Empirica **28:** 41–67, 2001.

Towards a Political Economy of Zero Budgeting in Austria

FRITZ BREUSS
Research Institute for European Affairs at the Vienna University of Economics and Business Administration (WU) and Austrian Institute of Economic Research (Wifo), Vienna, E-mail: breuss@fgr.wu-wien.ac.at; breuss@wifo.ac.at

Abstract. The EMU sets new standards for public finance. In particular, the Stability and Growth Pact aims at a budget "close-to-balance or in surplus". Austria is lagging behind in this respect. First, this paper discusses the reasons for that. Then, two scenarios of budget consolidation are analyzed with the Wifo macroeconomic model. In the case of the crash-scenario, which balances the budget already in 2002, the pure Keynesian solution would result in a decline of real GDP of 1% after six years. The precautionary consolidation scenario (balanced budget in ten years) would result in a real GDP loss of only 1/2%. With supply-side effects (incentives for investment due to privatization and UMTS licences sales or credibility effects), real GDP declines only by 1/3% in both scenario. Taking a consolidated view of the tax reform 2000 and the budget consolidation, on balance, the overall effects are rather positive than negative.

Key words: Fiscal policy, debt management, Economic and Monetary Union (EMU), Stability and Growth Pact, macro-model simulations.

JEL codes: C53; E17; E62; H63.

I. Introduction

The Economic and Monetary Union (EMU) has led to a dramatic change in the architecture of economic policy making in Europe. The member states of Euroland have not only handed over their responsibility for monetary policy to the European Central Bank (ECB), the introduction of the Euro has also enhanced more co-ordination of the fiscal policy attitudes of the member states as has ever been the case in the EU before. Formally, fiscal policy still is the responsibility of the member states. However, in order not to disturb a coherent monetary policy with the major goal of price stability, the fiscal policies of the member states must also fit into the overall picture. Economic policy is "a matter of common interest" (Art. 99, ex-Art. 103 EC Treaty). The Stability and Growth Pact (SGP)[1] is the legal precaution to secure this. The compliance with SGP led to the surprising result that in the near future the majority of EU member states will meet the medium-term budget target of "close-to-balance or in surplus". Nevertheless, the European economy is

on an upswing. It seems that the hitherto predominant (Keynesian) position that a budget consolidation must always have demand-contracting consequences will be gradually succeeded by the opinion that a credible fiscal consolidation can also have expansionary effects. In addition to the first-stage target of the SGP, only to look quantitatively on the budget balances, the European Council in Lisbon (March 23–24, 2000) embarked into a second-stage of fiscal policy making in the EMU. From now on, not only the "quantity" but also the "quality" is at the agenda of multilateral surveillance of fiscal policy in the EMU. The European Commission and the ECOFIN Council must report to the European Council on the degree to which the Member States contribute in their fiscal policy actions to economic growth and employment, in Spring 2001. Tax pressure on labour should be reduced and the impact of tax and social security systems on employment and education should be evaluated. Public expenditures should be reallocated more towards capital accumulation (real and human capital) as well as on R&D, innovation and information technology (IT). A co-ordinated fiscal policy also implies the harmonization of taxation and/or the reduction of unfair tax competition (BMF-Wifo, 1998). The European Council of Santa Maria da Feira (June 19–20, 2000) brought a first compromise, at least in the area of taxation of interest yields on financial assets.

The Euro project raises a bunch of questions concerning the management and design of fiscal policy. On one hand it can be asked whether there is – parallel to the centralised monetary policy – a need for the design of an European fiscal policy (see Masson, 2000). Connected with such considerations is the question of a stronger fiscal policy co-ordination (see Katterl and Part, 2000; Breuss and Weber, 1999b). The SGP already answered this question in the affirmative. Should the stronger co-ordination with the multilateral surveillance system (SGP) also be accompanied by an instrument of fiscal federalism? (see Breuss, 2000a). Beside such institutional questions, Masson (2000) asks, whether there are good reasons to assume that a centralized European fiscal policy would be better for economic growth than a fiscal policy which acted on a national basis, as is the practice in Euroland. Are there advantages or disadvantages arising from competition or co-ordination, or of spill-overs and externalities of fiscal policy?

In contrast to these hypothetical questions, this contribution deals with the concrete problem of how a single member of Euroland – Austria – can cope with the new challenges of the EMU. Firstly, one has to explain why Austria is lagging behind other Euroland members in consolidating its budget. Secondly, this contribution analysis the consequences of the planned budget consolidation measures under two scenarios by applying the Wifo macro model (Wifo = Austrian Institute of Economic Research, Vienna). One scenario deals with the official stability programme the Austrian government has submitted to the European Commission early in spring 2000 and which later was accepted by the ECOFIN, not without criticizing the rather sparse ambitious attitude towards consolidation. As an alternative the new goal of the Austrian government, to balance its budget by the year 2002 is evaluated by model simulations. The major focus of this analysis is the

macroeconomic impact of the budget consolidation, but not its implications for income distribution.

II. Why is Austria Lagging Behind other Euroland Members in Consolidating the Budget?

In the long period in which the government was dominated by the Socialist Party (SPÖ; 1970–1999), Austria was strongly rooted in "Austro"-Keynesianism. That implied deficit spending plus labour hoarding in the nationalized industries, cum hard currency policy to secure full employment as the major goal of policy making. Nevertheless, in the seventies the deficits of general government (central government, state government, local government and social security funds; the following analysis refers mainly to the general government in the Maastricht relevant definition of the public sector)[2] were relatively low (in 1970 the budget was in surplus by 1.7 percent of GDP; 1980 – 1.6 percent of GDP). The first rethinking towards a reduction of the influence of the state started when the nationalized industry slipped into a deep crisis in the middle of the eighties. In a soft-budget-constraint-like manner, the state had to cover the losses of the nationalized industries. The process of privatization started by building a holding (ÖIAG), covering all nationalized industries. The ÖIAG took over the debts of the former nationalized industries amounting to 80 bill. ATS. The present government is willing to eliminate this debt burden by completely privatizing (selling) the Staatsdruckerei, Dorotheum, Print Media and by selling the shares of the state of the following companies: Airport Vienna, PSK (already sold for 17.8 bill. ATS), Telecom Austria and Austria Tobacco.

Up to the middle of the nineties, the budget culminated in the highest deficits. The nineties also experienced a succession of fiscal shocks. On one hand, tax reforms resulted in positive income shocks, on the other hand, consolidation measures contributed negatively to economic growth (see Table I). The tax reform in 1988 – coming into force in 1989 – influenced domestic demand positively up to the early nineties. With this reform an attempt was undertaken in Austria for the first time to imitate the international trend of changing the paradigm of tax policy making. This trend started in the USA and aimed at a new weighting of the three classical tasks of fiscal policy (Musgrave, 1959), namely allocation, stabilization and income distribution. There was a shift in the priorities from the last task to that of allocation. The following tax reforms (1994 to 2000) followed straightway this way. A deterioration of the budgetary problems arose with the double steps – tax reform 1994 and EU accession in 1995. In these years, the budget deficit exploded to 4.9 percent and 5.1 percent of GDP respectively. This also implied an increase in public debt from 56.8 percent of GDP in the year 1990 to 68 percent of GDP in 1995. The tax reform 1994 increased the deficit by 3/4 percentage points of GDP. Austria, being the fourth richest EU member state, is net-payer into the

Table I. Chronicle of fiscal policy measures in Austria: 1990–2000

In force	Measures	Volume	Targets	GDP effects
1989	**Tax reform 1988**[1] Mitigation of the progression of income taxation; Reduction of tax rates for labour and income taxes partly financed by restricting tax exemptions plus increase of indirect taxes (General elections 1990)	17 bill. ATS (1989) (1% of GDP) Net-lending effect 1989: −7.7 bill. ATS (−0.5% of GDP)	1st step of tax reform: From tax justice to more efficiency in allocation	+0.3% 1989 to +0.5% 1992
1994	**Tax reform 1994**[2] Increase of the general write-off limits; cancellation of trade and wealth taxes; increase of the wage-sum tax; increase of the rate of corporate tax; final taxation of yields on interests (General elections 1994/95)	17.4 bill. ATS (1994) (0.8% of GDP) Net-lending effect 1994: −16.4 bill. ATS (−0.7% of GDP)	2nd step of tax reform: compensation for effects of progression in income taxation measures to improve the attractiveness of business location	+0.2% 1994 to +0.5% 1997
1996/97	**Consolidation measures in the context of the law on structural adjustment 1996**[3] After 2 years: expenditures = −68.05 bill. ATS revenues = +46.2 bill. ATS	114.3 bill. ATS (in 2 y.) (3.6% of GDP in 2 y.) Net-lending effect in 2 y.: +68.9 bill. ATS (+3.3% of GDP)	to meet the convergence criteria for entering into the 3rd stage of EMU	−1.5% 1996 to −2.1% 1997
1999	**1st stability programme (1999–2002) in the context of the commitment of the SGP for members of EMU** (no additional consolidation measures)	–	after entry into the 3rd stag eof EMU on January 1, 1999 commitment by the SGP*	–
2000	**Tax reform 2000**[4] reform of the tax scale = −17 bill. ATS family assistance = +6 bill. ATS other tax adjustments: = −3.8 bill. ATS (General elections 1999)	26.8 bill. ATS (in 4 y.) (0.9% of GDP in y. 4) Net-lending effect 2000 −26.6 bill. ATS (−0.9% of GDP)	basic reform of the tax scale for labour and income tax relieve for employees (compensation for progression in the tax on labour income)	+0.2% 2000 to +0.4% 2005

Table I. (continued)

In force	Measures	Volume	Targets	GDP effects
2000	**2nd stability programme (2000–2003) – SP-3-2000**[5] combined with consolidation measures: after 4 years: expenditures = −26.5 bill. ATS revenues = +3.3 bill. ATS privatizations = +8.0 bill. ATS	37.8 bill. ATS 2003 (+1.2% of GDP Net-lending effect 2003 39.8 bill. ATS (+1.3% of GDP)	to meet the targets of the SGP ("close-to-balance or in surplus") 2000 deficit 1.7% of GDP 2003 deficit 1.3% of GDP	−0.3% 2000 to −0.3% 2003 or −0.5% 2005 (with incentives −0.1% or −0.3%[6])
2000	**New consolidation target: zero budget 2002 – Hofburg-SP:** after 4 years: expenditures = −36.9 bill. ATS revenues = +26.0 bill. ATS privatizations = +8.0 bill. ATS	70.9 bill. ATS 2003 (+2.3% of GDP) Net-lending effect 2003 64.5 bill. ATS (+2.1% of GDP)	ambitious SP target: zero budget of general government public finances in 2002	−0.3% 2000 to −0.7% 2003 or −1% 2005 (with incentives −0.1% or −0.3%[6])

*SGP = stability and growth pact (and SP = stability programme).
Sources:
[1] Breuss and Schebeck (1988).
[2] Breuss et al. (1994).
[3] Schebeck and Weber for the Court of Audit (Rechnungshof (1999), p. 22.
[4] Breuss and Weber (1999).
[5] BMF, Austrian Stability Programme, 28 March 2000.
[6] Own simulations with the Wifo macromodel.

EU budget of around 1/2 percentage points of GDP annually. This is a regular additional burden for the budget.

Austria had the ambition to take part in the first round of countries to start with stage three of EMU in January 1, 1999. This led to a race – similarly in other EU member states – to fulfil the convergence criteria as the barrier to enter EMU. Most of the countries missed the fiscal criteria (a deficit of less than 3 percent of GDP and a debt to GDP ratio of less than 60 percent) in the middle of the nineties. With a strong consolidation package, Austria had to reduce its deficit by around three percentage points within two years (1996–97). This fiscal shock would have had a much stronger negative impact on real GDP (see Table II), if the consumers hat not decreased their savings ratio in order to absorb this shock, at least partially.

Government finances improved strongly in the run-up to the EMU. However, a substantial part of the 1996–97 budget consolidation comprised one-off measures and a political failure to further pursue fiscal consolidation. The flagging of the political will to continue with the consolidation efforts led to a new upsurge in the

Table II. Projections in the updated stability and convergence programmes (General government surplus (+)/deficit (−) as % of GDP)

	Date* 2000	1997	1998	1999	2000	2001	2002	2003
				Stability programmes				
Belgium	15.2./28.2.	−1.8	−1.0	−1.1	−1.0	−0.5	0.0	0.2
Germany	15.2./28.2.	−2.6	−1.7	−1.2	−1.0	−1.5	−1.0	−0.5
Spain	15.2./28.2.	−3.1	−2.3	−1.3	−0.8	−0.4	0.1	0.2
France	8.3./13.3.	−3.0	−2.7	−2.1	−1.7	−1.2	−0.7	−0.3
Ireland	18.1./31.1.	0.6	2.0	1.4	1.2	2.5	2.6	–
Italy	15.2./28.2.	−2.8	−2.7	−2.0	−1.5	−1.0	−0.6	−0.1
Luxembourg	8.3./13.3.	3.8	2.5	2.3	2.5	2.6	2.9	3.1
Netherlands	18.1./31.1.	−1.2	−0.8	−0.6	−0.6	−0.5	0.0	–
Austria	26.4./08.5.	−1.9	−2.4	−2.0	−1.7	−1.5	−1.4	−1.3
Portugal	8.3./13.3.	−2.0	−1.5	−2.0	−1.5	−1.1	−0.7	−0.3
Finland	18.1./31.1.	−1.6	1.4	3.1	4.7	4.2	4.6	4.7
Euro-11		*−2.6*	*−2.0*	*−1.4*	*−1.1*	*−1.0*	*−0.6*	*−0.3*
				Convergence programmes				
Denmark	15.2./28.2.	0.1	0.9	2.9	2.1	2.2	2.3	2.5
Greece	18.1./31.1.	−3.9	−2.5	−1.5	−1.2	−0.2	0.2	–
Sweden	18.1./31.1.	−2.0	2.3	1.7	2.1	2.0	2.0	–
United Kingdom	15.2./28.2.	−2.0	0.5	0.4	0.2	0.2	0.0	−0.3
EU-15		*−2.4*	*−1.4*	*−0.9*	*−0.7*	*−0.7*	*−0.4*	*−0.1*

* First date = examination by the European Commission, second date = evaluation by the ECOFIN Council.
Sources: Several ECOFIN meetings (Press releases -RAPID).
Public finances in EMU – 2000, European Commission, 24 May 2000, p. 29.

deficit. Not least, the reason for this was the tax reform of 2000. Only the strong goals of the SGP forced the government to embark on a consequent budget stabilization path. There are various arguments why the SGP makes sense (see Breuss, 1999, p. 108): one reason is to secure the price stability goal of the centralized monetary policy of the ECB. A non co-ordinated fiscal policy would – via negative spill-overs – cause undesired fiscal shocks from one Euroland to another. Another reason for fiscal discipline of the SGP is the credibility of the Euro project (market discipline).

Austria is just slowly beginning to get accustomed to the more narrow room for maneuvering fiscal policy in the EMU. The new government (ÖVP plus FPÖ), forming the coalition since February 2000 has only taken action in a second step to adjust more ambitiously to the new general conditions for fiscal policy making in EMU. The updated stability and convergence programmes show that Austria is lagging behind in the effort to consolidate the budget. Whereas a majority of EU

Member States already will exhibit a balanced budget in the year 2002, Austria (according to the official stability programme of March 2000) is the country of Euroland with the worst budget position (see Table II). If this process of budget consolidation continues further, sooner or later Europe will face the same "problem" as the USA already are confronted with: How to deal with a situation in which a state has a permanent budget surplus? One will then see a shift from the present political economy of budget deficits to that of budget surplus (see Alesina et al., 1998; Alesina, 2000).

The budgetary situation in Austria is characterized by the following features: first, the budgetary sensitivity with respect to the business cycle (0.3) is lower than on EU average (0.5; see EU, 2000, p. 40); secondly, there is strong inertia (sticking to the old habits – "Austro-Keynesianism"); thirdly, one can detect a kind of political business cycle which increases the deficit in the year of parliamentary elections by 0.8 percentage points of GDP. These features can be documented by the following econometric relationship. It does not make any difference whether the business cycle sensitivity is measured by GDP growth or by potential output gap.

$$\begin{array}{lccccccc} \mathrm{DEF}_t = & -1.50 & + & 0.23^*\mathrm{GDP}_t & - & 0.85^*\mathrm{ELECT}_t & + & 0.60^*\mathrm{DEF}_{t-1} \\ & (-3.51) & & (2.12) & & (-2.20) & & (5.72) \quad t\text{-values} \end{array} \tag{1}$$

$$R^2 = 0.65,\ \mathrm{DW} = 2.23;\ 1973\text{–}2000$$

$$\begin{array}{lccccccc} \mathrm{DEF}_t = & -1.24 & + & 0.29^*\mathrm{POG}_t & - & 0.79^*\mathrm{ELECT}_t & + & 0.49^*\mathrm{DEF}_{t-1} \\ & (-3.55) & & (2.35) & & (-2.09) & & (4.39) \quad t\text{-values} \end{array} \tag{2}$$

$$R^2 = 0.66,\ \mathrm{DW} = 1.89;\ 1973\text{–}2000$$

The public sector deficit of general government in percent of GDP (DEF_t) over the period 1973 to 2000 is explained by the cycle sensitivity[3] (in relation to GDP growth – GDP_t – or related to potential output gap – POG_t = actual GDP/trend GDP, measured by a Hodrick-Prescott filter), by a deficit increasing influence of elections (ELECT_t) and by the lagged dependent variable (DEF_{t-1}).

The fact that Austria's budget only slowly reacts to the business cycle can also be seen from Figure 1. The cyclically adjusted (structural) balance (calculated by the European Commission; EU, 2000) is nearly identical with the actual deficit. The low budgetary sensitivity to the business cycle has advantages and disadvantages. In contrast to Denmark, Finland and Sweden (where this sensitivity of around 0.8 is much higher than on EU average (0.5)), the low budgetary sensitivity of 0.3 allows Austria to have a higher structural deficit over the cycle in order to guarantee that the 3% reference value of the SGP will safely not be surpassed. Whereas in Finland the "cyclical safety margin" amounts to 3.4%, it is only 1% in Austria (see EU, 2000, p. 40).[4] The disadvantage of a low sensitivity to the cycle is that an upswing is not helpful in Austria (other than in Finland and Sweden) in order to consolidate the budget. Or, to put it differently, the structural component – the inefficiency of the public sector (compared to SGP budgetary targets) – is much

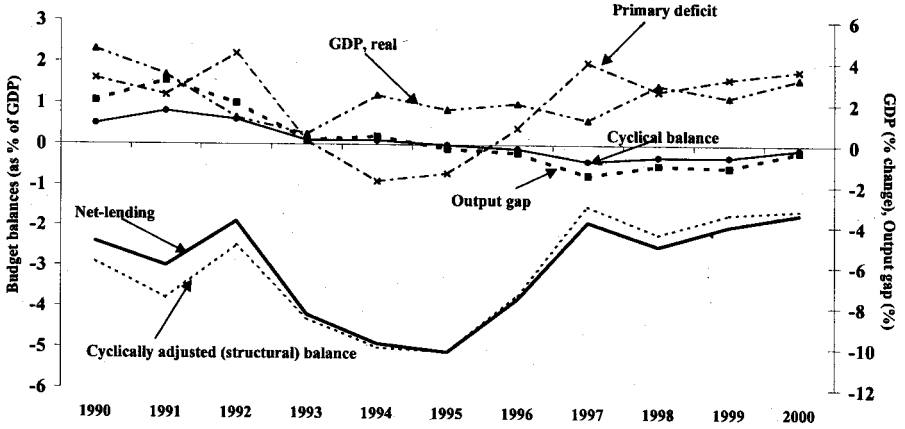


Figure 1. Fiscal indicators for Austria: 1990 to 2000.

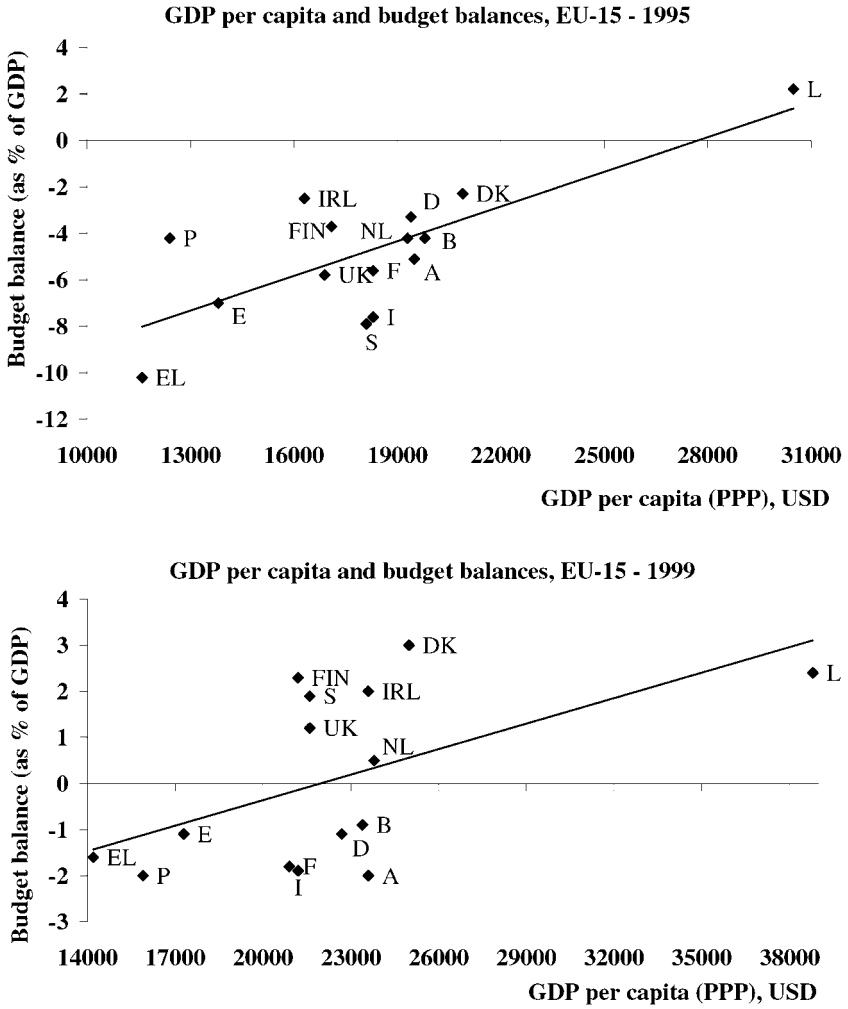
larger in Austria than in other EU member states. Equally low values can only be found in Greece, Portugal, Italy and Spain!

A further indication for the fact that a big public sector is no longer adequate in rich countries can be deduced from the negative (positive) relationship between deficit (surplus) of government balances and the stage of development (measured by GDP per capita). This relationship can be found since the nineties (see Figure 2).

The preparation for the entry into the EMU and the SGP seems to have set a break to the old "Wagner law" of an ever increasing public sector. There is no prediction whether this process will also be sustainable. However, econometric panel estimations on the factors influencing long-run growth show that public spending has negative influences on economic growth (see Wagner, 2000). Consequently, one can assert that public deficits are a "poor-man's" strategy. Poor countries must concentrate their fiscal activities strongly on income distribution. As a rule, income distribution based on a system of social transfers and on progressive income taxation leads to an imprecise targeting. In turn, this adds to the inefficiency of public activities and hence to unnecessary deficits. The "rich-man's" strategy aims at leading the government's financial balances into surplus. In rich countries the income distribution target is not as important as in poor countries. The state can concentrate more on the allocative and stabilizing functions of fiscal policy. Exactly this strategy leads to exhausting the possibilities of stimulating growth according to the findings of the "new growth" theory: financing R&D activities, investment in infrastructure, into human capital and education (see Masson, 2000, p. 15 ff.).

III. Economic Evaluation of Alternative Stability Programmes

Until recently, Austria had the opportunity to follow (at least) two paths of budgetary consolidation in order to meet the SGP goal of a balanced budget in the



Source: Own presentation based on data from Eurostat, OECD and EU (2000).

Figure 2. GDP per capita and general government financial balances in EU-15.

medium-run. The first would have been a "precautionary" scenario which foresaw that the deficit will be eliminated within approximately one decade, the other way is the "crash scenario" which aims at reaching a zero budget already in 2002. The first scenario is documented in the official stability programme of the Austrian government (BMF, 2000a) as of March 2000 (in the following analysis it is called "SP-3-2000"). The other scenario is an ambitious goal announced by the government at two conference (reform dialogue) in the "Hofburg" in Vienna in July and September 2000. Therefore, this scenario is called "Hofburg stability programme"

(or simply "Hofburg-SP"). In the following analysis the overall macroeconomic consequences of both scenarios are simulated by means of the Wifo macro-model.

1. THE PRECAUTIONARY SCENARIO – SP-3-2000

After the second year in the EMU, the Austrian government has submitted the stability programme within the scope of the surveillance and co-ordination mechanism of the SGP to the European Commission in April 2000. In May, the ECOFIN Council accepted the programme, however, it has also been criticized by the Council as not being ambitious enough to meet the SGP targets. This programme foresaw a step-by-step reduction of the public deficit from 1.7% in 2000 to 1.3% of GDP in 2003. In the following years, the deficit should decrease gradually by 0.1 percentage points of GDP each year.

Measures:

The Austrian stability programme of March 2000 (see BMF, 2000a, p. 4) – in our diction "SP-3-2000" – had the following economic-policy priorities:

- reducing public deficits
- making Austria a more attractive business location
- increasing the expenditure-to-GDP ratio for R&D[5]
- combating unemployment unremittingly
- renewing social-protection systems (restructuring the social welfare state)
- safeguarding pensions and retirement provision
- reforming government tasks and public services (new public management)
- selling Federal Government's shares in firms (privatization)

However, in the SP-3-2000, these political goals have been translated only to a minor degree into concrete measures. The first priority was reaching the SGP target of a balanced budget as soon as possible. Therefor the targets of a more "qualitative" nature, namely the increase of the R&D quota and the fundamental reform of the welfare state and its administration, remained rather a medium-term than a short-term target. Although the cuts in expenditures and the adjustments in taxes would decrease the budget deficit by one percentage point of GDP in the years 2000 to 2003, the budget could not be balanced with this package. This can only be managed by the crash programme of the Hofburg-SP.

The consolidation of the budget according to the SP-3-2000 (which included solely measures by the central government) should be primarily done by cuts in expenditures (see Table III). In particular, deep cuts would occur in the category of staff expenditures (reduction of 9.000 public servant posts until the year 2003), as well as cuts in expenditures concerning the pension insurance system (in October 2000, the reform of the pension system starts with an increase by 18 months of the age at which workers are eligible for early retirement). Sharp cuts were also planned in discretionary spending (concerning public consumption, public investment and subsidies). Additional public expenditures were agreed upon in the

Table III. Federal measures to consolidate the budget ("SP-3-2000"): 2000 to 2003 (Bill. ATS)

Measures	2000	2001	2002	2003
1. Expenditures:				
Staff expenditure	−1.3	−5.2	−8.5	−10.1
Pension insurance	0.0	−5.0	−10.0	−15.0
Other social transfers	0.0	−3.0	−3.0	−3.0
Discretionary spending	−10.0	−8.0	−8.0	−8.0
Family assistance	0.1	0.6	6.0	7.0
Miscellaneous (balance)	−3.2	2.6	2.6	2.6
Expenditure total	***−14.4***	***−18.0***	***−20.9***	***−26.5***
(as % of GDP)	*−0.5*	*−0.6*	*−0.7*	*−0.8*
2. Revenues:				
Motor vehicle-related insurance tax	3.7	5.0	5.2	5.3
Tobacco duty	0.6	1.2	1.2	1.2
Electricity levy	2.1	4.0	3.1	3.2
Fees	0.6	2.0	2.0	2.0
Non-wage labour costs	0.0	−4.9	−8.4	−8.4
Revenues total	***7.0***	***7.3***	***3.1***	***3.3***
(as % of GDP)	*0.2*	*0.2*	*0.1*	*0.1*
3. Sale of (UMTS) licences and real estate:	**9.0**	**8.0**	**8.0**	**8.0**
(as % of GDP)	*0.3*	*0.3*	*0.3*	*0.2*
Total (−1. + 2. + (3.)	***30.4***	***33.3***	***32.0***	***37.8***
(as % of GDP)	*1.1*	*1.1*	*1.1*	*1.2*

Source: BMF, Austrian Stability Programme, 28 March 2000, p. 10.

coalition pact between the ÖVP and FPÖ in the field of family assistance (6 bill. ATS), as well as additional subsidies for the agricultural sector and possibly also extra spending for military material (helicopters etc.)

On the revenue side there were some adjustments in indirect taxes. However, these measures only count for 1/10 of the total volume of the budget consolidation. One third of the consolidation should have resulted from privatization (proceeds of the sales of licences of Universal Mobile Telecommunication Systems (UMTS) in the year 2000 for which 4 bill. ATS have been foreseen – as well as sales of real estates). The tax increases partly serve to finance the reduction of non-wage labour costs (up to 15 bill. ATS in the year 2003) agreed upon in the coalition pact of February 2000.

Macroeconomic effects:

In order to evaluate the macroeconomic effects of the SP-3-2000 we use the Wifo macro model. This model is primarily a demand-driven model of the Keynesian

type. In addition to the demand components (consumption, investment, exports, imports etc.) the labour market and the income-price system are modeled. The model includes an extended public sector bloc with different categories of taxes and expenditures and hence is predestined to serve for fiscal policy simulations (tax reforms or experiments with budget consolidations).[6] A weak point of the model is that it does not endogenously catch modern features which arise in the context of the change of the fiscal policy paradigm ("fewer state and more private activities"). However, it is possible – as will be demonstrated – to implement elements of allocations in case of privatization exogenously into the model (i.e., a shift from less efficient public to more efficient private activities).

The measures planned in the SP-3-2000 (see Table III) are extrapolated with the values of 2003 for the years 2004 to 2005 (implying that the measures would not be tightened after the year 2003) in order to study the consequences arising out of the budget consolidation over a six year time horizon. The baseline scenario is the Wifo forecast for the Austrian economy of June 2000. This forecast already included the possible impact of the SP-3-2000 measures. In the pure Keynesian-type macro model, the consolidation measures would dampen domestic demand, in the public as well as in the private sector (indirectly via a reduction of disposable income; see Table IV). The discretionary measures lead to a reduction of public consumption as well as of public investment. If these cuts in expenditures are sustained over a longer period, the infrastructure (road construction, education, universities and lastly human capital) would be endangered in the long-run.

In the short-run (2000–2001), inflation would be affected due to the increase of fees and other indirect taxes. Later on, the inflationary effect would decline. Disposable income of private households and hence private consumption would decline over the whole period. In the unadjusted model run real GDP would decline by 1/2 percentage point cumulated over the period from 2000 to 2005 (starting with -0.27 percent in the year 2000).[7] This would amount to an annual income loss of 1/10 percentage point. The deficit (net-lending) of the public sector would go down by one percentage point of GDP (or by 40 bill. ATS in the year 2005). Public debt could be reduced by six percentage points (or by 220 bill. ATS in the year 2005).

Most of the macro models – this holds true also for the Wifo model – do not represent the effects of reallocation which occur when activities are shifted from the state to the private sector (privatization). These effects are not endogenously explained. In order to catch such economic processes, one must exogenously intervene into the model. There are several considerations that would justify such interventions. The case of the sales of third generation mobile phone (UMTS) licences is a new and interesting example. Eurostat (news release No. 81/2000, 14 July 2000) recently adopted a recommendation on how the proceeds of these sales should be recorded in the government accounts of the European System of Accounts 1995 (ESA 95). Generally, the allocation of UMTS licences should be recorded as the sale of a non-financial asset (the licences) by the government to the corporate sector. Revenue is then recorded in the government accounts at the time

Table IV. Macroeconomic effects of the "SP-3-2000" (with and without incentives for investment)

	2000	2001	2002	2003	2004	2005
	(cumulative deviations from baseline in %)					
Real demand:						
Private consumption	−0.35	−0.63	−0.72	−0.95	−1.11	−1.24
Public consumption	−1.02	−1.69	−2.21	−2.53	−2.52	−2.36
Gross fixed capital formation	0.50	0.47	0.66	0.58	0.42	0.35
(without incentives)	*−0.72*	*−0.56*	*−0.33*	*−0.39*	*−0.51*	*−0.56*
Public sector	−6.20	−5.22	−5.30	−5.56	−5.75	−5.86
Private sector	1.00	0.85	1.04	0.93	0.75	0.65
(without incentives)	*−0.33*	*−0.25*	*−0.02*	*−0.10*	*−0.24*	*−0.31*
Exports of goods and services	−0.03	−0.02	0.02	0.03	0.03	0.02
Imports of goods and services	−0.18	−0.54	−0.58	−0.70	−0.78	−0.84
Gross Domestic Product (GDP)	***−0.12***	***−0.14***	***−0.14***	***−0.24***	***−0.31***	***−0.33***
(without incentives)	*−0.27*	*−0.28*	*−0.28*	*−0.38*	*−0.44*	*−0.46*
Prices, income, current account:						
Deflator of private consumption	0.17	0.20	0.09	0.02	0.01	0.00
Disposable income, nominal	−0.61	−0.89	−0.88	−1.30	−1.41	−1.50
Wage share (% points)	0.35	0.07	−0.05	0.00	0.04	0.05
Current account (as % of GDP)	0.08	0.24	0.26	0.32	0.36	0.40
Labour market:						
Dependent employment (in 1.000)	−3.58	−6.56	−5.91	−6.37	−6.71	−7.19
(without incentives)	−5.15	−8.85	−8.64	−9.36	−9.82	−10.34
(% change)	−0.11	−0.21	−0.18	−0.20	−0.21	−0.22
Public sector (in 1.000)	−3.00	−7.00	−8.00	−9.00	−9.00	−9.00
Private sectors (in 1.000)	−0.58	0.44	2.09	2.63	2.29	1.81
(without incentives)	*−2.15*	*−1.85*	*−0.64*	*−0.36*	*−0.82*	*−1.34*
Unemployed labour (in 1.000)	1.17	1.97	2.00	2.65	2.85	2.79
(without incentives)	*1.68*	*2.19*	*2.10*	*2.65*	*2.79*	*2.71*
Unemployment rate (% points)	0.04	0.07	0.07	0.08	0.09	0.09
(without incentives)	*0.06*	*0.08*	*0.07*	*0.09*	*0.09*	*0.09*
Labour productivity (per total employment)	−0.02	0.05	0.03	−0.06	−0.13	−0.13
Private sector (per employees)	−0.03	0.04	0.06	−0.02	−0.10	−0.12
Public sector finances:						
Net-lending (bill. ATS)	31.85	34.76	33.72	39.75	39.91	40.05
(as % of GDP)	1.13	1.18	1.10	1.26	1.22	1.17
(without incentives)	*1.08*	*1.13*	*1.05*	*1.20*	*1.15*	*1.11*
Public debt (bill. ATS)	−31.85	−66.61	−100.33	−140.08	−179.99	−220.04
(as % of GDP)	−1.12	−2.18	−3.11	−4.16	−5.17	−6.09
(without incentives)	*−0.97*	*−1.99*	*−2.85*	*−3.84*	*−4.80*	*−5.67*

Source: Own simulations with the Wifo macromodel.

the licence is awarded (either via auctions like in Germany, the United Kingdom, Italy and in Austria or via a beauty contest like in France and in Portugal). The proceeds from the auctions in Germany amounted to 2.5% of GDP and in the United Kingdom to 2.4% of GDP. The auction in Italy raised 1.1% of GDP, in the Netherlands 0.6% of GDP and in Austria only 0.4% of GDP. In Finland and Spain the licences were allocated free of charge or for a very modest fee. In the general case, [8] the sale proceeds have an immediate impact on the government net borrowing/net lending: they increase the government revenues and so reduce once-for-all the deficit of the year when the licence is allocated (in the case of Austria in 2000). Some countries will use the revenues from the sales of UMTS licences in order to reduce the public debt (e.g., Germany and Austria) others will use them to finance other expenditures. If the proceeds from UMTS licences are used to reduce the public debt, this is recorded in the Maastricht-relevant public deficit definition only outside net borrowing/net lending (ECB, 2000, p. 46). In the case of Austria, where the auction of six UMTS licences resulted in proceeds of 11.4 bill. ATS (or 0.4% of GDP) on November 2–3, 2000, this reduced net lending by this amount. 4.1 bill. ATS of which are spent for infrastructure and R&D investments. The remaining 7.3 bill. ATS are used to redeem public debt in the year 2000. This, in turn, leads to lower interest payments in the following years and, hence, reduces the actual deficit further. Due to the tax saving effect (the licence is a non-material asset in the corporation's balance sheet and reduces the tax burden via the appreciation of this asset over the time period of the licence – in Germany 15 years) the net-effect for the budgets in the future is not identical with the full amount of the sale proceeds of the UMTS licences. The UMTS case does not only have direct consequences for the companies buying such licences and for the budget balances of the states: It indirectly also influences the financial markets. Companies must finance the huge price they have paid for the licences (at least in Germany and in the United Kingdom) via the capital markets (issuing bonds). The states, by reducing their debts (and current deficits), offer less bonds on the financial markets. The net effect of these activities will either lead to an increase (excess supply of bonds) or to a decrease of long-term interest rates (excess demand for bonds). In any case, the political economy of zero budgeting initiated by the SGP leads to a European-wide change in the landscape of financial markets. The supply of public bonds will decrease with declining deficits, those for private sector bonds will increase. Besides the impact of the sales of UMTS licences on fiscal developments and financial markets, the financial flows triggered by the German UMTS auction is reflected also in euro area M3 and its counterparts from the August 2000 data onwards. However, the redemption of debt (e.g., those of the German government) will be reflected in a decrease in the deposits held by central government and in credit to general government. However, according to the ECB (2000, p. 14), the effect on M3 should not be significant, because a large proportion of the government debt to be redeemed is held by monetary financial institutions.

Besides the deficit reducing aspect, the sales of the UMTS licences also have an investment-stimulating effect. The licence holders must invest into new net technology in order to provide the new UMTS services in the year 2002. According to involved experts (Siemens CEO Albert Hochleitner) these net investments would amount to 50 bill. ATS in Austria in the next few years (KURIER, October 18, 2000, p. 23).

In addition to the UMTS proceeds, also the proceeds of other privatizations (in total: 9 bill. ATS in 2000, and 8 bill. ATS in the following years; see Table III) is assumed to lead to a stimulus to private investment. After deflating with the investment deflator, implementing such incentives for private investment into the model, in the Austrian case of the SP-3-2000, results in an increase of real private investment of around 6 bill. ATS in 2000 and of 5 1/2 bill. ATS in he following years, or around one percentage point. This incentive effect helps to cushion the simple demand-oriented effect of the consolidation measures. Instead of a medium-run decline of real GDP the SP-3-2000 package of 1/2 percent, inclusive incentive effects this would result in a reduction of real GDP in the medium-run of only 1/3 percent (see Table IV). As the volume of the SP-3-2000 is relatively small the incentives have no major consequences for the other variables, except investment and hence real GDP.

2. THE "CRASH SCENARIO" – HOFBURG-SP

The ECOFIN Council criticized the SP-3-2000 that it was not ambitious enough to meet the medium-term SGP targets. This led the government to get off to a dramatic start by announcing the target of a zero budget for the year 2002. At two conferences ("reform dialogues") in the Hofburg on July 14, and on September 1, 2000 this target was discussed with representatives of other political parties, with experts and social partners in order to reach a national consensus. The concrete measures have been presented by the finance minister (Grasser, 2000) in its budget speech to the parliament on October 18, 2000 in a budget proposal for the years 2001 and 2002 (see also BMF, 2000b).

Measures:

According to the finance minister, the measures necessary to reach a zero budget in the year 2002, amount to 101 bill. ATS. 28.2 bill. ATS stem from increased taxes, 42.8 bill. ATS from cuts of expenditures of the central government (Bund), and 30 bill. ATS should be contributed by the state governments (Länder).[9] However, many transactions of the postulated 101 bill. ATS package (e.g., the reshuffling of receipts from funds to the federal budget, amounting to 10.9 bill. ATS, or the proceeds from privatization of hospitals managed and co-financed by the Länder) are only financial transactions between the different communities and have therefore no real effects in the economy. Furthermore, in the Maastricht relevant (ESA-95) definition of general government budget balances, only around 3/4 of the

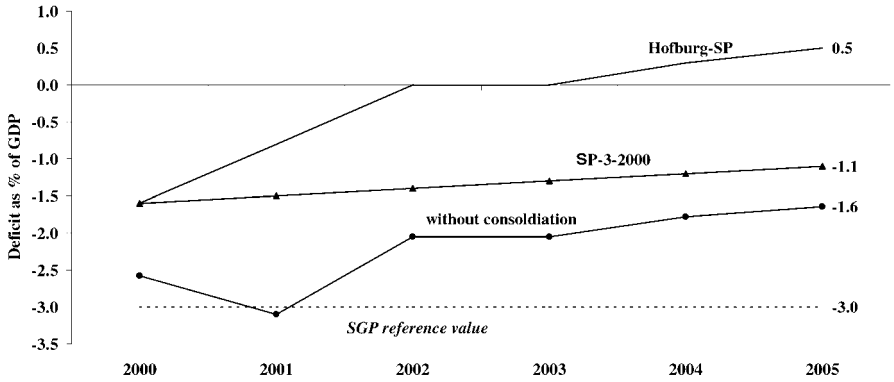


Figure 3. Financial balances for alternative consolidation scenarios.

announced package can be considered. For simulation purposes we implemented the measures to reach a zero budget for general government in the year 2002 (see Table V). Similar to the former scenario, the consolidation package has also been extrapolated up to the year 2005. The scenario constructed in this way is called "Hofburg stability programme" (or in short "Hofburg-SP"). In this scenario, it was assumed that – in order to secure sustainability of the budget consolidation – the budget will not only be balanced in the years 2002 and 2003 but will result in small surpluses (+0.3% of GDP in 2004 and +0.5% of GDP in 2005) afterwards (see Figure 3). In doing so, Austria would catch-up to countries like Finland, Sweden and Denmark which are more advanced in consolidating their budgets. Furthermore we assume that the economic-policy priorities mentioned in the context of the SP-3-2000 remain the same.

In contrast to the measures of the SP-3-2000 (Table III), in the Hofburg-SP (Table V) we assumed that the consolidation efforts are steadily tightened up to the year 2005 ("permanent" reforms!). The consolidation package of the Hofburg-SP consists not only of the new measures for the budgets 2001 and 2002, but partly also of measures which were already implemented in the budget programme for the year 2000 and continue to be effective in the following years (e.g., reductions in the case of pension insurance and discretionary spending). In contrast to the official announcement that 2/3 of the consolidation package consists of cuts in expenditures and only 1/3 of tax increases, the Hofburg-SP package in the Maastricht relevant definition amounting to around 70 bill. ATS in the year 2002 consist of expenditure cuts and tax increases by approximate similar shares. Only after the year 2003 we assume that the consolidation is managed primarily by the expenditure side (see Table V).

Staff expenditures will be further reduced. The government will cut 15.000 public sector posts in the year 2003 (11.000 of which are saved by not replacing posts becoming free after retirement, and 4.000 posts can be saved by spinning-off activities of the state) in order to save 10 bill. ATS by the year 2002 and 15

Table V. Fiscal measures to consolidate the budget ("Hofburg-SP"): 2000 to 2005 (Bill. ATS)

Measures	2000	2001	2002	2003	2004	2005
1. Expenditures:						
Staff expenditure	−1.3	−6.0	−13.0	−18.5	−18.5	−18.5
Pension insurance	0.0	−10.0	−10.9	−15.0	−15.0	−15.0
Other social transfers	0.0	−4.0	−5.0	−5.0	−5.0	−5.0
Discretionary spending	−10.0	−8.0	−8.0	−8.0	−8.0	−8.0
Family assistance	0.1	0.6	6.0	7.0	7.0	7.0
Miscellaneous (balance)	−3.2	2.6	2.6	2.6	2.6	2.6
Expenditure total	***−14.4***	***−24.8***	***−28.3***	***−36.9***	***−36.9***	***−36.9***
(as % of GDP)	−0.5	−0.8	−0.9	−1.2	−1.1	−1.1
2. Revenues:						
Motor vehicle-related insurance tax	3.7	5.0	5.2	5.3	5.3	5.3
Tobacco duty	0.6	1.2	1.2	1.2	1.2	1.2
Electricity levy	2.1	4.0	3.1	3.2	3.2	3.2
Fees	0.6	2.0	2.0	2.0	2.0	2.0
Income and wage taxes	0.0	15.6	15.8	15.8	15.8	15.8
Corporate and capital taxes	0.0	13.0	13.0	13.0	13.0	13.0
Legacy and bequest taxes	0.0	0.6	1.2	1.2	1.2	1.2
VAT	0.0	−1.3	−1.6	−1.6	−1.6	−1.6
Motor vehicle taxes for lorries	0.0	0.7	0.9	0.9	0.9	0.9
Non-wage labour costs	0.0	0.0	−8.0	−15.0	−15.0	−15.0
Revenues total	***7.0***	***40.8***	***32.8***	***26.0***	***26.0***	***26.0***
(as % of GDP)	*0.2*	*1.4*	*1.1*	*0.8*	*0.8*	*0.8*
3. Sale of (UMTS) licences and real estate:	**9.0**	**8.0**	**8.0**	**8.0**	**8.0**	**8.0**
(as % of GDP)	*0.3*	*0.3*	*0.3*	*0.3*	*0.2*	*0.2*
Total (−1. + 2. + 3.)	***30.4***	***73.6***	***69.1***	***70.9***	***70.9***	***70.9***
(as % of GDP)	1.1	2.5	2.3	2.3	2.2	2.1

Sources: "SP-3-2000" for the year 2000 and the "Hofburg-SP" for the years 2001–2002 with the target of the government to reach a zero budget in the year 2000; own further extrapolations up to 2005 under the assumption that the consolidation will be sustainable and result in small surpluses in the years 2004 and 2005.

bill. ATS in the year 2003. In addition, the Länder have offered to reduce staff expenditures amounting to 3.5 bill. ATS up to the year 2003 (see Table V). Although due to the problem of the ageing of population, one could anticipate a permanent reform of the pension system in order to achieve a sustainable development in this area, we assumed that the pension reform 2000 is sufficient to secure solvability at least over the medium-run.[10] Therefore we implemented the same amount of cost reductions as those of the SP-3-2000 scenario for the time period 2000 to 2005.

Similarly, we assumed the same amounts and time path of reductions in discretionary measures as in the case of the SP-3-2000. That means that after the sharp cuts in the year 2000, these restrictions (affecting public consumption, public investment and subsidies) will be eased from 2001 onwards (see Table V). Obviously, the government realized that with such a policy, Austria would run into the dilemma of destroying its growth potential in the medium and long-run. In particular, this is true if the state continues to cut expenditures for R&D, for human capital (education, universities, infrastructure). Therefore, at least 1/3 of the UMTS licences proceeds are used to counteract such tendencies. A stimulation of efficiency could also be reached, if the administration of public economic promotion was to be centralized (e.g., by creating a single company which co-ordinates the different funds: ERP, FGG, Bürges, RIP and labour market funds).

In the case of social transfers the government will save 5 bill. ATS from 2002 onwards under the heading "accuracy in social targeting" (see Table V). Based on the Mazal report (Mazal, 2000) the government bundled a package with several measures from taxation of accident benefits to the introduction of fees for university students (5.000 ATS per semester). The additional expenditures in the categories family assistance (child allowance) and miscellaneous expenditures are the same as those of the SP-3-2000. These positions have been agreed upon in the coalition pact by ÖVP and FPÖ in February 2000 (waiting or child allowance for all: 6 bill. ATS in 2002; more subsidies for the agricultural sector: 4 bill. ATS in 2001; military defence measures (helicopters): 3 bill. ATS for helicopters in 2000/2001 and more than 3 bill. ATS for fighters in 2002).

Overall, the expenditure side will contribute to the budget consolidation by 0.5% of GDP in the year 2000 up to 1.2% of GDP in the year 2003 (see Table V).

On the revenue side, the consolidation package (Hofburg-SP) consists of the tax measures already foreseen in the SP-3-2000 and implemented in the 2000 budget (motor vehicle-related insurance tax, tobacco duty, electricity levy fees), and of the new tax measures, consisting of a big variety of tax increases, starting in 2001. The latter are summarized in Table V under the headings income and wage taxes, corporate and capital taxes, legacy and bequest taxes, VAT and motor vehicle taxes for lorries). In our Hofburg-SP scenario, the tax measures will stay in place until the year 2005.

A problem for the budget consolidation is the coalition pact in which it was agreed upon that the non-wage labour costs would be reduced by 15 bill. ATS till 2003. This would have positive effects in the export industry, however, it would be a burden for the budget because it would enhance a reduction in the contributions by the social security system. The cuts of non-wage labour costs could either be fully or partly financed by a mineral oil tax. The increase of the mineral oil tax by 1 Schilling would lead to budgetary revenues of around 8 bill. ATS (see Kurt Kratena, Der Standard, July 10, 2000, p. 15). This would enable Austria to meet the Kyoto targets - the reduction of the CO_2 emissions by 13 percent in 2010. In

addition, Austria would catch-up to the position Germany takes in this respect by embarking upon the eco-tax. Although they are agreed upon in the coalition pact, another strategy to relief the budget would be to postpone these measures (family or child allowance, subsidies for the agricultural sector, defense expenditures) until the end of this coalition's period in 2004. Overall, the revenue side will contribute to the budget consolidation by 0.2% of GDP in the year 2000 up to 1.4% of GDP in the year 2001 and 1.1% in the year 2002 (see Table V).

Although, the policy of privatization will be continued, our Hofburg-SP scenario implements the same amount of proceeds and the same time profile as in the case of the SP-3-2000 (see Table V). We assume that the government will benefit from proceeds of 9 bill. ATS (7.3 bill. ATS net-proceeds of UMTS licence sales; the rest are proceeds of privatizing or selling real estates of the state to the Bundesimmobiliengesellschaft (BIG)). It is assumed, that this transaction and also those in the following years (further selling of state-owned real estate and parts of state-owned forests and lakes) will reduce the budget balance in a Maastricht relevant manner. For this purpose we implemented 8 bill. ATS annually from 2001 to 2005. All additional proceeds from privatization beyond the above mentioned amounts will be used to reduce the public debt and are assumed not to influence the budget balance. Generally, the potential for privatization in Austria ranges from 300 to 400 bill. ATS (estimates by the ÖVP) and 804 bill. ATS (estimates by Friedrich Schneider, University of Linz). In particular, the ownership of UMTS licences leads to a kick-off of new private investments. We take into consideration in our simulations the same amount of new private investments in order to offer the net for UMTS services as mentioned earlier (50 bill. ATS in the next few years) as in the case of the SP-3-2000.

Under the assumptions made in our Hofburg-SP scenario, in order to meet the zero-budget target in 2002, total savings of 2.3 percentage points of GDP (double the amount assumed in the case of the SP-3-2000 scenario) are necessary in the year 2002. A sustained budget consolidation will require further savings of that amount up to the year 2005. These savings are realized in the first phase more by increasing taxes than by cutting expenditures and only to a minor degree by revenues from privatization. After 2003, cuts in expenditures will slightly dominate the consolidation process.

Macroeconomic effects:

In a Keynesian demand-driven model, the consolidation measures of the Hofburg-SP must result in a sharp decrease of domestic demand. These are exactly the results one gets in simulations with the Wifo macro model, if no incentives for investments and no supply-side effects are implemented in the model (see Table VI). The purely Keynesian solution would lead to a cumulated reduction of real GDP by around one percentage point in 2005 (or by 0.15% per year, starting with -0.27% in 2000).[11]

Table VI. Macroeconomic effects of the "Hofburg-SP" (with and without incentives for investment)

	2000	2001	2002	2003	2004	2005
	(cumulative deviations from baseline in %)					
Real demand:						
Private consumption	−0.34	−1.31	−1.59	−1.83	−2.01	−2.15
Public consumption	−1.01	−1.98	−3.29	−4.28	−4.27	−4.23
Gross fixed capital formation	0.57	0.44	0.04	0.84	1.97	3.36
(without incentives)	*−0.71*	*−0.66*	*−1.01*	*−1.15*	*−1.61*	*−2.01*
Public sector	−6.20	−4.20	−4.25	−4.37	−4.48	−4.56
Private sector	1.07	0.76	0.32	1.16	2.34	3.79
(without incentives)	−0.31	−0.42	−0.81	−0.97	−1.46	−1.89
Exports of goods and services	−0.03	−0.03	0.01	0.06	0.08	0.08
Imports of goods and services	−0.16	−1.09	−1.48	−1.40	−1.07	−0.74
Gross Domestic Product (GDP)	***−0.11***	***−0.24***	***−0.40***	***−0.46***	***−0.42***	***−0.29***
(without incentives)	*−0.26*	*−0.38*	*−0.54*	*−0.72*	*−0.86*	*−0.95*
Prices, income, current account:						
Deflator of private consumption	0.17	0.20	0.09	−0.04	−0.14	−0.17
Disposable income, nominal	−0.60	−2.41	−2.22	−2.39	−2.55	−2.64
Wage share (% points)	0.33	0.19	−0.09	−0.28	−0.21	−0.22
Current account (as % of GDP)	0.08	0.52	0.71	0.67	0.52	0.36
Labour market:						
Dependent employment (in 1.000)	−3.47	−7.22	−12.76	−13.10	−11.39	−9.00
(without incentives)	*−5.04*	*−9.59*	*−15.61*	*−17.41*	*−18.51*	*−20.13*
(% change)	−0.11	−0.23	−0.40	−0.41	−0.35	−0.27
Public sector (in 1.000)	−3.00	−7.00	−13.00	−15.00	−15.00	−15.00
Private sector (in 1.000)	−0.47	−0.22	0.24	1.90	3.61	6.00
(without incentives)	*−2.04*	*−2.59*	*−2.61*	*−2.41*	*−3.51*	*−5.13*
Unemployed labour (in 1.000)	1.15	2.26	4.11	4.41	4.31	3.91
(without incentives)	*1.66*	*2.52*	*4.22*	*4.83*	*5.19*	*5.21*
Unemployment rate (% points)	0.04	0.08	0.14	0.14	0.14	0.12
(without incentives)	*0.06*	*0.09*	*0.14*	*0.16*	*0.17*	*0.17*
Labour productivity (per total employment)	−0.01	−0.03	−0.03	−0.09	−0.10	−0.04
Private sector (per employees)	−0.03	−0.01	0.02	0.05	0.01	0.03
Public sector finances:						
Net-lending (bill. ATS)	27.82	67.90	62.84	64.49	67.41	72.26
(as % of GDP)	0.98	2.30	2.05	2.05	2.08	2.14
(without incentives)	*0.93*	*2.25*	*2.00*	*1.96*	*1.92*	*1.90*
Public debt	−35.11	−103.02	−165.86	−230.34	−297.75	−370.01
(as % of GDP)	−1.24	−3.31	−5.02	−6.80	−8.64	−10.51
(without incentives)	*−1.08*	*−3.11*	*−4.76*	*−6.37*	*−7.94*	*−9.46*

Source: Own simulations with the Wifo macromodel.

However, in the context of the consolidation race in the run-up to EMU in the years 1995–1998, one can conclude from international experiences that a considerable base of the public sector can be reduced without influencing economic growth. I would estimate that this X-inefficiency share amounts to 1% or 2% of GDP.[12] Furthermore, one can see that the private sector (the financial markets) react highly positive if countries reduce the influence of the public sector. The sales of licences (UMTS) again are revenues for the budget and lead to new private investment (in one of the most advanced technologies - telecom). Privatization results in a reallocation of public to private activities. If they have been done inefficiently in the public sector before, this leads to an improvement of overall efficiency (supply-side effect). Furthermore, international financial markets acknowledge a credible budgetary consolidation by reducing the interest rate spreads (risk premia) on public debt. All these factors together could lead to an increase of total factor productivity, to more private investments and therefore to a potentially higher economic growth. In the course of the present budget consolidation, the state shifts its present priorities from income distribution[13] more and more to the allocative function of fiscal policy. This is realized either by directly investing into R&D and education (which is somewhat neglected in the present stability programmes) or indirectly by stimulating the overall efficiency via the process of privatization.

The supply-side considerations of the budget consolidation just discussed were implemented exogenously into the Wifo macro model in the following way: First, the revenues of privatization or of UMTS sales are assumed to stimulate real private investments (by deflating the revenues with the investment deflator) at least by the same amount and secondly, it is assumed that the achievement of the zero-budget target will increase Austria's credibility on the international financial markets and hence attract further (foreign) private investments, which leads to an additional increase of real private investment by one percent per year from the year 2003 onwards. The "privatization effect" increases private investment by around only less than 1/4 percentage points per year; the "credibility effect" will raise investment by 1 1/2 percentage points per year from 2003 to 2005. The positive GDP effects of privatization of around 0.15% after six years, however, just compensate the negative GDP effects of the disincentives for investments due to the abolition of the tax allowance in case of investments and reductions in the amortization reserves.

Under such assumptions, one can see a further strong reallocation from the public to the private sector (see Table VI). Public consumption decreases more than private consumption. Private consumption is dampened by the reduction of social transfers with the consequence of a decline in additional disposable income. Public investments go down, those of the private sector increase. The overall increase in private investment is the result of a dampening effect (due to the abolition of tax allowances) and the incentive effects as a result of UMTS related investments as well as credibility effects. Without incentives private investment would decrease. Exports would be stimulated slightly by reducing the non-wage labour costs in 2002 and 2003. Overall, real GDP would decrease until 2003 (by 1/2 percentage

points), after that a relative improvement can be expected due to the assumptions of investment stimulating credibility effects of the budget consolidation. The loss of real GDP would only amount to 0.3 percentage points after six years (or only 0.05% per year!). The total negative impact of the Hofburg-SP (without incentives) on real GDP of around one percentage point after six years is the result of cuts in expenditures (−1/2 percentage point), of tax increases (−1/4 percentage point) as well as of disincentives for investment due to the abolition of tax allowances (−1/4 percentage point).

Labour productivity in the private sector would increase in the medium run, in the economy as a whole (inclusive the public sector), however, it would decline. The negative effect on the number of employed persons would be relatively small. The decline in the public sector by 15.000 persons would partially be compensated by an increase in the private sector. The budgetary consolidation measures have only a slight impact on unemployment. The price effects of the measures are only felt at the beginning, because of the increase of indirect taxes. After 2002 there are no additional negative inflation effects. The wage ratio in percent of national income would slightly increase until 2001, however, fall afterwards. These results come about because of the specific pattern of the Hofburg-SP package: at the beginning, cuts in subsidies dampen the profits of the companies; after that, cuts in social transfers will hamper wage earners.

The measures taken to consolidate the budget in the Hofburg-SP would bring the expected results concerning the public finances. Taking into account the incentives for private investment, the reduction of the general government deficit and the building-up of surpluses in the years 2004 and 2005 could be improved by 1/4 percentage points of GDP. Similarly, the public debt could be diminished by 370 bill. ATS which would be one percentage point more than in the case of a pure Keynesian solution (see Figure 4). The break-even point of public debt to GDP ratio (i.e., relating to the SGP reference value of 60 percent of GDP) will be reached already in the year 2002. After that, the public debt to GDP ratio will decline to less than 55 percent in the year 2005. It might well be that the public debt can be reduced even further, if additional sales of state own assets are used to redempt old public debt. Then the actual interest payments on this debt could also be reduced over and above the values implied by this simulations. The Hofburg-SP result in an increase of the primary surplus (general government deficit minus interest payments) of 2 percent of GDP in the year 2000 to 3 1/2 percent of GDP in 2005.

The simulations, based on the Hofburg-SP to consolidate the budget, indicate that a zero budget in the year 2002 is possible. In particular, if the budget consolidation is credible, supply-side effects might compensate negative demand effects in the medium run. In comparison to the earlier consolidation package (the SP-3-2000), the Hofburg-SP is more equilibrated between measures on the expenditure and on the revenue side. The concentration only on the expenditure-side would have implied the fear that growth stimulating areas (discretionary expenditures –

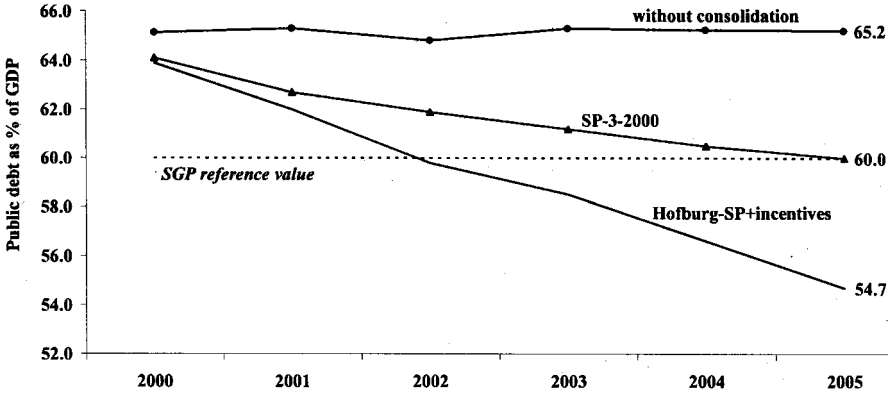


Figure 4. Gross public debt – Development under alternative stability programme scenarios.

R&D etc.) would have been hampered too much. Also the negative bias for income distribution has been softened by the Hofburg-SP package. However, it is beyond the scope of this analysis, to evaluate the overall effect of income distribution of the present consolidation measures.

IV. Tax Reform 2000 and Budget Consolidation – A Consolidated View

One reason for the effort of the government in seeking to reduce the public sector deficit is the deficit increasing effect of the tax reform 2000. This reform was planned before the general elections and came into effect in 2000 (political business cycle attitude!). This tax reform, however, was not yet designed under consideration of the new rules of the ECOFIN Council of February 28, 2000. The Council broadly endorsed four criteria for assessing whether a Member State actually has the capacity to cut taxes safely without jeopardizing the SGP commitments (EU, 2000, pp. VI–VII). These are: (1) uncompensated tax reductions can only be envisaged in Member States that meet the medium-term budget target of 'close-to-balance or in surplus'; (2) tax reductions must not be pro-cyclical; (3) account must be taken of the level of government debt and long-term budget sustainability; and (4) tax reductions should form part of a comprehensive reform package. The Commission intends to apply these criteria when assessing budgetary plans for 2002 and future updates to stability and convergence programmes.

At least two criteria (1) and (2) have been ignored when designing the tax reform 2000. Therefore, the present consolidation measures – with a few exceptions like the pension reform – rather have the character of a "budget repair" action than of a well-designed long-term and therefore sustainable reform of the system. Nevertheless, it is not uninteresting to consider both fiscal actions – the tax reform 2000 and the consolidation action – in a consolidated manner. Both actions came into force in the year 2000 and will influence the overall economy at least up to

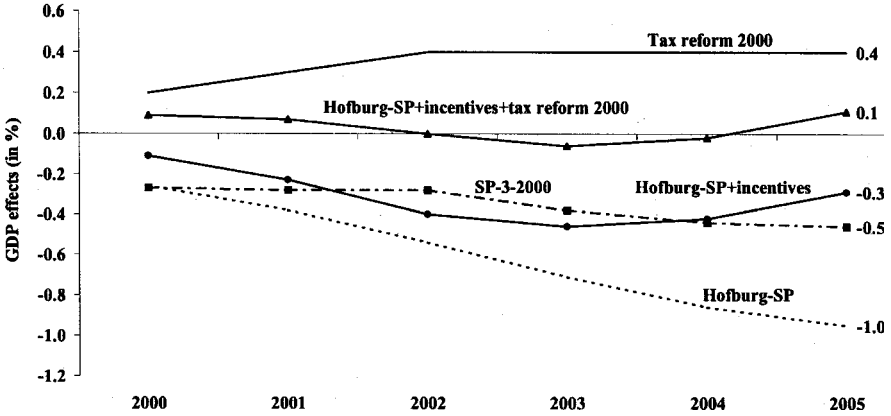


Figure 5. GDP effects of alternative stability programmes and of the tax reform 2000.

the year 2005. The macroeconomic effects of the tax reform have already been analyzed with the Wifo macromodel (see Breuss and Weber, 1999a).

The tax reform 2000 will result in a medium-term increase of real GDP of 0.4 percent.[14] The consolidation measures under the Hofburg-SP will lead to a loss of real GDP of 0.3 percent (in the case of the solution with investment incentives). By balance, even in the "crash scenario" of the budget consolidation a positive effect on the overall economy would emerge. Only if no supply-side effects are taken into account, both fiscal actions together would lead to a loss of real GDP of about 1/2 percentage points in the medium-run (see Figure 5).

V. Conclusions

As a member of the EMU, Austria is subject to the fiscal discipline of the SGP. Whereas other member states already are more advanced in the budget consolidation process, Austria is lagging behind. In an effort of force, the government aims at balancing the budget up to the year 2002. In comparison with the official stability programme of March 2000, this means an acceleration in cutting expenditures and also additional tax measures. This "crash course" of budget consolidation leads to a further dampening of domestic demand, however, it could also improve credibility with positive repercussions on the international financial markets. However, the government should take care that – other than in the consolidation phase 1996–97 where one-off measures dominated – sustainability is secured. The budget must be consolidated in a sustainable manner so that in bad times (in recessions) there is enough room for manoeuvre to counteract possible asymmetric shocks (an old message of Keynes, by the way!). With the Hofburg-SP, the public debt could be dramatically reduced. A general conclusion is that the target of the Hofburg-SP is feasible. In the case of the crash-scenario (Hofburg-SP), which balances the budget already in 2002 and would imply a sustained consolidation afterwards, the pure Keynesian solution would result in a decline of real GDP of one percentage points

after six years. The precautionary consolidation scenario (SP-3-2000) would result in a real GDP loss of only half of that size. Taking into consideration supply-side effects (incentives for investment due to privatization and UMTS licences sales or incentives due to a credible zero budgeting policy), real GDP would only decline by 1/3 percent in either scenario. So, the overall economic impact – if taking into account that fewer influence of the state is potentially improving economic growth – is not as dramatic as expected by the usual Keynesian thinking. To be fair, one must amalgamate both fiscal actions, coming into effect in 2000 – the tax reform and the consolidation actions. On balance, the overall effects are rather positive than negative.

Notes

1. The SGP consists of two Council regulations and two resolutions of the European Council (see Breuss, 1999, p. 117 and Breuss, 2000a).
2. As from the year 2000, ESA-95 (European System of Accounts) – the European accounting standards for reporting of economic data by the Member States to the EU – has replaced the earlier ESA-79 standard with regard to the comparison and analysis of national public finance data (see Eurostat, 1996). ESA-95, introduced in the EU in 1999, implies the same methodology for compiling data on fiscal indicators (budget balances, public debt et.).
3. The coefficients for cycle sensitivity, 0.23 and 0.29 respectively in the equations (1) and (2) refer to the short-run. Due to the lagged endogenous variable in the equations (DEF_{t-1}), in the long-run these coefficients would have double its value and, hence, would be equivalent to EU average.
4. Several studies (see e.g., Dalsgaard and de Serres, 2000 for a SVAR approach; Artis and Buti, 2000) and the European Commission (EU, 2000, p. 40) calculate "safety margins" which must be fulfilled in order not to violate the 3% reference value of the SGP. A structural deficit of 0.5% to 1.5% of GDP should be enough to allow the automatic stabilizers to operate without breaking the 3% of GDP deficit threshold even in periods of pronounced cyclical slowdowns (for a survey of such studies, see EU, 2000, p. 41). The "safety margin" for a structural deficit is calculated by multiplying the budgetary sensitivity to the cycle with the output gap.
5. The R&D expenditures as a percentage of GDP (R&D quota) in Austria will reach 1.79% of GDP in 2000. The R&D quota has steadily increased from 1.17% in 1981 to 1.82% in 1999. Austria still is below the average of OECD (2.2%). In the same period, Finland, with the same starting value as Austria (1.2% in 1981), has nearly reached the 3% benchmark (1998 2.92%).
6. For a detailed description of the Wifo macro model see Breuss et al. (1993).
7. The European Commission with its QUEST model estimates that the consolidation measures in Austria in the year 2000 would dampen real GDP by 0.19%. Whether this GDP loss also includes the positive effects of the tax reform is unclear (see EU, 2000, p. 27).
8. Alternatively, in special cases the licence proceeds may be recorded as rent for the use of the spectrum/frequencies, which implies that the proceeds are booked as regular receipts for the government and are spread out over the lifetime of the contract.
9. In the agreement between the different communities (Bund, Länder, Gemeinden), in the "Finanzausgleich", for the years 2001 to 2004 of October 16, 2000, the Länder committed themselves to contribute by a budget surplus of 23 bill. ATS (or 0.75% of GDP) to the budget consolidation of general government.
10. Fiscal sustainability is analyzed with different concepts (for an overview, see Breuss, 1999). In principle, it defines the conditions which secure that the public debt is not increasing in the

long-run. A very specific concept is that of Generational Accounting. Accordingly, intertemporal solvency requires that the present value of public spending must not exceed the present value of taxes plus current assets (intertemporal budget constraint). With this concept, one can calculate the real burden imposed on future generations (e.g., the long-run burden of the pension system – problem of ageing of population etc.). For such an exercise for Austria, see Keuschnigg et al. (2000).

11. The baseline scenario underlying these simulations starts with the Wifo economic forecast of October 2000 which already includes the effects of the consolidation measures up to the year 2001. This forecast is extended to the year 2005 by the author. Negative (positive) effects of the consolidation measures mean that the development without the Hofburg-SP would have been better (worse) by the percentage change stemming from the simulations.
12. Kramer (1999) estimates that – by comparing Austria with Germany concerning the share of expenditures for public staff in GDP – in the medium-run the savings potential for the budget amounts to 2 1/2% of GDP (or 70 bill. ATS). The European Commission (EU, 2000, table A.4.9) quantifies the outlays for the public staff to be 11.1% of GDP for Austria (for the year 2000), 8.1% for Germany and 10.3% for the EU-15. These figures, however, do not tell very much about the differences in productivity of the public staff in the EU member states.
13. Many politicians and authors claim that the present budget consolidation was executed primarily on the back of the poor part of the population whereas the entrepreneurs and the agricultural sector benefits from it. Whether the negative effects on income distribution estimated by Marterbauer and Walterskirchen (2000) of the SP-3-2000 (or more specifically of the budget 2000) will be aggravated by the Hofburg-SP or mitigated, is an open question.
14. Simulations by the European Commission with its QUEST model lead to the following results: A 1% of GDP tax reform in case of a reduction of labour, corporate and VAT taxes result in a long-run increase of real GDP of 0.54% (see EU, 2000, p. 69). The tax reform 2000 in Austria has a volume of roughly 1% of GDP. The simulations with the Wifo macro model (+0.4% increase of real GDP) therefore lead to similar results as those with the QUEST model.

References

Alesina, A. (2000) *The Political Economy of the Budget Surplus in the U.S.*, NBER Working Paper Series, No. 7496, January.

Alesina, A., Perotti, R., and Tavares, J. (1998) 'The Political Economy of Budget Deficits', *Brooking Papers on Economic Activity* **1**, 197–266.

Artis, M.J. and Buti, M. (2000) '*Close to Balance or in Surplus*': *A Policy Maker's Guide to the Implementation of the Stability and Growth Pact*, Centre for Economic Policy Research (CEPR), London, Discussion Paper Series, No. 2515, July.

BMF (2000a) *Austrian Stability Programme: Update of the Austrian Stability Programme for the period 2000 to 2003*, Federal Ministry of Finance, Vienna, March 28.

BMF (2000b) *Austrian Stability Programme: Update for the period 2000 to 2004*, Federal Ministry of Finance, Vienna, December 19.

BMF-Wifo (1998) *Conference Proceedings: Tax Competition and Co-Ordination of Tax Policy in the European Union*, Austrian Federal Ministry of Finance and Austrian Institute of Economic Research, Vienna, July 13–14.

Breuss, F. (1999) 'Wozu fiskalische Tragfähigkeit in der Wirtschafts- und Währungsunion der Europäischen Union?', in R. Neck and R. Holzmann, Hrsg, *Was wird aus Euroland? Makroökonomische Herausforderungen und wirtschaftspolitische Antworten*, Wien: Manz-Verlag, pp. 97–159.

Breuss, F. (2000a) 'Flexibility, Fiscal Policy and Stability and Growth Pact', in *Fourth ECSA-World Conference – The European Union and the EURO: Economic, Institutional and International Aspects*, European Commission, Luxembourg, pp. 98–126.

Breuss, F. (2000b) 'Die Wirtschafts- und Währungsunion und ihre Folgen', in F. Breuss, G. Fink and St. Griller, Hrsg, *Vom Schuman-Plan zum Vertrag von Amsterdam*, Wien–New York: Springer-Verlag, pp. 273–309.

Breuss, F., Neck, R., and Schebeck, F. (1993) 'Gesamtwirtschaftliche Auswirkungen finanzpolitischer Maßnahmen in einem keynesianischen ökonometrischen Modell der österreichischen Wirtschaft: Eine Simulationsanalyse', in R. Holzmann and R. Neck, Hrsg, *Konjunktureffekte der österreichischen Budgetpolitik*, Wien: Manzsche Verlags- und Universitätsbuchhandlung, pp. 177–247.

Breuss, F. and Schebeck, F. (1988) 'Gesamtwirtschaftliche Effekte der Steuerreform 1988', *WIFO-Monatsberichte* **11**, 623–633.

Breuss, F., Schebeck, F., and Wüger, M. (1994) 'Gesamtwirtschaftliche Auswirkungen der Steuerreform 1994', *WIFO-Monatsberichte* **1**, 50–56.

Breuss, F. and Weber, A. (1999a) 'Gesamtwirtschaftliche Auswirkungen der Steuerreform 2000', *WIFO-Monatsberichte* **7**, 523–529.

Breuss, F. and Weber, A. (1999b) *Economic Policy Coordination in the EMU – How Much Scope Will There Be within the Framework of the Stability and Growth Pact?*, WIFO Working Papers (113), Austrian Institute of Economic Research (WIFO), Vienna, May.

Dalsgaard, Th. and de Serres, A. (2000/I) 'Estimating Prudent Budgetary Margins for EU Countries: A Simulated SVAR Mode Approach', *OECD Economic Studies*, No. 30, Paris.

ECB (2000) *Monthly Bulletin*, European Central Bank, Frankfurt, September.

EU (2000) *Public Finances in EMU-2000*, Report of the Directorate General for Economic and Financial Affairs, European Commission, Brussels, May 24.

Eurostat (1996) *Europäisches System Volkswirtschaftlicher Gesamtrechnungen: ESVG 1995*, Eurostat, Luxemburg.

Grasser, K.-H. (2000) *Bundesvoranschlag 2001, Budgetrede des Bundesministers für Finanzen vor dem Nationalrat*, Wien, 18. Oktober.

Katterl, A. and Part, P. (2000) *Koordination der Wirtschaftspolitik in der EU*, Working Papers, Bundesministerium für Finanzen, Wien, No. 1, January.

Keuschnigg, Ch., Keuschnigg, M., Koman, R., Lüth, E., and Raffelhüschen, B. (2000) *Public Debt and Generational Balance in Austria*, Institute for Advanced Studies, Vienna, Working Paper Series, No. 80, March.

Kramer, H. (1999) *Personalaufwand des öffentlichen Dienstes im internationalen Vergleich*, unpublished WIFO-Papier, Dezember.

Marterbauer, M. and Walterskirchen, E. (2000) 'Verteilungseffekte des Regierungsprogramms', *Wirtschaft und Gesellschaft*, No.2, Vienna.

Masson, P. (2000) *Fiscal Policy and Growth in the Context of European Integration*, National Bank of Belgium, Working Papers No. 7, Brussels, May.

Mazal, W. (2000) *Erhöhung der Treffsicherheit des Sozialsystems*, Endbericht für die Bundesministerien für Wirtschaft und Arbeit sowie für Soziale Sicherheit und Generationen, Wien, 18. September.

Musgrave, R.A. (1959) *The Theory of Public Finance*, New York.

Rechnungshof (1999) Wahrnehmungsbericht des Rechnungshofes über die Konsolidierungspaktet, Reihe Bund 1999/2, Rechnungshof 29860001/002-Pr/8/99.

Wagner, A.F. (2000), *Institutions of Conflict Management and Economic Growth in the European Union*, University of Linz, unpublished manuscript, July 19.