

# PRIVATIZATION AND EUROPEAN ECONOMIC AND MONETARY UNION

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## INTRODUCTION

The two most important criteria for joining the European Economic and Monetary Union (EMU) were that debt should not exceed 60 percent of a country's gross domestic product (GDP) and that budget deficits should be 3 percent of GDP or lower.<sup>1</sup> There has been some concern in the past that privatization receipts collected by some European Union (EU) members have been used to meet such criteria, given that fiscal discipline has become a significant problem of economic management. Arguably, the main purpose of privatization is to make the enterprises being privatized more efficient and the economy more productive in general [Bös 1991]. Nonetheless, governments may also use privatization policies adopted during the 1990s as a means to shift policy coordination and pursue other national objectives, such as participating in EMU and the future development of the European Union. Specifically, privatization receipts could be used to tackle high levels of deficits and debt, and meet the convergence criteria. Thus, the short-run goal of raising money for political purposes may interfere with longer-run efficiency goals.

During the 1990s, few EU members have been able to fulfill the stringent convergence criteria. The cost-benefits of monetary union are also tenuous. Regardless, monetary participation may prove to be politically advantageous in several ways: as a symbol for political solidarity, as a way to reduce political influence over monetary policy, and shift policy coordination and responsibility to regional institutions [Feldstein, 1991; Kansas City FRB Symposium, 1991; Laidler, 1991; Vaubel, 1986]. As such, a country's inability to meet the union criteria can also have substantial adverse short- and long-term socio-political and economic effects.

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**TABLE 1**  
Steps In European Integration

Type of Integration	Free Trade Among Members	Common External Tariffs	Free Movement of Factors of Production	Harmonization of Economic Policies	Political Harmonization
Free Trade Area, 1951 <sup>a</sup>	X				
Customs Union, 1968	X	X			
Common Market, final, 1992	X	X	X		
Monetary Union, 1999	X	X	X	X	
Political Union, Est: 21st c.	X	X	X	X	X

Source: Lindert [1991].

a. This refers to the establishment of the European Coal & Steel Community.

Using country-level panel data on privatization receipts and budget deficits for OECD countries from 1990 to 1997, we empirically analyze whether the concern with deficits in the 1990s in Spain, Greece, Italy and Portugal is related to a shift from privatization as a tool of economic restructuring, to privatization as a tool of European monetary convergence. Our results indicate that a negative and statistically significant relationship exists between receipts from the sale of state-owned enterprises (SOEs) and deficit reduction from 1990 to 1997 in the southern European states. We do not find such a relationship for the other EU member states.

The next section introduces the main political-economy issues related to the European Economic and Monetary Union. This is followed by the hypothesis that privatization receipts might have been used by southern states for not only economic restructuring but also as a deficit reduction tool to meet European Monetary Union convergence criteria. The next three sections present the empirical model, the estimated results and some concluding remarks.

## ECONOMIC AND MONETARY INTEGRATION

Economic and Monetary Union is an attempt to deepen the integration of European countries [Forstater, 1999]. Table 1 shows the various steps taken and envisioned to reach full political integration. Monetary union is the crucial step toward political integration and is based on the idea of creating a currency zone, an arrangement by a group of countries to irrevocably fix exchange rates to one another—including the option of a common currency—and to permit full integration of financial and banking markets [de Grauwe, 1992; Hansen, Heinrich and Nielsen, 1991, 178-205].

Three developments have reinforced the goal toward fiscal and monetary integration: (1) the establishment of the European Monetary System (EMS) in 1979, aiming to establish an area of monetary stability in Europe; (2) provisions listed in the

**TABLE 2**  
Stages Of Economic And Monetary Integration

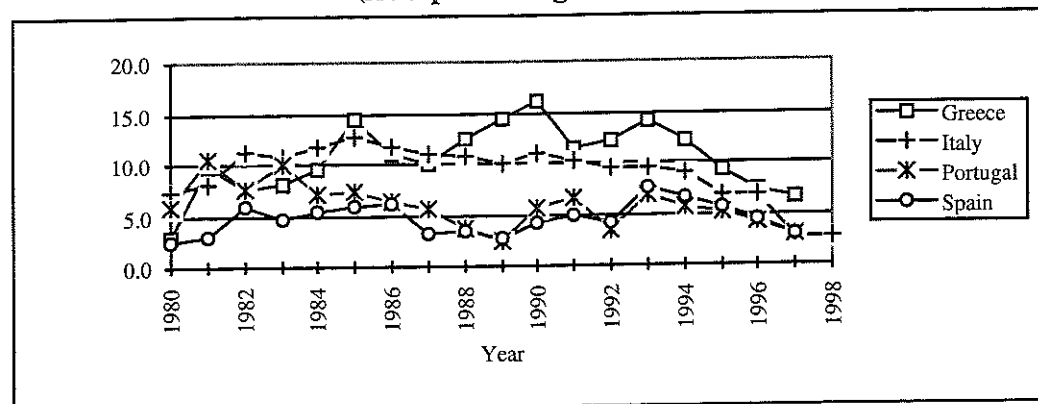
First Stage (7/1/1990)	Second Stage (Beginning of 1994)	Third Stage Initial: (1/1/1997- 1/1/1999) Revised: (1/1/1999 - 1/1/2001)
<ul style="list-style-type: none"> <li>Remove most of the restriction on capital movements.</li> <li>Increase coordination of individual economic policies.</li> <li>Intensify cooperation between central banks.</li> </ul>	<ul style="list-style-type: none"> <li>Multi-annual program to avoid high inflation rates and lower government debts in order to prepare for final state.</li> <li>European Monetary Institute established with three main function:               <ol style="list-style-type: none"> <li>to coordinate member state monetary policies to ensure price stability and monitor the EMS;</li> <li>to prepare for a common currency managed by a future European Central Bank (ECB); and</li> <li>to oversee development of the ECU.</li> </ol> </li> <li>EMI's main task is to harmonize monetary statistics and money market instruments as this is an essential pre-condition for monetary integration.</li> </ul>	<ul style="list-style-type: none"> <li>Subject to a decision by the European Council.</li> <li>If a majority of member states meet the economic conditions (convergence criteria) described in the Treaty, the last stage of EMU will be launched.</li> <li>Political leaders agreed they would not be able to meet the 1/1/97 deadline.</li> <li>The new goal is currently 1/1/1999.</li> <li>EMI is liquidated immediately and ECB conducts EU joint monetary policy.</li> <li>Each member state participating in EMU nominates a Council member, giving each member state an equal say in ECB decisions.</li> </ul>

Modified from the *Delors Committee Report* [CEC, 1989].

Single European Act (SEA) of 1987, encouraging monetary integration and its endorsement of a single European currency; and (3) the Maastricht Treaty of 1991, calling for a three-stage approach for full economic and monetary integration. Table 2 highlights the three-stage approach which includes specified procedures for convergence and a timetable for full participation in EMU.

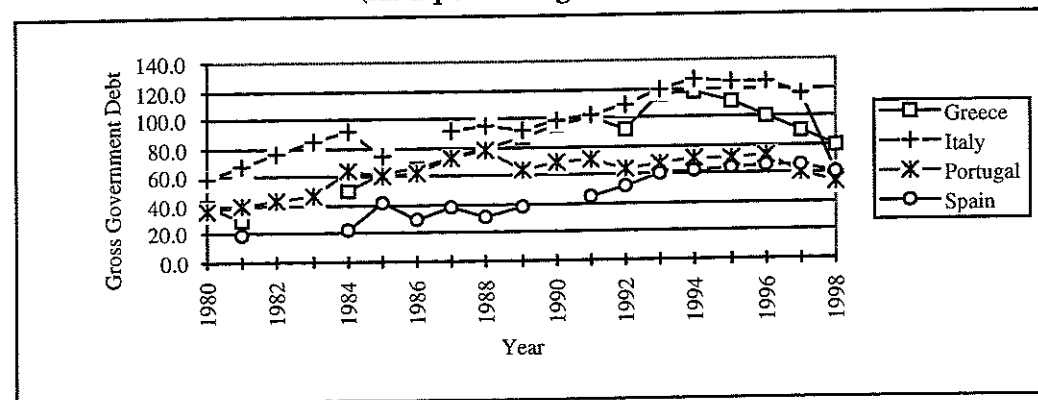
In recent years, academic work on the EMU has centered on the following issues: structural adjustments and a country's suitability for EMU [Craig, 1994; Frankel and Rose 1997; Funke, 1997; Kregel, 1999], the emerging economic dilemmas European members face on the road to EMU as of the signing of the Maastricht Treaty [Rehman, 1997], implications for post-EMU fiscal and monetary policymaking [Dellas, 1997; Knoester and Kolodziejak, 1996; Smithin, 1999], future performance of EMU [Horstmann and Schneider, 1994; Kenen, 1999; Fatas, 1997; Parguez, 1999; von Hagen, 1997], the creation of a core and second-tier EMU [Saccomanni, 1996; Vinals, 1996], and the uncertainty of the economic cost-benefits associated with EMU [Bovenberg and de Jong, 1997; Kansas City FRB Symposium, 1991; Vinals, 1994]. In particular,

**FIGURE 1**  
Budget Deficits in Southern Europe, 1980-1998  
(As a percentage of GDP)



Budget deficits for 1998 are forecasts. *OECD Economic Surveys* [1980-1997]

**FIGURE 2**  
Government Debt in Southern Europe, 1980-1998  
(As a percentage of GDP)



Government debt for 1998 is a forecast. *OECD Economic Surveys* [1980-1997]

there seems to be no general consensus on whether the benefits of European monetary integration outweigh its costs. On the one hand, some policy makers argue that monetary integration was a natural extension of Europe's trade integration. On the other hand, some economists have argued that Europe does not qualify as an optimal currency area, making the European Union unsuitable for monetary integration [Eichengreen, 1989; Wihlborg and Willett, 1991].<sup>2</sup>

The economic uncertainties associated with the creation of a European monetary union have led scholars to suggest that the continued enthusiasm shown by political leaders for monetary integration in the 1990s may be motivated by political rather than economic goals. Few EU members have been able to fulfill the stringent union convergence criteria during the past few years. Yet, monetary integration may prove to be politically useful in several ways: as a symbol of greater political solidarity

**TABLE 3**  
Meeting The Maastricht Criteria

European Member State	Budgetary Deficit % of GDP		Gross Government Debt % of GDP	
	1995	1997	1995	1997
Greece	9.2	6.2	111	107
Italy	7.1	3.7	125	123
Portugal	5.2	2.8	66.5	62.4
Spain	5.7	2.9	64	66

EMU fiscal criteria: budget deficit, 3 percent of GDP and government debt, 60 percent of GDP. *OECD Economic Surveys, Greece, Italy, Portugal and Spain* [1997].

[Feldstein, 1991, 83] and authority [Laidler, 1991, 86], as an effective way to shift the accountability of monetary and fiscal policies from national to European institutions [Laidler, 1991, 93; Vaubel, 1986], and as a way to reduce the pressure of domestic electoral politics on monetary policy [Kansas City FRB Symposium, 1991]. Whether political leaders have been motivated by economic or political arguments for monetary integration, EMU signifies the future development of European integration.<sup>3</sup>

The continuing challenge for member states is to find ways to deal with budget deficits and national debts, which is not an easy task given that these have been significant problem areas over the last few years for several member states, especially Spain, Italy, Portugal and Greece. Consequently, the introduction of privatization policies in southern Europe during the 1990s might possibly be connected to monetary integration. Specifically, privatization might be used by southern European governments as short-term policy means to meet the fiscal convergence criteria and participate in monetary integration. In turn, this implies that privatization policies may not be necessarily occurring for their direct economic merits, but to pursue larger political objectives.

#### THE LEGACY OF DEFICITS AND DEBT IN EUROPEAN COUNTRIES: PRIVATIZATION RECEIPTS TO THE RESCUE

Years of slow growth in the early 1980s in Europe and worldwide resulted in a deterioration of trade volumes. By this time, financial resources in the public sector were extremely limited and governments avoided increasing taxes to finance public enterprises [Vernon, 1988]. Thus, government debt has emerged as a significant problem area in economic management. As a percentage of national GDPs, Spain, Italy, Portugal and Greece show significant government debt-to-GDP ratios by the 1990s—Italy (125 percent in 1995) and Greece (117 percent in 1994) having by far the most serious problems [*OECD Economic Surveys*, 1997]. In addition, budget deficits as a percentage of GDP are relatively large, especially for Greece and Italy (11 and 16 percent, respectively, in 1990) [*OECD Economic Surveys*, 1994].<sup>4</sup>

Given these circumstances, the southern economies have had considerable economic difficulties responding to the challenges of full participation in the monetary

**TABLE 4**  
**The Privatization Of Telecommunications In Southern Europe**  
**(As of July 1, 1997)**

Privatization	Greece	Italy	Portugal	Spain
Telecommunications Organization	Hellenic Telecommunications Organ. (OTE)	Telecom Italia (TI)	Portugal Telecom (PT)	Telefónica
State Control, 1/1985	100%	84.6%	100% <sup>a</sup>	45%
Tranches Offered	1996: 8%	1985: 23.3% <sup>a</sup> 1997: 16.47% <sup>b</sup>	1995: 27% 1996: 22%	1985-87: 13% <sup>a</sup> 1995: 12% 1997: 20%
State Control, 7/1997	92%	44.8 %	51%	0%
Tranches Expected to be Offered	1997: 10%	1997: 30-35% 1997-98: 10-15%	1997: 26%	

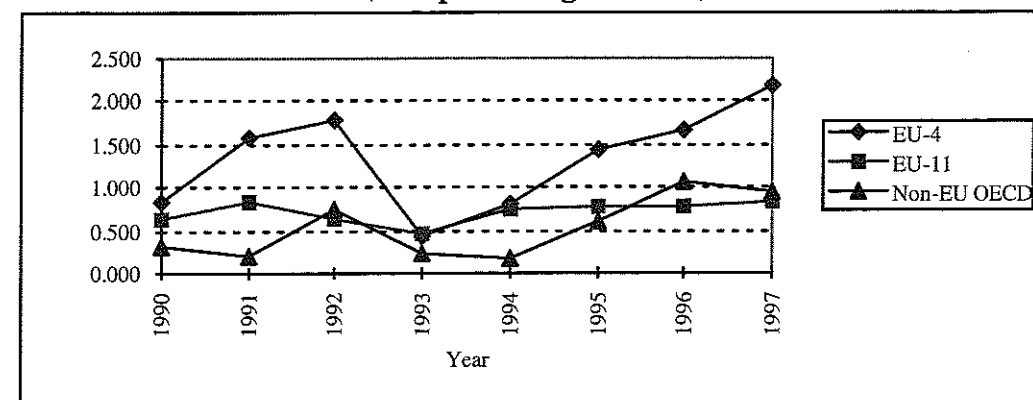
Source: National Ministries, European Commission, newspaper accounts. a Not part of a government program for privatization. b Not part of a government program for privatization, but a reduction in the government's shares due to the merger between STET and Telecom Italia.

union. Interestingly, deficit and debt percentages for EU countries—particularly Spain, Italy, Portugal and Greece—have substantially decreased from 1995 to 1997. The decrease in deficits/GDP, for instance, during this period decreased for the most part by 3 percentage points in the four southern countries, as shown in Table 3.

In the 1980s, Spain, Italy, Portugal and Greece initiated privatization policies,<sup>5</sup> the transfer of the central government's ownership rights in public entities to private investors, partly in response to industrial decline and the economic stalemate of the previous decade. For the most part, profitable public enterprises—such as public utilities and the non-declining industrial sectors—were not included in privatization programs. National leaders in Europe continued to resist the privatization of many sectors in the late 1980s and early 1990s. In part, the resistance came from the fact that European governments used SOEs to generate government revenue to subsidize other government activities, to sustain employment levels, and to maintain some control over social policy goals [Bös, 1991]. Furthermore, governments used some sectors—such as telecommunications—to control sectoral high-technology input use and industrial policy [Noam, 1986].

In the 1990s, privatization programs were introduced for several industrial and service sectors not privatized in the 1980s. For example, stakes in the profitable southern European telecommunications organizations were sold to the private sector as part of a comprehensive privatization program in the 1990s. From 1995 to 1997, 9 percent of the national telecommunications organization was sold to the private sector in Greece, 17 percent in Italy, 49 percent in Portugal, and 22 percent in Spain, as

**FIGURE 3**  
**Privatization Receipts, 1990-1997**  
**(As a percentage of GDP)**



EU-4: Greece, Italy, Spain, and Portugal. EU-11: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Netherlands, United Kingdom, and Sweden. Non-EU OECD: United States, Japan, Norway, Australia, New Zealand, Canada, Iceland, and Turkey. *OECD Financial Market Trends* [February 1995, June 1996, March 1997].

shown in Table 4.<sup>6</sup> In southern Europe, privatization receipts (as a percentage of GDP) for all sectors increased from .83 percent in 1990 to 2.18 percent in 1997, compared to 0.62 percent and 0.83 percent for the other EU member states, and 0.33 percent and 0.94 percent for non-EU OECD countries, as shown in Figure 3.

In the early 1990s, southern Europe experienced high deficits and indebtedness, and a surge in privatization. In turn, the region witnessed deficits and debt decline and an increase in privatization receipts during the late 1990s. One of the fiscal benefits of privatization policies is the subsequent increase in government revenue [Anderson and Hill, 1996, 2-5; Bös, 1991, 1-15]. Traditionally, privatization-related government revenue has been used to invest in infrastructure development, research and development, and industry modernization. Nonetheless, the sale of state-owned enterprises is a rather appealing way to pay off at least a portion of the national debt and, thus, to improve the country's fiscal position. Moreover, because most SOEs are recipients of government subsidies, the shift from government to private ownership may, therefore, also eliminate the need for this type of aid, providing fiscal relief and helping to lower the public deficit.

In all, the above discussion leads us to hypothesize that part of the revenues from the sale of SOEs might have been used as a short-term policy tool by the southern governments to tackle deficits and indebtedness, and to meet the convergence criteria for monetary participation in the EMU.

#### DATA AND METHODOLOGY

To empirically analyze the connection between privatization receipts, budget deficits and government debt, we collected data for 22 OECD countries from 1990 to 1997. The country-level data set on budget deficits and government debt comes from

the *OECD Economic Surveys* (1990-1998) and yearly privatization receipts were obtained from the *OECD Financial Market Trends* (February 1995, June 1996, March 1997). Since the Maastricht Treaty and the convergence criteria were established in the 1990s, our data set only covers the 1990-1997 period.<sup>7</sup>

Using the aforementioned panel, we can relate the budget deficit level (as a percentage of GDP) of country  $i$  in year  $t$  ( $DEFICIT/GDP_{it}$ ) to the value of privatization receipts (as a percentage of GDP) collected during the same year ( $PRIVATE/GDP_{it}$ ) by specifying a random effects model of the form:

$$(1) \text{DEFICIT/GDP}_{it} = a + b \text{PRIVATE/GDP}_{it} + g \text{SOUTH}_{it} + d \text{SOUTH-PRIVATE/GDP}_{it} + \mu_i + e_{it} \quad i = 1, \dots, N; t = 1, \dots, T$$

where  $u_i$  denotes the unobservable time-invariant country-specific effect and  $e_{it}$  is the usual error term. The model implicitly assumes that country-specific constant terms are randomly distributed across years and uncorrelated with the regressors. Moreover,  $\mu_i \sim iid(0, \sigma_u^2)$ ,  $e_{it} \sim iid(0, \sigma_e^2)$ , and the  $\mu_i$ s are independent of the  $e_{it}$ s [Baltagi, 1995].

$\text{SOUTH}_{it}$  is a dummy variable equalling one for Spain, Portugal, Italy, and Greece, and zero otherwise. *A priori*, we would expect  $b$  to be statistically insignificant if privatization receipts is not related to budget deficits for OECD countries (other than the four selected countries),  $g$  to be positive and statistically significant given that the selected southern countries have higher deficit to GDP ratios than all other OECD countries, and  $d$  to be negative for Spain, Italy, Portugal and/or Greece if these countries have partly used privatization receipts to cover budget deficits in order to meet the EMU criteria.

The above random effects specification is particularly suited for this study because it allows us to control for both observable and unobservable country-specific heterogeneity, which is more difficult to achieve with cross-sectional or time series data alone. Moreover, by incorporating more observations into the model, we obtain more degrees of freedom and more efficient parameter estimates [Baltagi, 1995].

## EMPIRICAL RESULTS

Table 5 reports the results from estimating equation (1) in linear and double-log form. Given the lack of data for some countries in some years, we estimated equation (1) using feasible generalized least squares (GLS) applied to an unbalanced panel. In essence, we employ a two-step procedure. First, the variance components of equation (1) are estimated using the residuals from ordinary least squares regressions and, second, the feasible GLS estimates are obtained using the estimated variances [Baltagi and Chang, 1994; Greene, 1997]. Further, we correct for heteroskedasticity through the country-specific effects using the method of Baltagi and Griffin [1988].

We begin by noting that the Breusch and Pagan's [1980] Lagrange Multiplier test statistic in both specifications provides strong evidence in favor of the random effects specification over ordinary least squares. Note also that privatization receipts are not statistically correlated with budget deficits for OECD countries—except Spain, Italy,

TABLE 5  
Model Parameter Estimates

	OLS Linear Model	Random Effects Model	OLS Double-Log Model	Random Effects Double-Log Model
Constant	4.3448 <sup>a</sup> (0.2621)	4.1807 <sup>a</sup> (0.3933)	1.4315 <sup>a</sup> (0.0725)	1.3636 <sup>a</sup> (0.0960)
PRIVATE/GDP	-0.1684 (0.2171)	-0.0699 (0.1875)	0.0736 <sup>b</sup> (0.0310)	0.0456 (0.0302)
SOUTH	2.5318 <sup>a</sup> (0.7179)	2.9564 <sup>a</sup> (0.9684)	0.2540 <sup>b</sup> (0.1288)	0.3311 <sup>c</sup> (0.1929)
SOUTH-PRIVATE/GDP	-0.5775 (0.3962)	-0.7979 <sup>a</sup> (0.3891)	-0.2720 <sup>b</sup> (0.1152)	-0.3157 <sup>b</sup> (0.1270)
Breusch and Pagan's (1980)		19.56 <sup>a</sup>		7.63 <sup>a</sup>
LM Test				
$\sigma_e^2$	4.6173	3.2847	0.2357	0.1856
$\sigma_u^2$		1.6519		0.0748
N	106	106	106	106
R <sup>2</sup>	0.1242	0.1191	0.1622	0.0748

Standard errors in parentheses. a implies statistical significance at one percent, b at five percent, and c at ten percent levels.

Portugal and Greece—from 1990 to 1997. Moreover, as expected, the selected southern European Union countries have higher budget deficits to GDP ratios than all other countries. However, there is statistically significant evidence that privatization receipts are inversely related to the deficit-to-GDP ratios for Spain, Italy, Portugal and Greece only.<sup>8</sup>

Using the estimates from the double-log specification of the random effects model, the parameters indicate that doubling the size of the privatization receipts/GDP ratio results in a reduction of the budget deficit to GDP ratio of almost 32 percent.<sup>9</sup> In all, this result is consistent with our assertion that Spain, Italy, Portugal and Greece might have resorted to using privatization receipts to lower the budget deficit, and thus, meet the strict EMU criteria.<sup>10</sup>

At the 2-3 May 1998 meeting in Brussels to launch the EMU, Spain, Italy and Portugal were officially admitted (along with Austria, Belgium, Finland, France, Germany, Ireland, Luxembourg, and the Netherlands) [*The Economist*, 1998]. Greece over the last few years decreased its deficit to GDP and debt to GDP ratios but not sufficiently for EMU inclusion at this time, yet Greece was acknowledged for its ef-

forts to meet the convergence criteria. Also, Italy did not meet the 60 percent debt to GDP ratio criteria, but Italy's efforts to decrease it were considered to be sufficient for allowing the country to be part of the Euro-11. The debt criterion could also be met if debt ratios were falling at a sufficiently fast pace.

### CONCLUDING REMARKS

Given the uncertainty of the economic cost-benefits associated with the creation of a European Monetary Union, and the difficulties faced by the southern European states in meeting the deficit and debt convergence criteria for EMU full participation, our study gives credence to political-economy studies isolating politics and European integration as influential in the support shown by national leaders to monetary union. The change in the 1990s in the southern states of increasing privatization of SOEs—especially the profitable state-owned enterprises, including telecommunications, which were not previously targeted for such policies—may have less to do with economic arguments associated with these policies than with long-term political commitments, of socialist and conservative governments alike, to participate in a monetary union and, in turn, the future development of the European Union.

Our main empirical finding of an inverse relationship between SOE privatization receipts and budget deficits for the southern European states is consistent with the notion that the recent surge in privatization in these countries may be driven by potential political gains than by sound economic policy. This has important social welfare implications if the short-run gains from meeting the EMU criteria were lower than the long-run gains from the economic merits of privatization policies and from investing privatization receipts efficiently. Additionally, our results have important implications for the long-run credibility of policymaking in Europe. Economic agents may become aware of the potential short-run political benefits derived from privatization and, therefore, may be less likely to support SOE privatization if they believe that they solely serve political—rather than economic—goals. These implications are worthy of further research.

### NOTES

This paper was written while Jeronimo was at the Institute for International Studies, Stanford University, Stanford, CA

1. The other three convergence criteria include: inflation rate must not be more than 1.5 percent higher than the average of the three lowest inflation rates in the European Monetary System; long-term interest rate must not be more than 2 percent higher than average in the three lowest inflation member states; and must not have experienced a devaluation during the two years preceding the entrance.
2. An optimum currency area (OCA) is generally defined as an economic unit composed of regions affected symmetrically by disturbances and between which labor and other factors of production flow freely [Mundell, 1961]. The basic idea is that it is worthwhile for a group of independent countries to adopt a single currency when the demand shocks that hit the countries are similar and when labor is highly mobile among the countries in the area. The OCA theory has been used to analyze the costs and benefits for nations to join a monetary union. Eichengreen's [1989] study on Europe and the

United States suggests that Europe does not fulfill the two requirements of an optimal currency area. He notes several reasons for his finding: (i) real exchange rates are more variable by a factor of three to four in Europe than among major regions in the United States; (ii) securities prices move less in Europe than in North America; and (iii) there is lower labor mobility in Europe. The latter may be limited for a long time to come by differences in language and by a culture that, unlike that of the United States, regards geographic mobility with suspicion. The conclusion is that regional adjustment is more efficient in the United States than in Europe. Similarly, Wihlborg and Willett [1991] argue that "Europe as a whole does not display the degree of factor mobility and wage-price flexibility necessary for a currency union to be an optimal institutional arrangement on traditional criteria" and that "a serious adjustment problem may arise for countries like Spain, Portugal and Greece if exchange rate adjustment is ruled out."

3. For a review of theories of European political and economic integration, see Michelmann and Soldatos [1994].
4. As pointed out by a referee, Belgium has also experienced relatively high public sector deficits and debt levels, so in this regard it can be characterized as a "southern" European country. However, the wording of the Maastricht criteria allows for flexibility in the fiscal "reference" values in the sense that countries can meet the criteria if the budget deficit and debt ratios have declined substantially and are approaching the reference value. In the case of Belgium, the debt to GDP ratio in 1997 was 2.1, which is well below the 3 percent reference value (and lower than that of Italy, Spain, Portugal and Greece). Instead, the main problem for Belgium has been meeting the 60 percent government debt to GDP reference value. Nonetheless, the government debt has been decreasing from 135 percent in 1993 to 113 percent in 1999, and it is projected to keep falling. The other Maastricht requirements deal with interest rate convergence and inflation, which again, have been much lower for Belgium than for the southern states.
5. In general, privatization policies can be seen as an economic solution to the managerial and financial constraints faced by public administrations, including the impossibility of raising equity capital, limited access to credit markets due to public sector borrowing limits, rigid personnel policies, inflexible pricing and service offerings, and the weak performance incentives of public administrations [Aharoni, 1986; Bös, 1991].
6. For a review of the historical development of the telecommunications sector in Europe, including the southern states, see Noam [1992].
7. According to the Maastricht Treaty, the criteria only apply to 1997 since membership was determined in 1998 and, as such, the empirical analysis is based on data up to 1997. The deficit and debt levels in 1999 were on average lower for the Euro-11 in 1999 when compared with 1998. The mean deficit ratio fell from 2.4 to 2.0 and the debt level fell from 73.9 to 72.5 during this period.
8. We also tested whether Belgium should be included as a "southern" country given its high debt to GDP ratio. When we include a dummy variable for Belgium interacted with the privatization to GDP ratio, we find that its coefficient is statistically insignificant. Thus, we find no evidence that privatization receipts have been used as a source of revenue to meet the Maastricht fiscal criteria.
9. This assumes there is no statistically significant relationship between the privatization receipts/GDP ratio and the budget deficit to GDP ratio for all other OECD countries.
10. We also estimated a random effects probit model where the dependent variable was whether country  $i$  in year  $t$  did not meet the EMU criteria, and 0 if it did. The estimates—available upon request—suggest that those countries not able to meet the EMU membership criteria were more likely to have higher privatization receipts than all other countries.

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