nonindustrial sectors	3.0	0.7	4.0	2.5	4.7	2.6	1.9	0.8	-0.1

Sources: International Monetary Fund, International Financial Statistics; OECD, Main Economic Indicators; and INSEE, Rapport sur les Comptes de la Nation.

^{1/} Market sectors.

Table A16. France: Distribution of Income
(In percent of GDP)

	1970	1980	1988	1989	1990	1991
Households <u>1/</u>						
Compensation of employees	49.3	56.0	51.8	51.4	52.0	52.5
Profit income	22.8	18.1	17.4	18.0	18.1	18.0
Net property income	2.5	2.7	2.3	2.8	3.2	3.5
Current transfers	16.5	21.3	23.9	23.6	23.5	24.4
Personal income	91.1	98.2	95.5	95.8	96.7	98.4
Taxes on income and property	4.7	6.0	6.1	6.0	6.0	6.8
Social security contributions	15.5	21.0	22.3	22.4	22.6	22.7
Disposable income	70.9	71.1	67.2	67.4	68.1	68.9
Corporate enterprises <u>2/</u>						
Value added	49.3	51.7	53.7	53.8	54.3	54.2
Gross operating surplus	15.2	13.3	17.8	18.0	17.7	17.3
Net expenditure <u>3/</u>	7.0	7.1	7.6	8.3	8.5	8.5
Disposable income	8.2	6.2	10.2	9.7	9.2	8.8
General government						
Total revenue	40.3	46.3	49.0	48.5	48.8	49.2
Disposable income	19.9	21.9	20.4	20.4	20.5	19.8
Memorandum items:						
Net direct taxes						
of households <u>4/</u>	3.9	6.3	5.2	5.6	5.6	5.9

Source: INSEE, Rapport sur les Comptes de la Nation.

1/ Including unincorporated enterprises.

2/ Nonfinancial enterprises (SQS).

3/ Out of gross operating surplus; compare Table A8.

4/ Direct taxes plus total social security contributions minus social security receipts.

Table A17. France: Indicators of Fiscal Developments 1/

(In percent of GDP)

	Levels			Change from preceding period <u>2/</u>			Percentage contribution of revenue increases to cover expenditure increases or falls <u>3/</u>
	Expenditure (1)	Revenue (2)	Balance (3)	Expenditure (4)	Revenue (5)	Balance (6)	
France							
1970	38.9	39.8	0.9	...	...	...	...
1980	46.7	46.7	--	7.8	6.9	-0.9	88.5
1985	52.1	49.3	-2.8	0.2	0.1	-0.1	50.0
1988	50.4	48.7	-1.7	-0.6	-0.4	0.2	66.7
1989	49.5	48.3	-1.2	-0.9	-0.4	0.5	44.4
1990	49.9	48.2	-1.7	0.4	-0.1	-0.5	-25.0
Germany							
1970	39.1	39.3	0.2	...	...	...	...
1980	48.6	45.7	-2.9	9.5	6.4	-3.1	67.4
1985	47.5	46.4	-1.1	-0.5	0.3	0.8	-60.0
1988	46.6	44.5	-2.1	-0.5	-0.7	-0.2	140.0
1989	45.2	45.4	0.2	-1.4	0.9	2.3	-64.3
1990	46.2	44.1	-2.1	1.0	-1.3	-2.3	-130.0
EC							
1970	36.8	37.0	0.2	...	...	...	...
1980	46.3	42.4	-3.9	9.5	5.4	-4.1	56.8
1985	49.0	43.8	-5.2	0.1	0.3	0.2	300.0
1988	47.0	43.3	-3.7	-0.8	-0.3	0.5	37.5
1989	46.5	43.6	-2.9	-0.5	0.3	0.8	-60.0
1990	47.4	43.3	-4.1	0.9	-0.3	-1.2	-33.3

Source: European Communities, European Economy, several issues; and staff calculations.1/ General Government.2/ Columns 4-6 are the first differences of columns 1-3.3/ Column 5 in percent of Column 4. A negative sign indicates an opposite movement of revenue and expenditure.

Table A18. France: International Comparison of Fiscal Impulses

(In percent of GNP/GDP)

	France		Germany		Large industrial countries, excluding the United States 1/		Large industrial countries (G7)	
	General government	Central government	General government	Central government	General government	Central government	General government	Central government
1981	-0.8	1.2	-0.5	-0.0	-0.7	0.0	-0.6	-0.1
1982	2.5	0.2	-2.0	-0.8	-0.4	-0.1	-0.1	0.4
1983	-0.4	0.2	-0.5	-0.3	-0.3	0.0	0.1	0.3
1984	-0.8	-0.0	0.5	0.3	-0.4	-0.1	0.2	0.2
1985	0.3	-0.1	-0.7	-0.3	-0.2	-0.1	0.2	0.2
1986	0.0	-0.4	0.4	0.0	-0.3	-0.6	-0.1	-0.3
1987	-1.1	-0.5	0.3	0.0	-0.8	-0.5	-0.8	-0.9
1988	1.0	0.0	0.9	0.4	0.0	-0.3	0.1	-0.3
1989	-0.2	-0.2	-1.7	-0.6	-0.6	-0.2	-0.5	-0.3
1990	-0.1	-0.3	2.3	0.7	0.5	0.2	0.2	-0.0
1991	-0.4	-0.3	...	...	-0.0	-0.3	-0.3	-0.3

Source: International Monetary Fund, World Economic Outlook.

1/ Canada, France, Germany, Italy, Japan, and the United Kingdom. The United States was excluded because of the special developments there during the 1980s.

Table A19. France: Structure of General Government Expenditure

(In percent of GDP)

	Current transfers			Government consumption			Interest payments			Gross fixed capital formation		
	1970	1985	1989	1970	1985	1989	1970	1985	1989	1970	1985	1989
Belgium	17.0	24.8	23.0	13.7	17.6	15.7	3.4	10.6	10.5	4.2	2.2	1.6
Denmark	14.9	21.3	24.2	20.0	25.3	25.7	1.3	9.9	7.6	5.0	2.2	1.9
France	20.1	26.5	25.3	13.4	19.4	18.5	1.1	2.9	2.7	3.9	3.2	3.2
Germany	15.9	20.7	20.2	15.8	20.0	18.7	1.0	3.0	2.7	4.6	2.3	2.3
Greece	8.5	17.6	17.3	12.6	20.4	22.0	0.9	5.4	9.6	--	4.4	3.1
Ireland	13.5	20.3	17.5	14.0	18.7	15.7	3.9	10.3	8.9	4.3	4.1	2.0
Italy	12.7	20.8	20.5	12.0	16.4	17.0	1.5	8.0	9.0	2.7	3.7	3.5
Luxembourg	17.0	28.2	27.3	10.5	15.6	16.5	1.1	1.1	0.8	3.6	5.2	5.6
Netherlands	18.4	32.2	31.9	15.4	16.2	15.2	2.9	6.3	6.0	4.7	2.6	2.3
Portugal	...	16.2	15.0	...	15.5	14.8	...	7.9	7.9	...	2.5	3.1
Spain	9.3	19.3	17.7	8.4	14.0	14.2	0.6	3.2	3.4	2.5	3.7	4.2
United Kingdom	10.4	16.1	12.9	17.5	20.8	19.6	3.9	4.9	3.5	4.7	2.0	1.5
EC <u>1</u> /	14.6	21.4	20.2	14.3	18.6	17.9	1.9	5.0	4.8	4.0	2.9	2.7

Source: European Communities, European Economy, Supplement A, No. 2 (February 1990). 1989 data are economic forecasting of the EC.

1/ EC excluding Greece and Portugal in 1970.

Table A20. France. International Comparison of Tax Revenue

(In percent of GDP and shares in total)

	In percent of GDP						Shares in total revenue	
	1965	1975	1985	1986	1987	1988	1965	1988
<u>Total tax revenue</u>								
EEC	27.2	33.4	39.4	40.1	40.6	40.8	100.0	100.0
France	34.5	36.9	44.5	44.1	44.8	44.4	100.0	100.0
Germany	31.6	35.7	38.0	37.6	37.7	37.4	100.0	100.0
United States	25.9	29.0	29.2	28.9	30.1	29.8	100.0	100.0
Japan	18.3	20.9	28.0	28.9	30.1	31.3	100.0	100.0
<u>Taxes on income and profits</u>								
EEC	7.8	11.2	13.5	13.5	13.7	13.9	27.9	33.3
France	5.5	6.5	7.7	7.9	8.0	7.7	15.9	17.4
Germany	10.7	12.4	13.2	13.0	12.9	12.8	33.8	34.2
United States	12.0	12.7	12.5	12.3	13.3	12.8	46.3	47.3
Japan	8.0	9.3	12.8	13.2	14.2	14.8	43.9	43.1
<u>Social security contributions</u>								
EEC	6.7	9.7	11.5	11.5	11.7	11.6	24.5	28.8
France	11.8	15.0	19.3	18.9	19.2	19.2	34.2	43.3
Germany	8.5	12.0	13.9	14.0	14.1	14.0	26.8	37.4
United States	4.2	7.1	8.6	8.6	8.7	8.8	16.4	29.7
Japan	4.0	6.1	8.5	8.6	8.6	9.1	21.8	29.0
<u>Taxes on property</u>								
EEC	2.0	1.8	1.6	1.7	1.8	1.8	7.6	4.5
France	1.5	1.3	2.0	2.1	2.1	2.1	4.3	4.8
Germany	1.8	1.4	1.1	1.1	1.2	1.2	5.8	3.1
United States	4.0	3.8	2.9	3.0	3.1	3.1	15.3	10.3
Japan	1.5	1.9	2.7	3.1	3.4	3.4	8.1	10.9
<u>Taxes on goods and services</u>								
EEC	10.2	10.3	12.3	13.0	13.0	13.1	38.7	32.5
France	13.2	12.3	13.2	12.9	13.1	13.1	38.4	29.4
Germany	10.4	9.7	9.7	9.5	9.6	9.4	33.0	25.2
United States	5.7	5.4	5.2	5.1	5.0	5.0	21.9	16.9
Japan	4.8	3.6	3.9	3.9	3.9	3.9	26.2	12.6

Sources: OECD, Revenue Statistics of OECD Member Countries 1965-1989.

Table A21. France: Public Sector Financial Balances ^{1/}

(In billions of francs and in percent of GDP)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
1. General government	-60.8	-100.4	-126.4	-120.2	-134.7	-138.4	-100.4	-94.9	-69.0	-90.3	-139.7
	-1.9	-2.8	-3.2	-2.8	-2.9	-2.7	-1.9	-1.7	-1.1	-1.4	-2.1
Central government	-34.4	-68.1	-122.0	-125.4	-134.9	-110.8	-102.8	-96.9	-86.6	-99.1	-118.6
	-1.1	-1.9	-3.0	-2.9	-2.9	-2.2	-1.9	-1.7	-1.4	-1.5	-1.8
Local authorities	-21.6	-29.1	-25.7	-14.5	-16.6	-12.7	-7.7	-10.3	-4.4	-1.4	-7.2
	-0.7	-0.8	-0.6	-0.3	-0.4	-0.3	-0.1	-0.2	-0.1	-0.0	-0.1
Social security system	-4.8	-3.2	21.3	23.5	16.8	-14.9	10.1	12.4	22.0	10.2	-14.0
	-0.2	-0.1	0.5	0.5	0.4	-0.3	0.2	0.2	0.4	0.2	-0.2
2. Public enterprises ^{2/}	-52.0	-57.3	-54.9	-26.8	-23.3	-18.9	0.7	-6.9	-4.1	-8.7	-9.0
	-1.6	-1.6	-1.4	-0.6	-0.5	-0.4	0.0	-0.1	-0.1	-0.1	-0.1
3. Total public sector (1+2) ^{3/}	-112.8	-157.7	-181.3	-147.0	-158.0	-157.3	-99.7	-101.8	-73.1	-99.0	-148.7
	-3.6	-4.3	-4.5	-3.4	-3.4	-3.1	-1.9	-1.8	-1.2	-1.5	-2.2
Memorandum items:											
General Government ^{4/}	-77.4	-107.5	-118.2	-108.9	-128.6	-132.2	-82.6	-109.8	-67.0	-85.7	...
	-2.4	-3.0	-3.0	-2.5	-2.7	-2.6	-1.5	-1.9	-1.1	-1.3	...
Central Government ^{4/}	-51.0	-75.2	-113.0	-117.9	-128.8	-104.6	-85.0	-118.8	-84.6	-94.5	...
	-1.6	-2.1	-2.8	-2.7	-2.7	-2.1	-1.6	-2.1	-1.4	-1.5	...

Sources: INSEE, Rapport sur les Comptes de la Nation; and data provided by the French authorities.^{1/} National accounts basis, including Fonds de Stabilisation des Changes (FSC); plus sign indicates financing capacity.^{2/} Grandes Entreprises Nationales.^{3/} Excluding nationalized enterprises in competitive sector.^{4/} Excluding operations of the Fonds de Stabilisation des Changes (FSC).

Table A22. France: Consolidated General Government Accounts

	In billions of francs 1991	In percent of GDP			Changes in percent			
		1980	1990	1991	1988	1989	1990	1991
Revenue	3,321.8	46.3	48.8	49.2	6.4	6.4	6.1	4.8
Tax revenue	1,596.5	23.3	23.4	23.7	5.1	6.2	4.9	5.0
Of which:								
Value added tax	470.6	8.3	7.4	7.0	6.1	5.2	3.3	-2.0
Other production taxes	455.6	6.3	6.7	6.7	6.1	5.4	6.7	4.8
Income and property taxes	626.6	8.4	8.9	9.3	3.0	7.8	4.5	8.2
Social security contributions	1,303.8	17.8	19.3	19.3	6.6	8.5	6.3	4.0
Other revenue	421.6	5.3	6.1	6.2	11.3	0.8	10.0	6.8
Expenditure	3,451.7	46.3	50.2	51.1	6.0	5.3	6.6	5.9
Current expenditure	3,174.9	42.5	45.8	47.0	4.9	5.3	5.7	6.8
Of which:								
Consumption	1,252.8	18.4	18.2	18.6	5.4	4.8	4.8	6.3
Compensation of employees	913.6	13.8	13.3	13.5	3.9	5.4	4.9	5.8
Other	339.2	4.6	4.9	5.0	9.5	3.2	4.7	7.5
Social transfers	1,479.7	19.2	21.3	21.9	6.7	5.8	6.4	7.0
Operating subsidies	96.9	1.9	1.5	1.4	-13.3	-0.0	-6.9	2.1
Interest payments	208.1	1.5	2.9	3.1	3.2	10.3	13.7	9.0
Capital and other expenditure	276.8	3.8	4.4	4.1	21.4	5.0	17.9	-3.5
Investment	229.1	3.2	3.4	3.4	17.4	6.7	10.6	3.2
Capital transfers and other ^{1/}	47.7	0.6	1.0	0.7	42.6	-2.5	52.3	-26.2
Net financing capacity ^{2/}	-139.7	-0.0	-1.4	-2.1	-1.7	-1.1	-1.4	-2.1
Memorandum items:								
Noninterest expenditure	3,243.6	44.9	47.3	48.1	6.2	5.0	6.2	5.7
Real revenue ^{3/}	...	46.3	48.8	49.2	3.5	3.2	2.9	2.0
Real expenditure ^{3/}	...	46.3	50.2	51.1	3.1	2.1	3.4	3.0
Real noninterest expenditure ^{3/}	...	44.9	47.3	48.1	3.2	1.8	3.0	2.8
Revenue elasticity ^{4/}	...	...	...	...	86.3	86.8	112.2	121.2
Expenditure elasticity ^{4/}	...	...	...	...	80.4	71.9	122.6	148.4

Sources: INSEE, Rapport sur les Comptes de la Nation.^{1/} Net of repayment.^{2/} In percent of GDP.^{3/} Deflated by GDP deflator.^{4/} Elasticity with respect to nominal GDP, in percent.

Table A23. France: Principal Tax Measures

Beneficiary	Measures	Effects in billions of francs					
		1988	1989	1990	1991	1992	1990-92
A. Households		12.7	-1.0	1.9	-2.1	-8.7	-8.9
	1. Reduction in income taxes through:	9.3					
	(a) Increase and extension of tax allowance						
	(b) Reduction in marginal tax rate from 58% in 1987 to 56.8% in 1988						
	(c) Reduction and indexation of tax rates.						
	2. Elimination of charge on video and music tapes.						
	3. Elimination and later reintroduction of wealth tax	-4.4					
	4. Reduction in taxes on savings instruments			0.1	0.2		0.3
	5. Reduction in housing levies for lower income earners			2.2	0.1		2.3
	6. Other	3.4	3.4	-0.4	-2.4	-8.7	-11.5
B. Enterprises		19.8	7.9	15.2	6.8	11.7	33.7
	1. Reduction in company tax rates from 50% in 1985 to 45% (1987), 42% (July 1987), 39% (1989), 37% (1990), and 34% (1991); (invested profits only); reduction in taxes of self-employed. Write-offs for past losses.	5.7	1.5	5.5	5.2	10.9	21.6
	2. Reduction in employment tax (<u>taxe professionnelle</u>) by 16%; increase in tax deductible in case of investment and employment creation; introduction of value-added ceiling.	2.0		0.8	2.2	3.5	6.5
	3. Deductibility of VAT from expenditures on telecommunications.	6.8					
	4. General expenditure tax: reduction from 30% to 15% in 1987 and elimination of tax in 1988	1.4					
	5. Reduction of tax on heavy fuel: 58% and on natural gas: 40%	0.7			0.1		0.1
	6. Elimination of credit tax		1.5				
	7. Reduction in life insurance tax		0.8	1.3	1.4	0.3	3.0
	8. Other	3.2	4.1	7.6	-2.1	-3.0	2.5
C. General		9.2	12.0	10.6	6.3	3.0	19.9
	1. Reduction in top VAT rate from 33.3% to 28% (1988), 25% (1990), 22% (1991)	5.1	5.5	6.9	6.2	4.4	17.5
	2. Reduction in VAT rate on records and cassettes from 33.3% to 18.6%	1.1					
	3. Reduction in VAT on medicine			3.4			3.4
	4. Unification of reduced VAT rate of 5.5%		2.6	0.2			0.2
	5. Other	3.0	3.9	0.1	0.1	-1.4	-1.2
D. Grand total		41.7	18.9	27.7	11.0	6.0	44.7
	(In percent of GDP)	(0.7)	(0.3)	(0.4)	(0.2)	(0.1)	(0.7)

Sources: Ministère de l'Economie, des Finances et du Budget, Les Notes Bleues, No. 375 (1988); and data supplied by the authorities.

Table A24. France: Central Government Budget

(Administrative basis; in billions of francs)

	1986	1987	1988	1989	1990	1991		1992
			Final outturn			Initial budget	Estimated outturn	Initial budget
Permanent operations								
Expenditure <u>1/</u>	1,114.1	1,124.1	1,153.1	1,212.1	1,280.7	1,280.1	1,334.9	1,321.7
Interest on public debt	101.7	108.8	114.6	133.6	150.9	152.7	161.8	166.7
Operating expenditure	402.0	412.8	430.5	453.6	478.6	480.4	502.1	498.2
Social transfers	151.8	153.9	159.9	167.7	164.9	165.5	166.3	165.7
Economic & other transfers	205.1	213.7	198.3	200.8	207.8	194.4	219.1	206.3
Capital expenditure	99.1	69.7	79.4	84.2	93.6	92.7	97.5	89.6
Defense	154.9	165.2	170.8	172.9	186.1	194.9	188.9	195.3
Special accounts, net	-0.5	-0.1	-0.4	-0.6	-1.2	-0.4	-0.7	-0.1
Revenue, net	963.1	1,011.8	1,046.7	1,126.9	1,185.5	1,209.5	1,223.1	1,244.7
Personal income tax	221.3	233.9	230.6	238.6	263.0	293.1	303.5	318.4
Corporate taxes	104.1	118.5	135.2	153.0	166.5	170.1	154.4	162.9
Other direct taxes	101.6	96.9	96.3	102.2	102.3	110.0	105.0	109.8
Value-added tax	475.5	509.6	552.8	594.9	625.4	670.0	641.9	709.2
Other indirect taxes	189.4	203.2	223.1	232.8	237.8	253.7	248.0	260.2
Nontax revenue	71.6	75.4	85.0	106.0	123.1	120.3	156.4	140.7
Earmarked accounts	44.7	46.0	38.6	39.0	43.5	--	53.8	--
Revenue sharing	-131.9	-153.4	-176.6	-185.3	-186.7	-204.6	-215.4	-231.3
Tax refunds and reliefs	-113.2	-118.2	-138.4	-154.3	-189.4	-203.1	-224.6	-225.1
Balance on permanent operations	-151.1	-112.3	-106.4	-85.2	-95.2	-70.6	-111.8	-77.0
Balance on temporary operations	3.8	-25.6	6.7	-17.3	-2.6	-10.1	-18.9	-12.9
Overall balance, including FSC <u>2/</u>	-147.3	-137.9	-99.8	-102.4	-97.7	-80.7	-130.7	-89.9
Overall balance, excluding FSC <u>2/</u>	-141.1	-120.1	-114.7	-100.4	-93.1	-80.7	-131.7	-89.9
(As percent of GDP)	(-2.8)	(-2.2)	(-2.0)	(-1.6)	(-1.4)	(-1.2)	(-2.0)	(-1.2)
Memorandum item:								
Primary balance <u>3/</u>	-39.4	-11.2	-0.1	33.2	57.8	72.0	30.1	76.8
(As percent of GDP)	-0.8	-0.2	-0.0	0.5	0.9	1.1	0.4	1.1

Sources: Budget documents, various years; and data provided by the French authorities.

1/ Including net special accounts (comptes d'affectation speciale).2/ Fonds de stabilisation des changes (FSC).3/ Overall balance minus gross interest payments.

Table A25. France: Central Government Revenue and Expenditure ^{1/}

	Changes in percent				1991 ^{2/}		1992 ^{3/}	Levels in	
	1987	1988	1989	1990	Budget	Outturn	Budget	percent of GDP	1991
Permanent operations									
Expenditure	0.9	2.6	5.1	5.7	4.9	4.2	3.2	20.6	19.8
Interest on public debt	7.1	5.3	16.6	12.9	10.7	7.2	9.2	1.0	2.4
Operating expenditure	2.7	4.3	5.4	5.5	5.9	4.9	3.7	8.0	7.4
Social transfers	1.4	3.9	4.9	-1.7	-0.4	0.8	0.1	3.6	2.5
Economic and other transfers	4.2	-7.2	1.3	3.5	1.6	5.4	6.1	3.0	3.2
Capital expenditure	-29.6	13.9	6.0	11.2	13.0	4.2	-3.3	2.0	1.4
Defense	6.6	3.4	1.3	7.6	2.9	1.5	0.2	3.3	2.8
Revenue, net	5.1	3.4	7.7	5.2	7.1	3.2	2.9	19.4	18.1
Personal income tax	5.7	-1.4	3.5	10.2	11.9	15.4	8.6	4.2	4.5
Corporate taxes	13.8	14.1	13.1	8.8	5.6	-7.3	-4.2	2.2	2.3
Other direct taxes	-4.6	-0.6	6.1	0.1	6.3	2.6	-0.2	1.8	1.6
Value added tax	7.2	8.5	7.6	5.1	9.4	2.6	5.9	9.3	9.5
Other indirect taxes	7.3	9.8	4.4	2.1	4.6	4.3	2.6	3.7	3.7
Nontax revenue	5.2	12.7	24.8	16.1	14.4	27.1	17.0	1.0	2.3
Memorandum items:									
Real expenditure ^{4/}	-2.0	-0.3	1.9	2.5	2.1	1.4	...	20.6	19.8
Real noninterest expenditure ^{4/}	-2.6	-0.5	0.7	1.6	1.4	1.0	...	20.6	19.8
Revenue elasticity ^{5/}	95.9	46.2	103.7	96.2	103.0	80.1	95.8	...	...

Sources: Budget documents, various years; and data provided by the French authorities.

^{1/} Budgetary outturns on an administrative basis, excluding earmarked accounts.

^{2/} The percentages for the budget compare with the initial budget for 1990; the preliminary outturn compares with the final outturn of 1990.

^{3/} Compared with the initial budget for 1991.

^{4/} Deflated by GDP deflator; for budget period, the official estimate is taken.

^{5/} Relative to nominal GDP, in percent.

Table A27. France: Simplified Accounts of the Local Authorities 1/

	In billions of francs		Structure (In percent)		Changes in percent			
	1980	1991	1980	1991	1988	1989	1990	1991
Expenditure								
Operating expenses	175.2	515.2	75.3	77.5	6.7	6.3	7.3	6.8
Of which:								
Intermediate consumption	41.9	139.7	18.0	21.0	5.6	6.3	7.7	6.7
Gross wages and salaries	53.4	152.3	23.0	22.9	3.7	6.5	5.6	6.1
Social security contributions	15.5	49.3	6.7	7.4	12.7	5.8	5.8	6.6
Investment	61.4	168.0	23.6	25.3	18.7	6.7	6.3	7.9
Interest on debt	17.7	56.1	7.6	8.4	2.0	3.6	3.9	9.0
Transfers	39.7	93.5	17.1	14.1	9.2	6.9	4.5	10.2
Current subsidies	4.5	9.3	1.9	1.4	-4.0	2.7	2.6	5.8
Social transfers	16.3	29.2	7.0	4.4	5.9	4.0	-2.3	8.2
Investment subsidies	5.6	9.1	0.9	1.4	16.3	25.3	8.4	6.1
Transfers between administrations	6.9	14.1	3.0	2.1	5.2	8.4	14.6	15.0
Other transfers	9.2	31.9	3.9	4.8	18.3	6.3	5.9	12.8
Total	232.6	664.8	100.0	100.0	6.7	6.3	7.1	7.0
Receipts								
Taxes and fiscal transfers	129.9	422.3	59.5	64.1	8.5	8.1	6.2	8.3
Production taxes	47.7	161.2	22.0	24.5	12.3	7.5	10.2	6.9
Income and wealth taxes	35.3	111.1	16.3	16.9	6.6	5.1	1.7	5.0
Fiscal transfers received	46.9	150.0	21.6	22.8	6.1	11.4	5.5	12.4
Other resources	87.1	236.3	40.1	35.9	8.5	6.5	7.0	4.2
Of which:								
Transfers from other government	36.8	79.2	17.0	12.0	9.3	7.0	10.8	3.1
Total	217.7	558.6	100.0	100.0	8.5	7.5	6.5	6.8
Financing capacity (+) or requirement (-)								
(In percent of GDP)	-15.6	-6.2	...	...	...	...	...	...
	(-0.6)	(-0.1)	...	...	...	...	...	...

Source: INSEE, Rapport sur les Comptes de la Nation.1/ National accounts definition.

Table A28. France: Level and Structure of Government Debt

(In billions of francs and in percent)

	Level						Structure					
	1980	1985	1988	1989	1990	1991	1980	1985	1988	1989	1990	1991
Negotiable debt	197.0	703.0	1,069.3	1,233.0	1,367.7	1,456.4	47.1	65.8	72.5	76.0	76.7	78.5
Long-term debt	114.0	366.0	619.3	713.0	817.8	899.3	27.2	34.3	42.0	44.0	45.9	48.5
Including OATs	...	72.0	394.6	524.8	662.0	...	...	6.7	26.8	32.4	37.1	...
Notes and bills	83.0	337.0	450.0	520.0	549.9	557.1	19.8	31.6	30.5	32.1	30.9	30.0
Including BTAN	...	...	276.6	352.0	406.6	417.7	...	...	18.8	21.7	22.8	22.5
Non-negotiable debt	221.5	364.6	405.5	389.2	414.6	398.3	52.9	34.2	27.5	24.0	23.3	21.5
Long-term debt later transferred to the stat	6.0	44.5	69.7	82.3	79.6	71.5	1.4	4.2	4.7	5.1	4.5	3.9
Savings bills	48.6	36.2	33.7	32.0	30.3	24.6	11.6	3.4	2.3	2.0	1.7	1.3
Deposits in current accounts	163.0	274.4	291.7	303.1	323.3	314.2	38.9	25.7	19.8	18.7	18.1	16.9
Treasury's account at the Bank of France	-18.1	-55.1	-43.4	-86.4	-74.0	-63.1	-4.3	-5.2	-2.9	-5.3	-4.2	-3.4
Miscellaneous	21.9	64.6	53.8	58.2	55.4	51.1	5.2	6.1	3.6	3.6	3.1	2.8
Total	418.5	1,067.6	1,474.8	1,622.2	1,782.3	1,854.7	100.0	100.0	100.0	100.0	100.0	100.0
(In percent of GDP)	14.9	22.7	25.7	26.3	27.5	27.5	...	...	...	...	...	...
General Government ^{1/}	1,043.9	2,136.5	2,684.6	2,923.5	3,034.1	3,282.2	...	...	...	...	...	...
(In percent of GDP)	37.2	45.5	46.8	47.5	46.7	48.6	...	...	...	...	...	...

Sources: INSEE, Rapport sur les Comptes de la Nation; and data provided by the French authorities.^{1/} General government consists of central government, the local authorities and social security.

Table A29. France: Decomposition of Central Government Debt Accumulation

(In percent of GDP)

	1983	1984	1985	1986	1987	1988	1989	1990	1991
Contributing factors									
Noninterest deficit	2.3	1.4	1.5	1.0	0.6	0.3	-0.2	-0.7	-0.2
"Past deficits"	0.1	0.2	0.2	0.1	0.5	--	0.1	0.6	1.0
Interest on public debt	1.3	1.5	1.8	1.8	1.8	1.0	1.9	2.1	2.1
Real GDP growth	-0.1	-0.3	-0.4	-0.6	-0.5	-1.0	-1.0	-0.7	-0.3
Inflation (GDP deflator)	-1.5	-1.3	-1.2	-1.1	-0.8	-0.7	-0.8	-0.8	-0.8
Residual ^{1/}	--	--	-0.3	-0.2	-0.6	1.4	0.6	1.3	-0.7
Total change in debt/GDP	2.4	1.6	0.5	0.9	0.5	1.7	0.6	1.2	0.1
Memorandum item:									
Debt/GDP ratio	20.6	22.2	22.7	23.6	24.1	25.8	26.4	27.5	27.6

Sources: INSEE, Rapport sur les Comptes de la Nation 1986, Vol. 1; and data provided by the French authorities.

^{1/} For 1987 this includes primarily the effects of early redemption of public debt owing to the proceeds from privatization.

Table A30. France: Monetary Targets and Underlying Assumptions

(Changes in percent)

	<u>Growth of M2 1/2/</u>		<u>Growth of M3 1/3/</u>		<u>Nominal GDP</u>		<u>Real GDP</u>		<u>GDP Deflator</u>	
	Target	Outcome	Target	Outcome	Forecast	Outcome	Forecast	Outcome	Forecast	Outcome
1978	12.5	13.3			12.6	13.8	4.5	3.4	7.8	10.1
1979	12.0	13.0			13.0	13.7	3.6	3.2	9.1	10.1
1980	11.0	8.1			11.9	13.2	2.6	1.6	9.1	11.4
1981	11.0	13.7			12.3	12.7	1.6	1.2	10.6	11.3
1982	10.0	12.0			17.0	14.6	3.1	2.5	13.4	11.8
	12.0	^{4/}								
1983	2.5-13.5	14.1			11.2	10.5	2.0	0.7	9.1	9.7
1984	9.0	8.5			7.7	8.9	1.0	1.3	5.6	7.5
1985	5.5-6.5	5.9			7.5	7.8	1.8	1.9	5.5	5.8
1986	4.0-6.0	4.6			6.1	7.9	2.0	2.5	4.0	5.2
1987		4.3	3.0-5.0	4.5	4.5	5.3	2.8	2.3	2.0	3.0
1988	4.0-6.0	3.7	3.0-5.0	9.1	4.8	7.5	2.2	4.5	2.4	2.8
1989	4.0-6.0	4.7	...	7.0	5.1	7.4	2.6	4.1	2.4	3.2
1990	4.0-6.0	0.8			5.5	5.4	3.0	2.2	2.5	3.1
1991	3.5-5.5	-3.2	5.0-7.0	3.8	5.4	4.0	2.7	1.2	2.8	2.8

Sources: Draft budget law, several years; and Banque de France, Statistiques Monétaires Provisoires.

1/ From 1983 to 1985, growth is measured as the yearly growth rate of the quarter centered on December. Since 1986, the yearly growth rate is centered on November.

2/ The definition includes nonresident deposits up to 1983. Since 1984, the nonresident deposits are no longer included.

3/ Since 1991, the target is expressed in terms of M3 (new definition).

4/ The target was implicitly changed in June 1981 to 12 percent.

Table A31. France: Main Monetary Aggregates

(In billions of francs and in percent) 1/

	1985	1986	1987	1988	1989	1990	1991	1992 Q1
Money (M1)	1,296.3 6.5	1,388.9 7.1	1,449.0 4.3	1,508.6 4.1	1,634.5 8.3	1,697.7 3.9	1,618.9 -4.6	1,503.4 -1.4
Quasi-money (M2 - M1)	1,177.1 5.2	1,198.8 1.8	1,250.1 4.3	1,290.3 3.2	1,296.0 0.4	1,254.9 -3.2	1,238.1 -1.3	1,212.6 -2.5
Money and quasi-money (M2)	2,473.4 5.9	2,587.7 4.6	2,699.1 4.3	2,798.9 3.7	2,930.5 4.7	2,952.6 0.8	2,857.0 -3.2	2,716.0 -1.9
Near money (M3 - M2)	848.6 12.0	960.1 13.1	1,195.6 24.5	1,424.4 19.1	1,697.1 19.1	2,084.8 22.8	2,298.3 10.2	2,453.4 10.2
Broad money (M3)	3,322.0 7.4	3,547.8 6.8	3,894.7 9.8	4,223.3 8.4	4,627.6 9.6	5,037.4 8.9	5,155.3 2.3	5,169.4 3.5
Nonmonetary liquidity (M4 - M3)	3.2 3,096.8	22.4 600.0	39.6 76.8	40.5 2.3	62.7 54.8	49.6 -20.9	49.0 -1.2	49.2 104.6
Liquidity (M4)	3,325.2 7.5	3,570.2 7.4	3,934.3 10.2	4,263.8 8.4	4,690.3 10.0	5,087.0 8.5	5,204.3 2.3	5,218.6 33.0
Memorandum items:								
Velocity of circulation								
M1	3.63	3.65	3.68	3.80	3.77	3.82	4.17	4.66
M2	1.90	1.96	1.98	2.05	2.10	2.20	2.36	2.58
M3	1.41	1.43	1.37	1.36	1.33	1.29	1.31	1.35

Sources: Banque de France, Statistiques Monetaires Definitives et Provisoires, and Statistiques Monetaires Provisoires.

1/ Year end data and year-on-year percentage changes.

Table A32. France: Credit Aggregates

(In billions of francs and in percent)

	1985	1986	1987	1988	1989	1990	1991
Total domestic credit	4,926.1	5,329.6	5,904.9	6,604.1	7,375.7	8,162.2	8,661.8
To government	931.1	1,069.5	1,194.7	1,335.6	1,449.5	1,605.0	1,717.0
Claims of financial institutions	815.3	911.1	930.0	1,024.0	970.8	974.3	1,014.2
To the economy	3,994.9	4,260.1	4,710.3	5,268.5	5,926.2	6,657.2	6,944.8
Claims of financial institutions	3,583.8	3,803.3	4,224.7	4,715.5	5,285.8	5,854.1	6,191.2
Negotiable financial instruments	266.9	323.7	354.8	404.9	485.1	544.9	582.0
Medium- and long-term external borrowing by nonfinancial agents	144.2	133.1	131.2	148.1	155.3	158.2	171.6
Memorandum items:							
Negotiable instruments as percentage of total credit to the economy	6.7	7.6	7.5	7.7	8.2	8.2	8.4
Growth rate of credit aggregates							
Total domestic credit	11.4	8.2	10.8	11.8	11.7	10.7	6.1
Government debt	18.6	14.9	11.7	11.8	8.5	10.7	7.0
Credits to the economy	9.7	6.6	10.6	11.9	12.5	12.3	4.3

Source: Banque de France, Statistiques Monetaires Definitives.

Table A33. France: Financial Institutions' Claims on the Economy

(In billions of francs and in percent) 1/

	1989	1990	1991	1991			
				Q1	Q2	Q3	Q4
By definition							
Enterprises	2,507.2	2,886.3	3,101.9	2,926.1	3,000.6	3,020.0	3,101.9
Households	2,165.2	2,317.7	2,370.0	2,315.1	2,340.6	2,357.9	2,370.0
Individuals	1,642.8	1,757.4	1,802.1	1,754.3	1,774.6	1,783.5	1,802.1
Self employed	522.4	560.2	567.9	560.8	565.8	574.4	567.9
Other	613.4	650.1	719.3	648.7	651.6	675.5	719.3
By type							
Overdraft: enterprises	776.8	898.1	954.1	908.9	940.2	939.6	954.1
Export	44.1	40.5	33.1	39.4	37.6	35.7	33.1
Investment	1,892.2	2,072.1	2,183.8	2,087.2	2,108.2	2,131.6	2,183.8
Overdraft: households	369.6	390.5	381.0	379.8	384.9	381.7	381.0
Housing	1,781.6	1,892.0	1,974.7	1,908.9	1,930.3	1,948.6	1,974.7
Developers	72.9	134.5	174.8	144.8	154.4	164.5	174.8
Other	348.8	426.3	489.8	420.9	437.2	451.7	489.8
TOTAL	5,285.8	5,854.1	6,191.2	5,889.8	5,992.7	6,053.5	6,191.2
(Changes in percent and contribution to growth)							
By definition							
Enterprises	16.0	15.1	7.5	14.5	12.9	10.6	7.5
Households	9.2	7.0	2.3	5.3	4.4	3.9	2.3
Individuals	9.5	7.0	2.5	5.5	4.7	3.4	2.5
Self employed	8.4	7.2	1.4	4.6	3.5	5.2	1.4
Other	7.2	6.0	10.6	4.6	4.5	9.3	10.6
By type							
Overdraft: enterprises	19.3	15.6	6.2	15.3	13.7	12.0	6.2
Export	-12.6	-8.2	-18.3	-11.8	-14.3	-15.6	-18.3
Investment	11.2	9.5	5.4	8.4	7.6	7.4	5.4
Overdraft: households	15.4	5.7	-2.4	2.6	1.5	-0.1	-2.4
Housing	6.6	6.2	4.4	5.7	5.0	4.3	4.4
Developers	75.3	84.5	30.0	66.1	49.7	41.2	30.0
Other	25.3	22.2	14.9	19.1	17.1	16.5	14.9
TOTAL	12.1	10.8	5.8	9.6	8.5	7.7	6.2

Source: Banque de France, Statistiques Monetaires Trimestrielles.

1/ End-of-period data; year-on-year changes in percent.

Table A34. France: M3 and Its Counterparts

(In billions of francs)

	1985	1986	1987	1988	1989	1990	1991
1. M3	3,322.0	3,547.8	3,894.7	4,223.3	4,627.6	5,037.4	5,155.3
2. External counterparts	66.5	154.1	127.1	80.7	54.5	-49.7	-5.9
Net foreign assets of the Banque de France	111.7	158.4	102.3	101.8	95.2	154.8	137.0
Net foreign asset position of banks	-45.2	-4.2	24.8	-21.1	-40.7	-204.4	-143.0
3. Domestic credit	4,952.6	5,504.6	6,035.0	6,791.3	7,487.2	8,083.3	8,407.5
Claims on government	815.3	911.1	930.0	1,024.0	970.8	974.3	1,014.2
Claims on the economy	4,137.3	4,593.5	5,105.0	5,767.3	6,516.4	7,106.0	7,393.3
4. Other sources (3 + 2 - 1)	1,697.1	2,110.9	2,267.4	2,648.7	2,914.1	2,996.2	3,246.3
Contractual savings	236.8	295.4	351.3	408.7	448.6	538.6	624.6
Net stable resources	1,276.3	1,685.6	1,812.7	2,139.0	2,412.5	2,432.2	2,602.0
Net miscellaneous items	183.9	130.0	103.3	101.0	53.0	22.4	-19.7
Memorandum item:							
5. Net domestic credit (1 - 2)	3,255.5	3,393.7	3,767.6	4,142.6	4,573.1	5,087.1	5,161.2
	(Contributions to the Growth in M3)						
Percentage change in M3	7.4	6.8	9.8	8.4	9.6	8.9	2.3
External counterparts	2.9	2.6	-0.8	-1.2	-0.6	-2.3	0.9
Banque de France	1.3	1.4	-1.6	-0.0	-0.2	1.3	-0.4
Other credit institutions	1.6	1.2	0.8	-1.2	-0.5	-3.5	1.2
Net domestic credit	4.5	4.2	10.5	9.6	10.2	11.1	1.5
Claims on government	4.0	2.9	0.5	2.4	-1.3	0.1	0.8
Claims on the economy	15.1	13.7	14.4	17.0	17.7	12.7	5.7
Contractual savings	-1.6	-1.8	-1.6	-1.5	-0.9	-1.9	-1.7
Net stable resources	-10.0	-12.3	-3.6	-8.4	-6.5	-0.4	-3.4
Net miscellaneous items	-3.0	1.6	0.8	0.1	1.1	0.7	0.8

Source: Banque de France, Statistiques Monetaires Trimestrielles.

Table A35. France: Monetary Base and Its Sources

(In billions of francs)

	1985	1986	1987	1988	1989	1990	1991
Monetary base	269.9	280.0	320.8	324.7	331.2	322.7	316.4
Sources:							
Net foreign assets	111.7	158.4	102.3	101.8	95.2	154.8	137.0
Credits to government	23.6	25.3	36.5	36.9	28.9	38.5	26.4
Discounted government paper	25.4	36.4	81.9	56.7	66.8	37.9	70.3
Discounted private bills and money market instruments	113.9	77.9	106.3	164.8	196.5	134.4	116.8
Other (net)	42.3	38.5	113.8	40.1	50.8	60.8	51.5
Treasury's account at the Banque de France	47.0	56.5	120.0	75.6	107.0	103.7	85.6
	(Contributions to growth of monetary base)						
Memorandum items:							
Percentage change in monetary base	17.5	3.7	14.6	1.2	2.0	-2.6	-2.0
Contributions							
Net foreign assets	17.4	17.3	-20.0	-0.2	-2.0	18.0	-5.5
Credits to government	5.3	0.6	4.0	0.1	-2.5	2.9	-3.7
Discounted government paper	-15.2	4.1	16.3	-7.9	3.1	-8.7	10.0
Discounted private bills and money market instruments	6.6	-13.3	10.1	18.2	9.8	-18.8	-5.5

Source: Banque de France, Statistiques Monetaires Definitives.

Table A36. France: Financing of the Treasury's Cash Deficit
(In billions of francs; as percent of total deficit in parentheses)

	1983	1984	1985	1986	1987	1988	1989	1990	1991
Cash deficit ^{1/}	147.1 (100.0)	143.3 (100.0)	157.6 (100.0)	139.4 (100.0)	124.1 (100.0)	127.3 (100.0)	107.7 (100.0)	111.5 (100.0)	112.4 (100.0)
Financing									
Long-term bond issues, net	44.5 (30.3)	79.0 (55.1)	86.3 (54.8)	129.8 (93.1)	14.8 (11.9)	60.8 (47.8)	74.9 (69.5)	85.4 (76.6)	87.7 (78.0)
Direct credits	44.3 (30.1)	17.0 (11.9)	48.3 (30.6)	-8.3 (-6.0)	-7.6 (-6.1)	34.9 (27.4)	-35.2 (-32.7)	12.6 (11.3)	-6.8 (-6.0)
Other ^{2/}	58.3 (39.6)	47.3 (33.0)	23.0 (14.6)	29.4 (21.1)	116.9 (94.2)	31.6 (24.8)	68.0 (63.1)	13.5 (12.1)	31.5 (28.0)
Of which:									
Privatization ^{3/}	-- (--)	-- (--)	-- (--)	-- (--)	66.8 (53.8)	13.2 (10.4)	-- (--)	-- (--)	-- (--)
Memorandum item:									
Monetary financing ^{4/}	115.2 (78.3)	117.2 (81.8)	124.3 (78.9)	95.8 (68.7)	18.9 (15.2)	94.0 (73.8)	-53.2 (-49.4)	3.5 (3.1)	39.9 (35.5)

Sources: Banque de France, Compte Rendu and Statistiques Monétaires Définitives; and data supplied by the authorities.

^{1/} Including operations of the Fonds de stabilisation des changes (FSC).

^{2/} Includes Bons du Trésor.

^{3/} Total of privatization receipts.

^{4/} Claims on government counterpart to M3.

Table A37. France: Key Interest Rates

(In percent per annum; period averages)

	Withholding tax 1/		1987	1988	1989	1990	1991				1992	
	1991	1992	Dec.	Dec.	Dec.	Dec.	Mar.	June	Sept.	Dec.	Mar.	June
Interbank market												
Intervention rate 2/	--	--	7.50	7.75	10.00	9.25	9.00	9.00	9.25	9.75	9.75	9.75
Three-month Interbank rate	--	--	8.60	8.47	10.89	10.27	9.43	9.71	9.43	10.11	10.12	10.11
Capital market												
Government bond yield	.15	.15	10.00	8.62	9.14	9.93	9.06	9.15	8.89	8.79	8.64	8.74
Lending rates												
Prime lending rate	--	--	9.60	9.25	11.00	10.25	10.25	10.25	10.25	10.35	10.35	9.85
Overdrafts and advances	--	--	16.80	16.50	17.90	17.05	17.23	17.27	17.26	16.76	16.93	...
Deposit rates												
Time deposits 4/	.35	.35	5.78	5.21	6.66	6.44	...	...	...	...	...	...
Passbook savings 5/	--	--	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Money market securities												
Billets de Tresorerie	.32	.15	8.34	8.27	10.62	9.99	9.54	9.92	9.54	10.12	10.41	10.34
Contractual savings												
Plan d'epargne logement	--	--	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Eurofranc three-month rate	--	--	9.18	8.52	10.81	10.25	9.42	9.70	9.43	10.10	10.15	10.11

Sources: Banque de France, Bulletin Trimestriel, and Statistiques Monetaires Provisoires; OECD, Financial Statistics Monthly; and International Monetary Fund, International Financial Statistics.

1/ A 2 percent surcharge for special social security contributions to be added to all withholding taxes on interest income.

2/ Rate on the appels d'offres; end of period.

3/ Average of maximum and minimum rates, with spreads of up to 5-6 percentage points.

4/ Compte a terme included in M3-M2; deposits of over F 500,000, and a maximum maturity of six months.

5/ Livrets A ou Bleu, included in M2-M1.

Table A38. France: Exchange Rate Developments

	Frac/ US\$	Frac/ DM	Frac/ ECU	Nominal effective exchange rate 1/ (1985 = 100)	Real effective exchange rate 2/
1985	8.99	3.05	6.80	100.00	99.98
1986	6.93	3.19	6.80	103.18	102.33
1987	6.01	3.34	6.93	103.54	102.56
1988	5.96	3.39	7.04	101.35	96.31
1989	6.38	3.39	7.02	100.00	92.34
1990	5.45	3.37	6.91	105.29	95.71
1991	5.64	3.40	6.97	103.15	93.62
1989					
Q1	6.29	3.40	7.08	99.10	91.78
Q2	6.55	3.39	7.04	99.25	91.23
Q3	6.51	3.38	7.01	99.85	92.67
Q4	6.17	3.40	6.96	101.79	93.67
1990					
Q1	5.74	3.39	6.92	104.23	94.03
Q2	5.64	3.36	6.90	105.15	95.14
Q3	5.34	3.35	6.93	105.54	95.90
Q4	5.06	3.37	6.92	106.24	97.78
1991					
Q1	5.21	3.40	6.97	104.80	97.23
Q2	5.88	3.39	6.97	102.36	92.67
Q3	5.93	3.40	6.97	102.17	90.96
Q4	5.55	3.41	6.97	103.27	...
1992					
January	5.38	3.41	6.96	...	...
February	5.51	3.40	6.96	...	...
March	5.64	3.40	6.94	...	...
April	5.57	3.38	6.93	...	...
May	5.45	3.36	6.91	...	...
June	5.30	3.37	6.90	...	...

Source: International Monetary Fund, International Financial Statistics.

1/ A downward movement in the index indicates the nominal depreciation of the franc.

2/ Measured by the index of relative unit labor cost in manufacturing measured in a common currency. A downward movement indicates improvement in competitiveness.

Table A39. France: Balance of Payments Summary

(In billions of francs)

	1988	1989	1990	1991	1991			
					Q1	Q2	Q3	Q4
Current account	-28.8	-29.8	-52.7	-33.4	-27.4	-5.3	-1.2	0.5
Trade Balance <u>1/</u>	-50.7	-67.9	-73.7	-56.4	-24.9	-13.0	-14.0	-4.5
Services	27.4	45.5	23.1	17.5	-2.6	3.8	8.9	7.4
Unrequited transfers	-40.3	-48.3	-44.4	-41.4	-11.0	-7.6	-6.8	-16.0
Other	34.8	40.9	42.3	46.9	11.1	11.5	10.7	13.6
Long-term capital	-3.8	73.3	89.4	17.7	-19.8	-10.3	24.7	23.1
Basic balance <u>2/</u>	-32.6	43.5	36.7	-15.7	-47.2	-15.6	23.5	23.6
Short-term bank capital	14.0	37.0	149.3	4.2	70.1	-41.4	26.8	-51.3
Short-term private nonbank capital	9.1	-66.9	-100.5	-42.3	-51.4	13.8	-7.9	3.2
Errors and omissions	4.1	-34.8	3.3	25.8	24.4	12.7	-18.1	6.8
Balance on official settlements <u>3/</u>	5.5	27.1	-58.9	31.2	4.5	31.3	-23.9	19.3
Change in official reserves	30.2	3.4	-60.4	29.9	1.6	5.5	-10.1	32.9
Net position with FECOM	-23.7	--	--	--	--	--	--	--
Other	-1.0	23.7	1.5	1.3	2.9	25.8	-13.8	-13.6
Memorandum item:								
Capital balance <u>4/</u>	23.4	8.6	141.5	5.4	23.3	-25.2	25.5	-18.2

Sources: Direction du Tresor and Banque de France, La Balance des Paiements de la France; Ministère de l'Economie, des Finances et du Budget, Les Notes Bleues; and data provided by the French authorities.

1/ Excluding international brokerage.

2/ Equals current account plus long-term capital balance.

3/ A plus sign indicates a reduction in net foreign assets or an increase in net foreign liabilities.

4/ Equals long-term capital plus short-term capital, including errors and omissions.

Table 40. France: Current Account Developments

	1987	1988	1989	1990	1991	1991			
						Q1	Q2	Q3	Q4
(In billions of francs)									
Trade balance	-52.2	-50.7	-67.9	-73.7	-56.4	-24.9	-13.0	-14.0	-4.5
Exports	849.3	952.5	1,087.9	1,122.9	1,165.0	286.4	295.2	274.9	308.5
Imports	-901.6	-1,003.2	-1,155.8	-1,196.6	-1,221.4	-311.3	-308.2	-288.9	-313.0
International brokerage, net	-3.2	0.3	3.7	3.4	6.7	1.6	1.4	0.7	3.0
Services, net	28.6	27.4	45.5	23.1	17.5	-2.6	3.8	8.9	7.4
Of which:									
Investment income, net	-11.0	-4.0	3.1	-16.1	-28.6	-6.2	-9.6	-6.7	-6.1
Travel, net	20.3	24.2	39.7	43.1	51.0	7.6	15.2	16.4	11.8
Major work projects	7.0	4.3	4.5	6.4	7.7	1.9	1.8	2.2	1.8
Technical cooperation	7.6	6.6	6.9	5.2	7.6	1.8	2.7	1.4	1.7
French government income and expenditure	3.5	-4.3	-5.0	-4.8	-5.1	-1.5	-1.2	-1.1	-1.3
Other goods and services, net	32.5	34.9	37.2	38.9	40.2	9.7	10.0	9.9	10.6
Unrequited transfers, net	-32.1	-40.3	-48.3	-44.4	-41.4	-11.0	-7.6	-6.8	-16.0
Private	-13.8	-14.5	-12.2	-15.1	-14.4	-3.6	-3.6	-4.5	-2.7
Official	-36.2	-25.8	-36.1	-29.3	-27.0	-7.4	-3.9	-2.3	-13.4
Current account	-26.6	-28.8	-29.8	-52.7	-33.4	-27.4	-5.3	-1.2	0.5
(As percent of GDP)									
Memorandum items:									
Current account	-0.5	-0.5	-0.5	-0.8	-0.5	-1.7	-0.3	-0.1	0.0
Trade balance	-1.0	-0.9	-1.1	-1.1	-0.8	-1.5	-0.8	-0.8	-0.3
Services, net	0.5	0.5	0.7	0.4	0.3	-0.2	0.2	0.5	0.4
Unrequited transfers	-0.6	-0.7	-0.8	-0.7	-0.6	-0.7	-0.5	-0.4	-0.9
(Changes in percent)									
Relative cyclical position ^{1/}	-0.5	0.2	0.1	-0.3	-0.4	...	...	...	...
Export performance ^{2/}	-5.8	-0.3	2.4	-0.3	0.7	...	...	...	...
Import penetration ^{3/}	4.2	3.7	4.3	3.8	2.1	2.3	2.1	3.0	0.9
Terms of trade ^{4/}	0.1	0.1	-1.6	0.2	0.5	0.6	-1.0	0.4	2.2

Sources: International Monetary Fund, International Financial Statistics; Direction du Trésor and Banque de France, La Balance des Paiements de la France; and data provided by the authorities.

^{1/} Difference between percentage growth of real total domestic demand in France and in partner countries (national accounts definition).

^{2/} Difference between percentage growth of export volume and export-weighted import volume of partner countries (national accounts definition).

^{3/} Difference between percentage growth of imports volume and value of total domestic demand (national accounts definition).

^{4/} Calculated for national accounts aggregates.

Table 41. France: Services Balance

(In billions of French francs)

	1988	1989	1990	1991	1991			
					Q1	Q2	Q3	Q4
Services linked to trade	0.6	-9.3	-12.7	-13.2	-8.5	-5.8	-3.0	-3.1
Freight insurance on merchandise	-6.7	-6.0	-5.0	-6.0	-5.0	-3.9	-2.0	-2.3
Sea transportation	-2.2	-4.9	-4.6	-6.2	-1.5	-1.9	-1.2	-1.6
Other transportation	8.5	3.1	-2.7	-0.4	-1.0	-0.3	-0.2	1.1
Insurance	1.0	-1.5	-0.4	-0.6	-1.0	0.3	0.4	-0.3
Services linked to technology	13.0	14.8	15.0	19.2	4.9	5.5	3.5	5.3
Major work projects	4.3	4.5	6.4	7.7	1.9	1.8	2.2	1.8
Technical cooperation	6.6	6.9	5.2	7.6	1.8	2.7	1.4	1.7
Processing and repair	5.3	2.7	2.7	3.2	1.1	0.8	0.7	0.6
Royalties, licensing	-6.5	-4.8	-3.8	-3.8	-1.2	-0.9	-1.4	-0.3
Management services	3.3	5.5	4.5	4.5	1.3	1.1	0.6	1.5
Interest, dividend and other investment income	0.4	3.1	-16.1	-28.6	-6.2	-9.6	-6.7	-6.1
Salaries and other labor income	-2.5	-0.9	-1.4	-0.1	-0.1	--	0.1	-0.1
Travel	24.2	39.7	43.1	51.0	7.6	15.2	16.4	11.8
Of which:								
EC of 12	5.8	12.1	15.9	20.6	3.4	4.4	8.6	4.2
United States	3.4	7.0	3.4	1.1	-0.5	0.8	0.7	0.1
Other services	-4.8	1.9	-1.1	-6.8	-2.5	-2.3	-1.6	-0.4
French government income and expenditure	-4.3	-5.0	-4.8	-5.1	-1.5	-1.2	-1.1	-1.3
Foreign government income and expenditure	0.8	1.2	1.1	1.1	0.3	0.2	0.2	0.4
Total services balance	27.4	45.5	23.1	17.5	2.6	3.8	8.9	7.4

Sources: International Monetary Fund, International Financial Statistics; Ministère de l'Économie, des Finances et du Budget, Les Notes Bleues; Banque de France, La balance des paiements; and data provided by the authorities.

Table A42. France: Merchandise Trade

(Customs data)

	1987	1988	1989	1990	1991	1991				1992
						q1	q2	q3	q4	q1
<u>(Changes in percent)</u>										
Volumes										
Exports	3.7	8.8	7.8	5.0	4.7	-1.0	3.3	8.1	8.6	...
Imports	7.0	6.6	8.7	5.0	2.3	2.0	-0.1	4.1	3.5	...
Unit value										
Exports	-0.6	3.3	5.9	-1.8	-1.0	-1.6	-1.0	-0.4	-1.0	...
Imports	-1.3	2.8	6.9	-1.7	-0.8	-1.2	1.3	0.1	-3.4	...
Values										
Exports	2.9	12.2	14.6	3.0	3.8	-2.7	4.3	8.1	6.0	8.5
Imports	6.6	11.9	15.2	3.3	2.0	0.7	2.9	5.0	-0.2	1.0
Import cover ratio	3.3	-2.0	0.9	0.1	-2.2	3.0	-3.3	-3.7	-4.7	...
Terms of trade	0.7	0.5	-0.9	-0.1	-0.1	-0.4	-2.2	-0.5	2.5	...
<u>(In billions of francs)</u>										
Trade balances										
Customs definition	-31.6	-32.8	-43.9	-49.6	-29.6	-18.4	-7.1	-9.4	5.3	3.9
National accounts definition	-65.5	-71.3	-94.0	-100.8	-86.8	-29.4	-20.2	-22.8	-14.4	-10.2
Of which:										
Agriculture <u>1/</u>	29.0	39.1	48.0	51.1	44.8	10.4	11.6	10.9	11.9	12.5
Energy	-83.7	-67.8	-84.3	-93.3	-94.8	-25.2	-19.6	-24.4	-25.7	-21.4
Manufacturing	-10.8	-42.6	-57.7	-58.6	-36.7	-14.6	-12.2	-9.3	-0.6	-1.2
Memorandum item:										
Services <u>2/</u>	72.5	74.9	102.0	99.0	110.7	24.1	27.8	27.4	30.4	31.2

Sources: Banque de France, La Balance de Paiements de la France; Ministère de l'Economie, des Finances et du Budget, Les Notes Bleues; and data supplied by the authorities.

1/ Including processed foods.

2/ National accounts definition.

Table A43. France: Commodity Composition of Trade

(Volumes, in percent) 1/

	Shares in total			Changes in percent			
	1970	1980	1990	1988	1989	1990	1991
Exports	100.0	100.0	100.0	8.1	10.2	5.5	4.2
Merchandise	79.1	80.9	81.2	9.0	9.1	5.6	4.4
Agriculture	5.6	5.8	6.8	8.5	1.5	1.0	-1.8
Industry	73.4	75.1	74.4	9.0	9.9	6.1	4.9
Foodstuffs	6.5	7.5	8.3	12.2	8.8	6.0	6.3
Energy	5.1	3.6	3.1	15.4	8.0	10.9	0.8
Manufacturing	61.8	64.1	63.0	8.3	10.1	5.8	4.9
Intermediate goods	23.9	22.1	21.2	7.5	6.2	4.4	4.1
Current consumption	11.8	10.9	11.7	11.0	12.5	5.8	3.0
Investment goods	14.9	19.7	19.3	8.0	13.5	6.9	6.0
Consumer durables	0.6	0.8	1.5	12.5	21.7	22.9	14.8
Vehicles	10.7	10.5	9.3	7.1	8.5	4.6	5.4
Nonindustrial	26.6	24.9	25.6	5.4	11.3	4.1	2.2
Services	20.9	19.1	18.8	4.2	15.4	5.2	3.6
Transport and communication	7.6	6.1	4.9	7.3	7.3	3.0	1.0
Market services	7.2	6.9	5.1	-4.4	4.5	-1.5	8.1
Insurance and financial services	0.4	0.4	2.2	1.1	84.6	45.0	-6.3
Imports	100.0	100.0	100.0	8.6	8.2	6.5	3.0
Merchandise	88.3	90.2	89.3	9.0	8.2	6.1	3.1
Agriculture	6.3	4.8	4.0	1.5	3.8	4.5	6.8
Industry	82.1	85.4	85.2	9.4	8.4	6.2	2.9
Foodstuffs	4.7	6.0	6.6	5.8	7.7	5.9	7.0
Energy	33.3	24.3	13.7	0.1	1.8	4.7	5.5
Manufacturing	44.0	55.1	64.9	12.2	10.0	6.5	1.9
Intermediate goods	22.8	22.7	23.1	8.6	9.3	5.6	1.3
Current consumption	6.3	10.9	13.0	9.3	9.5	6.1	2.2
Investment goods	10.5	14.4	18.7	19.3	9.8	10.2	4.8
Consumer durables	0.8	1.6	3.2	16.6	3.7	11.9	7.8
Vehicles	3.7	5.5	6.9	11.2	16.3	-0.9	-7.1
Nonindustrial	17.9	14.6	14.8	4.0	7.3	8.3	3.9
Services	11.7	9.8	10.7	5.0	8.7	9.9	2.9
Transport and communication	3.5	2.1	2.1	8.5	3.3	6.9	0.8
Market services	3.6	3.3	2.8	-6.5	1.3	3.6	10.6
Insurance and financial services	0.4	0.4	2.1	18.0	45.2	46.4	-1.6

Source: INSEE, Rapport sur les Comptes de la Nation.

1/ National accounts data.

Table A44. France: Import Cover Ratios and Terms of Trade

(In percent) 1/

	1970	1975	1980	1985	1988	1989	1990	1991
Import cover ratios 2/								
Merchandise	93.5	97.3	84.8	92.8	93.3	92.4	92.1	93.3
Agriculture	72.0	92.3	112.4	146.8	161.3	165.4	168.2	153.4
Industry	95.9	97.7	83.2	89.9	90.0	89.1	88.9	90.8
Manufacturing	109.2	126.3	110.0	113.2	95.0	94.1	94.2	96.4
Nonindustrial	131.3	148.2	161.2	172.2	151.8	160.3	154.0	152.7
Services	174.1	181.1	185.5	182.7	148.7	158.8	150.4	152.6
Transport and communication	268.9	288.7	269.8	203.7	179.5	184.6	168.7	169.7
Market services	182.0	217.5	198.3	191.5	173.5	179.7	171.2	171.2
Insurance and financial services	90.8	119.3	110.3	102.0	70.4	91.2	91.7	87.4
Terms of trade 3/								
Merchandise	125.7	113.3	100.0	98.9	112.1	110.0	110.2	110.3
Agriculture	96.7	105.0	100.0	92.3	99.0	103.9	109.1	108.3
Industry	129.0	114.0	100.0	99.7	113.6	111.0	110.9	111.0
Manufacturing	93.5	99.4	100.0	103.9	106.0	104.9	105.7	105.1
Nonindustrial	106.4	103.4	100.0	96.9	94.9	96.7	96.7	97.5
Services	116.3	103.1	100.0	98.3	93.7	94.3	93.2	93.8
Transport and communication	151.2	103.8	100.0	94.0	82.9	82.1	77.8	78.2
Market services	108.2	103.8	100.0	99.4	99.9	100.5	100.7	103.0
Insurance and financial services	98.4	102.3	100.0	98.4	95.1	96.7	98.2	98.3

Source: INSEE, Rapport sur les Comptes de la Nation.

1/ National accounts data.

2/ Volume ratios of exports to imports.

3/ 1980=100.

Table A45. France: International Competitiveness

(Changes in percent) ^{1/}

	1986	1987	1988	1989	1990	1991	Index ^{2/} 1991
Wage costs ^{3/} compared with:							
Seven countries ^{4/}	2.0	-0.9	-3.4	-2.5	1.1	-4.4	92.0
EMS countries ^{5/}	-2.2	-3.7	-1.8	-1.9	-2.6	-3.4	85.3
Germany	-4.2	-5.4	-2.9	-0.7	-2.1	-3.4	82.7
Unit labor costs ^{6/}							
compared with:							
Seven countries ^{4/}	1.6	-0.6	-5.9	-3.4	3.3	-3.2	91.8
EMS countries ^{5/}	-3.4	-5.0	-4.7	-2.6	-0.0	-1.1	84.3
Germany	-5.6	-8.7	-5.9	-0.7	1.1	-1.4	80.4
Export prices ^{7/} compared with:							
Seven countries ^{4/}	4.6	1.0	-0.8	-2.3	1.6	-3.5	100.4
EMS countries ^{5/}	-0.0	-0.2	1.1	-2.8	-1.3	-1.8	95.1
Germany	-3.2	-2.0	1.2	-0.4	-0.7	-1.6	93.4
Export profitability ^{8/}							
Absolute	-3.8	-1.5	7.8	4.7	-4.9	-4.5	97.2
Compared with partners ^{9/}	2.9	1.5	5.4	1.4	-1.2	-0.7	109.6
Nominal effective exchange rate							
Seven countries	4.4	1.3	-2.2	-1.5	7.5	-2.7	106.5
EMS countries	-2.3	-2.8	-0.5	-0.5	1.0	-0.7	94.4
Germany	-4.4	-4.6	-1.4	-0.1	0.7	-0.9	89.8
Real effective exchange rate ^{10/}							
Seven countries	2.8	0.6	-2.1	-1.5	3.4	-3.3	99.8
EMS countries	-1.9	-1.6	-0.2	-0.6	0.4	-1.9	94.3
Germany	-1.9	-1.6	0.0	0.6	1.4	-1.2	97.3

Sources: International Monetary Fund, International Financial Statistics; and staff calculations.

^{1/} Measured in common currency.

^{2/} 1980=100.

^{3/} Hourly remuneration in manufacturing.

^{4/} Seven most important partner countries: Belgium, Germany, Italy, Japan, Netherlands, United Kingdom, and the United States.

^{5/} Participants in the European Exchange Rate mechanism.

^{6/} In manufacturing.

^{7/} Export unit values for total exports; customs definition.

^{8/} Ratio of export unit values to unit labor costs in manufacturing.

^{9/} Compared with industrial countries.

^{10/} Nominal effective exchange rate corrected for differential in consumer price index.

Table A46. France: Regional Market Shares and Import Penetration

(In percent)

	1984	1985	1986	1987	1988	1989	1990	1991
Market shares <u>1/</u>								
EC12	13.4	13.5	14.1	14.4	14.4	14.3	14.8	14.6
OECD, excl. EC	6.0	6.2	6.2	6.3	6.4	6.2	6.7	6.8
Developing countries	9.4	9.2	9.6	9.2	8.1	8.4	9.1	8.2
OPEC	13.3	12.2	12.2	11.5	10.1	11.1	12.2	11.0
Eastern countries <u>2/</u>	12.7	12.6	11.2	10.9	10.3	8.6	8.3	8.2
World	10.0	10.0	10.5	10.7	10.5	10.4	11.1	10.8
Import penetration <u>3/</u>	111.0	115.2	120.0	126.1	131.5	137.4	143.3	148.8

Source: INSEE, National Accounts.1/ Share of exports of France in total exports of eight partners to respective geographical zone.2/ European planned economies.3/ Manufactured trade; in volume terms.

Table A47. France: Export Performance and Export Pricing

	1986	1987	1988	1989	1990	1991
Volume performance						
Total trade						
(1) Market growth	7.9	8.9	8.4	7.8	5.9	3.6
(2) Export growth	0.5	3.6	8.7	8.2	4.8	4.7
(3) Export performance = (2)-(1)	-7.4	-5.3	0.3	0.4	-1.1	1.1
Pricing behavior						
Total trade						
(1) Partner countries' export prices in dollars <u>1</u> /	18.0	14.4	5.4	-0.1	13.0	-1.0
(2) Franc/dollar rate	-22.9	-13.2	-0.9	7.0	-14.7	3.6
(3) Export prices of foreign producers in francs	-9.0	-0.7	4.4	6.9	-3.5	2.6
(4) Export prices of domestic producers in francs	-5.3	-0.6	3.3	5.9	-1.8	-1.0
(5) Relative price of exports = (4)-(3)	3.7	0.1	-1.1	-1.0	1.7	-3.6
Memorandum item:						
Relative export unit values in common currency: manufacturing	5.3	1.7	-1.0	-2.7	2.4	-2.6

Sources: International Monetary Fund, International Financial Statistics; and staff calculations.

1/ Export weighted.

Table A48: France: Geographical Distribution of Trade

	1986	1987	1988	1989	1990	1991
	(In percent of total)					
Exports						
EC12	57.9	60.4	61.6	61.2	61.3	61.4
Benelux	14.0	14.4	14.6	14.6	14.7	13.6
Germany	16.1	16.6	16.4	16.0	16.8	18.1
Italy	11.8	12.1	12.2	12.1	11.1	10.7
United Kingdom	8.8	8.8	9.8	9.6	9.2	8.7
OECD, excluding EC	19.4	18.8	18.9	18.3	17.4	16.9
Rest of World	22.8	20.8	19.5	20.5	21.3	21.7
Of which: OPEC	5.5	4.3	2.9	3.4	3.8	3.8
LDCs <u>1/</u>	14.3	13.8	14.3	14.4	15.3	15.6
Imports						
EC12	59.7	61.1	60.3	60.0	59.5	57.9
Benelux	15.1	15.0	14.4	14.4	13.9	13.6
Germany	19.3	19.8	19.7	19.4	18.8	17.7
Italy	11.6	11.7	11.6	11.5	11.5	10.9
United Kingdom	6.5	7.1	7.3	7.1	7.2	7.5
OECD, excluding EC	19.9	19.9	21.0	21.1	21.1	22.3
Rest of World	20.4	19.0	18.6	18.9	19.4	19.8
Of which: OPEC	5.5	4.4	3.4	4.1	4.4	4.6
LDCs <u>1/</u>	11.0	11.1	11.7	11.5	11.7	11.8
	(In billions of francs)					
Trade balances						
EC12	-54.1	-59.1	-42.4	-54.9	-39.1	5.2
Benelux	-19.4	-18.5	-11.2	-14.0	-4.9	-7.5
Germany	-39.2	-44.6	-50.2	-59.9	-41.8	-6.3
Italy	-6.2	-7.0	-4.8	-6.2	-5.9	-8.8
United Kingdom	14.9	8.6	17.3	18.7	16.2	11.0
OECD, excluding EC	-18.0	-27.4	-38.9	-54.5	-64.8	-81.4
Rest of World	6.4	-0.6	-8.8	-4.3	3.0	10.3
Of which: OPEC	-2.9	-4.5	-8.0	-12.5	-11.4	-12.7
LDCs <u>1/</u>	20.2	13.0	13.1	18.8	31.6	39.8

Source: INSEE, Rapport sur les Comptes de la Nation.1/ Including DOM/TOM.

Table A49. France: Capital Account

(In billions of francs)

	1987	1988	1989	1990	1991
Long-term capital flows	13.2	-3.8	73.3	89.4	17.7
Trade credit	9.1	6.6	8.4	8.1	3.6
Direct investment	-24.5	-33.1	-54.8	-97.4	-53.3
Inflow	27.8	42.9	60.9	50.3	62.5
Outflow	-52.3	-76.0	-115.7	-147.7	-115.8
Public sector investment	-3.2	-2.5	-3.0	-2.9	-3.9
Loans (net)	-0.7	-20.2	-40.1	-6.5	-14.8
Banks	29.7	-0.7	-10.7	8.7	11.1
Private nonbanks	-1.5	6.8	-3.3	-5.3	-1.6
Public	-28.9	-26.3	-26.1	-9.9	-24.3
Portfolio investment (net)	32.5	45.4	162.8	188.1	86.1
Residents	-20.3	-24.5	-42.4	-46.0	-75.8
Nonresidents	52.8	69.9	205.2	234.1	164.1
Short-term capital flows	11.8	28.5	-2.8	-10.1	-6.9
Private nonbanks	13.3	9.1	-66.9	-100.5	-42.3
Trade credits	9.0	8.9	10.3	-5.1	...
Loans	5.3	0.2	-37.3	-66.4	-34.4
Other	2.4	--	--	-44.4	-2.8
Banks	-55.9	14.0	37.0	149.3	4.2
In francs	-2.7	25.9	59.3	176.1	-11.5
In foreign exchange	-53.2	-12.0	-22.3	-26.7	15.7
Public sector	51.1	5.5	27.1	-58.9	31.2
Total capital flows	25.0	24.7	70.5	79.3	10.8
Private capital flows	-75.4	17.9	-18.5	200.4	-25.8
Memorandum item:					
Forward operations of banks with Banque de France	-24.1	7.3	2.1	-8.2	5.0

Sources: International Monetary Fund, International Financial Statistics; Ministère de l'Economie, des Finances et du Budget, Les Notes Bleues; and data provided by the authorities.

Table A50. France: Banking Sector External Position

(End of period, in billions of francs)

	1986	1987	1988	1989	1990	1991	1991			
							Q1	Q2	Q3	Q4
Assets										
Short term										
Francs	32.6	69.0	85.2	116.6	155.4	206.6	164.1	197.7	193.5	206.6
Foreign exchange	711.0	833.2	1,023.6	1,239.4	1,390.4	1,321.3	1,419.9	1,416.4	1,343.2	1,321.3
Long term										
Francs	175.2	165.9	162.4	166.4	155.0	153.2	157.9	155.4	154.5	153.2
Foreign exchange	274.2	255.1	291.3	294.2	293.2	293.2	316.1	332.2	309.3	293.2
Liabilities										
Short term										
Francs	69.2	102.7	145.3	231.6	442.1	482.7	482.3	486.1	499.0	482.7
Foreign exchange	944.5	991.4	1,184.1	1,432.6	1,557.1	1,491.3	1,621.3	1,592.2	1,531.9	1,491.3
Long term										
Francs	1.5	4.2	8.5	28.8	41.3	50.3	43.9	45.3	47.7	50.3
Foreign exchange	136.3	164.4	193.5	151.2	150.5	151.6	157.2	164.6	161.9	151.6
Net										
Francs	137.1	128.0	93.8	22.6	-172.0	-173.2	-204.2	-178.3	-198.7	-173.2
Foreign exchange	-95.6	-67.5	-62.7	-50.2	-24.0	-28.4	-42.5	-8.2	-41.3	-28.4
Total	41.5	60.5	31.1	-27.6	-196.0	-201.6	-246.7	-186.5	-240.0	-201.6

Sources: Banque de France, Quarterly Bulletin; and data supplied by the French authorities.

Table A51. France: Developments in Aid to Industry

(In billions of francs)

	1986	1987	1988	1989	1990	1991	<u>1/</u>
Functional aid (I)	19.4	25.6	25.5	20.8	25.0	28.2	
Investment	5.6	4.5	4.0	3.4	3.7	3.3	
Exports	8.2	16.2	17.0	13.0	15.7	18.2	
(of which credit insurance)	2.8	8.5	10.0	6.0	9.0	8.0	
Particular objectives <u>2/</u>	1.8	1.8	2.2	2.4	3.5	4.4	
Enterprises in difficulty	3.8	3.1	2.3	2.0	2.1	2.3	
Sectoral aid (II)	28.8	27.9	25.2	23.7	24.3	23.7	
Steel, construction, shipping, machinery	14.7	15.3	12.7	11.5	11.5	11.1	
Coal, primary goods, chemistry, paper	8.6	7.8	7.6	7.6	7.6	7.5	
Electronic industry, aerospace	5.1	4.5	4.6	4.3	4.9	4.7	
Other	0.4	0.3	0.3	0.3	0.3	0.4	
Total (I + II)	48.2	53.5	50.7	44.5	49.3	51.9	
(as a percent of GDP)	1.0	1.0	0.9	0.7	0.8	0.8	

Source: Data provided by the French authorities.

1/ Estimate.2/ Research, energy conservation.

References

Chapter I

- INSEE (1992), Rapport sur les Comptes de la Nation de l'Année 1991, Vol. 1.
Banque de France (1992), Annual Report, 1991.
OECD (1992), Economic Surveys: France 1991/92.

Chapter II

- International Monetary Fund, SM/91/153 (8/5/91), France - Staff Report for the 1991 Article IV Consultation
- Barro, R.J., "Are Government Bonds Net Wealth?," Journal of Political Economy, pp. 1095-1118, 1974.
- _____, "The Neoclassical Approach to Fiscal Policy," in R.J. Barro (ed.) Modern Business Cycle Theory, Oxford, Basil Blackwell, 1989.
- Bérégovoy, Pierre, "Un Symbole de Progres," in Livre Blanc sur la Reforme du Financement de l'Economie, Paris, La Documentation Française, 1986.
- Bernheim, B. Douglas and Bagwell, Kyle, "Is Everything Neutral," Journal of Political Economy, 1988, Vol. 96, No. 2.
- Brennan, H.G. and Buchanan, J.M., "The Logic of the Ricardian Equivalence Theorem," in Buchanan, Rowley, and Tollison (eds.) Deficits, New York, Basil Blackwell, 1987.
- Buchanan, J.M., Public principles of Public Debt, Homewood Il., Richard Irwin, 1958.
- _____, "Budgetary Bias in Post-Keynesian Politics: the Erosion and Potential Replacement of Fiscal Norms," in Deficits, 1987.
- Drazen, Allan and Masson, Paul R., "Credibility of Policies Versus Credibility of Policymakers," Mimeo, International Monetary Fund, June 1992.
- Feldstein, M.S., "Government Deficits and Aggregate Demand." Journal of Monetary Economics, January 1982.
- Herland, Michel, "L'impôt sur la dette publique: un retour aux sources," Revue Française d'Économie, Spring 1992.

- Lerner, A., "The Burden of the National Debt," in L. Meltzer (ed.), Income, Employment, and Public Policy: Essays in Honor of Alvin H. Hansen, New York, W.W. Norton, 1948.
- Levy, David, "The Paradox of the Sinking Fund," in Deficits, 1987.
- McCallum, John, "Government Spending and National Saving," in Proceeding of the McGill Conference on Fiscal Policy, Montreal, December 1989.
- Mattret, Jean-Bernard, "Reflexions sur l'Endettement Public," La Revue du Trésor, No.7, Juillet, 1991.
- Modigliani, F. and A. Sterling, "Government Debt, Government Spending, and Private Sector Behavior: A Comment." American Economic Review, December 1986.
- Musgrave, Richard A, "Public Debt and Intergeneration Equity," in Arrow and Boskin (eds.), The Economics of Public Debt, New York, St. Martin's Press, 1988.
- O'Driscoll, Gerald P. Jr., "The Ricardian Nonequivalence Theorem," Journal of Political Economy, 85, pp. 207-210, 1977.
- Resener, Madlyn, "The Bere Factor," Institutional Investor, December 1991.
- Ricardo, David, The Works and Correspondence of David Ricardo, Pierro Sraffa (ed.). Cambridge, at University Press, 1951.
- _____, "Le meilleur moyen de fournir aux dépenses publiques," Reprinted in Revue Française d'Économie, Spring 1992.
- Rueff, Jacques, The Age of Inflation, Chicago, Henry Regnery, 1964.
- Rowley, C.K., "Classical Political Economy and the Debt Issue," in Deficits, 1987.
- Sargent, Thos. and Wallace, Neil, "Some Unpleasant Monetarist Arithmetic", [1981], Federal Reserve Bank of Minneapolis, Quarterly Review, Winter 1985.
- Tobin, James, Asset Accumulation and Economic Activity, Chicago, at University Press, 1980.
- Vaughn, K.I. and Wagner, R.E., "Public Debt Controversies: An Essay in Reconciliation," Kyklos, Vol. 45(1), pp.37-49, 1992.
- Vernholes, Alain, Le Monde, July 1, 1991, p. 12.
- Wagner, Richard E., "Liability Rules, Fiscal Institutions, and the Debt," in Deficits, 1987.

Chapter III

- Andersen, Torben M. and Jan Rose Sorensen (1991), "Exchange Rate Risks, Interest Rates and European Monetary Integration," Centre for International Economics, Institute of Economics, University of Aarhus, Memo 1991-18. (Forthcoming in H. Kempf (ed.), Marchés et Actifs Financiers, Paris: Economica.)
- Artus, Patrick (1992), "Peut-on comprendre l'écart de taux d'intérêt entre la France et l'Allemagne?," Caisse de Dépôts et Consignations, Document de Travail No. 1992-01/E, March.
- Artus, P., S. Avouyi-Dovi, E. Bleuze and F. Lecointe (1991), "Transmission of U.S. Monetary Policy to Europe and Asymmetry in the European Monetary System," *European Economic Review*, 35, 1369-1384.
- Bartolini, Leonardo and Gordon M. Bodnar (1992), "Target Zones and Forward Rates in a Model with Repeated Realignments," IMF Working Paper WP/92/22.
- Bertola, Giuseppe and Lars E. O. Svensson (1991), "Stochastic Devaluation Risk and the Empirical Fit of Target-Zone Models," NBER Working Paper No. 3576.
- Chen, Zhaohui and Alberto Giovannini (1992), "Estimating Expected Exchange Rates Under Target Zones," NBER Working Paper No. 3955.
- Drazen, Allan and Paul R. Masson (1992), "Credibility of Policies versus Credibility of Policymakers," unpublished paper.
- Frankel, Jeffrey and Steven Phillips (1991), "The European Monetary System: Credible at Last?," NBER Working Paper No. 3819.
- Geadah, Sami, Tapio Saavalainen and Lars E. O. Svensson (1992), "The Credibility of Nordic Exchange Rate Bands: 1987-91," IMF Working Paper, WP/92/3, January.
- Giovannini, Alberto (1990), "European Monetary Reform: Progress and Prospects," *Brookings Papers on Economic Activity* 2, 217-291.
- Gudin, Philippe, Antoine Magnier and Nicolas Ponty (1991), "Taux d'intérêt: une asymétrie moins forte," *Economie et Statistique*, No. 246-247, September-October 1991.
- Koen, Vincent (1991), "Testing the Credibility of the Belgian Hard Currency Policy," IMF Working Paper WP/91/79.
- Lindberg, Hans, Lars E.O. Svensson and Paul Söderlind (1991), "Devaluation Expectations: The Swedish Krona 1982-1991," Institute for International Economic Studies, Seminar Paper No. 495.

- Newey, Whitney K. and Kenneth D. West (1987), "A Simple, Positive Semi-Definite, Heteroskedasticity and Autocorrelation Consistent Covariance Matrix," *Econometrica*, 55(3), 703-708.
- Rose, Andrew K. and Lars E. O. Svensson (1991), "Expected and Predicted Realignment: The FF/DM Exchange Rate during the EMS," Board of Governors of the Federal Reserve System, International Finance Discussion Papers, No. 395, April.
- Svensson, Lars E. O. (1990), "The Foreign Exchange Risk Premium in a Target Zone with Devaluation Risk," Centre for Economic Policy Research, Discussion Paper No. 494.
- Svensson, Lars E. O. (1991), "Assessing Target Zone Credibility: Mean Reversion and Devaluation Expectations in the EMS," IMF Working Paper WP/91/96, October.
- Svensson, Lars E. O. (1991), "The Term Structure of Interest Rate Differentials in a Target Zone: Theory and Swedish Data," *Journal of Monetary Economics*, 28(1), 87-116.
- Weber, Axel A. (1992), "Time-Varying Devaluation Risk, Interest Rate Differentials and Exchange Rates in Target Zones: Empirical Evidence from the EMS," Centre for Economic Policy Research, Discussion Paper No. 611.

Chapter IV

- Afsa, C. (1992), "Le revenu minimum d'insertion: une prestation d'accompagnement?," *Economie et Statistique*, No. 252, March: 43-50.
- Atkinson, A. B. and J. Micklewright (1991), "Unemployment Compensation and Labor Market Transitions: A Critical Review," *Journal of Economic Literature*, 29(4): 1679-1727.
- Bourdet, Y. and I. Persson (1991), "Politiques de l'emploi et durée du chômage: une comparaison franco-suédoise," *Observations et diagnostics économiques*, No. 138: 65-92.
- Cornilleau, G., P. Marioni and B. Roguet (1990), "Quinze ans de politique de l'emploi" *Observations et diagnostics économiques*, No. 31: 91-120.
- Ermakoff, I and R. Tresmontant (1990), "L'Impact de la politique de l'emploi: une estimation quantitative de certains dispositifs," *Economie et Prévision*, No. 92-93: 111-125.
- Jackman, R., C. Pissarides, and S. Savouri (1990), "Labour Market Policies and Unemployment in the OECD," *Economic Policy*, No. 11: 449-490.

Layard, R., S. Nickell and R. Jackman (1991), Unemployment: Macroeconomic Performance and the Labour Market, Oxford: Oxford University Press.

Legros, M. and B. Simonin (1991), "Minimum Income for Economic and Social Integration and Access to Employment: Some Reflections on the French Experience," *Labour and Society*, 16/2: 193-218.

Maurin, E. and C. Torelli (1992), "RMI et comportements sur le marché du travail," *Economie et Statistique*, No. 252, March: 37-42.

OECD (1991), Employment Outlook

Roguet, B. and L. Salzberg (1991), "Dépenses actives et dépenses passives pour l'emploi de 1985 à 1989," *Travail et Emploi*, No. 48: 75-79.

Schwansse, P., P. Scherer and A. Reutersward (1991), "How Labour Market Policies are Currently Viewed," in C. de Neubourg (ed.), The Art of Full Employment, Amsterdam: North-Holland.