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STABILIZATION PROGRAMMES AND FISCAL ADJUSTMENT: THE CASE OF SMALL OPEN EUROPEAN ECONOMIES*

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Abstract

In the 1980s debt had grown rapidly in most European countries. Many governments started to pursue stabilization policies to remove the danger of debt explosion. However, the design of stabilization policies in heavily indebted economies is extremely difficult. This paper contrasts the stabilization programmes of these countries and draws out preliminary conclusions for the design of such programmes in small open economies. Programmes relying on gevernment expenditure reduction, seem to be more successful than those that rely on revenue increases. The Danish and the Second Irish Stabilization are the main examples that support this conclusion. (JEL Classification: E62, E63. H62)

1. Introduction

In the 1980s public debt had grown rapidly in most European countries. Thus, debt service absorbed a significant share of government revenues, and shocks to real interest rates or to economic growth led debt-to-income ratios to rise uncontrollably. Many governments started to pursue stabilization policies to remove the danger of debt explosion. The similarity among the stabilization policies adopted by the governments of some small European economies in the 1980s, concerned mainly the income policy and the efforts for fiscal consolida-

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tion. However, there were significant differences in the monetary and exchange rate policies as well as in the magnitude and persistence of fiscal consolidation.

Table 1 briefly presents the main features of stabilization policies. Almost all programmes were based upon tax increases and cuts in expenditure as well as restrictions on wage increases. It becomes apparent that the rise of conservatism in the 1980s concerns mainly the type of policies pursued (Cohen, 1988). In other words, the shifts in policies are not necessarily associated with the changes of political parties in power. However, as it has been argued (Kapopoulos, 1995), the identity of political parties affects the credibility of stabilization plans they implement.

This paper contrasts the main features and the final results of the stabilization policies of some small open economies enacted in the last decade. Thus, we can draw out some implications for an optimal design of such a programme in the future. The most important finding is that the most successful programmes were those that relied on government expenditure reductions rather than revenue increases. The paper outline is as follows. Section 1 provides a comparative presentation of stabilization programmes adopted by a set of small open countries of the European Union in the 1980s. Section 2 presents some resulting stabilization facts associated with the implemented policies. Finally, Section 3 presents some concluding remarks.

2. A Comparative Presentation

Among the economies of the European Union, Ireland, Denmark, Portugal, Spain and Greece are as close as can be to the textbook notion of a "small open economy". All these countries are extremely open and small in traded goods markets to have any impact on developments in the rest of the world. Therefore, a more specific analysis of the main features of stabilization programmes adopted by these countries in the 1980s, is necessary so as to evaluate the contribution of each policy measure in the success of the programme.

2.1. The Danish Pleasant Experience, 1983-1986

The stabilization programme was part of the new policy introduced by the liberal-conservative minority government which came into power in the autumn 1982. The basic characteristics of the stabilization programme were:

(i) *Tight Fiscal Policy.* In 1982 Danish public debt was growing rapidly (65% at the end of 1982) because of high real interest rates and large primary deficits. The main instrument of fiscal consolidation was the fall in public consumption. Indeed, the average growth rate of public consumption was declining rapidly (from 4% in the period 1979-82 to 0.9% in the post stabilization period 1983-86). As a result, the average growth rate of public debt-GNP ratio started to decline (from 10.2% in the period 1979-82 to 0.0% in the post stabilization period).

(ii) *Fixed Exchange Rate Policy - Financial Liberalization.* Bo Nielsen and Sondergaard (1990, p. 10) summarize the monetary developments in Denmark over the last three decades: "the monetary regime moved from a fixed exchange rate-capital control system in the 1960s through a transitional period from 1972 to 1982 of variable exchange rate pegging-capital control to the present regime of fixed exchange rate within the EMS-free capital mobility".

In 1982 the new exchange rate policy was a radical change compared to the recent past, where various governments had quite frequently devalued the Danish kroner in order to improve the current account and the domestic activity level. As a result, the Danish economy was characterized by widespread devaluation expectations and very high interest rates. Thus, the fiscal package of stabilization policy was accompanied by the announcement that the exchange rate of the Danish kroner against the German mark would be fixed. To strengthen the credibility of this announcement, the Danish government first refrained from devaluing the kroner (there was a general EMS realignment in March 1983) and second, removed exchange controls.

Andersen and Risager (1988) argue that the government's commitment to the fixed exchange rate policy in a period of crisis and attacks on the currency, as well as the refraining from a devaluation of the kroner in the context of the realignment within the EMS, have contributed to an increase in the credibility of this policy[1]. In addition, Giavazzi and Pagano (1990) assert that the term structure of Danish interest rates around the announcement of the stabilization offers some evidence on the credibility of the new policy. Indeed, the long-term interest rate fell sharply after the announcement (October 16, 1982). However, the gap with German rates did not actually close.

(iii) *Suspension of the Automatic Wage Indexation.* The income policy played a crucial role. Danish authorities decided (a) the abolition of all indexation mechanisms in the wage-formation process and (b) a temporary wage-freeze.

Finally, even if the profits of fiscal policy have certainly been more restrictive after 1982, domestic demand boomed during the post stabilization period, partly due to strong expectational shifts. Thus, many economists talk about the "Danish miracle". However, De Grauwe and Vanhaverbeke (1990) argue that they did not sufficiently recognize that an essential part of the Danish policy package was the liberalization of capital movements which made this policy unique.

2.2. Fiscal Consolidation Through Increases in Tax Revenues: The "Failed" Irish Stabilization, 1982-85

The need for an austerity programme had been clear at least since 1981. Indeed,the gross public debt-to-output ratio in Ireland had been rising continuously between 1977 and 1981, from the already high level of 76.4 per cent to GDP in 1977, to 103.9 per cent in 1982. The main fact of the early 1982 was the consensus across the political spectrum which supported the following policy measures.

(i) *Tight Fiscal Policy.* In 1978-81, the primary budget deficit had averaged 7.2% of GNP. In 1982, there was a reduction to 6.2%, followed in 1983 and 1984 by a further reduction to only 1.9% of GNP. The main factor of this improvement was the increase in discretionary taxes (see Giavazzi and Pagano, 1990). Indeed, government expenditure did almost nothing to contribute to the deficit reduction. It has been argued (Alogoskoufis, 1992) that the small rise in expenditures, from 53 per cent of GDP in 1982 to 55 per cent in 1984, was partly due to the rise in expenditure on unemployment benefits.

(ii) *Tight Monetary Policy.* After a period of negative rates, Ireland witnessed a policy switch towards consistently positive and high real interest rates.

(iii) *Fixed Exchange Rate Policy* (participation in the EMS). For over half a century the Irish pound had remained at one-for-one parity with sterling. In 1982, the monetary authorities chose to participate in the ERM. It is important that in both 1982 EMS realignments, Ireland maintained the central rate.

The first Irish stabilization programme stopped inflation and improved the primary budget deficit. Business investment decreased dramatically from 1982 to 1984 and the average growth rate of GDP started declining (from 2.7% in the period 1979-81 to 0.0% in the period 1982-84). Dornbusch (1989, p. 194) explains that the "triumph of low inflation has come at the cost of extraordinary high unemployment, massive emigration and a precarious debt overhang"[2].

2.3. Fiscal Consolidation Through Cuts in Expenditures: The Second Irish Stabilization, 1987-89

In 1987, the minority government under Charles Haughey decided to adopt a stabilization plan. The principal features of this plan were:

(i) *Tight Fiscal Policy - Tax Reform.* The average growth rate of public debt-GDP ratio started declining (from 6.8% in the period 1982-84 to -0.8% in the period 1987-89). The main factor of this improvement was the lower government consumption and government investment[3]. In addition, the increase in tax revenues was obtained by widening the tax base in the context of a general fiscal reform. In contrast with the first Irish stabilization package, the marginal tax rate did not increase.

(ii) *Sharp Devaluation - Participation in the EMS.* The 1987 stabilization preceded by a sharp devaluation which improved the competitiveness of the Irish economy. Moreover, currency devaluation strangthened the credibility of the new parity.

The second Irish stabilization was expansionary. The average growth rate of GDP was growing rapidly (from 0.0% in the period 1982-84 to 3.7% in the period 1987-89). Participation in the EMS appears to have crucial role in the effectiveness of the Irish stabilization programmes in the 1980s. More specifically, Kremers (1990) presents empirical evidence that Ireland's disinflationary policy has derived credibility from its participation in the ERM.

2.4. The Incompleted Fiscal Adjustment: The Fiscal Greek Stabilization, 1985-87

After having enjoyed an output growth significantly faster that the OECD average for about thirty years, the Greek economy has —since the turn of the 1970s— entered a phase of stagflationary tendencies. Following the second oil-shock in 1979, fiscal policy became increasingly expansionary, mainly in election years (1981, 1985). This expansionary policy was pursued at a time when most EC countries, especially after 1982, were implementing disinflationary policies. The annual average inflation differential between Greece and the ERM countries was 14.5% in 1985. Public sector debt increased from 28.3% of GDP at the end of 1979 to 76.4% at the end of 1985.

To reverse the rapid growth of macroeconomic imbalances and the associated stagflationary trends of the first half of the 1980s, a two-year stabilization programme was introduced in October 1985. It reflected a major policy switch from expansion to restraint. The principle features of this programme were:

(i) *A sharp devaluation of the drachma.* The government decided an initial devaluation of the drachma by 15 per cent. After October 1985, the exchange rate policy aimed at maintaining competitiveness as measured by relative unit costs.

(ii) *Modification of the wage-price indexation scheme (A TA).* According to the new scheme, wages would be adjusted on the basis of the official forecast of inflation after deducting the effect of imported inflation. The system was made obligatory for both public and private employees.

(iii) *Tight monetary policy.* The main features were the reduction of the growth of domestic credit expansion (from 26.2% to 16.6%) and the gradual establishment of positive real interest rates for all borrowers.

(iv) *Fiscal policy.* Although the public sector borrowing requirement as percent to GDP declined from 17.9% in 1985 to 13.2% in 1987, it failed to reach the target. The main reasons for the reduction in the PSBR-to-GDP ratio were the higher taxes and the higher administered prices. In addition, part of the reduction in the PSBR was due to the sharp fall in oil prices in that period, since the government increased taxes without raising final prices.

The results achieved by the end of the stabilization period were very few. The most important result was the reduction in the inflation rate by almost ten percentage points as well as the remarkable improvement in the external position of the country. The external debt fell to 41.5% of GDP at the end of 1987 from 50.2% at the end of 1985. But the main macroeconomic imbalances were still excessive. Moreover, the programme did not explicitly tackle microeconomic and structural issues (OECD, Economic Survey, 1989). Thus, little progress had been made in enhancing the supply responsiveness of the economy. Finally, the relaxation of restrictive policies and the tight income controls at the end of stabilization programme (1989 was an election year)[4] induced a loss in credibility. Because of the relaxation of restrictive policies, the rate of inflation accelerated to over 20% in the first half of 1990. As a result, the already large differential with the EMS countries widened further. Moreover, the large public deficits (18% of GDP in 1989) caused a rapid increase in the public debt; it was 105% of GDP in 1989.

2.5. The Gradualism Approach to the Fiscal Adjustment: The Second Greek Stabilization, 1990-93

The conservatives returned in office in April 1990, and announced an economic policy programme which has as its main target the reduction of public deficits through a decrease in public spending and an increase in taxes and administered prices. This was accompanied by: (i) a restrictive wage policy which was made compulsory only for the public sector, (ii) a structural change in the pension system and (iii) a programme of privatizing enterprises nationalized after 1974.

At the end of 1990, the government also presented a "Medium-term Adjustment Programme, 1991-93" to support the first package of the stabilization measures. This dealt mainly with the macroeconomic imbalances and introduced some market structural reforms in order to boost the activity of the economy.

However, the programme did not achieve its targets. There was a remarkable improvement only in the balance of payments and inflation. The programme was forecast by the OECD to result in a reduction of the primary deficit from 9.8 percent of GDP in 1989, to 7.0 percent in 1990 and 3.8 percent in 1991. In addition, the programme, contrasted with the successful second Irish stabilization programme, was not sharp enough to ensure the credibility of the government (see Alogoskoufis, 1992)[5].

The moderate success of the Adjustment Programme in the fiscal area and the need to meet the Maastricht treaty's targets, induced the preparation of a new "convergence plan". The new strategy made a shift in priorities. First, the policy makers relied mainly on the dynamic effects of the cuts in tax rates to boost the supply responsiveness of the economy. Second, the government increased the tax base and imposed an extraordinary tax levy on buildings in order to offset the revenue losses from the cuts in tax rates.

2.6. The Portguese Stabilization Plan of the Late 1980s

The main features of the economic policy after the 1974 revolution was the rapid modernization of the Portuguese economy. After having joined the European Union in 1986, Portugal faced the challenge posed by the creation of a European internal market by 1992. Even though impressive progress has been made in many areas over the last decade, not all the results have been satisfactory. In 1988, Portugal experienced a return of inflationary pressures. Linked to the deteriorating inflation performance were the continuing difficulties of bringing the public sector deficit under control and the way in which these deficits were financed. Indeed, the public debt rose from 40% of Gross Domestic Product in 1980 to 74% in 1988.

In March 1987, the government adopted a programme for the structural adjustment of the foreign deficit and unemployment (PCEDED). The programme was going to be implemented in two stages (1987-90 and 1991-94). However, the favourable unexpected developments in employment, inflation and investment induced a revision of the programme by the government. The PCEDED "was quickly overtaken by events" (OECD, Economic Surveys, 1991, p. 37).

In practice, the Portuguese government chose two solutions to the debt problem: first, to privatise and, second, to create surpluses by reducing expenditures and increasing taxes (Macedo and Sebastiano, 1989). More specifically, the principal features of the adjustment policy were:

(i) *Tight Fiscal Policy - Tax Reform.* The tax base was to be significantly broadened, allowing for lower marginal tax rates for a given level of tax revenues. The lower tax rates and the increase in the efficiency of the tax collection system largely contributed to the fight against tax evasion. Consequently, the direct tax revenues of the Central Government as percent to GDP rose from 5.6% in 1987 to 8.5% and 8.4% in 1988 and 1989, respectively.

(ii) *Privatization.* The government had recently embarked upon a programme of privatising enterprises nationalized after 1974. For the first phase of privatization, the government selected profitable enterprises and two insurance companies. But the new Privatization Law, passed in April 1990, allowed full privatization of public enterprises. The proceeds from privatization were used to reduce public debt and to the extent that profits rose after privatization, tax revenues would expand. In 1991, revenues from privatization were expected to be equal to 2.55% of GDP (OECD, Economic Surveys, 1991).

In July 1990, the authorities adopted a new adjustment plan with the title QUANTUM, which distinguished between two scenarios. One being called "scenario without convergence", the other "scenario with convergence" (elimination of the inflation differential *vis-a-vis* EC countries by 1995). This medium term strategy embodied fiscal consolidation through (i) cuts in expenditure and (ii) increases in indirect taxation in line with EC tax harmonization proposals. However, the progress on the fiscal consolidation front had not been achieved in the years 1990 and 1991. In contrast, the implementation of the direct tax reform in the years 1987-89 was a more significant move towards fiscal contraction. Thus, the newly elected government after the elections in October 1991 presented its revised programme of economic convergence entitled "QUANTUM 2", This programme put an emphasis on (i) the avoidance of exchange rate depreciation and (ii) the role of privatization procedure in the reduction of public debt. The experience of other European countries could give the incentive in Portugal to examine the possibility of EMS membership in order to gain credibility for a disinflation. The EMS membership came then as a positive contribution to debt stabilization through the reduction of the inflation risk premium (Torres, 1990).

In practice, 1990 saw the end of the crawling-peg exchange rate regime. An index with the main currencies of the ERM, weighted by their share in Portuguese external trade, had been used as a reference for the long term objective of exchange rate policy. In addition, the exchange rate would fluctuate within a secret band of a few percentage points around the central objective. The aim was to join the Exchange Rate Mechanism in 1992. However, joining the ERM with an unsatisfactory progress on the fiscal contraction would lack credibility and could not reduce inflationary expectations (Macedo, 1990).

2.7. Structural Switches and Persistent Disinflation: Spain in the 1980s

Over the last decade, Spain did not experience an explicit and rigorously specified stabilization plan. However, some features of macroeconomic policies pursued in Spain, underlined the efforts to stabilize the main indices of the economy.

The strong recovery which started in late 1985, continued unabated up to the middle of 1989. During this period, the economy was growing by more than 5 per cent per annum leading to a marked fall in unemployment. Investment was the fastest growing component of the Spanish economy. These developments were primarily ascribed to:

(i) the industrial re-structure undertaken in the 1970s, (ii) the labour market reforms (1984-85), which greatly enhanced the firms' scope to adjust their labour force to changing demand and costs conditions and (iii) the enhanced growth expectations after Spain's entry in the European Union.

In the last years, EMS membership was the main stabilization fact. The entrance of the peseta in the ERM, which took place in July 1989, had significant effects on: (i) the Spanish economic stability, (ii) monetary policy effectiveness and credibility and (iii) the short term volatility and medium term behaviour of the peseta. The authorities decided to integrate the peseta in the exchange rate mechanism of the EMS with a wider fluctuation band of 6 per cent compared with the normal margin of 2.25 per cent. Then, some objections were raised against the Spanish membership. A serious objection concerned the argument that the benefits from membership would likely be smaller than the costs from not being able to use the exchange rate in a more discretionary manner. However, it should be mentioned that the nominal exchange rate changes were not very effective in influencing the real exchange rate in an economy as highly indexed as that of Spain (Vinals, 1990 and Dolado and Vinals, 1990). Another objection to the Spanish membership concerned the argument that the peseta would not be able to remain within a system, like the EMS, after the complete liberalization of capital mobility, since speculative attacks would then be unstoppable.

In practice, given the large interest rate differential prevailing at that time, the participation in the EMS provided a further exchange rate guarantee, making financial and real investments in Spain highly attractive. Moreover, because of the resulting upward pressures on the peseta, it appeared to be one of the strongest currencies within the EMS.

3. Stabilization Facts

The most considerable component of stabilization packages, previously described, was the attempt of fiscal adjustment. To compare the programmes from this point of view, we can observe Figure 1. The Figure plots primary surpluses in the pre-stabilization and post-stabilization periods, both measured relative to GDP. As can be seen, the Danish and the second Irish stabilization plans induced the most severe fiscal contractions. The first Greek programme was a stabilization without fiscal adjustment, while the second Greek and the first Irish programme achieved a fiscal contraction although left the balance with a deficit. In Portugal, the fiscal contraction had not been achieved in the years 1990 and 1991. Because of the implementation of the direct tax reform in the years 1987-89, the primary balance was already in surplus[6].

Another important point to be mentioned is the role of initial devaluation in the stabilization programmes. Of the six stabilization programmes described above, two preceded by devaluations. This was the case both in the second Irish stabilization and in the first Greek stabilization. The initial devaluation could be considered as another reason for expansionary effects[7].

The policy of an unanticipated devaluation has been considered in the literature as a preferable adjustment policy in the presence of external and internal imbalances, contrasted with monetary and fiscal policies, because it shifts demand and production towards domestic goods (expenditure switching effect). Figure 2 depicts quarterly changes in exchange rates against the US dollar in the pre-stabilization and post-stabilization periods. As evidenced by the Figure, the second Greek stabilization was accompanied by a higher depreciation rate than the first plan in which an initial devaluation of the drachma was its main component. It is obvious that the initial devaluation enhanced the credibility of the new parity. In the case of the Danish and the first Irish stabilization plans, we see a low depreciation rate which was associated with the refraining from the general EMS realignments.

Finally, Figure 3 plots yearly changes in the reserve money in the pre- and post-stabilization period. We note that the Danish stabilization package did not include a tight monetary policy. Indeed, in comparison with other countries, Denmark is an outlier.

3.1. Expansionary Effects

In many cases, the result of the fiscal austerity, combined with a tight monetary policy, has been a moderation of inflation, and after an initial recession, a period o sustained growth has followed. The Danish, the first Greek and the second Irish stabilization plans had remarkable expansionary effects on private consumption. Table 2 and Figure 4 confirm that Greece and Denmark experienced an expansion in GDP growth during the post-stabilization periods . For Ireland, this expansion appeared only in the second stabilization policy (1987-1989), which was implemented by the conservatives (see Figure 3). The Danish and the second Irish stabilization experienced an expansion in private consumption too. However, the opposite holds for the case of Greece (see Table 2). Indeed, Figure 5 plots the time-series of public and private consumption for Greece. The negative correlation between public and private spending lasted only for the years 1986 and 1987. Actually, in the pre-election year, 1988, the attempt for fiscal adjustment stopped.

The negative correlation between private and public spending during the post-stabilization periods for Denmark could be seen from Figure 6. The Figure indicates that the private spending has responded with one-period lag after the adoption of the stabilization package. Finally, Figure 7 for Ireland does not verify the existence of the negative correlation between private and public consumption.

These expansionary effects could be explained by the well-known argument of the "German view" (Fels and Froelich, 1987; Hellwig and Neumann, 1987 and Giavazzi and Pagano, 1990b)[9]. Also, Drazen (1990) explains this perrerse effect through what he calls "the policy expectations view". According to this argument, fiscal consolidation may be considered by the private sector as a signal that the share of government consumption in output is going to be reduced permanently, so that taxes will be permanently lower. Thus, individuals adjust upwards the estimation of their human capital and increase consumption. This "expectational crowding-in" leads to negative fiscal multipliers.

3.2. Disinflationary Effects

The most important feature of post-stabilization periods was disinflation. Table 3 presents different measures of the output cost of these disinflationary policies. These measures are known as "sacrifice ratios". The first measure uses output gaps. It is computed as deviations of real GDP from its linear trend growth rate between 1960 and 1989. It is defined as the number of extra per cent loss of output to inflation reduction. The second "sacrifice ratio" measures how much unemployment it takes to bring inflation down by one per cent. Following the methodology of Giavazzi and Spaventa (1989), we show two different measures of the reduction in the inflation differential relative to Germany: (i) the absolute fall in the differential and (ii) its per cent reduction relative to the initial level.

Sacrifice ratios were very low and often negative for the selected periods, as evidenced by Table 3. In Denmark (1983-88) and Spain (1985-89), the cumulated output gains were very high. In these countries disinflation was accompanied by capital inflows and enhanced credibility after their entrance in the EMS and the European Union, respectively. In Greece, the disinflation of the period 1986-88 was accompanied by a short increase in business investment and, thus, the output loss was negative. But the socialist government followed the stabilization plan for only two years. In the pre-election year 1988, the programme was abandoned.

4. Concluding Remarks

The design of stabilization policies in heavily indebted economies is extremely difficult. Indeed, large public debt issued at fixed nominal interest rates creates an incentive for the government to use surprise inflation to reduce the real interest rate it pays on the debt. Therefore, the announcement of a disinflationary monetary and fiscal policy is not very credible since governments would have to give up an essential amount of seigniorage revenues. Some small and "fiscally weak" European countries have tried to stabilize their economies in the last decade, and their experiences are very useful lessons.

The paper has contrasted the stabilization programmes of these countries and drawn out preliminary conclusions for the design of such programmes in small open economies. First, programmes relying on government expenditures reduction, seem to be more successful than those that realy on revenue increases. The Danish and the second Irish Stabilization are the main examples that support this conclusion. Second, the devaluation in the initial stages of such a programme can offer an important contribution in the success of this programme. Finally, the refraining from general EMS realignments can enhance credibility gains.

TABLE 1

Main Features of Stabilization Policies in Small Open European Economies

	DK	Ist IR	2nd IR	Ist GR	2nd GR	PT
Tight Fiscal Policy:						
a) through increase in taxes	No	Yes	No	Yes	Yes	Yes
b) cuts in expenditures	Yes	No	Yes	No	Yes	No
Fixed Exchange Rates (ERM)	Yes	Yes	Yes	No	No	No
Financial Liberalization	Yes	No	No	No	No	No
Tight Monetary Policy	No	Yes	No	Yes	Yes	No
Sharp Devaluation	No	No	Yes	Yes	No	No
Abolition or Modification of Wage-Price Indexation Schemes	Yes	No	No	Yes	No	No
Restrictive Wage Policy	Yes	No	No	Yes	No	No
Restrictive Wage Policy only for the public sector	No	No	No	No	Yes	No
Privatization	No	No	No	No	Yes	Yes

Notes: Spain did not experience an explicit and rigorously specified plan. EMS membership was the main stabilization fact.

TABLE 2

Key Statistics on the Danish, Irish and Greek Stabilizations

	Average Growth:			
	of public consumption as % of GDP	of private consumption as % of GDP	average deviation from trend* GDP growth	long-term interest rates
Denmark				
1979-82	4.0	1.8	-0.8	18.2
1983-86	3.6	1.8	2.2	12.8
Ireland				
1979-81	5.8	1.5	-0.6	16.0
1982-84	4.9	1.5	-1.4	15.2
1987-89	5.2	1.7	1.2	9.9
Greece				
1982-85	0.6	2.4	-0.97	16.7
1986-88	-0.06	0.9	0.08	16.9
1991-93	-2.6	0.4	0.6	18.2

Notes: (*) Linear trend: 1960-1989. For Greece 1960-1993.
Source: National Accounts, OECD.

TABLE 3

The Output Cost of Disinflationary Policies

	Greece		Denmark	Ireland		Portugal		Spain	
	1986-88	1991-93	1983-88	1982-84	1982-89	1982-89	1985-89	1982-89	1985-89
Reduction in the inflation differential relative to Germany:									
(a) percentage points	10.9	5.89	0.3	5.6	10.5	7.6	7.3	5.1	2.6
(b) % of the initial level	47.2	71.04	8.3	47.4	88.9	43.6	42.6	56.0	39.3
(c) cumulative increase in unemployment*						-20.7	-34.9	23.2	-11.7
(d) cumulated output loss**	-0.1	1.75	-5.6	4.3	4.6	1.9	-7.7	-7.3	-11.0
Sacrifice Ratios:									
(d)/(a)	-0.009	0.30	-18.60	0.76	0.44	0.25	-1.00	-1.40	-4.20
(d)/(b)	-0.002	0.02	-0.67	0.09	0.05	0.04	-0.10	-0.10	-0.30
(c)/(a)***						-2.70	-4.70	4.50	-4.50
(c)/(b)***						-0.50	-0.80	0.40	-0.30

Notes:

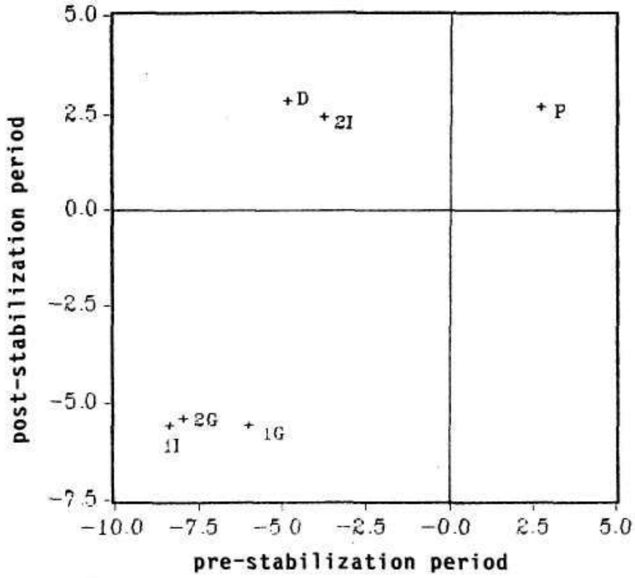
(*) cumulative increase in unemployment: sum of year to year changes in OECD standardised unemployment.

(**) cumulative output loss: sum of deviations from trend GDP growth (linear trend: 1960-1989). For Greece 1960-93.

(***) For Portugal, these ratios were constructed for the periods 1983-1988 and 1985-1988.

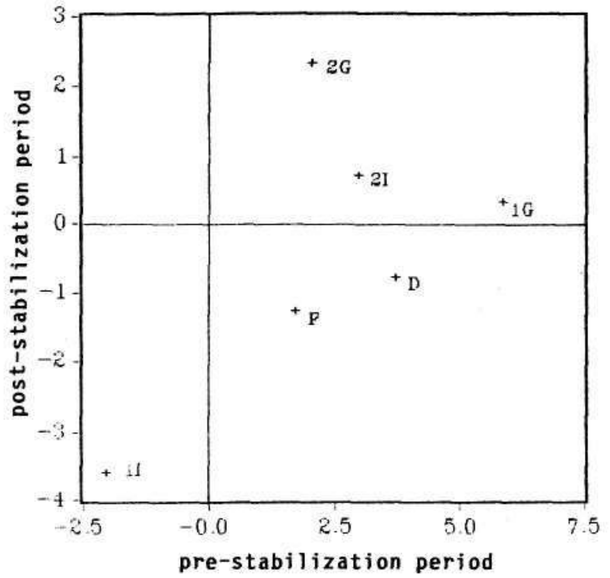
Sources: OECD Economic Outlook and Main Economic Indicators, except CPI inflation. The latter is from IFS Yearbook 1990, IMF.

Figure 1.
Primary Balances and Stabilization
Policies in the 1980s



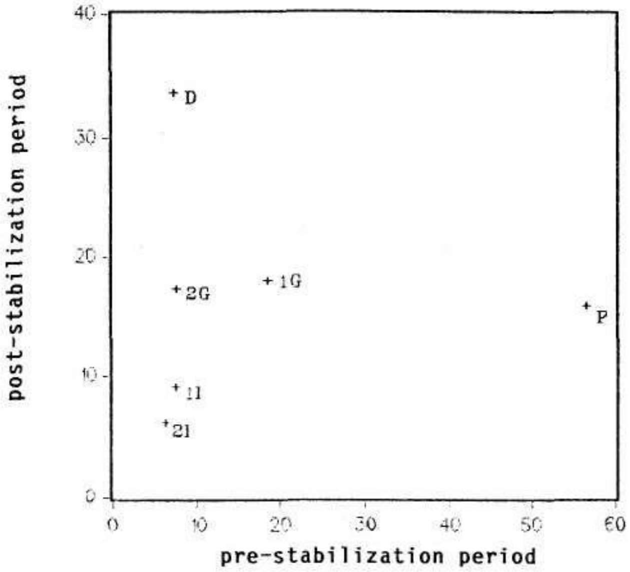
D= Danish, 1G= 1st Greek, 2G= 2nd Greek, 1I= 1sr Irish, 2I= 2nd Irish, P= Portuguese (79-82, 83-86) (82-85, 86-88) (79-81, 82-84) (84-86, 87-89) (88-89, 90-91)

Figure 2
Exchange Rate Management and Stabilization
Policies in the 1980s



D	= Danish	(1979.Q1-1982.Q4,	1983.Q1-1986.Q4)
1G	= 1st Greek	(1982.Q1-1985.Q3,	1985.Q4-1988.Q2)
2G	= 2nd Greek	(1988.Q1-1990.Q1,	1990.Q2-1992.Q2)
1I	= 1st Irish	(1979.Q1-1981.Q4,	1982.Q1-1984.Q4)
2I	= 2nd Irish	(1984.Q1-1986.Q4,	1987.Q1-1989.Q4)
P	= Portuguese	(1988.Q1-1989.Q4,	1990.Q1-1991.Q4)

Figure 3
Changes in the Reserve Money and
Stabilization Policies



D = Danish, 1G = 1st Greek, 2G = 2nd Greek, 1i = 1st Irish, 21 = 2nd Irish, P = Portuguese (79-82, 83-86) (82-85, 86-88) (79-81, 82-84) (84-86, 87-89) (88-89, 90-91).

Figure 4
Stabilization and Expansion Average
Deviation from trend* GDP Growth

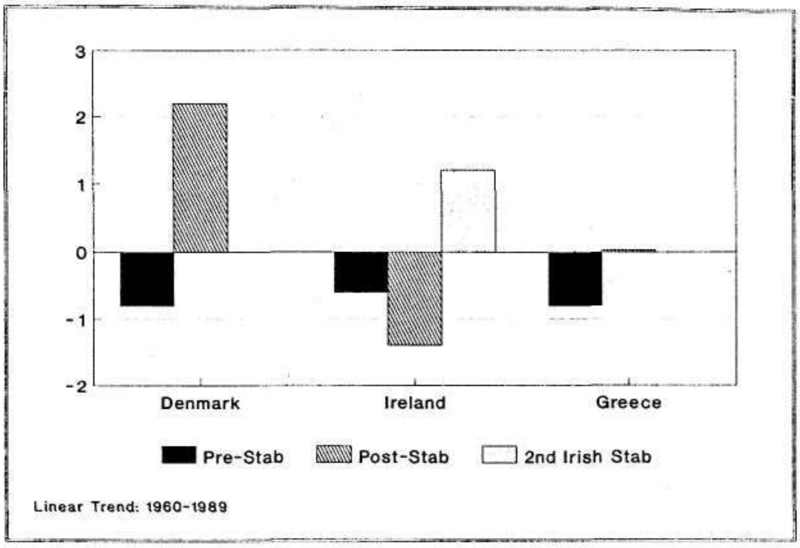


Figure 5
Public Consumption and Private Consumption
(as percent of GDP - Greece)

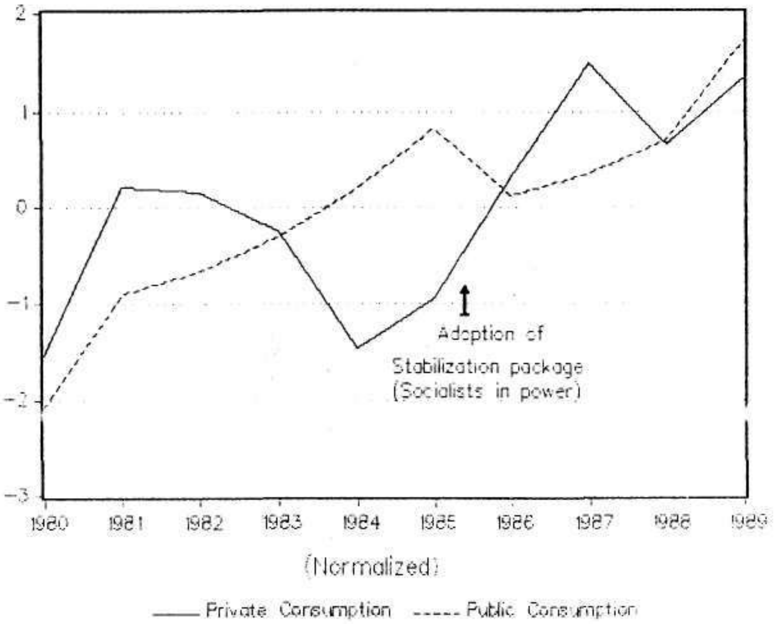


Figure 6
Public Consumption and Private Consumption
(as percent of GDP - Denmark)

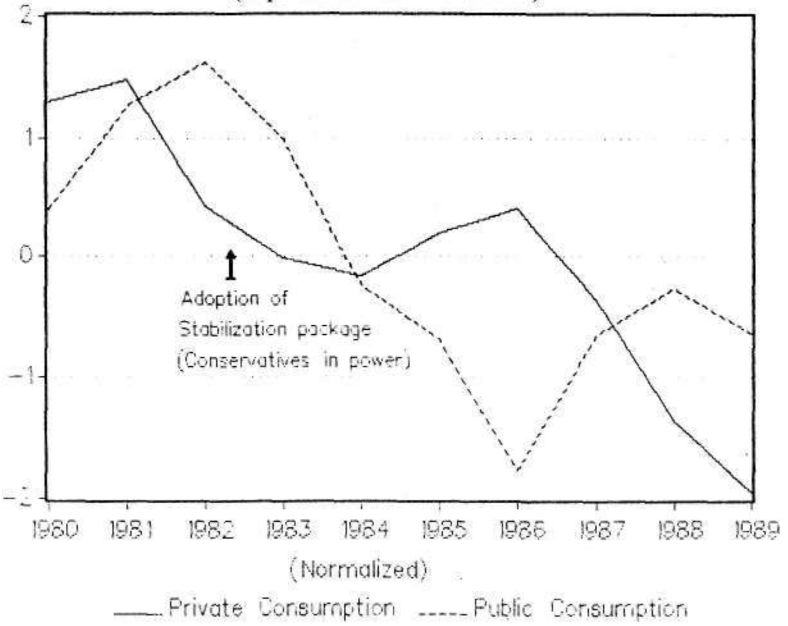
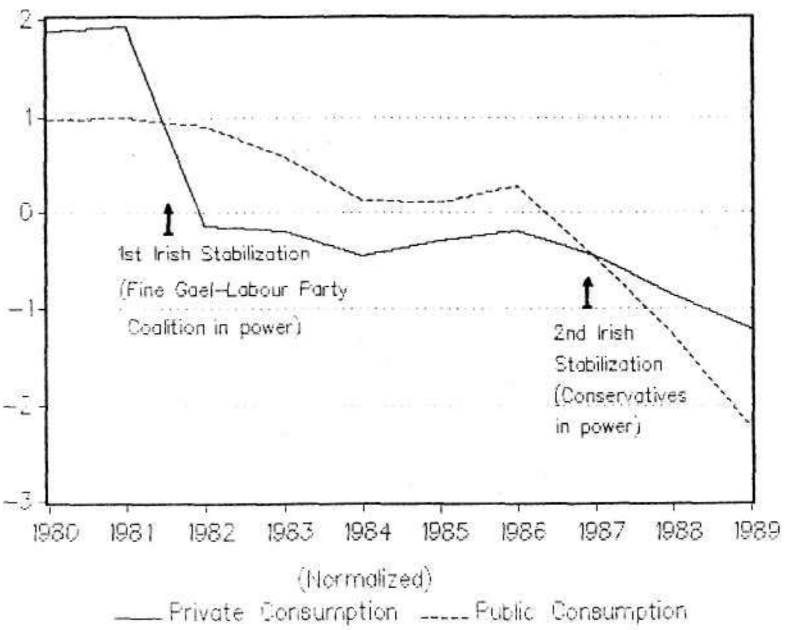


Figure 7
Public Consumption and Private Consumption
(as percent of GDP - Ireland)



Footnotes

1. They present a figure of interest rates in Denmark. After the announcement of the new policy, a reduction in inflationary expectations and a fall in the long-term Danish interest rates occurred. They note that a new fall in interest rates occurred immediately after the realignment (March 21, 1983) which enhanced the credibility of the exchange rate policy, since the Danish kroner essentially was held unchanged. The next decline in interest rates occurred on April, 1 where the government announced a further liberalization of fiscal movements.

2. It has been argued (McAleese and McCarthy, 1989) that Dornbusch underestimates the effects of the external shocks in the early 1980s —shocks to the terms of trade, world economic activity and international interest rates— and, thus, attributes to the price stability policies the high unemployment and debt accumulation which were due to external shocks. In addition, Newell and Symons (1990) consider the behaviour of the real interest rates as the most important of the external shocks.

3. Honohan (1992) describes the adopted procedures for cutting spending and argues that these cuts were achieved mainly through a postponement of public fixed capital formation and public service pay rates.

4. It has been argued (Kapopoulos and Lazaretou, 1996) that the political budget cycle is very visible in the postwar Greek economy.

5. It has been argued that the credibility of a stabilization programme could be greatly enhanced either through a consensus among the major political parties (Katseli, 1990) or by joining the drachma to the ERM (Demopoulos, 1992, 1993 and Alogoskoufis and Christodoulakis, 1991).

6. In the case of Portugal, we consider the QUANTUM as the main stabilization plan only conventionally. As we have mentioned above, the direct tax reform and the privatization procedure had already started in the year 1989.

7. For a descriptive presentation of this argument, see Alogoskoufis (1992).

8. The sample period is 1983-1986 for the Danish post-stabilization and 1986-1988 for the Greek post-stabilization.

9. Alexander and Demopoulos (1989) identify this perverse effect (negative fiscal multiplier) for the Greek economy.

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