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Are Europe's Social Security Finances Compatible with EMU?¹

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Abstract

Pursuant to the Treaty of Maastricht, members of the European Union (EU) intend to participate in the Economic and Monetary Union (EMU), in part through convergence toward specified limits on the overall deficit and gross debt of general government. The paper argues that in several EU members, the financial imbalance of social security institutions may constitute an impediment to meeting these requirements. Given a constraint on further payroll tax increases, most countries will need to undertake major reform of public pension and health-care systems, to ensure adherence to the EMU fiscal criteria in the medium to long run.

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ARE EUROPE'S SOCIAL SECURITY FINANCES COMPATIBLE WITH EMU?

I. INTRODUCTION

In 1991, members of the European Union (EU) had agreed to complement the goal of unifying the internal market of goods and services with the creation of a currency union, in the context of the Economic and Monetary Union (EMU), by the end of the decade. The achievement of this goal, it was argued, would confer considerable benefits in terms of efficiency, stability, and growth, and thus, enhance welfare in the entire region, with favorable spillovers to the rest of the world. The basic instrument for pursuing this overarching aspiration, the Treaty of Maastricht, specifies the conditions for all present and future EU members for participation in EMU. The Treaty prescribes, *inter alia*, limits on the overall deficit and gross debt of general government, *including* social security institutions, to be met or approached at a satisfactory pace prior to the final stage of the EMU. Hence the relevance of the question addressed in this paper, namely, whether the financial situation of, and financial outlook for, social security institutions will contribute or interfere with the establishment and maintenance of EMU.

In industrial countries, public pensions have attracted the attention of analysts since the 1970s mainly because of their potential implications for private savings and work effort. Increasingly, policymakers also began to turn their attention to the long-run sustainability of both public pension and health-care systems and to initiate reform measures to preserve or restore it. In the period ahead, in Europe, the advent of EMU is bound to concentrate minds on how to deal with the near-term as well as long-term financial problems confronting social security. The purpose of this paper is to inquire whether the predicament faced by European

countries can be characterized--borrowing a metaphor--as a *wolf at the door*, as *termites in the basement*, or simply as a *domesticated pussycat*.²

II. TRENDS IN SOCIAL SECURITY FINANCES

During the postwar period, pay-as-you-go public pension systems--supported by favorable demographic developments--yielded considerable surpluses that encouraged the expansion of defined benefits in nearly all industrial countries. During that period, in a number of countries, the right to health care was extended to the entire population. Meanwhile, there was a widespread increase in replacement rates under unemployment insurance programs. By the late 1970s and early 1980s, financial pressures began to emerge, following the drive to broaden coverage and to ease eligibility for benefits, accompanied by increased longevity and declining fertility. Most European countries avoided deficits in the social security funds through a steady increase in payroll tax rates (Table 1).³ Also, in some countries, from around the mid-1980s, the expansion of benefits was halted and, in a few cases, somewhat reversed (Table 2). Nevertheless, various *dysfunctional features* of social security schemes--that is, where easy eligibility for pensions or sick pay is being used to contain the rise in unemployment--remained.

²This was the symbolism--referring to the views expressed by various observers--used by Schultze (1989) in an analysis of the U.S. budget deficit.

³On the other hand, Denmark finances a universal pension scheme largely with general tax revenue. Similarly, countries (Denmark, Finland, Greece, Ireland, Norway, Portugal, Spain, Sweden, the United Kingdom) where health-care services are financed mostly or partly with general tax revenue, had to resort to a rise in the overall tax burden as well.

Table 1. Selected Countries: Effective Social Security Contribution Rate, 1980 and 1994 1/
(In percent of gross compensation of employees, including contributions)

	1980	1994 2/
European Union		
Austria	22.8	25.3
Belgium	22.2	29.2
Denmark 3/	4.5	7.7
Finland	18.1	31.4
France	32.5	38.5
Germany	26.6	30.4
Greece	22.9	34.8
Ireland 4/	13.5	17.8
Italy	24.1	30.9
Luxembourg 4/	25.6	28.3
Netherlands	30.7	37.8
Portugal	17.9	20.7
Spain	24.2	29.7
Sweden	21.5	23.2
United Kingdom	10.1	11.6
Other OECD Europe		
Czech Republic 4/	...	36.4
Hungary	...	36.6
Norway	23.5	23.5
Poland 4/	...	32.4
Switzerland	15.1	19.2
East Asia		
Hong Kong	0	0
Indonesia 4/	8.9	10.9
Japan	13.4	17.0
Korea 4/	5.8	8.8
Thailand 4/	2.4	4.8
United States	10.1	12.6

Sources: OECD National Accounts database; national sources; and Fund staff estimates.

1/ Employer plus employee contributions, as a ratio of all-inclusive compensation of employees.
2/ For Portugal, 1989; for Norway, 1991; and for Germany, Hungary, and the United States, 1993.

3/ Denmark finances the social security system almost entirely with general tax revenue.

4/ Based on statutory rates.

Table 2. European Union: Social Security Benefits
by Function, 1980 and 1994 1/

(In percent of GDP)

	1980	1994
Belgium		
Health-care benefits	9.2	9.2
Old-age and survivors' pensions	11.0	11.4
Unemployment benefits	3.1	2.8
Denmark		
Health-care benefits	10.0	8.8
Old-age and survivors' pensions	10.0	12.0
Unemployment benefits	3.6	5.5
France		
Health-care benefits	8.5	9.8
Old-age and survivors' pensions	10.5	12.6
Unemployment benefits	1.2	2.3
Germany		
Health-care benefits	11.3	11.5
Old-age and survivors' pensions	11.9	12.2
Unemployment benefits	1.3	2.7
Greece		
Health-care benefits	2.4	3.7
Old-age and survivors' pensions	6.1	10.2
Unemployment benefits	0.3	0.4
Ireland		
Health-care benefits	8.5	7.4
Old-age and survivors' pensions	6.2	5.6
Unemployment benefits	1.7	3.5

Table 2. European Union: Social Security Benefits
by Function, 1980 and 1994 1/ (concluded)

(In percent of GDP)

	1980	1994
Italy		
Health-care benefits	6.3	7.3
Old-age and survivors' pensions	9.9	15.6
Unemployment benefits	0.4	0.6
Luxembourg		
Health-care benefits	10.2	9.1
Old-age and survivors' pensions	12.0	11.0
Unemployment benefits	0.2	0.5
Netherlands		
Health-care benefits	14.1	13.5
Old-age and survivors' pensions	9.0	11.4
Unemployment benefits	1.8	3.2
Portugal		
Health-care benefits	5.2	8.9
Old-age and survivors' pensions	4.5	7.4
Unemployment benefits	0.3	1.1
Spain		
Health-care benefits	6.5	8.2
Old-age and survivors' pensions	7.2	9.7
Unemployment benefits	2.7	4.1

Sources: Eurostat (1996) and national sources.

1/ Health-care benefits include sick pay and disability pensions. Unemployment benefits include some expenditures on active labor market programs. Data for 1994 are preliminary. Comparable data on Austria, Finland, and Sweden are not available for this period.

The bulk of *pension* reform measures adopted since the mid-1980s was largely aimed at improving marginally the cost-effectiveness of existing pay-as-you-go defined-benefit programs⁴--the dominant public pension model, supplemented in some countries (Denmark, France, the Netherlands, the United Kingdom) with compulsory private pension schemes.⁵ These measures covered three areas. First, the effective retirement age was raised through increases in the standard retirement age (Germany, Greece, Italy, Portugal, the United Kingdom) and the minimum service period (Germany, Greece, Italy), tightening of early retirement provisions (France, Germany), and a slight reduction in noncontributory period for pension eligibility (Austria). Second, replacement rates were cut through stricter benefit indexation (Austria, Finland, France, Germany, Greece, Italy, the Netherlands) and reduced proportion of earnings or longer service period used for computing the pension base (Austria, Finland, France, Italy, the Netherlands, Portugal, the United Kingdom). And third, special pension benefits were eliminated or restricted for public sector employees (Finland, Greece, Italy, Portugal).

In *health care*, many of the reform measures were of an experimental nature and spread over a wide spectrum.⁶ Cost-containment efforts were focused on the supply of, rather than the demand for, services and benefits. On the supply side, reform initiatives included:

⁴For a review, see Franco and Munzi (1996).

⁵See European Commission (1994).

⁶See the surveys in OECD (Organisation for Economic Co-operation and Development) (1992, 1994).

greater reliance on global budgets to limit hospital expenditures (Belgium, France, Germany, the Netherlands); reduction in excess hospital capacity and development of outpatient and other alternative care (Denmark, France, Hungary, Sweden); case-related financing of hospitals (Austria, Sweden); mixed financing of physicians (Finland, Norway, the United Kingdom); and competitive managed-care schemes (the Netherlands, the United Kingdom). On the demand side, various steps have been taken in: cost sharing, including some copayments (Denmark, France, Germany, Greece, Portugal); and limiting pharmaceutical subsidies to certain lists or reference prices (Denmark, Netherlands, Norway). To illustrate the relatively limited extent of these measures, only two countries (Ireland, Sweden) were successful in reducing the ratio of health-care expenditures to GDP since the early 1980s. While strictly speaking not regarded as health-care programs, some countries trimmed the eligibility for, or amount of, cash benefits in the form of disability pensions (Greece, the Netherlands) and sick pay (Germany, Hungary, the Netherlands, Sweden).

Unemployment insurance has been rationalized in a few countries (Germany, Ireland, the United Kingdom), limiting assistance to frictional unemployment, while treating structural unemployment mainly with active labor market programs. Various measures involved some tightening in eligibility rules (Belgium, Spain, Sweden, the United Kingdom), reduction in the statutory replacement ratio (Germany, Ireland, Spain, the United Kingdom), and shortening of the compensation period (France).⁷

Although clearly moving in a favorable direction, the above reform measures--given their rather modest scale and the need to phase them in over a prolonged period--do not seem

⁷For a brief summary of reform measures see, for example, OECD (1995).

sufficient to cope with the dramatic aging that will be experienced in the future in most of Europe. Indeed, the expected doubling of the old-age dependency ratio within the next four decades, will lead, with unchanged policies, to a substantial increase in social security entitlements.⁸ In the health-care area, this trend is compounded by technological developments whose immediate effect will be to increase costs.

III. THE DEFICIT CRITERION

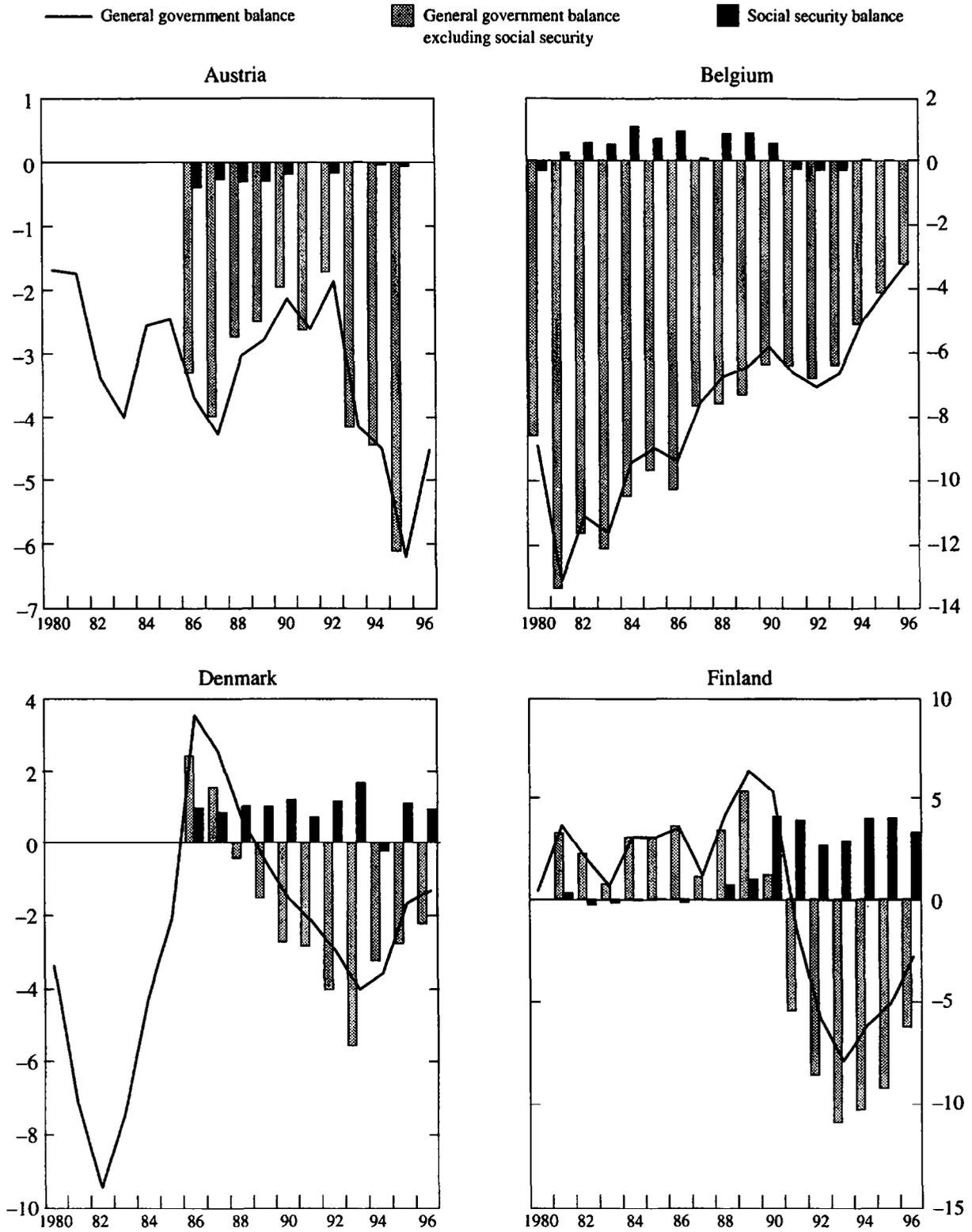
A key condition for participating in EMU is that, effective 1997, the overall deficit of the general government--excluding receipts from privatization--should not exceed the reference value of 3 percent of GDP. Under the recently agreed Stability and Growth Pact, EU members participating in EMU will be further committed to maintaining the financial position of the general government close to balance or surplus over the medium term; failure to remain within the reference value could result in a significant financial penalty.

As a major component of the general government--in spite of their extrabudgetary status--social security finances have a direct bearing on the ability of EU members to meet the medium-term fiscal balance or surplus target, subject to the deficit ceiling. While, since 1992, each government has pursued a convergence plan to meet the ceiling, the actual role of social security operations within the plan has been mixed (see Chart).

Notwithstanding past savings on the benefit side and prevailing high contribution rates, three EU members (Ireland, Italy, Spain) continue to experience significant deficits in the

⁸See, for example, the long-run projections of public pension expenditures in EU member countries in Franco and Munzi (1996).

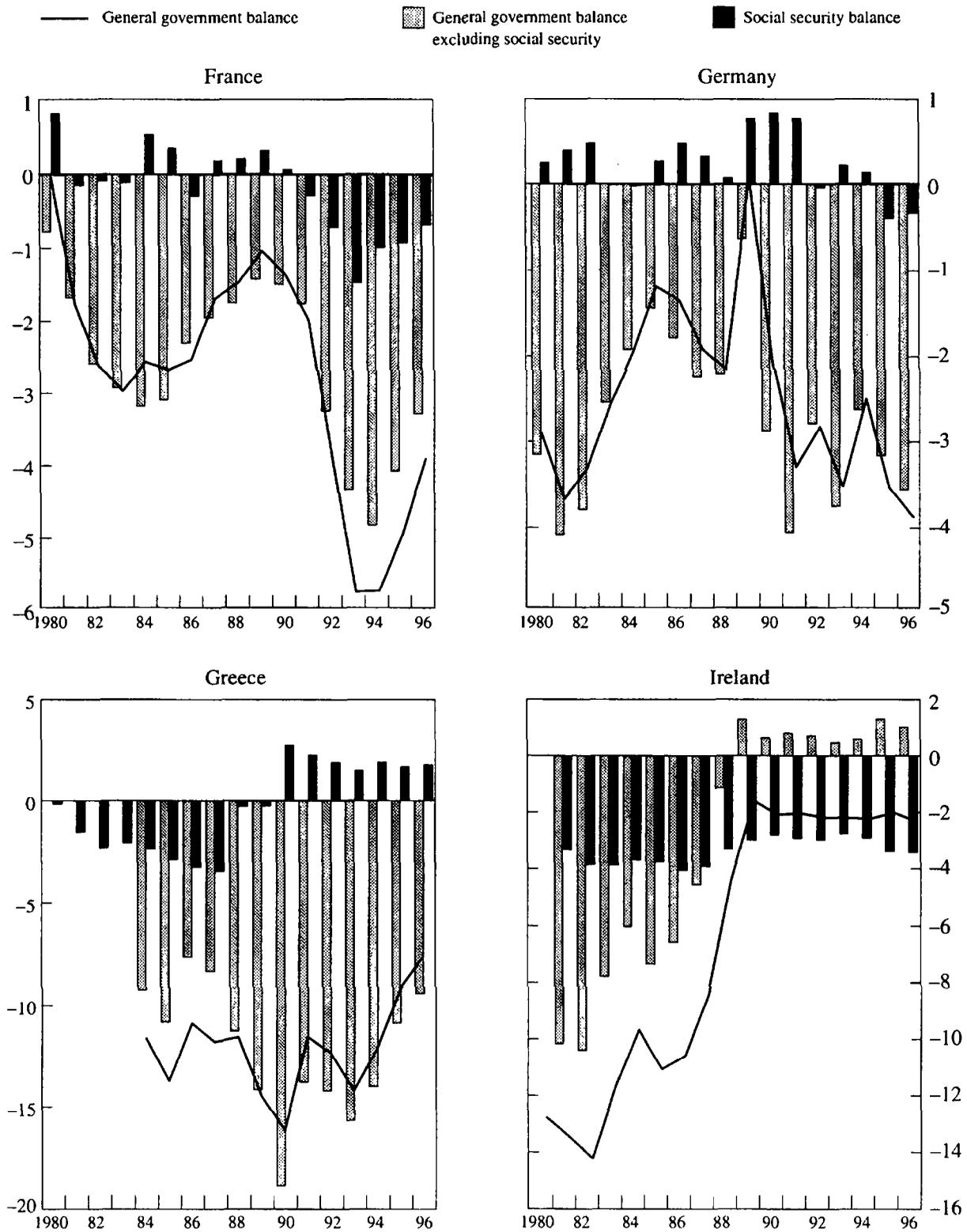
General Government and Social Security Balance, 1980-96¹ (In percent of GDP)



Sources: IMF World Economic Outlook; national sources; and Fund staff estimates.
¹Excluding privatization proceeds. Preliminary estimates for 1996.

General Government and Social Security Balance, 1980-96¹

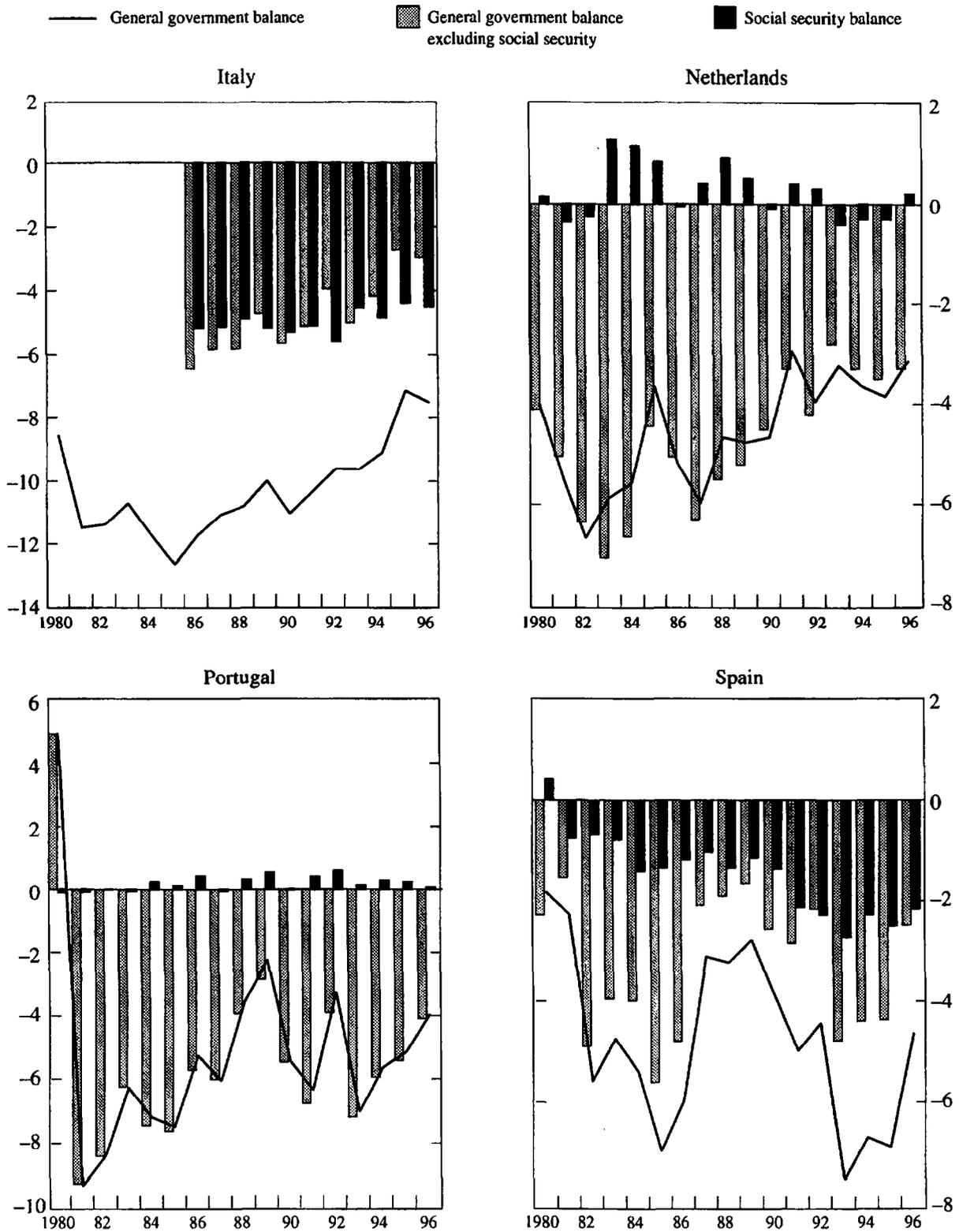
(In percent of GDP)



Sources: IMF World Economic Outlook; national sources; and Fund staff estimates.

¹Excluding privatization proceeds. Preliminary estimates for 1996.

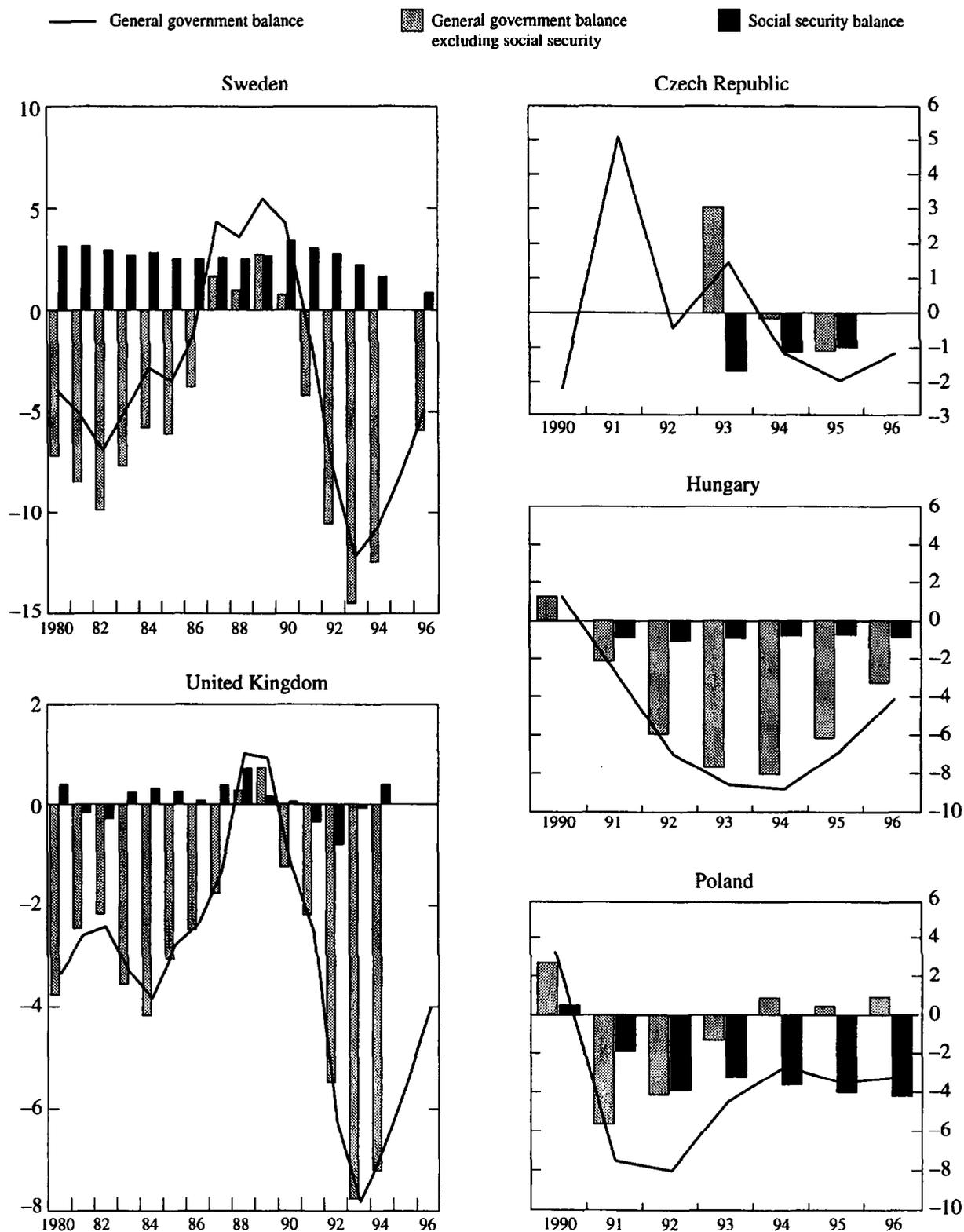
General Government and Social Security Balance, 1980-96¹ (In percent of GDP)



Sources: IMF World Economic Outlook; national sources; and Fund staff estimates.

¹Excluding privatization proceeds. Preliminary estimates for 1996.

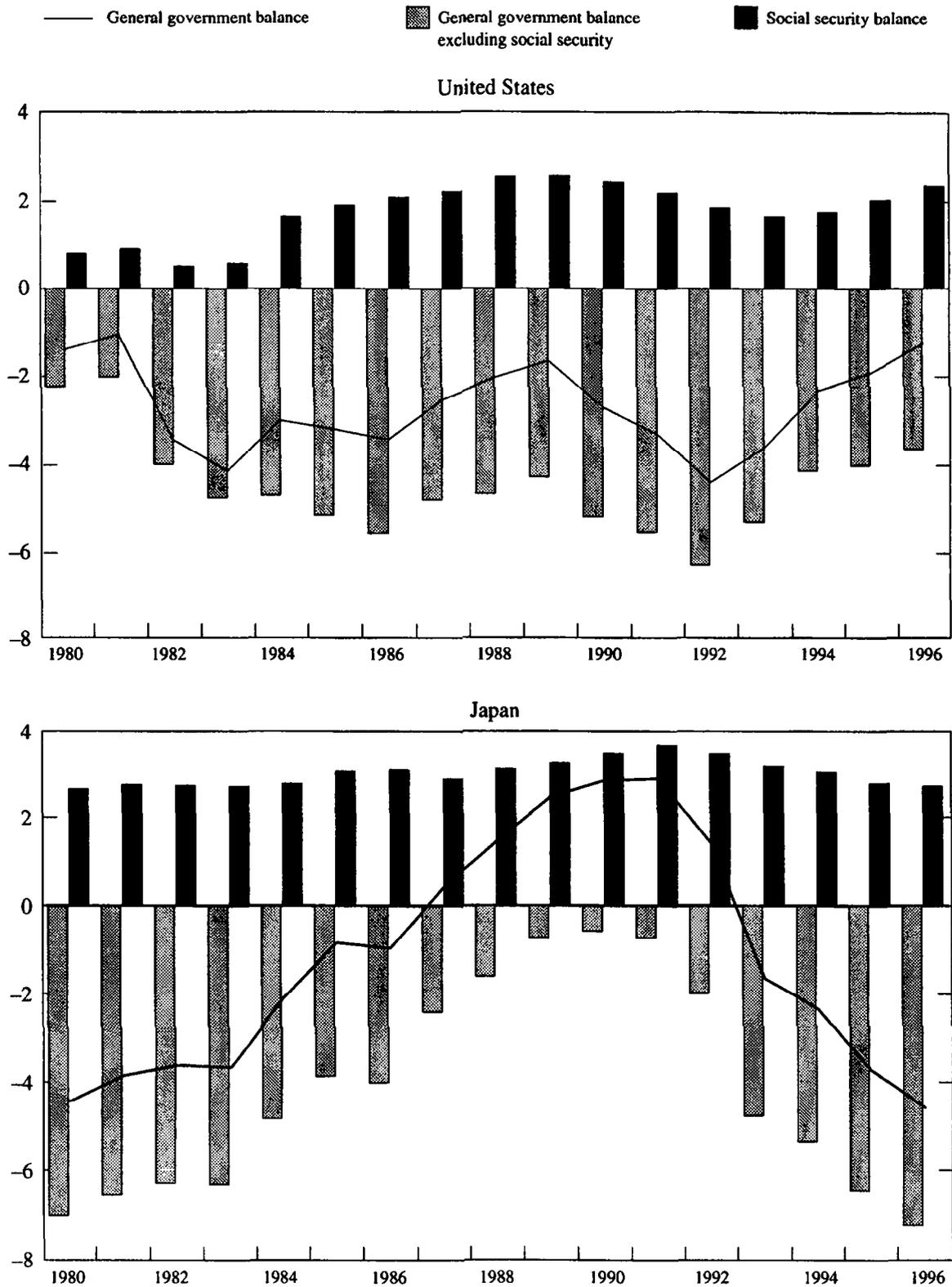
General Government and Social Security Balance, 1980-96¹ (In percent of GDP)



Sources: IMF World Economic Outlook; national sources; and Fund staff estimates.
¹Excluding privatization proceeds. Preliminary estimates for 1996.

General Government and Social Security Balance, 1980-96¹

(In percent of GDP)



Sources: IMF World Economic Outlook; national sources; and Fund staff estimates.

¹Excluding privatization proceeds. Preliminary estimates for 1996.

social security accounts.⁹ Four other countries (Austria, Denmark, Finland, Greece) would show social security imbalances, in the absence of sizable budgetary transfers (shown in Table 3, as compared with the Chart). Arguably, without such explicit or implicit social security imbalances, some of these countries could already have met the reference value by 1996.¹⁰ In a number of EU member countries, including France and Germany, the authorities intend to further streamline benefits, instead of resorting to additional tax increases, in order to support the convergence process.¹¹

It is worth noting that, by comparison, in Japan and the United States, large social security surpluses have been generated with relatively low contribution rates or budgetary

⁹An important caveat applies to the recorded balance of the social security accounts in some countries that rely on general tax revenue, rather than employee and employer contributions, to finance health-care programs and means-tested pensions. Despite every effort to include in social security revenue such earmarked *statutory transfers* from the budget and to exclude only *compensatory transfers* used for deficit financing, this distinction may be blurred in the social security balances shown for some countries in the Chart. To the extent statutory transfers are excluded from social security revenue, the social security deficit is overstated; more likely, however, is the case where all transfers are included and the deficit is understated. In any event, the general government balance for any given country reflects fully--either implicitly in the budgetary accounts or explicitly in the social security accounts--the financial position of social security institutions.

¹⁰As reported in European Commission (1996), in 1996, only Luxembourg met both the deficit reference value and the balance-budget target, while Denmark, Ireland, and the Netherlands seem to have complied with the reference value.

¹¹Since 1991, France has introduced two taxes, CSG (*Contribution Sociale Généralisée*) and RDS (*Remboursement de la Dette Sociale*), on a broader base than payroll (that is, including income from business, property, and investment), earmarked to finance family allowances and to service pension fund obligations, with a view to substituting, at least in part, payroll contributions. By now, the combined rate of these taxes is almost 3 percent, which allowed for a 1 percentage point cut in the contribution rate; a further 1 percentage point tax increase, along with an additional 1 point cut in contribution, has been proposed for 1997. In Germany, the law stipulates that contribution rates be adjusted automatically to cover any shortfall in the social security funds--thus containing the buildup of unfunded liabilities.

Table 3. OECD Member Countries: Government Transfers to Social Security, 1980 and 1994
(In percent of GDP)

	1980	1994 1/
Europe		
Austria	2.5	3.8
Belgium	6.4	3.3
Denmark	4.1	5.4
Finland	1.3	9.7
France	2.2	2.8
Germany	2.5	2.4
Greece	0.1	2.4
Hungary	...	0.8
Ireland	1.3	0.3
Italy	4.1	5.0
Netherlands	3.4	0.9
Poland	...	3.6
Portugal	0.6	0.5
Spain	1.9	6.0
Sweden	0.6	0
United Kingdom	1.2	1.2
Japan	2.4	2.6
United States	0.2	0.7

Sources: OECD National Accounts database; national sources; and Fund staff estimates.

1/ For Portugal, 1989; for Norway, 1991; and for Germany, Ireland, Spain, and the United States, 1993.

transfers. In the case of the United States, however, social security surpluses have been used as an offset to budget deficits, in the context of medium-term fiscal adjustment plans.¹²

Among the OECD countries that have applied for EU membership, the Czech Republic, Hungary, and Poland display significant deficits and high contribution rates, reflecting deep-seated distortions in virtually all social security programs--inherited in part from the pretransition period--still awaiting reform. For these countries, overhaul of social security is likely to be a critical step for joining the EU, even prior to participation in EMU.

On balance, while most EU members are poised to meet the deficit reference value, it appears that some members, including two applicants for membership, risk failing it on account of endemic--explicit or implicit--social security imbalances. (This finding is hardly altered upon recalculating the social security balance on a structural basis, that is, removing the effect of the recent recession.)¹³ In the short run, deficits in the social security accounts possibly may be accommodated with expenditure cuts or tax increases elsewhere in the government. Over time, however, it will become increasingly difficult for most countries to continue to meet the deficit ceiling, let alone the medium-term balance or surplus target envisaged under the Stability and Growth Pact, without comprehensive social security reform.

¹²See, for example, the commentary on targeting the unified budget (including social security operations), under the Gramm-Rudman-Hollings legislation, in U.S. General Accounting Office (1989).

¹³Structural balance estimates tend to improve only in a few cases, albeit by less than 1 percent of GDP--except in Finland where it improves by slightly more--relative to the unadjusted balance, because of the rather low GDP elasticity (in the 0.5-1.0 range) of payroll taxation.

IV. THE DEBT CRITERION

Another important requirement for EMU participation is that the gross debt--less proceeds from privatization--of general government does not exceed the reference value of 60 percent of GDP. Although, in principle, this criterion should be fulfilled by 1997, in fact, a participating country must make reasonable progress toward reducing its debt outstanding toward the ceiling. By now, in five EU members (Finland, France, Germany, Luxembourg, the United Kingdom) the debt limit broadly has been met, while in two (Denmark, Ireland) the debt ratio has been judged to be diminishing at a satisfactory pace. At the other end of the spectrum, in three countries (Belgium, Greece, Italy) the debt stock exceeds the level of GDP by a wide margin (Table 4).¹⁴ For these and the rest of the EU membership, plus one applicant, it is plausible to assume that, on the basis of a medium-term fiscal consolidation strategy that targets primary surpluses (measured in percent of GDP) in excess of the difference between the interest rate and growth rate--assisted perhaps by significant privatization--the debt criterion will be within reach.

Nevertheless, the long-run outlook for reducing and maintaining public debt below the EMU limit is clouded by the likely deterioration in social security finances. On current policies, the dramatic rise in old-age dependency ratios will be reflected in widening deficits, as the marked rise in pension and health-care expenditures will have to be financed from a shrinking payroll tax base of a reduced workforce. For at least five EU members (Belgium, France, Portugal, Spain, Sweden), the present value of net unfunded pension liabilities

¹⁴See also European Commission (1996).

Table 4. Selected Countries: General Government Debt, end-1995

(In percent of GDP)

	Gross Liabilities Outstanding	Unfunded Public Pension Liabilities 1/
Europe		
Austria	69	93
Belgium	133	153
Czech Republic	13	...
Denmark	77	234 2/
Finland	59	65
France	53	102
Germany	58	62
Greece	112	...
Hungary	87	...
Ireland	85	18
Italy	125	60
Luxembourg	2	...
Netherlands	79	53
Poland	58	...
Portugal	72	109
Spain	66	109
Sweden	79	132
United Kingdom	47	24
Japan	88	70
United States	67	23

Sources: IMF World Economic Outlook database; Roseveare and others (1996); and Fund staff estimates.

1/ Present value of projected pension expenditure net of revenue from employee and employer contributions through 2070, and of preexisting assets. Underlying assumptions include 1.5 percent yearly productivity growth and 5 percent discount rate.

2/ Present value of projected *gross* pension expenditure through 2070.

surpasses the value of GDP,¹⁵ reflecting a considerable additional burden on future generations (Table 4).¹⁶ The picture would be, worse upon adding an estimate of unfunded health-care liabilities, in view of the much larger health-care expenditure per aged than per working age individual.¹⁷ Under rather conservative assumptions about health-treatment costs (assumed to grow at the same rate as GDP) by 2030, yearly health-care expenditure is projected to rise 1 1/2 to 2 1/2 percentage points above the present 6-7 percent of GDP.¹⁸ The present value of unfunded contingent liabilities are not, of course, additive to actual public debt outstanding, but are rather indicative of the order of magnitude of lasting structural reform required for maintaining sustainability.

V. CONSTRAINT ON ADJUSTMENT

The past expansion of European social security systems, with few exceptions (notably, Denmark, Ireland, the United Kingdom), has been financed to a large extent with high and rising payroll taxes. The convenience of this approach stems from administrative ease in withholding the tax at source, which permits immediate implementation of any tax change. On

¹⁵For Denmark, the present value calculation is not comparable, since it refers to gross liabilities.

¹⁶It should be noted that contingent public liabilities (whether funded or unfunded) refer only to potential claims by beneficiaries by virtue of their *contributions* into insurance-based defined-benefit programs (herein mainly public pensions and health care), thus excluding universally available education, social assistance, or public health programs, financed from general revenue.

¹⁷The ratio of public health-care outlays on the population over 65 years of age, in relation to those of 65 years or younger, fluctuates around 3.5 among major European countries.

¹⁸See Roseveare and others (1996).

the other hand, the limit to relying on further payroll tax increases seems to have been reached, and in some countries, probably surpassed. In particular, resistance to further payroll tax increases comes from organized labor on the ground that such increases may erode take-home pay and contribute to an expansion of the informal sector and increased unemployment. Meanwhile, opposition from the business sector stems from the adverse effect of payroll tax increases on external competitiveness--as the payroll tax is not subject to adjustment at the border.¹⁹ In fact, high payroll tax rates tend to compound the unfavorable effect on competitiveness, of labor market rigidities and lower productivity in major European countries,²⁰ when compared to trading partners in North America and East Asia (Table 1). These elements have negative implications for Europe's trade performance, direct investment inflows, as well as domestic employment.

Moreover, the damage to competitiveness is likely to be exacerbated by the ongoing liberalization of trade and capital flows, both within the single market and toward the rest of the world. Ultimately, *globalization* will impose the hardest constraint on further payroll tax rate increases. Therefore, adjustment in social security finances will have to be undertaken

¹⁹By contrast, under WTO (World Trade Organization) rules, indirect taxes (value added tax, excises) are rebated on exports and imposed on imports. Similarly, on a unilateral basis, capital exporting countries usually exempt or provide a tax credit on foreign-source income.

²⁰See, for example, McKinsey Global Institute (1993, 1994). Empirical estimates for industrial countries, in Kopits (1982), suggest that payroll taxation has a strong influence on the cost of labor.

primarily on the benefit side; indeed, a serious effort should be made to create room for reductions in social security contribution rates.²¹

VI. IMPLICATIONS FOR REFORM

In the foreseeable future, Europe's social security institutions are facing a relatively narrow latitude for maneuver. Their financial position is rather weak in several countries and a further deterioration can be expected practically in the entire industrialized region, mainly as a result of demographic forces. The policy goal of establishing EMU underscores these deficiencies and makes the need for corrective action even more compelling. For some countries, the situation can be characterized as a *wolf at the door* in the sense that social security deficits may constitute an impediment to entry in EMU. For a couple of economies in transition, even EU accession may be at stake. Remaining outside EMU would mean a loss of benefits anticipated from a favorable assessment by financial markets, in terms of reduced interest premia and elimination of intra-EU exchange rate risk, and from the ensuing expansion of trade, investment, growth, and, of course, employment. More generally, the long-run outlook is akin to having *termites in the basement*, as very few EU members would be able to comply with reference values for the deficit ceiling and the public debt, given

²¹Occasionally, it is suggested to shift, at least partially, the source of financing public pension programs from payroll taxation to income taxation because of fairness, or to value added taxation because of efficiency and revenue considerations. To an extent, this was the approach followed by France with the recent adoption of the two broad-based social security taxes. The scope for a substantial shift, however, is limited, on the one hand, by tax competition within the EU single market--given that minimum rates have been set only for the value added tax and certain excises--and on the other, by the relatively high tax rates that prevail in most EU member countries.

mounting social security imbalances on the strength of population aging during the first half of the next century.

In view of the limits to payroll taxation (or rather, of the need for tax cuts) and the narrowing scope for significant cuts in discretionary budgetary outlays, the only viable option for most EU members is to avert these imbalances with a large-scale social security reform, focused mainly on the public pension and health-care systems.²² In the first place, such an effort should consist of an eradication of all remaining dysfunctional features, including low standard retirement age, early retirement schemes, and easy access to disability pensions and sick pay. Removal of these features should strengthen work incentives and help ease the labor-market rigidities that explain in part the high level of structural unemployment in some countries.

In addition, for pensions, further steps toward placing the computation of benefits on a sound actuarial basis (including an appropriate accrual formula, sharp reduction in noncontributory service period, calculation of pension base over lifetime earnings), as well as a fair yet realistic indexation formula, are necessary. Besides reforming the existing public pension system, consideration might be given--as one already in some countries--to introducing a supplementary funded defined-contribution pension scheme,²³ in combination with a minimum basic pension--subject to a means test.

²²In Germany, for example, the Blüm Commission has been appointed to prepare a comprehensive reform of the pension system. For an overview of major reform options in old-age pensions and unemployment compensation, faced by European countries, see Ploug and Kvist (1996).

²³For a discussion of some transition issues, see Holzmann (1996).

As regards health care, it is necessary to embark on a deep reform on both the demand and supply sides. Further cost-containment measures should include enhanced cost-sharing, effective provision of medical services, and effective medical provider payment systems. Rationalization of new technology and adoption of strict spending limits for certain services are inevitable. A level of basic health care could, of course, be made available free to low-income households.

Much like the selected mix between the solidarity and insurance principles for public pensions, the choices among rationing, regulation, and a market-based approach to health care should be the outcome of social consensus, to be reached on the broadest possible basis in each country. In any case, the solution adopted should allow for a decline in payroll tax rates and, if possible, for accumulation of a contingency reserve--to reach, at a minimum, the level of yearly benefit payments.

REFERENCES

- European Commission, 1996, *Report on Convergence in the European Union in 1966* (Brussels, November).
- European Commission, Network of Experts, 1994, *Supplementary Pensions in the European Union: Developments, Trends, and Outstanding Issues* (Brussels).
- Eurostat, 1996, *Social Protection Expenditure and Receipts, 1980-94* (Brussels: European Commission).
- Franco, Daniele and Teresa Munzi, 1996, "Public Pension Expenditure Prospects in the European Union: A Survey of National Projections," European Commission (March 11).
- Holzmann, Robert, 1996, "On Economic Usefulness and Fiscal Requirements of Moving from Unfunded to Funded Pensions," University of Saarland (unpublished, September).
- Kopits, George, 1982, "Factor Prices in Industrial Countries," *Staff Papers*, International Monetary Fund, Vol. 29, No. 3 (September), pp. 437-466.
- McKinsey Global Institute, 1993, *Manufacturing Productivity* (Washington, October).
- _____, 1994, *Employment Performance* (Washington, November).
- OECD, 1992, *The Reform of Health Care: A Comparative Analysis of Seven OECD Countries*, Health Policy Studies No. 2 (Paris).
- _____, 1994, *The Reform of Health Care Systems: A Review of Seventeen OECD Countries*, Health Policy Studies No. 5 (Paris).
- _____, 1995, *The OECD Jobs Study: Implementing the Strategy* (Paris).
- Ploug, Niels, and Jon Kvist, 1996, *Social Security in Europe: Development or Dismemberment?* (The Hague: Kluwer Law International).
- Roseveare, Deborah, Willi Leibfritz, Douglas Fore, and Eckhard Wurzel, 1996, *Ageing Populations, Pension Systems and Government Budgets: Simulations for 20 OECD Countries*, Economics Department Working Paper, No. 168 (Paris: OECD).
- Schultze, Charles L., 1989, "Of Wolves, Termites, and Pussycats--Or Why We Should Worry About the Budget Deficit," *The Brookings Review* (Summer).
- United States General Accounting Office, 1989, *Social Security: The Trust Fund Reserve Accumulation, the Economy, and the Federal Budget* (Washington, January).