

IMPLICATIONS OF THE CRISIS FOR PUBLIC FINANCES: THE CASE OF AUSTRIA

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The economic crisis of 2008-09 has greatly compounded the challenge of economic policymaking both at the EU level and at the national level by causing a permanent loss in potential output – which may reach between 4 per cent and 6 per cent in the case of Austria (Gaggl and Janger, 2009) – and by sharply driving up public deficit and debt ratios.

This study highlights the implications these developments are likely to have for fiscal and structural policymaking in Austria. Section 1 outlines how the economic crisis of 2008-09 and upcoming demographic changes would cause public finances to deteriorate significantly and permanently in the absence of consolidation. Section 2 discusses the timing and composition of consolidation strategies: When should policymakers act, and on which areas should they focus? Section 3 concludes.

1 High consolidation needs due to crisis (and ageing societies)

The global financial and economic crisis has not only caused GDP, and thus real income, to contract in 2009 compared with 2008; it has also caused public finances to deteriorate sharply. The analysis of historical economic crises, especially those associated with a crisis of the banking sector, shows that public deficits – and even more so public debt ratios – may become ‘unsustainable’ in the medium to long term in the aftermath of such crisis. Recent data on, and forecasts of, deficit and debt levels worldwide have confirmed these patterns for European countries and, with some qualifications, also for Austria.

Figure 1 shows the OeNB June 2010 forecast for the Austrian deficit and debt ratio until 2012 (see Ragacs and Vondra, 2010). In 2009 the Maastricht deficit increased by 3 percentage points and is expected to reach 4.5 per cent of GDP in 2010, with the debt ratio developing correspondingly. For 2011 and 2012, the OeNB forecasts slight reductions in the deficit driven by expenditure containment; the debt ratio is projected to increase further. In the following sections we will argue that a large part of the deterioration since 2008 is of a permanent nature.

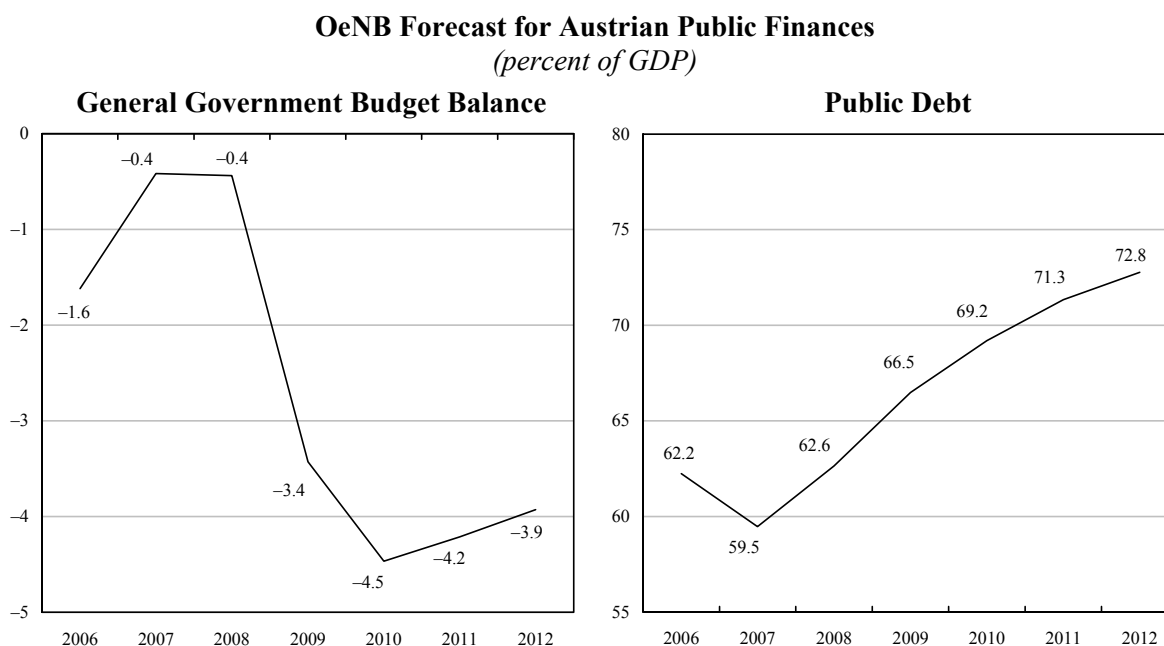
Thus, the economic crisis jeopardizes the long-term sustainability of public finances, as economic recovery alone will not suffice to lower debt and deficit levels – it will take considerable consolidation measures to achieve that. In addition to the medium- to long-term impact of the global financial and economic crisis and its budgetary implications, the impact of Europe's ageing societies constitutes a further risk to the long-term sustainability of public finances, also for Austria.

The notion of sustainability is based on the idea of ensuring intergenerational fairness and is aimed at securing fiscal policy leeway in the long run. In this context the ageing-related public expenditures play a key role, as they typically increase the budgetary burden.

Intuitively speaking, fiscal policies will be sustainable as long as governments do not default¹ (Balassone und Franco, 2000). The notions of long-term sustainability of public finances found in the literature fall into three broad families:

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Figure 1



Source: OeNB.

- According to Domar (1944) the public debt ratio should converge to a finite value in order to avoid a continual rise of the tax burden.
- Sustainability as defined in Buitier (1985), Blanchard (1990) and Blanchard *et al.* (1990) requires that the debt ratio converges back to its initial level (in order to prevent the debt ratio from exploding).
- Taking this idea one step further, Blanchard (1990) and Blanchard *et al.* (1990) define a fiscal rule that will ensure the convergence of the debt ratio to its initial level – and thus sustainability. According to this rule, the discounted value of all future primary surpluses equals the current level of public debt.

Even though there is no agreed definition of what constitutes a sustainable position of public finances (Balassone and Franco, 2000), analyses of fiscal sustainability tend to concentrate on the public debt ratio, as a continually growing debt ratio and fiscal sustainability are considered to be a contradiction in terms.

The European Commission assesses the implications of demographic ageing with two sustainability gap indicators named “S1” and “S2” (European Commission, 2005). These two sustainability gap indicators show the size of the budget adjustment that is required to ensure that a given target debt ratio is reached. S1 shows the budget adjustment required to reach a target debt ratio of 60 per cent in 2060, and S2 shows the sustainability gap for an infinite time horizon. In its 2009 Sustainability Report, the European Commission (2009e) finds Austria to have a sustainability gap (S1) of 3.8 per cent of GDP, based on the budgetary position of 2009, the European Commission’s spring forecast and the projected increases in age-related expenditure (European Commission, 2009c); in the “lost decade” crisis scenario, which assumes below-average

¹ A government would be considered to have defaulted on its debt if it is no longer in a position to refinance itself, *i.e.* to place debt securities in the market.

growth until 2020, the sustainability gap would be even 5.3 per cent of GDP. Measured in terms of S2, Austria is found to have a sustainability gap of 4.7 per cent of GDP (or 6.1 per cent of GDP in the “lost decade” crisis scenario).

The following analysis is not based on a specific notion of sustainability, as the prevailing big uncertainty about macroeconomic developments in the future (and thus about estimates for the output gap and/or the structural budget balance of the base year) would not allow for an exact and reliable quantification of adjustment needs. Much rather, the paper shows that it will take fundamental consolidation measures and structural reforms, even under relatively optimistic macroeconomic assumptions, to reach a trend primary surplus that is sufficient to reduce the public debt ratio to a level of or below 60 per cent of GDP and that further measures will be needed to frontload or to reduce the additional fiscal cost of demographic changes.

1.1 Structural deterioration of public finances caused by a combination of factors

Part of the crisis-related deterioration in public finances will have long-term implications, thus creating a need for consolidation in the post-crisis period. The burden on public households has been increased by a range of direct (1) and above all indirect factors (2, 3 and 4):

- 1) fiscal cost of financial market intervention (= direct fiscal cost of financial crises);
- 2) additional debited interest resulting from the sharp rise in debt ratios;
- 3) discretionary fiscal policy stabilization measures (especially if permanent);
- 4) permanent effects of automatic stabilizers following a loss in potential output.

The fiscal effects of financial market interventions include above all the potential cost of guarantees, in case the underlying risks should materialize, and overvalued purchases of problem banks or their toxic assets. These costs loom large in the public mind; yet how big an effect these measures are actually going to have on public finances in Austria, or in other EU Member States or worldwide, is difficult to say at the current juncture. At any rate, these direct costs can be expected to be a mere fraction of the associated indirect costs. According to Cottarelli and Viñals (2009b), even in the current crisis, only a relatively small portion of the expected debt surge is due to official financial support operations. This has been the rule also in past financial crises, as is evidenced by historical analyses provided by Reinhart and Rogoff (2009) or by the European Commission (2009e, Part III).

As Figure 1 exhibits, the public debt ratio is expected to shoot up quickly also in Austria. Currently, we expect the debt ratio to climb by around 10 percentage points from end-2007 to end-2010. The measures taken to stabilize the banking sector actually account for a relatively small share of this increase. The key drivers behind the budget deterioration are the free operation of automatic stabilizers and the discretionary fiscal policy stabilization measures. Even if output were to return to its old path and even if all stabilization measures were to be of a temporary nature, the surge in debt would still have effects into the future through higher interest payments. Given that the average nominal interest rate on public debt currently exceeds average nominal output growth in Austria, as in most other euro area countries, and given that this positive interest rate/growth differential is likely to persist in the next decade, the government will need to achieve a considerable primary surplus to stabilize the debt ratio.

While there has been a case for economic stimulus packages in this global crisis,² it is self-evident that such packages create the need for even further adjustments when the crisis is over.

² See Almunia *et al.* (2009) for evidence on the relatively high multipliers of discretionary fiscal policies in times of crisis, as well as IMF (2008) for the merits of using stimulus packages in such exceptional periods.

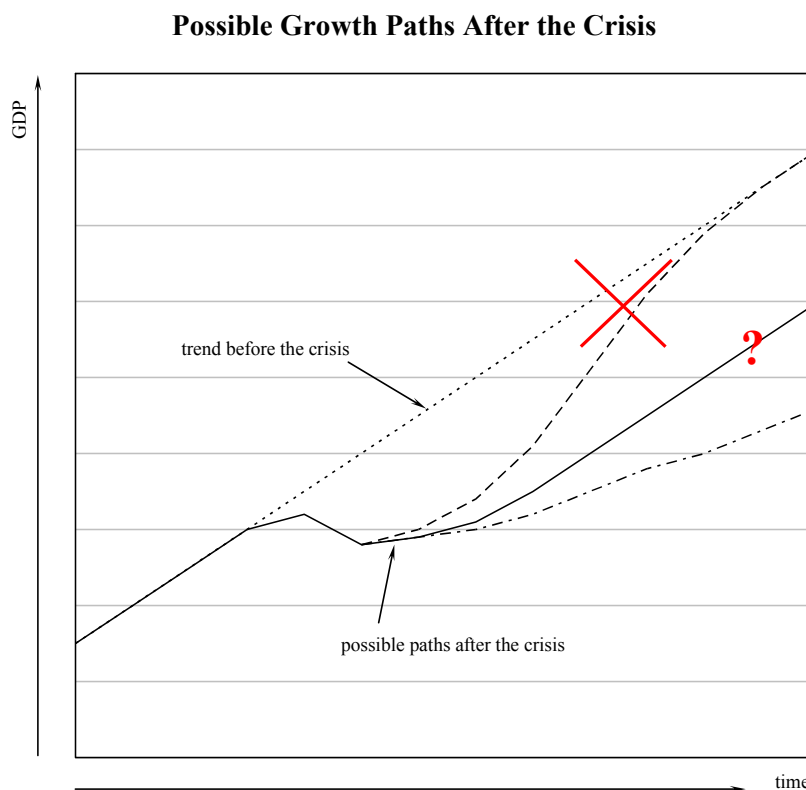
These adjustment needs may go beyond the afore-mentioned higher interest burden if, as is the case in Austria, the bulk of measures is of a permanent nature (like the income tax reform and the permanent increase in family transfers).³

It is too early to say whether and, if so, how deeply the economic crisis of 2008-09 may affect potential growth rates of individual economies in the medium term (Gaggl and Janger, 2009). Yet even if the economies were to return to their pre-crisis potential growth rates when the crisis is over, it appears to be unlikely that all of the output loss incurred in 2009 can be recouped in the foreseeable future as the crisis will probably have had permanent negative effects on the levels of trend employment, trend TFP and the capital stock (see Figure 2).

Subject to the free operation of automatic stabilizers, this fact constitutes an additional challenge for fiscal policy, as a comparatively lower output will go hand in hand with lower tax revenues, and as a potentially higher trend unemployment rate will push up social transfers. This means – for a given real trend growth rate of acyclical expenditure – that the cyclically adjusted budget balance is going to deteriorate, resulting in an even higher consolidation need.

Figure 3 shows how these effects add up, comparing the European Commission's spring 2008 forecast (which was still based on the assumption of an economic downturn and not of a severe recession) for Austria's cyclically adjusted general government budget balance⁴ and its output gap⁵ with the Commission's spring 2010 forecast. The latter brought an ex post downward revision of the cyclically adjusted balance for 2006 by 0.5 percentage points and for 2007 by 0.6 percentage points. The European Commission considered a comparatively larger part of the tax

Figure 2



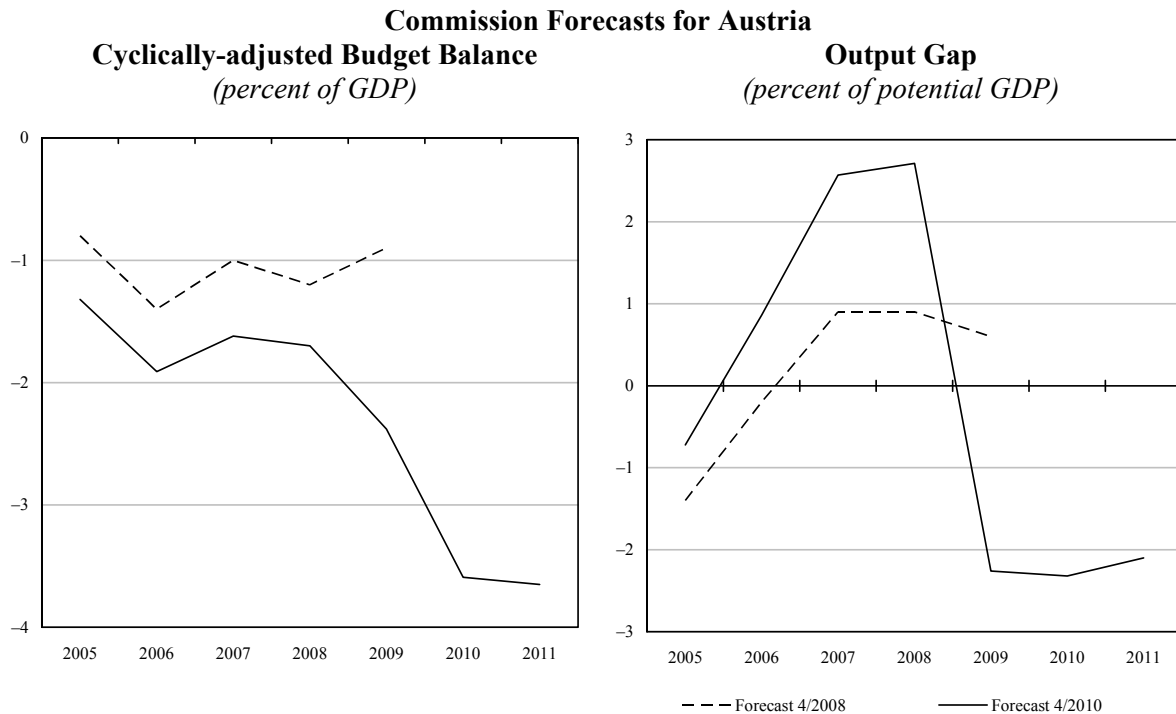
Source: OeNB.

³ Subject to a very narrow interpretation of “permanent fiscal measures”, the tax reform and increases in some transfers would not qualify as such, as income tax brackets as well as the size of some of the transfers in case (e.g., family allowance) are not indexed. In other words, any additional negative fiscal impact of such measures will be automatically reduced by any bracket creep that may occur in the future, or by any real depreciation of such transfers.

⁴ General government budget balance as adjusted for the estimated effect that the business cycle may have through the play of automatic stabilizers.

⁵ Difference between current output and potential output in percent (for an extensive discussion of the concepts of potential output and output gap, see Gaggl and Janger, 2009).

Figure 3



Source: European Commission.

revenues of those years to be of a cyclical nature in its spring 2010 forecast – which means that it has become more pessimistic in its assessment of the underlying structural developments. This change in the assessment of Austria's cyclical position is also evident from the sharp downward revision of the output gaps for those years.

Furthermore, the comparison of the successive forecasts for 2009 highlights the effect of the comprehensive discretionary fiscal measures that were adopted after the spring of 2008. Together with the very low growth of potential output estimated for 2010, those measures are a key driver behind the further deterioration in 2010.⁶

1.2 Without consolidation, public finances would deteriorate further until 2020

1.2.1 Even comparatively optimistic assumptions...

The following scenario is meant to show how Austria's debt ratio and deficit ratio are likely to change, even under optimistic macroeconomic assumptions, should policymakers fail to undertake fiscal consolidation until 2020. This scenario is based on the following assumptions:

- The starting point for our scenario is the OeNB June 2010 forecast for the years 2010 to 2012 (see Figure 1). The output gap in 2012 is expected to be –1.3 per cent of potential output. We assume this gap to close in a linear fashion from 2013 to 2014.

⁶ The autumn 2008 forecast was completed shortly before the economic crisis broke out (*i.e.*, before the stimulus packages were adopted). At the time, the European Commission expected Austria's cyclically-adjusted budget deficit to reach 1.2 per cent of GDP in 2010. This forecast has since been revised upward by around 2 ½ percentage points.

- We assume that the temporary measures adopted in 2008 and 2009 will indeed be phased out. Moreover, we expect the revenues from profit-related taxes, which declined more sharply in 2009 than historical elasticities would have suggested, to return to the old trend path by 2014 (so that the GDP share of these revenues will rebound to the 2006 level in 2014). This would allow the government to recoup some of the revenue shortfall that occurred in 2009.
- The trend growth of real GDP and the rise in age-related expenditure for education, long-term care, health care and pensions as a share of real GDP from 2012 onward are based on the latest Ageing Report of the European Commission (2009c).⁷ Following comprehensive (parametric) pension reforms in the first half of the last decade, the GDP share of age-related expenditure is projected to rise by roughly ½ percentage point from 2012 to 2020.
- All revenues and other categories of primary expenditure are assumed to grow at a trend rate of 2 per cent (in real terms), which corresponds to the projected average rate of real GDP growth (2013 to 2020) and implies constant structural ratios.⁸ Like the European Commission (2007) we also assume the primary balance to have a semi-elasticity of 0.47 with regard to real GDP.
- For 2020, we expect the average real interest rate on public debt to be 2.5 per cent per annum, with interest rates gradually rising to this level from 2013 to 2020. A level of 2.5 per cent roughly matches the average since 1999 and is below the 3 per cent level assumed by the European Commission in its Ageing Report (2009c).
- We have not specifically taken into consideration the government's banking package, as the amounts budgeted so far have negligible effects on the debt ratio (about 2 per cent of GDP in 2009) and on the deficit ratio (roughly neutral).

Our scenario runs until 2020, as this is roughly the point when the effects of ageing on the Austrian economy in general and on public finances in particular are going to increase sharply (see below).

1.2.1 ... imply a further rise of the debt ratio in the absence of fiscal consolidation

Even under this fairly optimistic macroeconomic scenario would the public debt ratio rise to about 80 per cent of GDP until 2020 (see Figures 4 and 5 for an overview). While the budget balance improves until 2014 as the negative output gap is closed, the fact that the debt ratio will have breached the 75 per cent mark by then means that the primary balance would still be more than 1 percentage point below the level that would be necessary (when having a trend real growth rate of 2 per cent and an average real interest rate of 2.5 per cent) to stabilize the debt ratio at this very high level.

Given the growing share in GDP of interest payments on government debt (as indicated by the negative contribution of the orange bars in the figure decomposing the change in the deficit ratio from year to year) from 2.5 per cent of GDP in 2008 to 3.5 per cent of GDP in 2020,⁹ we will see even in this period, both the budget deficit and the debt ratio stand to deteriorate further in spite of the until then only slight rise in age-related costs. As noted in Section 1.1, the higher interest rate burden exacerbates the need for consolidation.

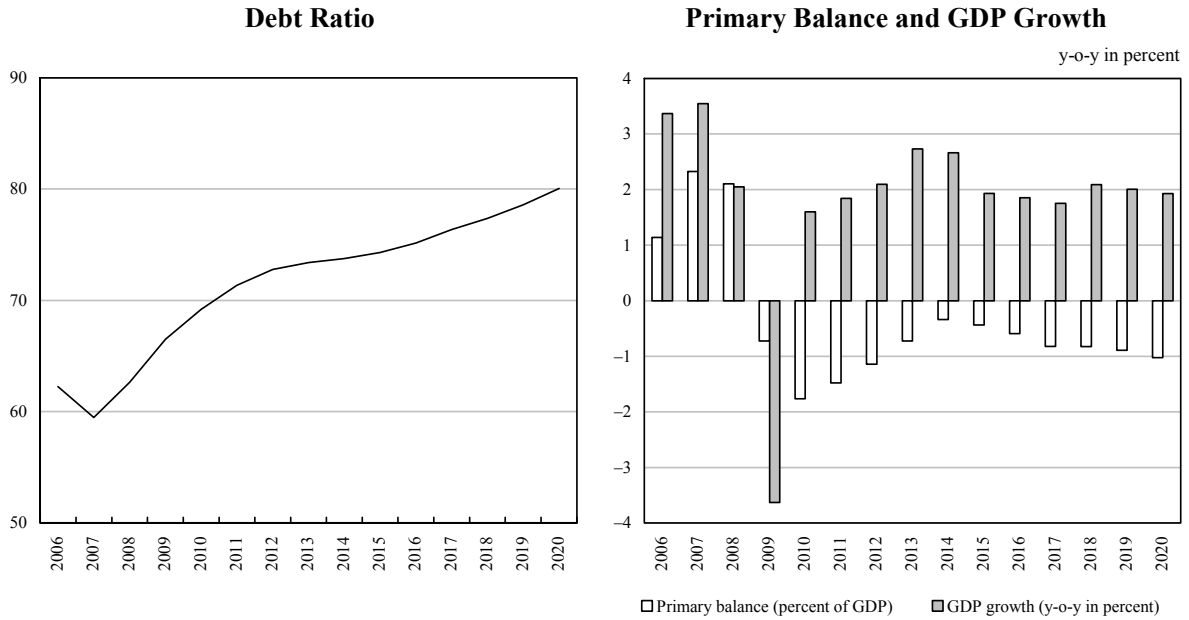
⁷ We wish to thank Caroline Haberfellner for having made the underlying data available to us. While these data are based on a different macroeconomic scenario (the assumptions were made before the fall of 2008; see below), the dampening effect of comparatively weaker employment growth and of lower real wages on pension benefits (reflecting lower pensionable earnings and shorter contribution periods of newly retiring workers) will remain limited on pensions in Austria until the medium term, because unlike in other countries, pension benefits are indexed to consumer prices in Austria.

⁸ In other words, in this scenario we assume that quantity taxes (such as the petroleum tax), fees, nominally fixed transfers and wage and income tax brackets will be adjusted regularly, or that these factors will offset each other.

⁹ In calculating the budget deficit, we furthermore assumed that the GDP deflator would grow by 2 per cent (thus implicitly using the change in the GDP deflator to calculate real interest rates). The results for the debt ratio and for the primary balance would be the same even if we used different assumptions for the inflation rate (see, e.g., Blanchard and Illing, 2009, chapter 27).

Figure 4

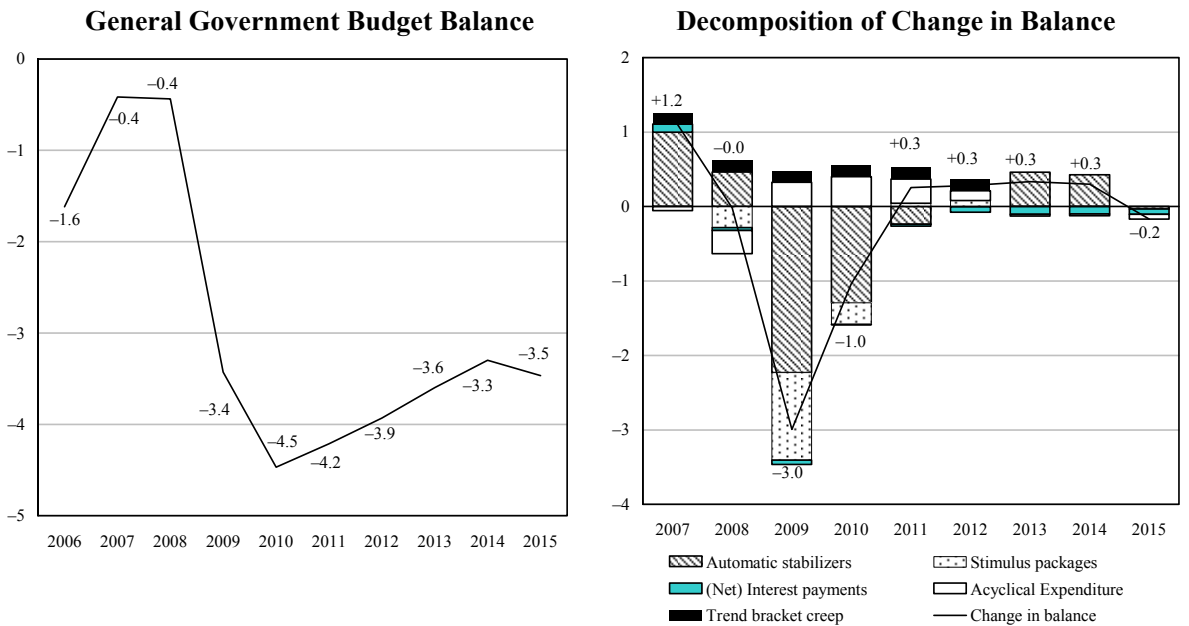
Scenario: Development of Public Finances Without Further Consolidation
(percent of GDP)



Source: OeNB.

Figure 5

Scenario: Development of Public Finances Without Further Consolidation
(percent of GDP)



Source: OeNB.

Figure 5 illustrates the effects of the slow-down in growth on public finances – the light blue bars in the graph for “automatic stabilizers” do not sum to zero between 2006¹⁰ and 2015. When computing the effect of automatic stabilizers on the (change in) budget balance, an average trend growth rate of real expenditure of 2 per cent was assumed. The average rate of real GDP growth in the scenario over this time horizon will, however, be much lower (the loss in potential output until 2014 implied by our scenario is around 5½ per cent compared with the growth rates of GDP in the EC’s (2009c and 2009d) Ageing Report).

The contribution of stimulus packages to the change in the budget balance is strongly negative from 2008 to 2010 (when different measures came into effect) and slightly positive in 2011 and in 2012 (when some parts are expected to expire). From 2009 to 2012 there is a positive effect on the balance of the development of acyclical primary expenditure,¹¹ a trend which cannot be sustained without structural reforms. The already observed expenditure containment in 2009 can be mainly attributed to the newly implemented budget framework for the federal government (see also Box 1 in Section 2.2.1). This containment is expected to continue over the next few years, which is partly due to a lowering of expenditure ceilings for the period 2011-13. However, a permanent dampening of the expenditure path is rather unlikely without structural reforms, and such reforms have not been announced yet.

A positive contribution over the projection horizon comes from the trend bracket creep in the income tax which vanishes after 2011 due to our assumption of indexation from 2012 on; in Section 2.2.3 we will discuss what would happen if there were no regular adjustments of nominally fixed categories in the Austrian income tax and transfer system.

The scenario outlined here is somewhat more optimistic about the development of the debt ratio until 2020 than the baseline scenario that the European Commission used in its latest Sustainability Report (2009f).

The diverging underlying assumptions make the projections of the individual scenarios hard to compare, though. For instance, the scenarios of the European Commission are implicitly based on a spending elasticity of close to 1 relative to real GDP (with the exception of pension payments). A spending elasticity of close to 1 means that the shares of spending aggregates in GDP will remain broadly constant as long as the demographic composition remains constant. If we assume GDP to have dropped by a cumulative 10 per cent over x years, this would mean that, say, health care expenditure will likewise have gone down by a cumulative 10 per cent over the same period.¹²

In our scenario, we have expressly refrained from making such an assumption, even though real spending growth will have to go down by necessity during an economic setback in order to avoid an explosion of spending. Yet such measures are in fact already consolidation measures. Moreover, this assumption would imply that, in a short- to medium-term perspective, automatic stabilization would be limited to cyclically sensitive spending categories (typically passive labor market policies).¹³

¹⁰ As of now, the output gap for 2006 is estimated to be slightly positive (see also Figure 3). So the sum of the bars in Figure 5 slightly overestimates the negative impact of automatic stabilizers.

¹¹ When computing the effect of acyclical primary expenditure on the balance, we controlled for cyclical price developments and the direct effects of pension and/or public wage increases on public revenue. Furthermore, we excluded expenditure increases related to stimulus measures.

¹² This assumption is controversial. It does, however, explain why, in the lost-decade scenarios of the European Commission’s Ageing and Sustainability Reports, the additional cost of ageing in percent of GDP is shown to be largely driven by pensions for Austria but also for the EU average, whereas the share of health-care expenditure in GDP remains basically unchanged when compared with the baseline scenario.

¹³ In reality, though, the public sector automatically creates stabilization effects for the real economy by continuing to pay public pensions, retaining public employees, etc.

The minimum structural adjustment need highlighted by our scenario exceeds the 1 per cent of GDP that would be necessary in the short run to stabilize the debt ratio (as outlined above) at the level of 2014. After all, the demographic changes start to affect public households already in the second half of the 2010s, by raising costs for pensions, health care and long-term care, and above all by reducing trend growth. Lower output growth, in turn, increases the primary balance required to stabilize debt, while at the same time causing the actual primary balance to shrink through the effect of the automatic stabilizers. However, the automatic stabilizers affect the primary balance only through weaker tax revenue growth as the slowdown in output growth reflects a smaller supply of labor rather than a rise in the unemployment rate.

1.3 *Developments from 2020 shaped by demographic change*

From roughly 2020 onward, the budgetary pressures of demographic change will increasingly add to the repercussions of the economic crisis. This shift in the weight of the driving factors makes 2020 an ideal end point for our scenario.

The Ageing Report of the European Commission (2009c) projects the working-age population in Austria to keep increasing until 2020, but to decline thereafter (see Table 1 for an overview of key demographic metrics and projected age-related costs for Austria for the period from 2007 to 2060).¹⁴ While the overall population will keep growing beyond 2020, partly through migration, the share of the population aged 65+ will increase by a disproportionately large extent.¹⁵ The reduction in the working-age population will cause potential output growth to drop relatively sharply,¹⁶ which will in turn hurt growth of tax revenues and social security contributions.

At the same time, these projected dynamics – growth of total population, reduction of working-age population – imply that in the absence of offsetting measures the growth rate of public spending will exceed that of revenues or GDP. This is especially true for spending on health care and on long-term care. The pension reforms that Austria adopted between 2001 and 2005¹⁷ actually keep the rise in pension expenditure relatively low compared with other EU countries. Due to these measures, Austria boasts the fourth-lowest real increase in average pensions in the period from 2007 to 2060 within the EU; and within the euro area, Austria is outperformed only by Italy (European Commission, 2009d, Table A66).¹⁸ This is also an important reason why the overall increase in ageing-related fiscal costs is estimated to be under the EU average.

Until roughly 2020, the projected rise in the spending ratios for health care, pensions and long-term care is broadly offset by a considerable decline in the share of spending on education in GDP. The number of students is expected to bottom out in absolute terms around 2020 (European Commission, 2009d, Table A111). From 2020 onward, the share of age-related expenditure in GDP is projected to rise by 3 percentage points until 2050, and to shrink somewhat until 2060.

In the baseline scenario of the Ageing Report the rise in spending is driven not only by purely demographic factors, but also by rising demand (especially for public health care). Some of

¹⁴ The macroeconomic assumptions for the baseline scenario were taken before the summer of 2008, *i.e.* before the economic crisis hit Europe with full force. This is why the results in Table 1 on employment and potential output growth in 2010 and the figures on age-related expenditure as a percentage of GDP are not directly comparable with the scenario until 2020 in Section 1.2.

¹⁵ This causes the dependency ratio to rise sharply.

¹⁶ The baseline scenario projection reflects the assumption that the labor market participation of the working age population (15-64) will rise, that the unemployment rate will drop slightly, and that productivity growth will remain broadly constant in Austria over the period from 2007 to 2060.

¹⁷ Among other things, the reforms provided for longer averaging periods and lower accrual rates. However, some reforms were subsequently diluted somewhat, *e.g.*, through the extension of the early retirement scheme for workers with long employment histories.

¹⁸ However this may raise the issue of “social sustainability”.

Table 1

Key Results of the Ageing Report for Austria

	2007	2010	2020	2030	2040	2050	2060
<i>(millions)</i>							
Total population	8.3	8.4	8.7	9.0	9.1	9.1	9.0
<i>(share of total population, percent)</i>							
65 years and above	16.9	17.6	19.4	23.7	27.2	28.2	29.0
below 15 years	15.6	14.9	14.3	14.1	13.6	13.5	13.8
<i>(annual change, percent)</i>							
Working-age population (from 15 to 64 years)	+0.2	+0.4	+0.1	-0.6	-0.1	-0.2	-0.3
Employment	+0.7	+0.6	+0.2	-0.2	-0.2	-0.2	-0.2
Potential GDP	+2.2	+2.2	+1.9	+1.5	+1.5	+1.5	+1.5
<i>(percent of GDP)</i>							
Age-related expenditure	26.0	25.7	26.2	27.7	28.6	29.3	29.0
<i>of which: Pensions</i>	12.8	12.7	13.0	13.8	13.9	14.0	13.6
<i>Health care</i>	6.5	6.6	7.0	7.4	7.8	8.1	8.0
<i>Long-term care</i>	1.3	1.3	1.4	1.7	2.0	2.4	2.5
<i>Unemployment</i>	0.7	0.6	0.6	0.6	0.6	0.6	0.6
<i>Education</i>	4.8	4.5	4.1	4.2	4.2	4.2	4.3

Source: European Commission (2009c, 2009d).

the assumptions underlying the Ageing Report for the long-term projections for Austria are controversial, like the assumed strong decline in early retirements.

Looking ahead, based on current knowledge, the additional costs arising from ageing would appear to be higher than the additional costs created by the global economic crisis.

1.4 Summing up: Large consolidation effort of about 4 per cent of GDP will be necessary in the medium term

Summing up the results from the scenario in Section 1.2 and the projected effects of ageing in Section 1.3, one could approximate the overall necessary consolidation (and structural reform) effort as follows:

After the output gap has closed and crisis-related temporary effects have run out (expiration of temporary stimulus measures, unwinding of revenue shortfalls) the primary balance will be around $-1/3$ per cent of GDP in our scenario (in 2014). As said before, assuming a trend growth rate of 2 per cent and an average real interest rate of 2.5 per cent, the primary balance of 2014 (the year with the best primary balance in our scenario) has to be improved by about $3/4$ percentage points to reach the 0.4 per cent of GDP which would be necessary to bring down the debt ratio again.

Frontloading the increase in age-related expenditure would roughly take another 3 per cent of GDP. So the overall effort required for consolidation and structural reform is close to 4 per cent

of GDP, which is in line with the most recent sustainability gaps calculated by the European Commission of 3.8 per cent of GDP (S1) and 4.7 per cent of GDP (S2), respectively.

As said before, a lower rate of trend GDP growth implies further consolidation efforts: To give an example: When trend GDP growth shrinks from around 2 per cent to around 1.5 per cent (given an unchanged real interest rate of 2.5 per cent), the primary balance needed to stabilize the debt ratio becomes twice as high. Furthermore a lower trend growth also means that the yearly increases of public expenditure in other areas need to be contained. While the growth of subsidies may be reduced by itself (as lower activity could mean a lower demand for subsidies), that may not be the case in other areas. Given that labour productivity growth is projected to remain constant (see EC, 2009d), growth of average wages can be expected to remain constant as well. And as the overall population of Austria will presumably continue to grow (see Table 1), it might be difficult to contain spending growth in areas like general public services and public order and safety without implementing any reforms.

2 When and how to consolidate?

The following section essentially deals with the action required to offset the rise in the deficit and debt ratios in the aftermath of the economic crisis of 2008-09. Economic policy measures that may be taken to counter the problem of demographic change are also touched upon in this section.

2.1 Fundamental considerations

Given the sharp global contraction, the expansionary fiscal measures that policymakers adopted by concerted international action to dampen the setback and stabilize the real economy have driven up public deficits. If the consolidation drive of the coming years is to be a success, it will have to go beyond a mere stabilization of the debt ratio once the crisis is over. There are three reasons for this:

- First, the government will have to create scope for the operation of the automatic stabilizers and for discretionary measures that may have to be taken in future crises¹⁹ – in other words, the government will have to strengthen Austria's resilience to shocks. As evidenced by Nowotny (2009), the stabilizing function of fiscal policy had been limited since the 1980s because of insufficient action to reduce structural deficits.
- Second, the challenges that result from ageing populations, as outlined in Section 1.3, will have to be tackled. These challenges alone imply that the medium-term need for fiscal adjustment and structural reforms will go far beyond the short-term requirements under the corrective arm of the Stability and Growth Pact (reducing the deficit ratio to below 3 per cent).
- Third, Austria will have to meet the requirements of the European fiscal framework (see below).

2.1.1 Coordinated action within the European fiscal framework is required ...

While the principle necessity of post-crisis consolidation is undisputed, there is a lack of agreement about when the crisis would be considered to be over, and about when to actually launch consolidation measures. Making the start of consolidation contingent on a self-sustained economic revival is equally problematic. The contraction bottomed out. However, unwinding expansionary

¹⁹ According to an IMF analysis of the packages adopted by India, China and the G-7 countries, countries with originally lower debt ratios have tended to put together bigger packages (Horton and Ivanova, 2009).

fiscal measures too soon could jeopardize the as yet fragile recovery²⁰ and would thus prolong the recession and increase unemployment (and hence undo previous improvements of the fiscal situation to a certain extent); there is no unambiguous empirical evidence for the existence of non-Keynesian effects in this context.²¹

Given the high degree of international economic integration, national consolidation measures have dampening effects on trading partners' economies. These spillover effects and the prevention of free-riding behavior essentially call for consolidation strategies to be coordinated internationally similar to the way support measures have been coordinated.

For the EU Member States, the Stability and Growth Pact constitutes an operational framework for coordinating the timing and extent of consolidation. Under the provisions of the excessive deficit procedures under Article 104 (7) of the Treaty, the earliest possible start of consolidation as well as the year until which the deficit must have been brought back below 3 per cent of GDP have been laid down for the countries concerned. Moreover, the minimum structural consolidation that is to be achieved per year during the respective period has been specified. The recommendations and requirements of the European Commission or of the European Council are guided by the principle of taking adequate account of national conditions and particularities, such as the size of the economic or fiscal contraction, or the size of the debt.

Based on the recommendations of the European Council (2009) made at the end of November 2009, Austria should continue implementing the fiscal measures under the stimulus package in the first half of 2010. At the same time, Austria is expected to develop a detailed consolidation strategy until June 2010, which it should start implementing in 2011, so as to remove the excessive deficit by 2013 (this is the deadline for most euro area countries in EDP). Consolidation should moreover be designed to reverse the trend in the government debt ratio, so as to ensure a gradual reduction to the reference value of 60 per cent of GDP in the foreseeable future.

2.1.2 ... and a credible long-term strategy that is communicated as soon as possible

According to the OECD (2009f), it would be important to target a smooth transition between phasing out temporary support measures stimulating the economy and strengthening financial market stability, and phasing in structural measures with a medium- to long-term horizon. When unwinding temporary stimulus and stabilization measures too late, policymakers run the risk of destabilizing expectations, thus undermining the effect of the implemented measures and raising the actual need for consolidation (through rising interest payments on public debt).

As argued by Giavazzi (2009) structural reform measures promising medium-term savings – such as the introduction of fiscal rules or medium-term finance plans; raising the regular retirement age – should have priority, in order to convince investors that policymakers really mean to resume sound fiscal policies and in order to prevent investors from demanding risk yields on sovereign bonds. While such measures do dampen spending in the medium term, they do not imply any short-term setback in demand.

In principle, there can also be negative effects on economic activity from the sole announcement of consolidation measures, for example when finite-lived forward looking agents take future decreases in monetary transfers into account and decrease consumption immediately.

²⁰ The situation might be different in some other EU countries where – regardless of possible negative effects on the recovery – consolidation had to start immediately due to strongly elevated spreads on government bond yields which signal doubts on the solvency of these countries.

²¹ See Prammer (2004) for an overview of non-Keynesian effects, a description of the conceptual frameworks and an assessment of their empirical relevance.

However, such negative effects of announcements should be very limited: Government consumption and government investment use up resources and so changes in these aggregates affect GDP when they take place, and empirical studies on quasi-experiments with tax rebates indicate that even the timing of monetary transfers matter (which might be due to liquidity constraints and/or myopia; see for example Blinder, 2004).

2.2 *Where to start with consolidation?*

The potentially most controversial issue is the question of which taxes to increase, and which spending items to cut. Public interventions in time of crisis and exit policies may have highly divergent effects on macroeconomic developments, depending on the design of the measures and the starting conditions (see also the example of Japan versus Sweden and Finland in Gaggl and Janger, 2009).

2.2.1 *Spending cuts and, if need be, higher “growth-friendly” taxes...*

A (sustainable) consolidation strategy hinges above all on an adjustment of the primary balance, which may a priori be achieved through spending cuts or revenue increases. Empirical evidence suggests that consolidation measures tend to be more successful (i.e. more sustainable) when they are based on spending cuts (e.g., Ardagna, 2004; European Commission, 2007, part IV).

Spending cuts should, as much as possible, be supported through an increased output orientation and measures that raise efficiency. In this respect, the new federal budget law (see box 1) may create a positive momentum, as may efforts to improve the quality of the public finances in general (e.g., Haberfellner and Part, 2009). As already indicated in Section 1.2.2, first effects of the new budgetary framework could already be observed in 2009 where growth in federal expenditure was extraordinarily low. Low growth of public wages and intermediate consumption implied by low growth of expenditure ceilings in 2011 and 2012 are the only fiscal adjustment effort included in the OeNB's June 2010 forecast presented in Section 1.

Measures to improve the incentive structures of the fiscal sharing scheme (Schatzenstaller, 2006)²² as well as measures to enhance the efficiency of public administration at all levels of government and in the area of health care and education have typically been cited as ways to achieve this goal (e.g., during the latest IMF article IV consultations with Austria, see IMF, 2009 and 2010b). Furthermore the Austrian Institute for Economic Research suggests reducing the level of capital transfers and subsidies to private sector companies, which are very high in Austria by international standards (see Aiginger *et al.*, 2010).

On the revenue side, policymakers would be well advised to consider redistribution effects as well as the “growth friendliness” or the allocative effect of different options. Based on an empirical study by Johansson *et al.* (2008), the OECD (2009e) has formulated the general recommendation of raising taxes on immovable property and consumption (above all the consumption of goods with negative externalities such as alcohol, tobacco and fuel).

Likewise, the IMF (2009) advised Austria against increasing the tax burden on labor, recommending petroleum tax and tax increases on immovable property instead,²³ thus mirroring the recommendations identified by the Austrian Institute of Economic Research (Aiginger *et al.*, 2010).

²² For instance, it has often been criticized that compulsory school teachers are regional civil servants but paid by the central government (see also Government Debt Committee, 2009).

²³ The IMF estimates that those measures might contribute up to ¾ per cent of GDP to consolidating the budget.

Box 1
New (Federal) Budget Framework in Austria²⁴

The Austrian Parliament adopted the Austrian Federal Budget Reform in December 2007. As this reform is quite large in scale, it is implemented in two stages.

The first stage was implemented in 2009 with the introduction of a legally binding 4-year medium-term expenditure framework (MTEF) including an explanatory strategy report. The binding ceilings are enacted into law. The ceilings for about 80 per cent of total expenditure are fixed in nominal terms. Nevertheless, some expenditures which either heavily depend on the business cycle or on total tax revenues have variable ceilings based on certain indicators (e.g., unemployment benefits).

The five headings of the Medium Term Expenditure Framework (1. General Government Affairs, Court and Security; 2. Employment, Social Services, Health and Family; 3. Education, Research, Art & Culture; 4. Economic Affairs, Infrastructure and Environment; and 5. Financial Management and Interest) represent the main policy fields. Expenditure ceilings are set on the heading level as well as for the underlying budget chapter level representing the different ministries' portfolios. These ceilings are binding – at the heading level for four years, at the chapter level for the following year. The chapter level limits for the other three years will be of a merely indicative character. At the same time, incentives for line ministries to use resources more efficiently have been created by granting them more flexibility in building reserves and allowing them to carry forward appropriations from one year to another.

The spending ceilings are adopted, and may be changed, by Parliament. The MTEF is expected to tighten spending discipline. By offering a stable framework, the MTEF should contribute to sustainable public finances.

The second stage of the budget reform consists of a new budget structure (global budgeting instead of line item budgeting), result-oriented management of state bodies, accrual accounting and budgeting and performance budgeting and will take effect in 2013. The current budget law primarily focuses on inputs; the second step of the reform aims at interweaving input-, output- and outcome information in the budget documentation in a consistent and transparent manner. Outputs and outcomes will be formulated for all policy fields on all budgetary levels – with a focus on priorities to prevent an administrative overkill. As the objective of the reform is to create better instruments for management decisions, for budget steering activities as well as improved information for politics, administration and the public about the financial status of the ministries and the federal sector, there is also the need to reform the accounting and budget system.

Moreover, there is the potential to raise additional revenue by correcting the relative discrimination of owning fixed-income financial assets (interest and dividend income are subject to taxation while capital gains are only taxed under very specific circumstances).

²⁴ For further information see Meszarits *et al.* (2008).

Payroll and wage taxes as well as relatively high social security contributions push the average and marginal tax burden of Austrian workers with low or medium wages far beyond the corresponding OECD and EU-15 averages (OECD, 2009d). This is why policymakers would be well advised not to increase taxes on labor any further (Haberfellner and Part, 2009). We also wish to point out that – from an incentive perspective – the tax burden on labor needs to be assessed together with the transfer system, as upper income limits or progressive adjustments of transfers raise effective marginal tax rates.

2.2.2 ... supported by structural reforms which raise potential output

Sustainable consolidation strategies go beyond improving budgetary conditions by effectively contributing to raising the growth path in the medium run. A comparatively higher growth path will, in turn, create leeway for fiscal policy. This section discusses shortly which measures could raise the path of potential output and support fiscal consolidation.²⁵

Due to demographic change increasing the labor supply will be a crucial task for economic policy to dampen the decrease in trend growth. In Austria there is potential to increase the participation rates of specific groups, such as older workers, women, migrants and low-skilled workers.

In spite of increasing life expectancy, the average retirement age has declined by about three years since 1970 for both men and women (Sozialversicherung, 2009).²⁶ In 2008, the employment rate of older workers was far below the EU-15 average (41 versus 47.5 per cent). The OECD (2007) suggests limiting invalidity pensions and other possibilities for early retirement (such as the early retirement scheme for workers with long employment histories) to raise the *de facto* retirement age. Such a measure would have to be accompanied by measures to increase the employability of older workers (such as flattening the seniority wage curve and enhancing lifelong learning and the acquisition of transferable skills). Obviously, reforms in this area would also have direct fiscal implications by decreasing the growth rate of pension expenditure.

At 65 per cent, the employment rate of women in Austria was about 5 percentage points above the EU-15 average in 2008, but below the average of Switzerland and the Nordic countries. Furthermore, the share of part-time employment is very high; especially for women above 30 (see Grossmann *et al.*, 2009). This can be attributed to the system of half-day schooling and the limited supply and quality of formal childcare. The OECD (2009b) has, among other things, identified the training of kindergarten teachers as well as the sharing of competences between federal and regional government as possible areas for improvement in the latter area. Changing to a system of full-day schooling and following the OECD's recommendations on child-care could not only raise female labor supply, but also enhance the quality of labor in the future. Thereby it would also ease the integration of migrants (and their descendants) into the labor market.

Despite relatively high (and above EU-average) spending on research and development, there is some potential in Austria to increase potential output by raising aggregate productivity. Possible measures include improving the supply of risk capital, a reform of the financing of universities, fostering competition in the service sector (more resources for regulators, measures to increase price transparency ...) and so on.²⁷

²⁵ More details can be found in Grossmann *et al.* (2009) and Janger and Reinstaller (2009).

²⁶ In 2008, the effective retirement age for old age pensions was 62.7 years for men and 59.5 years for women, compared with 53.7 years or 50.3 years for invalidity pensions. Invalidity pensions have been sharply on the rise compared with old-age pensions since 2003, accounting for roughly one-third of the annual number of new pensions (Sozialversicherung, 2009).

²⁷ For more recommendations in this area see Grossmann *et al.* (2009); Janger and Reinstaller (2009); Aiginger *et al.* (2006); and the OECD's economic survey on Austria (2007).

2.2.3 Temporarily higher inflation is no viable option

In the literature, allowing for higher inflation rates is also discussed as a possible solution, for example by Rogoff (2008) (in the context of public and private debt).

One channel is seigniorage: The amount of cash in circulation in the euro area is about 9 per cent of GDP, so a 1 per cent increase in the price level leads to non-recurring seigniorage revenue in the range of 0.1 per cent of GDP, which also corresponds to the G7-average estimated in Cottarelli and Viñals (2009a).

Furthermore, an unexpected rise in inflation would lead to a real devaluation of the non-indexed medium-to-long-term part of outstanding public debt which is denominated in domestic currency. The IMF (2010a) estimates that an annual inflation rate of 6 per cent from 2009 to 2014 in highly developed major economies would depress the debt ratio by an average of 8 to 9 percentage points by 2014 (compared to the 2014 debt ratio in a baseline scenario with an average growth of the GDP deflator of about 2 per cent). For euro area countries, the estimates are close to 7 percentage points for Germany and 10 percentage points for France, the latter having a much higher non-indexed medium-to-long-term debt compared to GDP. Austria has a lower share of short-term debt than most other OECD countries (see Cecchetti *et al.*, 2010); when accounting for SWAPs, the foreign currency share in overall debt is around 3 per cent (as of January 2010) and the debt ratio is slightly below the ones of France and Germany. So the effect of the IMF scenario in Austria should be in the range of 10 percentage points.

However, higher inflation would also devalue claims held by the government, like holdings of participation capital in Austrian banks under the support measures for the financial sector.²⁸

A crucial factor for the “success” of inflating away part of the debt is the disinflation period. If the disinflation is not credible and inflation premia and nominal interest rates remain high, governments would have to pay high real *ex post* interest rates. So the financing needs of governments during this period are an important determinant for the long-run effects of temporarily higher inflation.²⁹

However, one has to be aware that the current situation differs from past episodes of high public debt ratios, which have typically been the result of warfare. While wars may sharply drive up national debt levels, the primary balance will, as a rule, improve automatically once the war is over (as military expenditure goes down again; see also Reinhart and Rogoff, 2010). This is indicated in Figure 6, which shows the development of public finances before, during and after warfare in the UK and the US. For both countries we see a huge increase in the debt-to-GDP ratio during wartime and a substantial improvement in fiscal balances (a proxy of the primary balance in the case of the US and the change in debt for the UK) which is driven by a large drop in defense spending.

At the current juncture, however, deficits are likely to remain high without substantial consolidation. A real devaluation of outstanding public debt would indeed reduce the effect of additional interest payments by (at least temporarily) lowering the debt ratio, yet it would have no direct impact on the primary balance, which has deteriorated permanently given a loss in output and lasting economic stimulus measures.

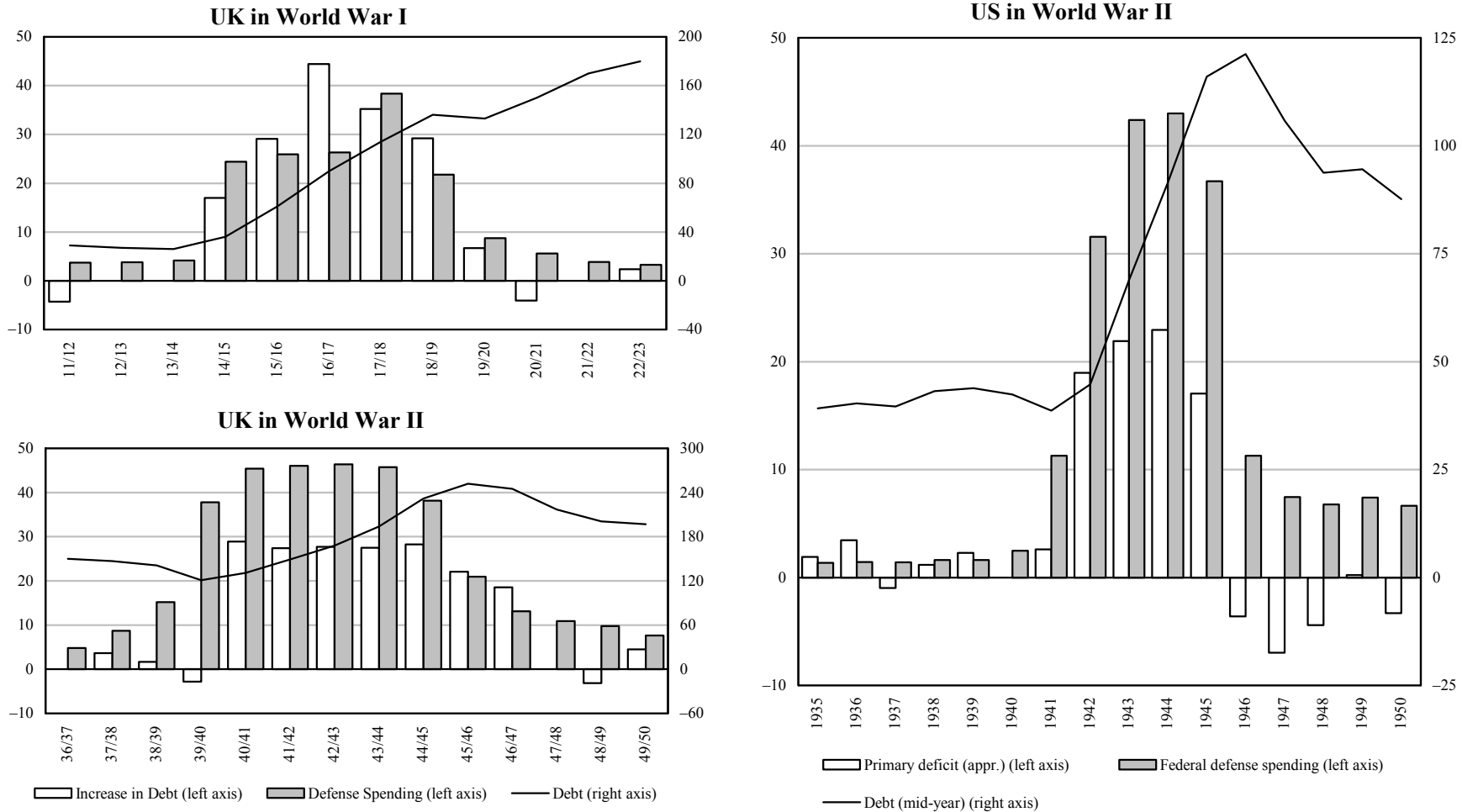
Furthermore, average debt maturities have shortened during the crisis in many countries (including Austria), which further increases financing needs in the short-to-medium term.

²⁸ In 2008 actual interest payments by the government were 2.5 per cent of GDP while received interest income was 0.6 per cent of GDP.

²⁹ One possible way to circumvent these adverse effects on public finances in the disinflation phase would be to issue inflation-indexed bonds (which would also prevent a rise in real interest rates via higher inflation uncertainty premia).

Figure 6

Wars, Deficits and Debt: Experience of US and UK
(percent of GDP)



Source: ukpublicspending.co.uk, US Bureau of Economic Analysis, US Treasury.

The probably most important argument against using high inflation for easing the interest burden on public debt is that such a policy would have substantial negative effects on the real economy like distortions in resource allocation (see IMF, 2010a) and a loss in confidence in (monetary) policy institutions. It could also substantially hurt households in the middle class, as their portfolios usually have a much higher share of fixed-income products than the richest households (see Fessler and Schürz, 2008, for Austria).

Higher inflation rates could, however, substantially affect the primary balance indirectly via the non-neutrality of inflation in the tax system and a real devaluation of nominally fixed transfers.³⁰ Immense distortions could arise in the context of taxation of nominal profits and interest payments. For example, households' income from interest payments is taxed at 25 per cent in Austria. So a 3 per cent interest rate with 2 per cent inflation would mean a net real return of 0.25 per cent (and tax payments of 0.75 per cent) while a 7 per cent interest rate with 6 per cent inflation would mean the same before-tax real return of 1 per cent while the net real return would be -0.75 per cent (with tax payments of 1.75 per cent).³¹

2.3.4 A very attractive no-go: consolidating via bracket creep

The non-neutrality of tax systems to inflation (and nominal GDP growth) is also an important issue when making long-run projections of public finances. While in a balanced-growth path proportional taxes like VAT or corporate income tax should in principle grow at the same rate as GDP without any policy change,³² this is not true for excise duties, nominally fixed transfers and the personal income tax.

In the current OeNB forecast, the elasticity of the income tax paid by employees on the average wage rate is 1.8 and the elasticity for pensioners is even 2.³³ So not adjusting the brackets for growth of average wages and pensions (or not even for inflation) would increase revenue substantially. As Table 2 shows, we expect the income tax of employees to make up about 5.8 per cent of GDP in 2010 and income tax receipts of pensioners 1.7 per cent. Assuming no change in brackets until 2020, nominal GDP growth of 4 per cent per year (in line with the macroeconomic scenario from above), a development of pension payments and employment as in the Ageing report, and nominal growth of average wages of 3 per cent, these numbers would increase to 6.5 and 2.4 per cent, respectively. This would imply a rise in the ratio of income tax over GDP by 1.4 percentage points, despite an assumed decrease in the wage share in GDP. Furthermore, while gross public pension payments would increase stronger than GDP over this horizon (see Table 1), the ratio of net pension payments over GDP would actually decrease.

In our simulation we assume that there are no behavioral changes; however, negative effects on labor supply are very likely to be a by-product of such a policy. The tax burden on labor significantly increased over the last decades. Thus, given the already very high burden on this production factor (see Section 2.2.1), raising taxes should be considered a NO-GO. However, a

³⁰ In their recommendation of raising inflation targets, Blanchard *et al.* (2010) also say that tax systems are often not designed for high inflation.

³¹ Additional indirect effects of higher inflation could arise via a lagged response of (parts of) the expenditure side. However, they should be negligible as wages are likely to show a lagged response too and they are by far the most important tax base in Austria.

³² To a very small extent, nominally fixed categories are also relevant for VAT (the revenue threshold above which companies are subject to VAT is nominally fixed) and corporate income tax (there is a nominally fixed minimum tax payment which has to be made every year regardless of profits); but the effects of non-indexation of these brackets is negligible.

³³ The OECD (2008) analyzes the extent of bracket creep in overall wage taxation in different OECD economies. Comparing these numbers with updated figures for Austria (the 2005 tax reform strongly increased the degree of progressivity in the Austrian income tax system; see Breuss *et al.*, 2004) indicates that the potential for consolidation via bracket creep in wage taxation is similar to the OECD average.

Table 2

Mediu-term Effects of Bracket Creep
(percent of GDP)

	2010	2020	Difference
Income tax of employees	5.8	6.5	0.8
<i>Memo: Compensation of employees</i>	49.9	46.0	
Income tax of pensioners	1.7	2.4	0.7
<i>Memo: Gross pensions (Ageing Report 2009)</i>	12.7	13.0	
Overall	7.5	9.0	1.4

Source: OeNB.

decrease in income tax brackets in the next few years is very unlikely and the most recent tax reforms (2000, 2005, 2009) compensated only for part of the previously incurred bracket creep.

On the expenditure side, part of the transfer payments is also nominally fixed. Among monetary transfers, family related transfers play a special role in fiscal projections for the next decade(s): In 2010, they are projected to make up around 2 per cent of GDP. Looking at the demographic assumptions in EPC, the number of eligible people³⁴ will decrease by about 10 per cent until 2020. So even if these transfer payments are indexed to prices (but not to real growth), their share in GDP would decrease to around 1.5 per cent in 2020. The fiscal space created by these demographic changes could be used to increase transfers in kind to families (see Section 2.2.1).

3 Conclusions

A permanent loss in potential output following the crisis and the permanent nature of many discretionary stimulus measures have created a need for adjustment that goes significantly beyond the need to finance the economic stimulus packages *ex post*. The repercussions of the crisis on public finances are going to be exacerbated in the medium term also by the implications of demographic change.

In view of the anticipated negative effects on the real economy and in order to prevent free-riding behavior, policymakers should coordinate their measures internationally (and are, indeed, obliged to do so within the EU by the Stability and Growth Pact). While determined action is required to implement the necessary considerable fiscal adjustment, policymakers must at the same time proceed with sufficient caution so as not to jeopardize the as yet fragile recovery. Nevertheless governments would be well advised to develop credible consolidation programs rather soon, in order to ensure rapid implementation during the next recovery stage and in order to secure public confidence in the sustainability of public finances. Consolidation should focus on spending cuts, while avoiding conflicts with other economic policy goals (e.g., in the research and education areas). Any revenue-side measures should dampen growth as little as possible, which would speak for an increase in specific excise taxes and in taxes on immovable property.

These measures should be supported by structural reforms raising potential output (and thereby increasing tax revenue) like measures to increase the average retirement age.

³⁴ Most of these transfers are for children who are underaged and/or in professional education (including tertiary education).

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