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Options for Revenue-based Fiscal Consolidation

A balanced consolidation strategy focuses on measures targeted at the expenditure side of the budget. In addition it will resort to accompanying revenue options. The respective recommendations elaborated by WIFO are based on selected tax measures with positive economic effects as well as proposals for limited privatisation, which permits to retain the ownership of strategically important public companies.

This article is based on the following WIFO study: Karl Aiginger, Michael Böheim, Kristina Budimir, Norbert Gruber, Hans Pitlik, Margit Schratzenstaller, Ewald Walterskirchen, Optionen zur Konsolidierung der öffentlichen Haushalte in Österreich, February 2010, 175 pages, € 60, free download: http://www.wifo.ac.at/www/jsp/index.jsp?fid=23923&id=38441&typeid=8&display_mode=2 Options for the Consolidation of Government Budget in Austria. Executive Summary, 12 pages, € 20, free download: http://www.wifo.ac.at/www/jsp/index.jsp?fid=23923&id=39722&typeid=8&display_mode=2 • The authors are grateful to Gunther Tichy for helpful and constructive comments. • The data were processed and analysed with the assistance of Elisabeth Neppi-Oswald and Andrea Sutrich • E-mail addresses: Michael.Boeheim@wifo.ac.at, Heinz.Handler@wifo.ac.at, Margit.Schratzenstaller@wifo.ac.at

In addition to the fiscal consolidation potential of spending cuts, discussed by Pitlik – Budimir – Gruber (2010) in this issue, generating additional revenues is a further option. A revenue-based consolidation can draw on an increase of taxes and levies on the one hand and on the generation of privatisation proceeds on the other hand.

Although the empirical literature attributes a higher probability of success to an expenditure-based consolidation than to revenue-based measures (Pitlik – Gruber – Walterskirchen, 2010), it seems sensible not to rule out tax increases and privatisations a priori in view of the sheer size of the consolidation requirements (Aiginger – Pitlik – Schratzenstaller, 2010).

However, a consolidation programme that is also based on additional revenues has to meet two principal requirements: firstly, tax increases for consolidation purposes should be applied to a broad taxable base, i.e., they should not only rely on an increase of a single "mass tax", so that the burden resulting from each affected tax and thus potential side effects will be minimised. Secondly, tax increases and privatisation aiming at fiscal consolidation should be part of a concept for a long-term reform of the expenditure structure and of the public sector's functions: Lowering taxes on labour (wage tax, social contributions), which are unusually high and rising in Austria, would substantially improve the growth and employment neutrality of the Austrian tax system – particularly for lower and middle incomes¹. To compensate for revenue losses, tax exemptions that entail undesired economic effects should be abolished in a structural reform. Certain taxes, which are likely to have positive macroeconomic steering effects (taxes on the use of the environment and energy, and on the consumption of alcohol and tobacco and on gambling) as well as certain taxes on property could be raised (Aiginger et al., 2008). Additional revenues from the tax increases mentioned above should temporarily serve the purpose of consolidation, in the long run, however, they should be used to offset a lowering of taxes on labour, which are detrimental to growth and employment. Similarly, one-off proceeds should not be the main focus, when public assets are privatised. Rather, the long-term consequences for a desirable and efficient division of labour between the public sector and the private sector should be taken into account.

¹ On the structure of the Austrian tax system, which is unsatisfactory both in terms of growth and employment policy and in terms of distribution and environmental policy, Schratzenstaller (2009).

The options for a revenue-based consolidation, which are discussed below, include the abolition of tax exemptions, levying excise taxes on public bads and taxes on property, the increase of mass taxes (wage and income tax, VAT, social contributions)² as well as privatisation. In addition to a quantification of potential revenues the authors discuss the expected economic effects.

The Austrian tax system allows for numerous exemptions, the abolition of which would not only entail positive fiscal effects, but would also be conducive to other economic policy objectives (e.g., the scrapping of tax breaks which are counterproductive from the perspective of employment or ecological considerations³) and would contribute to a simplification of the overall tax system. Based on current budgetary costs potential additional revenues from the abolition of capped special expenses ("Topfsonderausgaben"), tax privileges for the 6th to 10th hour of overtime per month and the sole earner allowance for childless couples would add up to an amount of € 500 million per year (Table 1). The VAT exemptions (e.g., for the operation of museums, theatres, zoos, nature reserves and botanical gardens), the review or abolition of which the European Commission has demanded from Austria for some time, entail costs of € 250 million per year for the government. As not all exemptions can be abolished immediately, the additional revenues from this measure are estimated at € 170 million. In this context the effects of halving the VAT rate for medicine due to the decisions of the Austrian Parliament of September 2008, which involves tax losses rising annually from € 270 million in 2008 to € 350 million in 2013, should also be reviewed.

Revenue potential from taxes and levies

Reduction of tax exemptions and tax simplification

Table 1: Potential additional revenues from the abolition of tax exemptions

	Additional revenues Million € p.a.	Explanation
Abolition of capped special expenses ("Topfsonderausgaben")	170	Simplification
Abolition of tax privileges for the 6th to 10th hour of overtime per month	100	Positive employment effects
Abolition of the sole earner allowance for childless couples	60	Improvement of the targeting of family policy
Abolition of VAT exemptions	170	Simplification
Total	500	

Source: WIFO.

Beyond the recommendations for a scrapping of tax privileges which are given here further measures could be taken, which support private consumption expenditure in order to offset potential negative (short term) demand effects of the consolidation efforts. This applies particularly to the field of the promotion of savings; a reduction, e.g., of the deductibility of insurance premiums for private pension schemes, of tax exemptions during the build-up of savings as well as of the pension payments themselves or of the promotion of house purchase savings for higher incomes could reduce the savings ratio in the medium term.

Taxes on socially undesirable activities are an important and market-conforming instrument to internalise external costs and thus to curtail these public bads⁴. The latter include environmental and energy taxes as well as taxes on the consumption of alcohol and of tobacco and gambling, the latter causing not only external but also individual costs.

Excises on public bads

² Most of the options presented here are described and explained in greater detail in Aiginger *et al.* (2008).

³ Köppl –Steininger (2004) on ecologically counterproductive elements of the tax system.

⁴ Aiginger *et al.* (2008) provide a detailed discussion of the options for a more intensive use of taxes on public bads.

Mineral oil tax on fuels, which is designed as an ad rem tax, is an important environmental tax affecting traffic. Its steering effect could be enhanced by raising it. A CO₂ tax on all fossil fuels depending on their emission intensity would be another option to boost environmental taxes. In view of the permanently increasing electricity consumption the rate of the electricity surcharge could be raised additionally.

These options or a combination of them (Table 2) could each generate additional revenues of € 1 billion per year. As even in the case of an increase of the environmental taxes compensations and exemptions will be granted to industries that are particularly exposed to international competition (e.g., transport companies) or to private households (e.g., with a low income), potential additional revenues are estimated at € 500 million here.

Taxes on the consumption of energy and the use of the environment

Table 2: Options for raising revenues from environmental taxes

	Additional revenues Million € p.a.	Annotations
Increase of the mineral oil tax on fuels by € 0.10 per litre of petrol and diesel oil	1,000	Petrol and diesel oil prices still lower than in Germany and Italy
Introduction of a CO ₂ tax on fossil fuels of € 30 per ton of CO ₂	1,000 ¹	Taxation of fossil fuels in accordance with their CO ₂ emission intensity.
Raising the electricity tax from € 0.015 to € 0.0275 per kWh	1,000 ¹	Curbing of the permanent increase of electricity consumption
Increase of the mineral oil tax on fuels by € 0.03 per litre of petrol and diesel oil, introduction of a CO ₂ tax of € 10 per ton of CO ₂ , introduction of an electricity tax of € 0.01 per kWh.	1,000	Due to the combination of the three options the increases of the individual taxes are lower; several ecologically relevant consumption categories are targeted, there is a basis for future gradual tax increases.

Source: Kletzan – Köppl – Kratena (2008). – ¹ Net, after compensation payments to energy intensive companies.

Table 3: Options for an increase of revenues from taxes on public bads

	Additional revenues Million € p.a.
Increase of the tax on cigarettes from € 26.69 to € 46.25	310 to 520
Reintroduction of a wine tax of € 0.11 per litre	30
Increase of the beer tax from € 2 to € 2.50 per degree Plato	50
Legalisation of petty gambling in Upper Austria, Salzburg, Burgenland, Vorarlberg, Tyrol and levying a slot machine tax	50
Total	440 to 650

Source: WIFO.

In addition, raising the tax on cigarettes to the EU-15 average, a reintroduction of the wine tax, an increase of the beer tax as well as levying a slot machine tax in five Länder, where petty gambling is still illegal, could yield total revenues of between € 440 million and 650 million (Table 3). Due to expected tax exemptions additional revenues of € 400 million are assumed.

In Austria the contribution of taxes on property to the overall tax revenues is below average and declining, whereas the weight of taxes on labour is above average and rising in the long term. As shown by empirical studies, e.g., of the OECD, a tax system which relies on taxes on property rather than on labour taxes, provides a better basis for economic growth than one which heavily taxes personal and business income. As the Austrian tax system as a whole exhibits little tax progression⁵, an enhancement of taxes on property seems justified also from a distribution policy perspective and according to the ability-to-pay principle.

Taxes on property

⁵ The bottom income decile bears a total tax burden of 37.3 percent of the total gross equivalent income, the top income decile bears a burden of 40 percent (Guger et al., 2009).

For several reasons the reintroduction of the general wealth tax, which was abolished in Austria in 1994, is not a recommended option. Firstly, a general wealth tax which targets all assets entails substantial administrative costs for taxpayers and tax authorities. Secondly, enforcement and control problems arise, especially in the private sphere (banking secrecy); therefore the Austrian wealth tax was largely paid by companies (80 percent of revenues). Thirdly, in the business sector the wealth tax is a burden on the net asset value, when companies do not earn profits; this may be avoided by an exemption of the business sector from taxation, but this would create incentives for transferring private assets to the business sector. Fourthly, in an increasingly internationally integrated economy enforcement problems are likely to arise, especially in the field of financial assets, because it is to be feared that moveable assets are transferred abroad to evade taxation.

Pure wealth taxes are hardly levied in other countries any more either (in the OECD or in the EU this is the case only in France, in Switzerland and in Norway). However, numerous OECD countries use certain taxes on property much more than Austria and to an increasing extent: especially real property tax (which is levied in 24 EU countries), capital transfer taxes, among others stock exchange transfer tax (in 8 EU countries), and inheritance and gift tax (in 17 EU countries). In addition, capital gains are subject to taxation in the majority of OECD countries, often irrespective of the period during which the assets have been held and at a uniform, relatively low, flat rate withholding tax.

Self-evident options for Austria consist in a reform of capital gains tax as well as real property tax for non-agricultural land and real estate. Potential additional revenues could amount to slightly more than € 1 billion, if revenues from the reintroduction of the stock exchange transfer tax and a reformed inheritance and gift tax⁶ are added.

Starting from the estimated market value of real estate a reformed real property tax, the base of which would be the market value instead of the assessed value (unit value), would generate additional revenues of at least € 500 million⁷, even if owner-occupied homes as well as agriculture and forestry were partly exempted and the tax rate would be significantly below the current rate (1 percent). The assessed values were surveyed for the last time in a principal assessment ("Hauptfeststellung") in 1972 and adjusted overall since then⁸. Therefore there is an increasing discrepancy between assessed values and market values; further, effective taxation differs by region, because land and real estate prices have evolved differently depending on the region in recent decades. Abstaining from a regular adjustment of the assessed value causes a gradual erosion of the tax base and consequently the revenues from real property tax.

In principle real property tax can have a regressive effect. According to WIFO estimates (Guger *et al.*, 2009, using data of 2005) the bottom income decile of property owning households bears a real property tax burden of 0.55 percent of the net household income, for the top income decile this burden is 0.23 percent. The average property tax burden amounts to 0.32 percent of net household income. Under the (unrealistic) assumption that real property tax is passed on completely to rent, the bottom income decile of renting households bears a real property tax burden of 0.58 percent of the net household income, whereas the top income decile bears a tax burden of 0.18 percent of net household income (average: 0.29 percent). However, it remains to be seen whether an increase of real property tax via replacing the assessed value with the market value would necessarily have regressive effects. The undervaluation because of the current tax base can be expected to be par-

⁶ The valuation method for real property to calculate the tax base of inheritance and gift tax was ruled unconstitutional by the constitutional court. As, for political reasons, the thus unconstitutional inheritance tax code was not corrected, it expired in 2008 without being replaced.

⁷ Aiginger *et al.* (2008) expect additional revenues of € 1 billion from a reformed real property tax which is on average applied to 90 percent of real property (market value) at a tax rate of 0.5 percent.

⁸ Since 1972 they have been increased overall by a total of 35 percent; during the same period consumer prices have risen by 247 percent.

ticularly large for high value property. Further, average owner-occupied homes could be subject to preferential taxation, so that the real property tax burden would be correspondingly lower for owners with low and middle incomes. According to a recent study by the Austrian National Bank (OeNB) owner-occupied homes account for only half of all private real estate (Fessler *et al.*, 2009). In the case of rented homes the actual tax incidence of an increase of real property tax depends on the degree of passing the real property tax on to rent. According to the few existing empirical studies on this topic (e.g., Büttner, 2003) it is partly possible to pass real property tax on to rent. Here, too, it is important, to what extent real estate of individual income strata is undervalued, higher quality real estate being likely to be undervalued to a particularly large extent.

It is difficult to estimate the potential revenues from an enhanced capital gains tax, among other reasons because of the volatile taxable base. Felderer *et al.* (2009) calculate – in line with Aiginger *et al.* (2008) – an annual revenue of € 200 million.

For inheritance and gift tax it is assumed that a reform would generate at least the revenue which was realised before their expiration (roughly € 150 million).

As is currently discussed in Germany, a reintroduction of the stock exchange transfer tax, which has been suspended since 2001, should also be considered. In the medium term the revenues from the stock exchange transfer tax should serve to compensate for the abolition of the capital duty, which fiscally penalises debt financing of companies compared to equity financing. The previous Austrian stock exchange transfer tax was levied on the turnover of shares and bonds at stock exchanges at a rate of 0.15 percent. At this rate (paid in equal shares by the buyer and the seller) it would – in terms of the exchange trade volume of 2008 and assuming a dampening of the trade volume of 15 percent by the tax – generate revenues of about € 190 million⁹. Taking expected tax exemptions into account additional revenues of € 150 million seem realistic. In view of the minor importance of the Vienna stock exchange a reintroduction of the stock exchange transfer tax should at least be coordinated with the most important neighbouring stock exchanges (Prague, Budapest, possibly also Frankfurt) to avoid negative consequences for Austria as a financial centre.

Table 4: Options for raising revenues from taxes on property

	Additional revenues Million € p.a.	Annotations
Reform of real property tax	500	Reform of the valuation method for non-agricultural land and real estate, so that 90 percent of the market value is taxed, tax rate below 0.5 percent; tax exemptions for owner-occupied homes.
Reform of capital gains tax	200	Abolition of minimum holding periods, flat tax rate of 25 percent, exemptions for old age provisions and owner-occupied housing
Reform of the inheritance and gift tax	150	Reform of the valuation method for land and real estate, tax concessions for land and real estate used for business, agriculture and forestry.
Reintroduction of the stock exchange transfer tax	150	Tax base: stock exchange transactions involving shares and bonds, tax rate: 0.15 percent
Total	1,000	

Source: WIFO.

In the current discussion it is often emphasised that a consolidation based on the revenue side of the budget must necessarily rely particularly on an increase of mass taxes, as taxes with low revenues or low potential for additional revenues are not suf-

Increase of mass taxes

⁹ The total revenues from the stock exchange transfer tax, which was levied until 2000, are unknown, because they were reported jointly with the revenues from capital duty (as revenues from capital transfer taxes). Due to the abolition of the stock exchange transfer tax the revenues from capital transfer taxes halved (from € 115 million in 2000 to € 56 million in 2001).

efficient to meet the consolidation requirements. For the reasons mentioned above a contribution to fiscal consolidation from the revenue side should rest on a broad foundation of tax types and taxable bases.

By contrast, an increase of the three most important mass taxes¹⁰ of the Austrian tax system (VAT, social contributions, wage tax) is problematic for various reasons. In particular, all three mass taxes alike have a dampening effect on private consumption, which would not be welcome from an economic policy perspective, given the currently feeble economic recovery (Marterbauer, 2010).

An increase of the regular VAT rate could generate additional revenues of about € 900 million per percentage point. At 20 percent the regular VAT rate is still 5 percentage points below the ceiling defined by the European VAT directive – this means potential additional revenues of € 4.5 billion at the most.

Despite the substantial revenue potential an increase of the regular VAT rate seems problematic for several reasons: Firstly, the tax hike would affect domestic prices of non-tradable goods. Secondly, a VAT increase would entail undesired distribution effects. According to Guger *et al.* (2009) indirect taxes in Austria, three quarters of which consist of the VAT, are strongly and increasingly regressive. On average of all private households the VAT burden reached 12 percent of net household income in 2005. At 21.6 percent the burden of the bottom decile exceeds the average by far. Whereas the effective VAT rate is 16 percent of net household income in the second decile, it amounts to only 9.2 percent in the top decile. Further the regressivity of VAT is much higher both for renters and owner-occupiers than that of the real property tax. The bottom decile of renters' households bears a VAT burden of 23.2 percent (average 13.4 percent). For the top decile this burden is only 9.8 percent. For owner-occupiers the VAT burden amounts to 11.3 percent on average, it is 19.6 percent and 9 percent in the bottom and top deciles, respectively. An increase of the VAT rate would thus entail highly regressive distribution effects, which would exceed those of a reformed real property tax discussed above. In addition a VAT hike would enhance the incentive to provide especially labour intensive services off the books and thus further boost the already large shadow economy (Schneider, 2009).

An increase of social contribution rates by a percentage point each (employee's and employer's contribution, excluding pensions) would generate additional revenues of € 880 million in the health insurance, € 2,970 million in the pension insurance and € 780 million in the unemployment insurance. Thus raising the rate of social contributions would generate additional revenues of € 4,630 million per percentage point.

However, an increase of social contributions is advised against for several reasons: From a growth and employment perspective further burdening the factor labour with taxes and social contributions is not appropriate in Austria. These taxes and contributions are among those tax categories that are most detrimental to growth and employment. In future they should be lowered rather than raised – all the more so, because in the wake of the current economic crisis and the presently still weak growth tax relief for the factor labour would mean an important contribution to the stabilisation of employment. As Guger *et al.* (2009) show, social contributions have an indirect regressive effect because of the income threshold. The average burden of social contributions was 12 percent of gross equivalent income for employees' households. Whereas the ratio is 8.9 percent to 12 percent for the 1st to 4th decile, it rises to 13.6 percent for the 9th decile, but is lower again for the top decile at 10.4 percent.

The scope for raising the wage tax rates is equally limited in Austria, because the top tax rate and the starting tax rate are among the highest in the EU (Schratzstaller, 2009). The starting income tax rate of 36.5 percent acts as a barrier to a shift from

An increase of the regular VAT rate

Raising the social contribution rates

Increase of wage tax rates

¹⁰ In 2008 wage tax yielded revenues of € 21.3 billion, revenues from VAT and social contributions amounted to € 21.9 billion and € 41.7 billion, respectively.

marginal to full-time employment. An increase would be problematic from the point of view of both employment and distribution.

If – as is often demanded in the public debate – the financial sector is to be held responsible for financing a substantial share of the costs of the crisis in accordance with the costs-by-cause principle, the tax policy suggestions discussed here are of limited use. Merely the stock exchange transfer tax as well as a general financial transaction tax could target the financial sector specifically. To place a heavier burden on the financial sector in accordance with political priorities or to send a political signal, temporary measures such as the special tax on the banking sector suggested by the Halle Institute for Economic Research ("Equalisation of burdens tax", "Lastenausgleichsabgabe", Blum *et al.*, 2009) might be implemented. The banking sector as a whole – i.e., including those banks which have not required government bail-outs, but nevertheless benefited from their stabilising effects – would thus contribute more to the financing of the costs of the crisis than they currently do in Austria via payments of guarantee premiums or dividends. Of course potential consequences for an increase of share capital as well as the credit conditions of banks would have to be taken into account in this context. Further options would consist in special taxes on managers' bonuses¹¹ or a limitation of the tax deductibility of managers' compensation. A further option would be a reform of the taxation of private foundations, possibly in combination with the establishment of a binding minimum activity in the social and public spheres.

Besides the options for the generation of additional public revenues that Austria can decide on by itself a general financial transactions tax to be introduced Europe-wide could finance a substantial part of the EU-budget and thus relieve the national budgets from EU contributions (Schulmeister – Schratzenstaller – Picek, 2008): A financial transactions tax with a rate of 0.01 percent of the basic value of a transaction could generate revenues of slightly more than € 70 billion for the EU as a whole (in a scenario with a medium dampening of transactions by the tax). There is no empirical evidence on the incidence of capital transfer taxes, i.e., the burdening effects of a financial transactions tax. Part of the tax burden would probably be shifted to the demand side (institutional investors, private businesses and households) – depending on the demand elasticity and the intensity of competition in the taxed sectors. More detailed studies would have to analyse which distribution effects are to be expected.

In substance privatisation is defined as the sale of productive wealth or shares in equity capital of the public sector. Strategies for sustainable fiscal consolidation do not always include the privatisation of public assets, because it is considered to produce mainly one-off effects. Also, in view of the financial crisis, which resulted from a combination of regulatory shortcomings and flawed judgments of the private sector and which further spurred the general distrust in the dynamics of self-regulating markets, further privatisations are seen sceptically by Austrian policy makers despite the international empirical evidence (Megginson, 2005).

The use of the economic policy instrument of privatisation depends on the availability of a *privatisation potential*. It exists where the government acts as an entrepreneur, although there is no market failure and the private entities can take over the part of the producer¹².

Especially in the most recent decade Austria has made considerable efforts to open its product markets to competition. Thus, within the framework of an early liberalisation process commercial and private consumers in the network industries, especially in the energy sector and in telecommunications, were enabled to choose alterna-

Other suggestions and options

A general financial transactions tax

Privatisation

Privatisation and liberalisation in Austria

¹¹ In the first quarter of 2010 the UK levies a one-off tax of 50 percent on managers' bonuses exceeding £ 25,000. France is planning the introduction of a similar levy.

¹² This producer's part has to be strictly distinguished from the role of the government as a demander of goods and services provided by the market.

tive suppliers. In addition, in crafts and trade barriers to entry were removed and the administration was simplified (Amendment to the Austrian Industrial Code, "Gewerbeordnung", in 2002), whereas freelance services are still considered in need of reform (OECD, 2010). With the expected price reductions and quality improvements as well as productivity growth and adjustments of the product range numerous measures to enhance competition do not only exert a positive effect on the efficiency and performance of the companies and sectors themselves, but, via the intermediate goods trade, the positive effects spread to other industries.

In the wake of the current financial crisis the (re-)nationalisation of Kommunalkredit Bank and Hypo Group Alpe Adria public shares in companies active in the market were even increased. The equity holdings of the Republic of Austria in other Austrian banks (Erste Group, Raiffeisen Zentralbank, ÖVAG etc.) to improve the banks' equity is no nationalisation in the formal sense. All in all, however, the government's direct influence on the private business sector via shares in equity capital is rising significantly again for the first time in more than 20 years as a consequence of the crisis¹³.

In Austria there are still numerous state-owned companies at all levels of government (federal level, state level and local community level) – many of which are hidden in holding companies. Substantial one-off contributions to fiscal consolidation can be expected even from a partial privatisation.

As Sweden's positive experience with the continuous privatisation since the mid-1990s shows (Jonung – Kiander – Vartia, 2008, OECD, 2008), the privatisation of public assets can be used as "initial funding" for the consolidation of the budget. On the one hand it can generate additional revenues, on the other hand it can increase the acceptance of spending cuts, particularly as a purely expenditure-oriented budget consolidation as well as a revenue-based consolidation via the increase of taxes and social contributions will reach a natural limit. Besides the one-off revenues the involvement of profit-oriented private investors can contribute to a positive evolution of the business, as efficiency potential is activated and the business model is extended to foreign markets¹⁴.

Privatisation potential

Calculation of the privatisation potential in the Austrian energy sector

A quantification of the actually attainable privatisation proceeds requires an individual valuation of each company. The existing estimates (Tables 5 and 6) are reference points serving as benchmarks. They are based on the following assumptions:

The company value of listed utilities (Verbundgesellschaft and EVN) was derived on the basis of the current share price and the number of issued shares (as of October 2009), whereas the company value of non-listed utilities was estimated applying the cash flow method (as permanent rent $UV = \frac{CF}{i}$ on the average cash flow CF of the most recent eight years; source: AMADEUS data base). This approach has the advantage that the only parameter for which assumptions have to be made is the interest rate. As no information on risk-adequate interest rates was available, two scenarios were calculated: scenario 1 assuming a low interest rate of 5 percent and scenario 2 assuming a high interest rate of 10 percent. The estimated company values should be interpreted as a rough orientation, as the uncertainties with respect both to the cash flow forecast and the risk-adequate interest rate are substantial.

The combination of private investors and a core government shareholder, who takes into account public interests (e.g., safeguarding commodity supplies), has proved a success in the Austrian experience. Thus, the Austrian Mineral Oil Admini-

¹³ In order to terminate a government equity holding in systemically relevant financial institutions as soon as possible, the exit date and exit conditions should be determined in advance.

¹⁴ This could over-compensate for a loss of dividends due to the sale of equity shares.

stration which was formerly considered unwieldy could be transformed into the internationally oriented listed OMV, which succeeds in the market, reliably earns high profits and is among Austria's most important tax payers. A similar statement can be made about the fully privatised steel companies that developed from recipients of government subsidies into successful listed world market champions in the high quality steel sector. From an industrial policy perspective it is an important fact that the companies' headquarters remained in Austria and companies made no use of their off-shoring options despite the involvement of foreign investors.

The biggest privatisation potential in Austria exists in the field of utilities. In Austria the liberalisation of the energy market was not accompanied by an extensive privatisation of utilities. The government's majority stake in the utilities (at least 51 percent), which is guaranteed by the constitution, also contributes to the conflicts of interest, which are ultimately responsible for limited competition in Austria's energy markets even a decade after the liberalisation (*Böheim – Friesenbichler – Sieber, 2006*). A privatisation promises decisive impulses for enhanced competition.

For this sector a sensible economic policy option for the government would be limiting its role to that of a core shareholder, who still wants to be involved in the company's strategic decision-making, but who does not participate in the company's operational management. To play the part of a strategic core shareholder the blocking stake according to the stock corporation law (25 percent plus 1 share) is sufficient. A government stake exceeding this limit is no strategic necessity and could thus be sold to private investors.

Table 5: Estimated proceeds from a partial privatisation of Verbund and the utilities of the Länder

Reduction of the government stake to 25 percent plus 1 share

	Company value Million €	Government stake In percent	Privatisation potential In percent	Privatisation potential Million €
<i>Scenario 1: interest rate 5 percent</i>				
Verbund	10,356	51.0	26.0	2,692
BEWAG	911	100.0	75.0	683
Energie OÖ	3,825	51.0	26.0	995
Energie ST	1,648	75.0	50.0	824
EVN	2,196	51.0	26.0	571
KELAG	1,715	63.9	38.9	666
Salzburg AG	2,020	42.6	17.6	355
TIWAG	2,763	100.0	75.0	2,072
VBG, Illwerke	2,192	95.5	70.5	1,545
Wien Energie	5,385	100.0	75.0	4,039
Total	33,011			14,442
<i>Scenario 2: interest rate 10 percent</i>				
Verbund	10,356	51.0	26.0	2,692
BEWAG	455	100.0	75.0	341
Energie OÖ	1,913	51.0	26.0	497
Energie ST	824	75.0	50.0	412
EVN	2,196	51.0	26.0	571
KELAG	858	63.9	38.9	333
Salzburg AG	1,010	42.6	17.6	177
TIWAG	1,382	100.0	75.0	1,036
VBG, Illwerke	1,096	95.5	70.5	773
Wien Energie	2,693	100.0	75.0	2,020
Total	22,781			8,853

Source: AMADEUS data base, WIFO calculations.

Under the assumption that the government limits its stake in the utilities (Verbundgesellschaft and nine utilities of the Länder¹⁵) to the blocking stake, estimated privatisation proceeds of between € 8.9 billion and 14.4 billion could be attained (Table 5).

Even if the state remained the majority shareholder owning 50 percent plus 1 share, estimated proceeds of between € 3.2 billion and 6.3 billion could be attained (Table 6).

Table 6: Estimated proceeds from a partial privatisation of Verbund and the utilities of the Länder

Reduction of the government stake to 50 percent plus 1 share

Company	Company value Million €	Government stake In percent	Privatisation potential In percent	Privatisation potential Million €
<i>Scenario 1: interest rate 5 percent</i>				
Verbund	10,356	51.0	1.0	104
BEWAG	911	100.0	50.0	455
Energie AG Oberösterreich	3,825	51.0	1.0	38
Energie Steiermark	1,648	75.0	25.0	412
EVN	2,196	51.0	1.0	22
KELAG	1,715	63.9	13.9	238
Salzburg AG	2,020	42.6	0.0	0
TIWAG	2,763	100.0	50.0	1,382
Vorarlberger Illwerke AG	2,192	95.5	45.5	997
Wien Energie	5,385	100.0	50.0	2,693
Total	33,011			6,340
<i>Scenario 2: interest rate 10 percent</i>				
Verbund	10,356	51.0	1.0	104
BEWAG	455	100.0	50.0	228
Energie AG Oberösterreich	1,913	51.0	1.0	19
Energie Steiermark	824	75.0	25.0	206
EVN	2,196	51.0	1.0	22
KELAG	858	63.9	13.9	118
Salzburg AG	1,010	42.6	0.0	0
TIWAG	1,382	100.0	50.0	691
Vorarlberger Illwerke AG	1,096	95.5	45.5	499
Wien Energie	2,693	100.0	50.0	1,346
Total	22,781			3,233

Source: AMADEUS data base, WIFO calculations.

Table 7: Estimated proceeds from a further partial privatisation of OMV, Telekom Austria and Post AG

Reduction of the government stake to 25 percent plus 1 share

Company	Company value Million €	Government stake In percent	Privatisation potential In percent	Privatisation potential Million €
OMV	7,938	31.5	6.5	516
Telekom Austria	5,226	28.4	3.4	179
Post AG	1,303	53.0	28.0	365
Total	14,467	–		1,060

Source: AMADEUS data base, WIFO calculations.

By limiting its stake to the blocking stake according to the stock corporation law (25 percent plus 1 share) in the remaining three listed companies OMV, Telekom Austria and Post AG additional privatisation proceeds of € 1 billion could be generated for the government budget (Table 7).

¹⁵ Additional privatisation potential would arise in the field of utilities of the federal state and district capitals (municipal utilities, "Stadtwerke").

The Federal Real Estate Corporation (Bundesimmobiliengesellschaft, BIG) and the Austrian Forest Corporation (Österreichische Bundesforste, ÖBf¹⁶) also offer potential for privatisation. Potential proceeds from a partial sale of the BIG's real estates are estimated at € 1.1 billion to 3.5 billion (Table 8), while the sale of forest land of the ÖBf would yield privatisation proceeds of € 2.1 billion to 6.4 billion (Table 9).

Table 8: Estimated proceeds from a partial privatisation of the Federal Real Estate Corporation (BIG)

	Net income from rent 2008	Valuation factor	Company value	Privatisation potential		
				Government share 25 per cent plus 1 share	Government share 50 per cent plus 1 share	Government share 75 per cent plus 1 share
	Million €			Million €		
BIG	233	20	4,662	1,166	2,331	3,497

Source: WIFO calculations. The company value of BIG was assumed to be identical with the value of its real property. The latter was calculated on the basis of the net income from rent by approximating the value of a property as 20 times the net annual income from rent as customary in the industry.

Due to insufficient data no estimates of potential privatisation proceeds in other fields can be given. At the federal level the government should deliberate which parts of the ÖBB, Austria's railway company, could be privatised. Here at least Rail Cargo Austria, which has evolved into a remarkable logistics group competing with private suppliers of transport services, should be considered in a first step.

At the federal state level privatisation potential arises from a sale of the real estate corporations of the Länder.

Table 9: Estimated proceeds from a partial privatisation of the Austrian Forest Corporation

	Total acreage 2008	Average value	Company value	Privatisation potential		
				Government share 25 per cent plus 1 share	Government share 50 per cent plus 1 share	Government share 75 per cent plus 1 share
	Hectares	€ per m ²		Million €		
ÖBf	854,700	1.00	8,547	2,137	4,274	6,410

Source: WIFO calculations.

Private investors could take over a stake of 25 percent in larger municipal utilities. 75 percent of the equity capital would remain under the control of the local community. Subsidiaries with the reverse capital relations (private 75 percent, local community 25 percent) could be established abroad making the existing know-how of the utility marketable by exporting it. This set-up would be beneficial to both sides ("win-win") without negative effects on the quality of the local community's supply obligations. The local communities would benefit from the one-off privatisation proceeds and in the long run from the improved company performance via higher dividends, while investors are given the opportunity to enter a potentially profitable market. Due to the lack of data on Austrian municipal utilities it is impossible to quantify the proceeds from this privatisation option.

By tapping additional revenues a total of between € 10 billion and 28 billion could be raised for fiscal consolidation, € 2.4 billion of which would be taxes (Table 10), the rest would consist of privatisation proceeds (Table 11).

Summary and conclusions

¹⁶ The privatisation of the ÖBf requires a relaxation of the imperative to maintain real asset values ("Substanzerhaltungsgebot") in the federal forest law ("Bundesforstgesetz") of 1996.

The package of measures, which was recommended by WIFO already in the study "Ziele und Optionen der Steuerreform" ("Objectives and options of the tax reform", Aiginger et al., 2008) would consist of a reduction of tax exemptions, an increase of excise taxes on the consumption of energy and the environment and on other public bads as well as an enhanced use of wealth-related taxes. If tax hikes become necessary for fiscal consolidation, then – irrespective of the consolidation requirements – an improvement of the tax structure should be aimed at, which relieves the factor labour, has limited dampening effects on growth and contributes to a more even secondary distribution. If the additional revenues from these tax sources are used temporarily for consolidation purposes, fewer negative growth and employment effects are to be expected than from an alternative package of measures.

Such alternative options for the generation of additional tax revenues of € 2.4 billion would be raising the regular VAT rate (plus 1 $\frac{1}{3}$ percentage points; additional revenues € 1.2 billion) and social contribution rates (0.26 percentage points; additional revenues € 1.2 billion). However, these options have serious disadvantages: the increase to the regular VAT rate would entail undesired distribution effects and would exert an upward pressure on the domestic price level. Undesired distribution effects as well as negative growth and employment effects would be the implication of raising the social contribution rates, which would further increase the burden on the factor labour, which already exceeds the average and is rising.

The potential of proceeds from the privatisation of state shares in companies, which can be generated in the short to medium term ranges from € 7.6 billion to 25.4 billion (Table 11). A (further) partial privatisation (blocking minority) of listed companies (OMV, Post AG, Telekom Austria) would yield about € 1 billion. The privatisation potential of Verbund and the utilities of the Länder would range between € 3.2 billion and 14.4 billion depending on the "depth of privatisation". Expected proceeds from a partial privatisation of BIG and ÖBf would amount to between € 1.1 billion and € 3.5 billion and between € 2.1 billion and € 6.4 billion, respectively.

By implementing two alternative packages of measures additional tax revenues of € 2.4 billion could be generated.

In Austria the state still owns substantial stakes in companies. The privatisation potential at the federal, state (Länder) and local government levels is correspondingly large.

Table 10: Summary of the options for fiscal consolidation based on taxes and social contributions

	Volume Million € p.a.	Alternative Options	Volume Million € p.a.
<i>Abolition of tax privileges</i>	500	Increase of the regular VAT rate by 1 $\frac{1}{3}$ percentage points	1,200
Abolition of capped special expenses ("Topfsonderausgaben")	170		
Abolition of tax privileges for the 6th to 10th hour of overtime per month	100		
Abolition of the sole earner allowance for childless couples	60		
Abolition of VAT exemptions	170		
<i>Increase of taxes on public bads</i>	900	Increase of the social security contribution rate by 0.26 percentage points	1,200
Increase of mineral oil tax and the electricity surcharge, introduction of a CO ₂ tax	500		
Others (tobacco tax, wine tax, beer tax, slot machine tax)	400		
<i>Increase of wealth-related taxes</i>	1,000	Increase of wage tax	–
Real property tax	500		
Capital gains tax	200		
Inheritance and gift tax	150		
Stock exchange transfer tax	150		
<i>Total</i>	<i>2,400</i>	<i>Total</i>	<i>2,400</i>

Source: WIFO.

Table 11: Summary of the privatisation potential in Austria

	Minimum scenario ¹	Maximum scenario ²
	Million €	
OMV	516	516
Telekom Austria	179	179
Post AG	365	365
Utilities	3,233	14,442
BIG	1,166	3,497
ÖBf	2,137	6,410
Total	7,595	25,409

Source: AMADEUS data base, WIFO calculations. – ¹ The government keeps a stake of 25 percent plus 1 share in OMV, Telekom Austria and Post AG, of 50 percent plus 1 share in the utilities and 75 percent plus 1 share in BIG and ÖBf. – ² The government reduces its stake to the blocking stake (25 percent plus 1 share) in all companies.

The obvious privatisation potential of the ÖBB and the real estate corporations of the Länder, which cannot be quantified due a lack of data, have to be added.

As "initial funding" the materialisation of this privatisation potential could contribute substantially to fiscal consolidation: under the simplifying assumption that the privatisation proceeds are used to reduce government debt and that the average interest rate applied to the calculated consolidation potential is 4 percent, interest payments could be reduced by between € 300 million and slightly above € 1 billion per year. Apart from its contribution to fiscal consolidation further privatisation and liberalisation seem sensible from a regulatory policy perspective and to ensure the long-term competitiveness of Austria as a business location.

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Options for Revenue-based Fiscal Consolidation – Summary

Measures on the revenue side of the budget could raise a total of between € 10 billion and 28 billion, of which € 2.4 billion would originate from taxes and levies and the rest would be privatisation proceeds.

The first choice would be slashing tax exemptions: an increase of excises on the consumption of energy and the environment and on other public bads as well as an enhanced use of specific wealth taxes. Overall, this combination of measures is considered more advantageous than the alternative of raising VAT and social contributions because of its positive effects on the economic structure, growth and distribution.

As the state still holds considerable shares in companies, there is a substantial corresponding privatisation potential at the federal, regional and local levels of government. WIFO estimates the short- to medium-term privatisation potential at between € 7.6 billion and 25.4 billion without the government having to give up property of strategic importance.

A continued partial privatisation (reduction of the state share to the blocking minority) of listed corporations (the oil and gas corporation OMV, Austrian Post and Telekom Austria) could raise about € 1 billion. The privatisation potential of the electricity provider Verbund and the regional utilities ranges from an additional € 3.2 billion to 14.4 billion depending on the "depth of privatisation". Between € 1.1 billion and 3.5 billion could be expected from a partial privatisation of the Federal Real Estate Corporation (Bundesimmobiliengesellschaft, BIG), while the Austrian Forest Corporation (Österreichische Bundesforste, ÖBf) could yield another € 2.1 billion to 6.4 billion.

Realistic privatisation proceeds from the Austrian railway (ÖBB) and the real estate corporations of the Länder, which are not quantified in this study due to insufficient data, have to be added.

As "initial funding" the realisation of this privatisation potential could contribute substantially to the consolidation of government budgets: under the simplifying assumption that the privatisation proceeds are used to reduce government debt and that the average interest rate is 4 percent the calculated consolidation volume would result in a reduction of interest payments by € 300 million to 1 billion. Apart from its contribution to fiscal consolidation further privatisation and liberalisation also seem necessary from a regulatory policy perspective to ensure the long-term competitiveness of Austria as a business location.