



OECD Economics Department Working Papers No. 245

The Tax System in the Czech Republic

Chiara Bronchi, Andrew Burns

https://dx.doi.org/10.1787/242706151678



Unclassified

ECO/WKP(2000)18



Organisation de Coopération et de Développement Economiques Organisation for Economic Co-operation and Development

Dist. : 02-Jun-2000

OLIS :

English text only

25-May-2000

PARIS

ECO/WKP(2000)18

Unclassified

ECONOMICS DEPARTMENT

THE TAX SYSTEM IN THE CZECH REPUBLIC

ECONOMICS DEPARTMENT WORKING PAPERS NO. 245

by Chiara Bronchi and Andrew Burns

Most Economics Department Working Papers beginning with No. 144 are now available through OECD's Internet Web site at http://www.oecd.org/eco/eco.

91640

Document complet disponible sur OLIS dans son format d'origine Complete document available on OLIS in its original format

ABSTRACT/RÉSUMÉ

This paper discusses the tax system in the Czech Republic and offers some specific suggestions for reform. Viewed in international context, the Czech system is broadly similar to those operated in other OECD countries. Like them, it exhibits a number of non-neutral features, some of which reflect the economy's command and control past and others which reflect compromises between the desire to minimise economic distortions and the need to implement a system that is administratively and politically practical. The evidence, reviewed in this paper, suggests that the main priorities for reform should include: eliminating the tax bias in favour of self-employed work forms; substantially reducing the number of goods and services subject to the reduced VAT rate; lowering social security contributions and increasing reliance on the personal income tax system. In addition, more use of property taxes, in particular real estate, might be warranted from the points of view of revenue enhancement and income distribution. Finally, tax administration could be strengthened by a more comprehensive registration of taxpayers, better training of personnel, tighter enforcement and the introduction of binding tax-rulings.

JEL Code: H2

Keywords: taxation, the Czech Republic

Ce document examine le système fiscal de la République tchèque et formule plusieurs propositions spécifiques concernant les réformes à mettre en œuvre. Dans une optique internationale, le système de la République tchèque est assez proche de ceux des autres pays de l'OCDE. Comme eux, il présente un certain nombre de caractéristiques non neutres, dont certaines tiennent au passé communiste de l'économie et d'autres reflètent un compromis entre, d'une part, la volonté de réduire au minimum les distorsions économiques et, de l'autre, la nécessité de disposer d'un système qui soit pratique sur le plan administratif et politique. L'analyse présentée dans ce document incite à penser que les réformes devraient viser en priorité à éliminer le biais fiscal en faveur du travail indépendant, à réduire sensiblement le nombre de biens et services assujettis au taux réduit de TVA, à réduire les cotisations de sécurité sociale et à mettre davantage l'accent sur l'imposition des revenus des personnes physiques. Par ailleurs, un alourdissement des impôts sur la propriété, immobilière notamment, se justifierait à la fois du point de vue du renforcement des recettes fiscales et de celui de la redistribution des revenus. Enfin, l'administration des impôts pourrait être améliorée grâce à un enregistrement plus systématique des contribuables, une meilleure formation du personnel, une application plus rigoureuse des obligations fiscales et l'adoption d'une procédure de décision préalable contraingnante.

Classification JEL: H2

Mots-clés: fiscalité, la République tchèque

Copyright OECD, 2000

Applications for permissions to reproduce or translate all, or part of, this material should be made to: Heads of Publication Service, OECD, 2 rue André Pascal, 75775 Parix Cedex 16, France.

Table of Contents

| | | Page |
|---------|---|------|
| I. | Forces shaping the system: past, present and future | 4 |
| II. | Main features | |
| III. | Problems with the system | 25 |
| IV. | Suggestions for reform | 35 |
| Annex | Details of the tax system | 42 |
| Bibliog | raphy | 59 |

THE TAX SYSTEM IN THE CZECH REPUBLIC Chiara Bronchi and Andrew Burns¹

I. Forces shaping the system: past, present and future

- 1. The tax system in the Czech Republic is broadly similar to that observed in many OECD countries and it carries relatively few vestiges of the pre-transition system. Nevertheless, several of its features reflect the difficulties inherent in moving towards a market-based economy. Box 1 provides a brief description of the system under communism and the reforms undertaken at the beginning of the transition. The most important of these were the elimination of a large variety of negative tax rates used to subsidise "socially sensitive" consumption and the establishment of a corporate tax system that was rule-driven and not subject to negotiation as had been the case under central planning. Following these initial steps, a more fundamental reform was passed in 1992 by the Czechoslovak Parliament but entered into force only in 1993, after the break up of the country into the Czech and Slovak Republics. It replaced the previous tax system with one based on the same principles as observed in mature market economies.
- 2. In its main features, the structure of the new system compares with those of most OECD countries. The overall tax burden is about average (Figure 1), although at 36 per cent it is much higher than observed in almost all OECD countries when they were at similar stages of development.³ The tax mix is fairly diversified, with personal income, social security contributions and consumption taxes accounting for the major part of revenues (Table 1). By international comparison, the share of corporate income tax is average, while those of consumption and social security contributions are high (taken together they account for more than 75 per cent of total tax revenues). Individual income taxes represent a smaller proportion of tax revenues than in most other countries, while that of other taxes, including those levied by local governments (property taxes and other fees) is very small (Table 2).

1. An earlier version of this paper served as background for the *OECD Economic Survey* of the Czech Republic, which was published in February 2000 under the authority of the Economic and Development Review Committee of the OECD. Chiara Bronchi is economist in the Policy Studies Branch of the Economics Department, where Andrew Burns is Head of the Czech Republic/Hungary Desk. The authors are indebted to Val Koromzay, Andrew Dean, Jørgen Elmeskøv, Jean-Claude Chouraqui, Thomas Dalsgaard, Flip De Kam and David Holland for valuable comments. Special thanks go to Raoul Doquin de St. Preux and Chantal Nicq for technical support and to Anne Eggimann, Nadine Hofman and Diane Scott for secretarial assistance. The paper has benefited from discussions with numerous Czech experts in the Ministry of Finance, in the private sector and at the University of Economics, Prague.

3. Of the five non-transition OECD countries (Greece, Ireland, Korea, Portugal and Spain) which have or had a similar or lower level of income compared to that in the Czech Republic in the preceding 35 years, all had lower average tax burden at that time than the Czech Republic does now. Their aggregate tax rates ranged between 17 and 24 per cent and averaged about 20 per cent. Looking at the remaining OECD countries, their average tax burden in 1965 was 28 per cent at a time when their incomes were on average twice as high as those currently observed in the Czech Republic.

^{2.} Both the Slovak and Czech Republics adopted the 1992 Czechoslovak legislation. Since then, subsequent modifications have caused the legislation in each country to diverge increasingly.

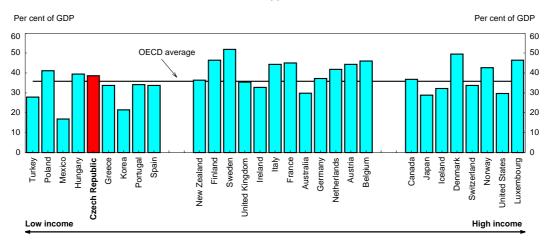


Figure 1. The overall tax burden in OECD countries (1)

Tax revenues as per cent of GDP.
 Source: OECD National Accounts, OECD Revenue Statistics.

Table 1. General government consolidated tax revenues

| | 1989 ¹ | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--|-------------------|------|------|------|------|------|------|
| | Per cent of GDP | | | | | | |
| Profits taxes/corporate income taxes | 11.0 | 7.0 | 5.6 | 4.9 | 4.0 | 3.3 | 3.7 |
| Payroll and social security taxes | 12.6 | 16.9 | 16.6 | 16.4 | 16.5 | 17.0 | 16.9 |
| Turnover tax (net)/taxes on goods and services | 11.4 | 14.1 | 13.8 | 13.2 | 13.0 | 12.6 | 11.9 |
| Wages tax and other taxes on individual incomes/individual income taxes | 7.0 | 3.8 | 4.6 | 5.0 | 5.1 | 5.2 | 5.2 |
| Other taxes (agricultural land, trade taxes, etc)/property and other taxes | 4.9 | 0.5 | 0.6 | 0.6 | 0.5 | 0.5 | 0.6 |
| Total tax revenues | 47.0 | 42.2 | 41.3 | 40.1 | 39.1 | 38.6 | 38.3 |

^{1.} The figures for 1989 may alternatively be presented on a basis which counts the subsidies paid in the form of negative turnover tax rates as public expenditure. If turnover tax receipts and total tax receipts are calculated gross, before deduction of the subsidies through negative turnover taxes, this gives turnover tax receipts in 1989 of Kc 135 billion and aggregate revenues of Kc 403 billion. As a percentage of total tax receipts calculated on the gross basis, turnover taxes contributed 33 per cent. Total taxes on this basis were 53 per cent of GDP.

Source: Ministry of Finance; OECD (1998c) Revenue Statistics.

Box 1. The tax system prior to the transition

Although the existing tax framework in the Czech Republic is dramatically changed from the one in operation at the time of the Communist regime, some of its features bear traces of the old system.¹

Taxes on enterprise surpluses (profits) yielded 11 per cent (a comparatively high proportion) of GDP. This heavy reliance on corporate taxes reflected the state's use of this mechanism, as owner, to appropriate its share of enterprise profits. As a result, the actual rate at which firms were taxed varied widely and was subject to yearly negotiation (both during the planning process and at the end of the fiscal year). Among other considerations, tax rates were set as a function of a firm's profitability and national industrial policy objectives. In this context, the tax administration was an active player in the economic policy and planning process.

The turnover tax was applied to all goods, whether or not they served as inputs in the production process. The tax schedule was extremely complicated, with specific rates (ranging from -.74 to 733 per cent) specified for some 1 506 commodities groups.² The consumption of some 428 groups of "socially necessary" goods was subsidised by applying negative turnover tax rates, which sought to ensure that producers covered their production costs while consumers paid a substantially lower price.

Payroll taxes were applied at a more or less uniform rate and their share in GDP (12.6 per cent), was higher than the average among OECD and European countries. The narrow spread of earned incomes at that time and the absence of other significant sources of income meant that, even at high rates, the tax introduced relatively few distortions.

Personal income taxes did not exist *per se*. Wage earnings were subject to a schedular tax with the rate paid depending on the age, sex, marital status and number of dependants of the taxpayer, but not their salary. Beginning in 1991, this tax was supplemented with taxes on other forms of income³ to create what could be called a personal income tax system. This new system remained schedular, with different sources of income being taxed at different rates and wage earnings still subject to different tax rates depending on family situation. Because income from different sources was not aggregated and the tax applied to various income sources was flat, the system was not progressive.

While these taxes were more or less appropriate for the pre-transition economy (where prices fulfilled only a small allocative role), for the market-based economy of the transition at least three changes were immediately essential. *First*, the corporate taxation system needed to be revised and made more transparent, eliminating the role of negotiation (*ex post* and *ex ante*) of taxes. *Second*, the wide variation in turnover tax rates had to be abolished to allow prices to reflect resource costs; and *finally*, the personal income tax system needed to be revised in anticipation of the widening of the income distribution and the increased importance of non-wage incomes. Of these tasks, the most difficult and most economically pressing was the transformation of the turnover tax into a value added tax. Such changes were introduced gradually beginning in 1990 and culminated in the major 1993 reform described in the main text.

^{1.} This description of the tax system under communism draws heavily upon Heady et al. (1994).

^{2.} Calculated as a per cent of the net of tax price. During the communist regime these rates were expressed as a per cent of the tax-inclusive price.

^{3.} Income was grouped under income from employment, agriculture or literary and artistic work and "other income" such as income from capital and income from entrepreneurial activity. This other income was subject to the non-wage rates.

Table 2. **The structure of taxation by type of tax**1997

| | Corporate income taxes | Individual income tax | Social security and payroll taxes | Consumption taxes | Other taxes, including property taxes | | | | | |
|-----------------------------|------------------------|-------------------------------|-----------------------------------|-------------------|---|--|--|--|--|--|
| | | Per cent of total tax revenue | | | | | | | | |
| United States | 9.4 | 39.0 | 24.2 | 16.7 | 10.7 | | | | | |
| Japan | 15.0 | 20.5 | 36.9 | 16.5 | 11.0 | | | | | |
| Germany | 4.0 | 23.9 | 41.6 | 27.7 | 2.8 | | | | | |
| France | 5.8 | 14.0 | 43.0 | 27.9 | 9.3 | | | | | |
| Italy | 9.5 | 25.3 | 33.6 | 25.9 | 5.8 | | | | | |
| United Kingdom | 12.2 | 24.8 | 17.2 | 35.0 | 10.9 | | | | | |
| Canada | 10.3 | 38.0 | 15.5 | 24.4 | 11.7 | | | | | |
| Australia | 14.6 | 42.0 | 6.7 | 27.5 | 9.2 | | | | | |
| Austria | 4.7 | 22.1 | 40.4 | 28.2 | 4.6 | | | | | |
| Belgium | 7.5 | 31.0 | 31.8 | 26.7 | 3.0 | | | | | |
| Czech Republic | 8.6 | 13.5 | 43.9 | 32.6 | 1. 4 | | | | | |
| Denmark | 5.2 | 52.4 | 3.7 | 33.0 | 5.7 | | | | | |
| Finland | 8.1 | 33.4 | 25.2 | 30.9 | 2.5 | | | | | |
| Greece | 6.4 | 13.2 | 32.2 | 41.0 | 7.2 | | | | | |
| Hungary ¹ | 4.9 | 16.8 | 36.3 | 39.3 | 2.7 | | | | | |
| Iceland | 2.8 | 32.8 | 8.8 | 47.5 | 8.2 | | | | | |
| Ireland | 10.0 | 31.4 | 14.0 | 39.7 | 4.9 | | | | | |
| Korea | 10.5 | 17.1 | 9.1 | 45.4 | 17.9 | | | | | |
| Luxembourg | 18.5 | 20.4 | 25.4 | 27.0 | 8.7 | | | | | |
| Mexico ¹ | 18.9 | 14.8 | 22.1 | 39.3 | 4.9 | | | | | |
| Netherlands | 10.5 | 15.6 | 41.0 | 28.0 | 5.0 | | | | | |
| New Zealand | 10.6 | 43.2 | 1.0 | 34.6 | 10.6 | | | | | |
| Norway | 12.2 | 25.7 | 22.4 | 37.0 | 2.7 | | | | | |
| Poland | 7.7 | 21.5 | 32.9 | 34.9 | 3.1 | | | | | |
| Portugal | 10.9 | 17.7 | 26.0 | 42.0 | 3.4 | | | | | |
| Spain | 7.8 | 21.9 | 35.0 | 28.9 | 6.3 | | | | | |
| Sweden | 6.1 | 35.0 | 32.5 | 22.3 | 4.1 | | | | | |
| Switzerland | 5.9 | 31.2 | 36.9 | 18.3 | 7.7 | | | | | |
| Turkey | 5.7 | 21.7 | 14.5 | 37.1 | 20.9 | | | | | |
| Average OECD ² | 8.8 | 26.6 | 26.1 | 31.3 | 7.2 | | | | | |
| Average G7 ² | 9.5 | 26.5 | 30.3 | 24.9 | 8.9 | | | | | |
| Average EU(15) ² | 8.5 | 25.5 | 29.5 | 30.9 | 5.6 | | | | | |

Note: Consumption taxes equal total taxes on goods and services less "profits of fiscal monopolies" and other "taxes".

Source: OECD (1998c) Revenue Statistics.

3. Tax revenues, as a share of GDP, have declined in each year since the establishment of the Republic, and are now close to the OECD average (Figure 2). Most of the fall reflects reductions in corporate income tax receipts, following the lowering of rates from 42 to 35 per cent between 1994 and 1998), and a purposeful narrowing of the tax base. Collections from indirect taxes and property taxes have also fallen, while social security contributions have remained a relatively stable share of GDP. Revenues from personal income taxes have increased substantially but, because the authorities sought to reduce the overall tax burden, these increases did not fully compensate for the losses from other revenue sources.

^{1. 1996} data. PEMEX revenues have been excluded from consumption taxes. Individual and corporate taxes have been estimated as well as payroll and property taxes. Unallocated state and municipal tax revenues have been included.

^{2.} Excluding Mexico.

^{4.} It was 42 per cent in 1994, 41 per cent in 1995 and 39 per cent in 1996 and 1997.

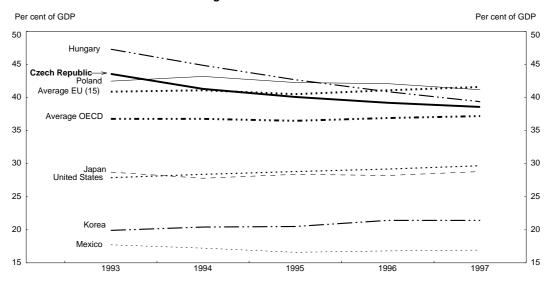


Figure 2. Total tax revenue

Source: OECD Revenue Statistics (1998c).

- 4. The decline in revenues, as a share of GDP, was only partially offset by reduced spending and, as a result, the general government surplus observed early in the transition moved into deficit in more recent years. At 42 per cent of GDP in 1998, consolidated government expenditures in the Czech Republic are above the OECD average and much higher than in other lower income countries such as Korea and Ireland (Table 3). The 3.1 per cent of GDP decline in government spending since 1994 reflects a substantial (1.5 per cent of GDP) fall in investment spending and a 3.1 percentage point drop in expenditure on goods and services, offset by a 2.2 per cent increase in subsidies and personal transfers (Table 4) -- particularly pensions.
- 5. Looking forward, tax policy will be driven by a number of issues. Perhaps the principal one is the necessity of meeting the harmonisation criteria for EU accession. At the moment, the most serious changes involve the alignment of a number of indirect taxes (VAT and excise rates) with EU norms. In addition, there are numerous smaller tasks aiming at fine-tuning that need to be accomplished but which will undoubtedly take time. Over the medium term, the tax-system faces important challenges emanating from the changing nature of the Czech economy. Its reliance on indirect taxes and payroll taxes from dependent employment means that the rise in unemployment and fall in labour force participation of the past few years have had a strong impact on the overall tax base. Similarly, the decreasing importance of large-scale manufacturing firms in the economy and the concomitant rising share in total output of small service-sector firms implies increases in the cost and complexity of tax administration.⁵ An additional transitional

^{5.} The smaller size of the average reporting unit and the overall increase in their number implies the large losses of economies from scale.

pressure is likely to flow from plans to introduce a new regional level of government. For the moment, its nature and tax powers are unspecified (see OECD, 2000) but its introduction will certainly play a role in the future development of tax policy in the Czech Republic.

Table 3. General government expenditures in the OECD¹
1998

| | Per cent of GDP |
|--------------------------|-----------------|
| United States | 32.8 |
| Japan ² | 36.9 |
| Germany | 46.9 |
| France | 54.3 |
| Italy | 49.1 |
| United Kingdom | 40.2 |
| Canada | 42.1 |
| Total of above countries | 38.8 |
| Australia | 32.9 |
| Austria | 49.4 |
| Belgium | 51.0 |
| Czech Republic | 42.1 |
| Denmark | 55.1 |
| Finland | 49.1 |
| Greece | 41.8 |
| Hungary | 44.3 |
| Iceland | 36.2 |
| Ireland | 33.1 |
| Korea | 25.6 |
| Netherlands | 47.2 |
| New Zealand | 39.8 |
| Norway | 46.9 |
| Poland | 45.7 |
| Portugal | 43.6 |
| Spain | 41.8 |
| Sweden | 60.8 |
| Total | 39.4 |

^{1.} Current outlays plus net capital outlays.

Source: OECD (1999c).

6. Over the longer term, the tax system will face increasing pressure to meet growing expenditures from existing entitlement programmes. As indicated in OECD(2000), an ageing population and a relatively generous pension scheme that is indexed on wages rather than inflation will impose a considerable additional demand on the system. By the same token, health spending can be expected to increase as the population ages. While improved productivity performance and the general process of catch up in the economy will counterbalance these pressures somewhat, they are likely -- nonetheless -- to require some hard decisions concerning spending. A more fundamental and longer-term concern revolves around the creation of fiscal conditions that will maximise the speed with which living standards converge to those in western Europe. While the international evidence is not conclusive and the issues involved extend well

^{2.} The 1998 outlays would have risen by 5.4 percentage points of GDP if account were taken of the assumption by the central government of the debt of the Japan Railway Settlement Corporation and the National Forest Special Account.

beyond distortions created by the tax system, high levels of government spending (and taxation) have often been found to be associated with slower economic growth. With standards of living in the Czech Republic some 40 per cent lower than in the rest of the OECD, the need to keep economic distortions and other impediments to growth at a minimum is of primary importance if convergence is to be achieved within a reasonable time frame.

Table 4. General government consolidated expenditure by function and economic type

| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--|------|------|----------|--------|------|------|
| | | | Per cent | of GDP | | |
| By function | | | | | | |
| Total expenditure | 43.9 | 45.2 | 44.0 | 43.1 | 42.3 | 42.1 |
| General public services | 3.4 | 3.7 | 3.8 | 4.1 | 2.4 | 2.3 |
| Defense | 2.4 | 2.4 | 2.1 | 2.0 | 1.7 | 1.7 |
| Public order and safety | 2.3 | 2.5 | 2.5 | 2.6 | 2.0 | 2.0 |
| Education | 5.3 | 5.4 | 5.3 | 5.3 | 4.6 | 4.2 |
| Health | 2.8 | 6.9 | 6.8 | 6.7 | 6.6 | 6.7 |
| Social security and welfare | 15.7 | 11.8 | 11.7 | 11.7 | 13.9 | 14.1 |
| Housing and community amenities | 3.9 | 3.5 | 3.0 | 2.9 | 3.6 | 3.1 |
| Recreation, cultural and religious affairs and | 0.8 | 0.9 | 1.0 | 1.0 | 1.0 | 0.9 |
| services | | | | | | |
| Economic affairs and services | 5.9 | 7.0 | 6.8 | 6.2 | 5.8 | 6.4 |
| Fuel and energy | 0.4 | 0.4 | 0.3 | 0.8 | 0.2 | 0.2 |
| Agriculture, forestry, fishing and hunting | 1.1 | 0.9 | 0.8 | 0.7 | 0.9 | 0.9 |
| Mining, manufacturing and construction | 0.6 | 1.3 | 0.2 | 0.1 | 0.1 | 0.1 |
| Transportation and communication | 2.8 | 3.3 | 3.4 | 3.1 | 3.2 | 3.0 |
| Other economic affairs and services | 1.0 | 1.2 | 2.2 | 1.4 | 1.3 | 2.1 |
| Other expenditures | 2.1 | 1.5 | 1.5 | 1.3 | 1.2 | 1.2 |
| By economic type | | | | | | |
| Total expenditure | 43.9 | 45.2 | 44.0 | 43.1 | 42.3 | 42.1 |
| Current expenditure | 37.7 | 37.9 | 36.8 | 36.5 | 36.7 | 36.8 |
| Expenditure on goods and services | 12.6 | 11.4 | 9.1 | 9.1 | 8.3 | 8.3 |
| Wages and salaries | 3.7 | 4.2 | 3.7 | 3.7 | 3.8 | 3.5 |
| Interest payments | 1.8 | 1.3 | 1.2 | 1.1 | 1.3 | 1.2 |
| Subsidies and other current transfers | 23.3 | 25.2 | 26.4 | 26.4 | 27.2 | 27.4 |
| Subsidies | 6.4 | 7.2 | 8.5 | 8.2 | 7.8 | 7.8 |
| Transfers to households and non-profit | 16.8 | 17.9 | 17.9 | 18.2 | 19.2 | 19.4 |
| institutions | | | | | | |
| Capital expenditure | 6.3 | 7.3 | 7.3 | 6.6 | 5.6 | 5.3 |
| Investment | 3.9 | 4.7 | 4.7 | 4.5 | 3.5 | 3.2 |
| Purchase of stocks | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Purchases of land and intangible assets | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 |
| Capital transfers | 2.3 | 2.5 | 2.6 | 2.0 | 1.9 | 1.9 |

Source: Ministry of Finance.

II. Main features of the system

Personal taxes

- The personal income tax system (PIT) applies a progressive rate schedule to all earned income and income from some other sources (principally intellectual property and rents from secondary dwellings). The schedule comprises five income brackets with rates ranging from 15 to 40 per cent, the number and level of top rates having been reduced since its original implementation in 1993. A wide range of tax allowances, awarded on the basis of marital status and family size, helps to promote horizontal and vertical equity. Standard deductions range from 18 to 58 per cent of the earnings of an average production worker (APW). The degree of progressivity in the system is about average, with the top 20 per cent of wage earners paying 46 per cent of all personal income taxes (Figure 3, Panel A). However, as compared with most OECD countries relatively few taxpayers are exposed to top rates (see Table A1 in annex) and not all personal income is taxed according to this schedule. Distributed income from capital holdings is taxed under a separate flat-rate regime at rates ranging between 0 and 25 per cent depending on the manner in which the income concerned is distributed (Table 5). These rates are low by international comparison (Figure 4) and are substantially below the top income tax rate. Nevertheless, the after-tax distribution of taxable income in the Czech Republic is among the most evenly distributed in the OECD area (Figure 3, Panel B) principally reflecting the evenness of the pre-tax distribution of income.
- 8. In addition to personal income taxes, labour income is subject to social security taxes. The entire social security system was described in detail in OECD (1998a) and progress in its reform since then is discussed in OECD (2000). The various compulsory contributions that are part of it were first introduced in 1993 and the aggregate contribution rate, both statutory and net of other taxes, is among the highest in the OECD area (Table 6). Only healthcare payments are earmarked contributions. Payments from the other social security taxes enter general revenues and over the period 1993-98 receipts from these sources have exceeded expenditures on the programmes that carry their names by 14 per cent. Social security contributions represent the largest and a growing share in government revenues, having increased between 1993 and 1997, from 38.6 to 43.9 per cent -- well above the OECD average. Indeed, only France and the Netherlands collect a larger share of GDP in revenues from this source (Figure 5).

^{6.} However, the taxable base of the self-employed may be determined as the difference between the income and the related deductible expenses. Alternatively, the taxpayer may opt for a lump-sum deduction of expenses from income as defined by the tax law (see Table A.1 in annex).

^{7.} Each taxpayer is entitled to a basic personal allowance of Kc 34 920 (about 18 per cent of the earnings of an average production worker). An additional allowance of Kc 19 884 is granted for a spouse living in the taxpayer's household if the spouse's annual income does not exceed Kc 34920. Further, an allowance of Kc 21 600 is granted for each dependent child. Table A.1 in the annex provides more details on the conditions and allowances associated with these and other taxes on personal income.

^{8.} This surplus would leave place to a deficit of 10 per cent if other social benefits such as the child allowance and administrative costs were added to the expenditures. Moreover, it is expected that rising joblessness will mean that, in 2000, expenditures on the pensions, employment policy and sickness benefits will exceed revenue from the payroll taxes.

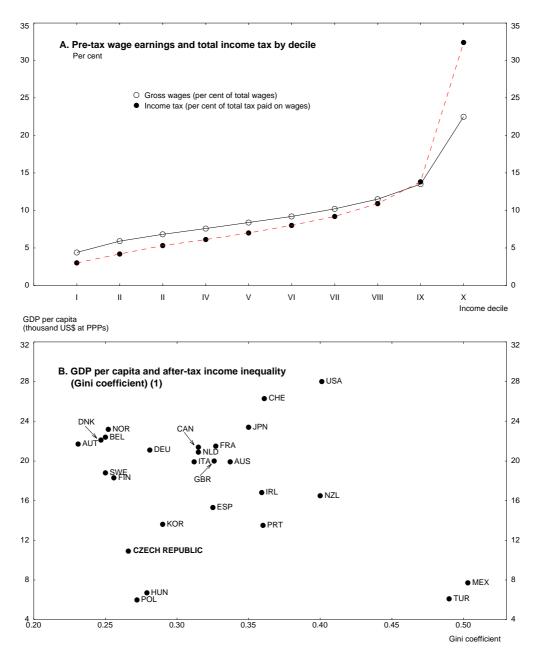


Figure 3. Tax and the distribution of income

The Gini coefficient is a measure of income inequality: the higher the coefficient, the wider the income distribution. Data are for 1996 or nearest year available.
 Source: Ministry of Finance; World Bank, World Development Indicators, 1998.

Table 5. Principal statutory personal income tax rates¹

| Income | Tax base | | Rates | |
|---------------------------------|--|---------------------|-------------------------------------|---|
| | - | Tax brackets | Tax rates | Lower threshold as a percentage of APW wage |
| 1. Income from labour | Wage income, occupational pensions and income from entrepreneurial activity net of deductible expenses | | | |
| | | 0 - 102 000 | 15 | 0 |
| | | 102 001 - 204 000 | 20 | 0.65 |
| | | 204 001 - 312 000 | 25 | 1.3 |
| | | 312 001 - 1 104 000 | 32 | 1.99 |
| | | Above 1 104 000 | 40 | 7.03 |
| Distributed income from capital | Dividends and other income from profit distribution | | 25 per cent final withholding tax | |
| | Interest payments from deposit accounts and saving books | | 15 per cent final withholding tax | |
| | Capital gains | | Exempt (under certain restrictions) | |
| | Dividends and interest paid by a <i>Pension Fund</i> and annuities paid by private pension schemes | | 15 per cent final withholding tax | |

^{1.} Data are for 1 January 1999.

Source: OECD; Ministry of Finance.

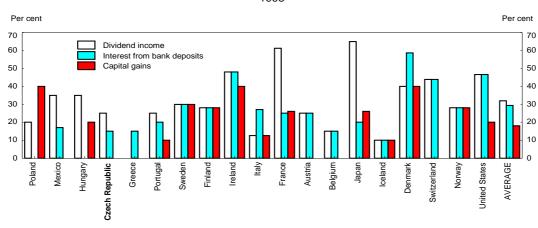


Figure 4. Highest "all-in" rates on capital income (1) 1998

"All-in" rates include surcharges and local tax rates when applicable. Countries are ranked by ascending GDP per capita at purchasing power parities.

Source: OECD.

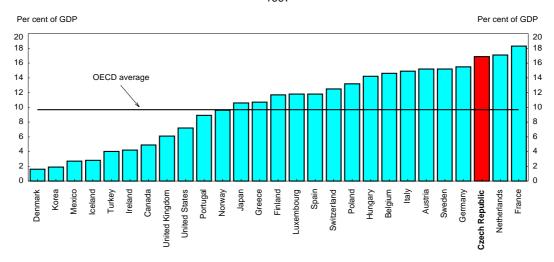


Figure 5. Social security contributions 1997

Source: OECD Revenue Statistics (1998c).

Table 6. Social security contributions of top income wage earners

1998¹

| _ | Employee c | ontributions | Employer contributions | | |
|----------------|--------------------|-----------------------|------------------------|-----------------------|--|
| Country | Legal rate | Net rate ² | Legal rate | Net rate ² | |
| United States | 1.45 ³ | 1.45 | 1.45 ³ | 0.88 | |
| Japan | 12.75 | cap | 27.75 | 13.88 | |
| Germany | 14.25 | cap | 20.75 | cap | |
| France | 13.60 | 7.60 | 35-45 ⁴ | 20.42-26.25 | |
| Italy | 9.19 | 4.96 | 38.90^{5} | 21.99 | |
| United Kingdom | 10.00 ⁶ | cap | 10.00 | 6.90 | |
| Canada | 2.80 | cap | 2.90 | 1.54 | |
| Australia | 1.50 | 1.50 | n.a. | n.a. | |
| Austria | 17.15 ⁷ | cap | 17.65 | 11.65 | |
| Belgium | 13.07 | 5.10 | 35.06 ⁸ | 20.98 | |
| Czech Republic | 12.50 | 7.50 | 35.00 | 22.75 | |
| Denmark . | 9.00 | 3.70 | 0.33 | 0.22 | |
| Finland | 8.05 | 4.54 | 28.70 | 20.66 | |
| Hungary | 11.50 | 1.50 | 40.64 | 32.88 | |
| Iceland | n.a. | n.a. | 5.83 | 4.08 | |
| Ireland | 6.75 | 2.25 | 12.00 | cap | |
| Korea | 2.30 | 1.38 | 10-40 | 6.88-27.54 | |
| Luxembourg | 10.70 | cap | 16.35 | cap | |
| Mexico | 5.25 | cap | 18.95 | 12.51 | |
| Netherlands | 7.65 | cap | 19.80 | cap | |
| New Zealand | n.a. | n.a. | n.a. | n.a. | |
| Norway | 7.80 | 7.80 | 15.51 | 11.17 | |
| Poland | n.a. | n.a. | 48.00 | 30.72 | |
| Portugal | 11.00 | 6.60 | 23.75 | 14.87 | |
| Spain | 6.40 | cap | 30.80 | 19.77 | |
| Sweden | 6.95 | cap | 38.66 | 27.84 | |
| Switzerland | 13.40 | 7.52 | 6.55 | 4.38 | |
| Turkey | 14.00 | 6.30 | 25.00 | 14.00 | |

- Data are for 1 January 1998. 1.
- The net rate differs from the legal rate wherever employee's contributions are deductible from the personal income tax and 2. employer's contributions are deductible from the corporate income tax, and whenever a ceiling applies.
- For wages in excess of \$68 400 only the Medicare tax applies. For wages below \$68 400 the rate rises to 7.65 per cent 3. because it includes social security contributions at a rate of 6.2 per cent.
- Employer's contribution rates vary between 35 and 45 per cent, depending on the wage level and the type of employee. 4.
- 5.
- A supplementary contribution to the work injury fund (INAIL) of 1 per cent is compulsory for manual workers.

 The rate is 2 per cent on the first £62 per week and 10 per cent on the next £403 per week, up to the upper earnings limit of 6.
- 7. Blue collar workers must pay 17.7 per cent. In addition certain employees must pay a state union contribution (0.5 per cent) and a bad weather contribution (0.7). Employers face a 18.2 per cent rate for blue collar workers.
- 8. This rate applies when there are more than 19 employees and is 33.25 when there are fewer than 10. For firms with between 10 and 19 comployees the rate is 33.25.

Source: OECD, European Tax Handbook, 1999.

9. Table 7 reports the principal parameters of the health and social security systems for both the employed and the self-employed. Employee and self-employed contributions are fully deductible from the personal income tax base and employer contributions are fully deductible from the corporate income tax base (see below). The total contribution rates applied to wage and self-employed income are the same (except that for the latter participation in the sick-leave programme is optional), but the base upon which they are levied differs importantly between the two groups. For the self-employed the contribution rates are applied to only 35 per cent of self-employed income, subject to both ceilings and floors⁹, whereas all of an employee's earnings are taxed without reference to floors or ceilings.

Table 7. Social and health insurance contributions
1999

| | Employee | Employer | Total | Self-employed |
|---|--------------------------|----------------------------|----------------------------|---|
| Contributions rates | | | | |
| Health insurance | 4.5 | 9.0 | 13.5 | 13.5 |
| Social insurance Sickness benefit Pension Employment policy Total | 1.1 6.5 0.4 8.0 | 3.3 19.5 3.2 26.0 | 4.4 26.0 3.6 34.0 | 4.4 (voluntary) 26.0 3.6 34.0 |
| Total | 12.5 | 35.0 | 47.5 | 47.5 |
| Contribution base | | | | |
| Health insurance | Gross wages | Gross wages | | 35 per cent of annual net income. The ceiling is 486000 Kc. The floor is twelve times the minimum wage. |
| Social insurance | Gross wages | Gross wages | | 35 per cent of yearly net income. The ceiling is 486000 Kc. The floor is 18300 Kc. |

Source: Ministry of Finance.

9. The effect of the floor is that no self-employed worker pays less social security contributions than would a minimum wage worker. On the other hand, the amount of contributions paid by a self-employed person affected by the ceiling is the same as paid by an employee earning about 2.6 times an average production worker's salary.

Value-added tax

10. With few exceptions, Czech value-added tax (VAT) rules follow the EU model. VAT is charged on all taxable transactions, including domestically-produced supplies in kind, and imported goods. Exported goods are zero-rated while small firms, financial and social-security services are exempt. The tax is imposed at an internationally high standard rate of 22 per cent (down from 23 per cent prior to January 1995) although it falls within the recommended interval of the EU (Table 8). There is a reduced rate of 5 per cent which, in an apparent effort to serve redistributive goals, is applied to an exceptionally wide range of "socially sensitive" items including foodstuffs, pharmaceutical products, telecommunications, heating fuels, construction and most services (see Table A2 in annex). The wide range of activities exempt from VAT or subject to reduced or zero rates means that the effective VAT rate (the ratio of VAT revenue to consumption) is low by international comparison as is the productivity of the tax (measured as the ratio of the effective to the statutory rate).

The taxation of firms

Corporate income tax

11. Corporate income tax (CIT) is levied on the worldwide income (profit) from all activities of legal entities, including limited partnerships and domestic income earned by permanent establishments of foreign companies. Deductible business expenses include physical depreciation of capital, interest on liabilities, provisions for bad debts and social security contributions. At the beginning of the transition, the statutory corporate tax rate was higher than in most OECD countries (Table 9) and depreciation periods were extremely long. Since then, the rate has been gradually reduced, reaching 35 per cent in 1998¹⁴ -- a level comparable to that observed in most OECD countries. Most recently, depreciation schedules were

10. A zero rating implies that companies can claim refunds of the tax paid on their inputs and that no VAT is paid on their sales. In contrast, exemption implies that VAT is paid on the inputs of a firm but not on its own value added. Firms with an annual turnover in excess of Kc 3 million or whose three-month turnover exceeds Kc 750 000 must register in the VAT system; smaller firms pay VAT only on their inputs. As compared with other OECD countries, this threshold is relatively high.

- 11. However, most of these low-rated items do not fall in the seventeen "socially and culturally sensitive" categories recognised by the EU.
- 12. The IMF reports a measure of the productivity of VAT defined as VAT revenues divided by GDP divided in turn by the statutory VAT rate. This measure gives a sense of the additional revenue that could be expected from a percentage point increase in the VAT under some very strict assumptions. The measure reported here is somewhat more informative and has a clear economic interpretation -- as it measures the ratio between actual VAT revenues and the revenues that would be expected if the VAT were successfully collected at its standard rate on all consumption goods. It therefore indicates the extent to which exemptions, zero-rating, reduced rates and tax evasion erode revenues. As such it is also an approximate measure of the distortions that these deviations from the standard rate introduce.
- 13. Non-incorporated firms, including unlimited partnerships and that share of total profit accruing to general partners in limited partnerships are treated for tax purposes in the same way as the profits of the self-employed. In all of these cases, the salaries of the employees of the firm (other than that of the self-employed individual or the partners) is deducted from sales in determining the taxable base. As is the case for the self-employed, social security contributions would be paid on 35 per cent of this amount and personal income tax on the amount left after payment of the social security contributions.
- 14. It is scheduled to be lowered again in early 2000 to 31 per cent.

ECO/WKP(2000)18

also shortened (effective beginning 1999) and now range from four to 30 years, broadly in line with OECD practice.

Table 8. VAT productivity and effective VAT rates 1997¹

| | VAT per cent GDP | Standard VAT rate | Effective VAT rate ² | VAT productivity ³ |
|-------------------------|------------------|-------------------|---------------------------------|-------------------------------|
| | А | В | С | C/B per cent |
| United States | n.a. | n.a. | n.a. | n.a. |
| Japan | 1.8 | 5.0 | 3.1 | 89.0 |
| Germany | 6.6 | 16.0 | 11.5 | 76.6 |
| France | 7.9 | 20.6 | 14.7 | 71.3 |
| Italy | 5.7 | 20.0 | 9.8 | 51.6 |
| United Kingdom | 6.9 | 17.5 | 10.8 | 61.8 |
| Canada | 2.5 | 7.0 | 4.3 | 61.4 |
| Australia | n.a. | n.a. | n.a. | n.a. |
| Austria | 8.2 | 20.0 | 15.3 | 76.4 |
| Belgium | 7.0 | 21.0 | 12.5 | 59.5 |
| Czech Republic | 7.1 | 22.0 | 12.6 | 57.4 |
| Denmark | 9.8 | 25.0 | 22.2 | 88.7 |
| Finland | 8.2 | 22.0 | 18.1 | 82.2 |
| Greece | 7.5 | 18.0 | 11.6 | 64.3 |
| Hungary | 7.9 | 25.0 | 14.4 | 57.6 |
| celand | 9.4 | 24.5 | 17.3 | 70.7 |
| reland | 7.7 | 21.0 | 17.4 | 83.0 |
| Korea | 4.3 | 10.0 | 8.5 | 84.8 |
| Luxembourg | 5.7 | 15.0 | | |
| Mexico | 3.1 | 15.0 | 4.7 | 31.5 |
| Netherlands | 7.0 | 17.5 | 13.2 | 75.3 |
| New Zealand⁴ | 8.8 | 12.5 | 15.2 | 121.5 |
| Norway | 8.8 | 23.0 | 21.7 | 94.4 |
| Poland | 8.4 | 22.0 | | |
| Portugal | 7.9 | 17.0 | 14.4 | 84.4 |
| Spain | 5.8 | 16.0 | 9.9 | 61.9 |
| Sweden | 7.3 | 25.0 | 14.5 | 58.2 |
| Switzerland | 3.4 | 6.5 | 5.7 | 87.6 |
| Turkey | 6.5 | 15.0 | 9.9 | 66.0 |
| OECD average⁵ | 6.7 | 17.7 | 12.5 | 72.7 |
| G7 average ⁵ | 5.3 | 14.4 | 9.0 | 68.6 |
| EU average⁵ | 7.3 | 19.4 | 14.0 | 71.1 |

Note: n.a. is not applicable, .. is not available.

Source: Adapted from OECD (1999d) Revenue Statistics, OECD (1998b) Consumption Tax Trends and Analytical database.

As of 1st January 1998 (except for Germany) where the standard VAT rate was raised from 15 to 16 per cent on 1st April 1998.
 Effective VAT rate is VAT revenue divided by base (i.e. consumption).

VAT productivity is effective VAT over standard rate.

The general sales tax at standard rate is levied on 60 per cent of the value of the supply for long-term stay in a commercial dwelling which may partly explain why the effective VAT rate exceeds the standard rate.

Simple average over available countries.

Table 9. Trends in basic rates of central government corporate income tax

| | 1986 | 1991 | 1995 | 1996 | 1997 | 1998 |
|---------------------------------|----------|-------|-------|-------|-------|-------|
| _ | Per cent | | | | | |
| United States | 46 | 34 | 35 | 35 | 35 | 35 |
| Japan | 43 | 38 | 38 | 38 | 38 | 34 |
| Germany ¹ | 56 | 50-36 | 45-30 | 45-30 | 45-30 | 45 |
| France | 45 | 34-42 | 33 | 33 | 33 | 33 |
| Italy | 36 | 36 | 36 | 36 | 36 | 37 |
| United Kingdom | 35 | 34 | 33 | 33 | 33 | 31 |
| Canada | 36 | 28 | 28 | 29 | 29 | 28 |
| Australia | 49 | 39 | 33 | 36 | 36 | 36 |
| Austria ² | 50 | 30 | 34 | 34 | 34 | 34 |
| Belgium | 45 | 39 | 39 | 39 | 39 | 39 |
| Czech Republic ³ | 75 | 55 | 41 | 39 | 39 | 35 |
| Denmark . | 50 | 38 | 34 | 34 | 34 | 34 |
| Finland | 33 | 23 | 25 | 28 | 28 | 28 |
| Greece ^{1,4} | 49 | 46 | 35-40 | 35-40 | 35-40 | 35-40 |
| Hungary ^{1,3} | 55 | 40 | 18-41 | 18-42 | 18 | 18 |
| celand | 51 | 45 | 33 | 33 | 33 | 30 |
| Ireland | 50 | 43 | 40 | 38 | 38 | 32 |
| Korea ⁵ | 27 | 34 | 34 | 34 | 28 | 28 |
| Luxembourg | 40 | 33 | 33 | 33 | 33 | 30 |
| Mexico ⁶ | 39 | | | 34 | 34 | 34 |
| Netherlands | 42 | 35 | 35 | 35 | 35 | 35 |
| New Zealand | 45 | 33 | 33 | 33 | 33 | 33 |
| Norway | 28 | 27 | 19 | 21 | 21 | 28 |
| Portugal ¹ | 42-47 | 36 | 36 | 36 | 36 | 34 |
| Spain | 35 | 35 | 35 | 35 | 35 | 35 |
| Sweden | 52 | 30 | 28 | 28 | 28 | 28 |
| Switzerland | 4-10 | 4-10 | 4-10 | 4-10 | 4-10 | 4-10 |
| Turkey | 46 | 49 | 25 | 25 | 25 | 25 |
| Average basic rate ⁷ | 44.5 | 37.1 | 33.8 | 33.8 | 33.8 | 33.1 |
| Range (maximum-minimum) | 48.0 | 32.0 | 22.0 | 18.3 | 18.3 | 20.0 |
| Standard deviation ⁷ | 9.8 | 7.4 | 5.6 | 4.9 | 5.1 | 4.4 |

Note: Austria, Canada, Finland, Germany, Italy, Japan, Norway, Portugal, Switzerland and the United States also have subcentral corporate taxes. Rates rounded to nearest percentage point. Many countries also have special rates for firms with lower profits and for particular sectors.

- 1. When two rates are shown, the first one applies to retained earnings, the second one to distributed income.
- 2. 1986 data are national data.
- 3. The first column applies to 1988 instead of 1986. In 1988, in Hungary, the first 3 million forints was taxed at 35 per cent.
- 4. The first rate applies to companies listed in the Athens Stocks Exchange, the second rate applies to non-listed companies.
- 5. Adjusted taxable income less than 100 million won was taxed at 20 per cent in 1991 and since 1997 at 16 per cent.
- 6. Mexican corporate tax data for the first year considered are from national sources and concerns 1988 instead of 1986.
- 7. This average excludes Switzerland, takes into account the rates on retained earnings for Germany (respectively 50 per cent in 1991 and 45 per cent in 1995-98), 34 per cent for France in 1991 (rate applicable from the second part of the year onwards), 40 per cent for Greece in 1995 and 1997 (rate applying to non-listed corporate profits) and 42 per cent for Portugal in 1986.

Source: OECD, Owens and Whitehouse (1996), European tax handbook, 1999.

12. The combined statutory CIT rate in the Czech Republic was the eleventh highest in the OECD in 1996, the last year for which comprehensive comparative data are available (Table 10). Since then it has fallen to 35 per cent, which raises its rank to fourteenth in 1998. Partial relief from CIT is provided to firms when they distribute earnings to shareholders while various special rules concerning the treatment of

international firms are described in Box 2. Except when a dividend is paid out to a pension fund, a company receives a credit against its own CIT liability equal to one half the 25 per cent withholding tax on

Table 10. **The taxation of profit** 1996

| | Combined statuto corporate income ta | | come tax as a per cent of GDP ¹ |
|--------------------------|--------------------------------------|-----------------|---|
| | | Per cent (rank) | |
| United States | 39.5 (10) | 2.7 | (15) |
| Japan ² | 50.0 (3) | 4.7 | (1) |
| Germany ² | 56.3 (1) | 1.4 | (23) |
| France | 41.7 (6) | 1.7 | (21) |
| taly ³ | 53.2 (2) | 4.0 | (6) |
| Jnited Kingdom | 33.0 (19) | 3.8 | (7) |
| Canada | 46.1 (4) | 3.3 | (10) |
| Australia | 36.0 (13) | 4.7 | (2) |
| Austria ⁴ | 34.0 (16) | 2.1 | (18) |
| Belgium | 40.2 (7) | 3.1 | (13) |
| Czech Republic⁵ | 39.0 (11) | 4.2 | (4) |
| Denmark ^{6 -} | 34.0 (16) | 2.4 | (16) |
| Finland | 28.0 (22) | 3.2 | (11) |
| celand | 33.0 (19) | 0.9 | (24) |
| reland | 38.0 (12) | 3.2 | (12) |
| Mexico | 34.0 (16) | 2.3 | (17) |
| Netherlands _ | 35.0 (15) | 4.1 | (5) |
| New Zealand ⁷ | 33.0 (19) | | (8) |
| Norway ⁸ | 28.0 (24) | 4.3 | (3) |
| Portugal ⁹ | 39.6 (9) | 3.3 | (9) |
| Spain ¹⁰ | 35.8 (14) | | (19) |
| Sweden | 28.0 (22) | 2.9 | (14) |
| Switzerland | 39.8 (8) | 1.9 | (20) |
| Turkey | 44.0 (5) | 1.5 | (22) |
| Total average | 32.5 | 2.9 | |

Note: Combined rates include surcharges and local tax rates where applicable. The numbers in parenthesis indicate the rank of each country for each measure. A low number indicates a high rate and vice versa. Averages are simple averages over available countries.

- 1. Corporate income tax revenues (item 1200 in country details of OECD Revenue Statistics) as a per cent of GDP.
- 2. In addition to item 1200, CIT includes the enterprise tax reported under item 1100 (taxes on income, profits and capital gains of individuals) in country details of OECD Revenue Statistics.
- 3. In addition to item 1200, CIT includes the item Retenue d'acompte sur bénéf. sociétés (40 per cent) reported under item 1100 (taxes on income, profits and capital gains of individuals) in country details of OECD Revenue Statistics.
- 4. In addition to item 1200, CIT includes tax on industry and trade and contribution to chamber of commerce reported under item 1100 in country details of OECD Revenue Statistics.
- In addition to item 1200, CIT includes tax on unincorporated individuals reported under item 1100 in country details of OECD Revenue Statistics.
- 6. In addition to item 1200, CIT includes the Danish Realrenteafgift, a tax on yields of pension scheme assets, reported under item
- 1300 (unallocable between 1100 and 1200) in country details of OECD Revenue Statistics.
 7. In addition to item 1200, CIT includes property speculation reported under item 1300 (unallocable between 1100 and 1200) in country details of OECD Revenue Statistics.
- 8. The CIT-GDP ratio includes corporate income taxes on oil and gas activities for which the combined CIT rate is 78 per cent. This explains in part why the ratio has a low ranking with respect to the combined rate.
- In addition to item 1200, CIT includes the sum of Impôt professionnel, Impôt industriel, Impôt foncier rural et urbain, Impôt industrie agricole reported under item 1300 (unallocable between 1100 and 1200) in country details of OECD Revenue Statistics.
- In addition to item 1200, CIT includes local taxes (property and business taxes mainly) reported under item 1300 (unallocable between 1100 and 1200) in country details of OECD Revenue Statistics.

Source: OECD Revenue statistics (1998c), OECD Economic Outlook (1999c).

Box 2. Special rules concerning inter-company activities

Special tax rates apply to domestic-source income derived by resident companies from subsidiaries in which they have an ownership in excess of 25 per cent. A 25 per cent final withholding tax is levied on:

- Dividends and other income.
- Interest paid abroad that is disallowed under thin capitalisation rules when paid from a subsidiary abroad.
- The difference between the agreed price and the market price under the transfer-pricing rules.
- Fees paid abroad to a board of directors or a supervisory board.

Transfer pricing and thin capitalisation

Prices agreed between related parties that differ from prices contracted with independent customers in similar commercial transactions may be adjusted by the tax administrator. Companies can, however, dispute this treatment if they properly document their transfer prices. Similarly, interest charged on loans between related debtors and creditors must in general be equal to 1.4 times the Czech National Bank Discount Rate (11.5 per cent in 1998). This provision does not apply when the creditor is resident abroad and the interest rate charged is below the central bank's discount rate.

When a company's debt to equity ratio exceeds prescribed limits, thin capitalisation rules may limit the deductibility of interest charges on loans. Interest paid on foreign loans provided by related parties in excess of the ratio 4:1 between the aggregate value of foreign value of foreign debt and all equity of the company is not deductible for tax purposes. The ratio for banks and insurance companies is 6:1. However, newly established companies are exempted from thin capitalisation rules in the year of establishment and during the subsequent three calendar years.

the dividend paid out, reducing in these instances the effective corporate income tax on distributed earnings to 26.9 per cent. Moreover, the deductibility of interest income (a cost to the firm but a return to capital for the economy), various fiscal depreciation rules and tax evasion mean that not all of economic profit is subject to the CIT. Similar factors tend to reduce the CIT tax base in other OECD countries as well. As a result, the statutory rate is a poor indicator of the extent to which profit is taxed. Indeed, the ranking of countries according to statutory CIT rates is quite different from that based on CIT revenues as a share of GDP (Table 10, column 2), although such ratios need to be interpreted with care (Box 3).

Box 3. Measuring the extent to which capital income is taxed

The ratio of corporate income tax revenue to GDP reported in Table 10 attempts to measure the extent to which capital income (profit) is taxed in OECD countries. As such, this indicator suffers from three principal weakness: 1) it includes only corporate income tax in the numerator, whereas capital income is also frequently taxed in the personal income tax system; 2) the denominator does not bare a stable relationship to profit over time or across countries and 3) whereas estimates of the incomes generated in the informal sector (i.e. "non-declared") are included in National Accounts data, and, therefore, comprised within the denominator. However, they do not generate income tax revenues and, as a result, the CIT/GDP ratio underestimates the extent to which the formal sector is subject to taxation. Furthermore, the size of this bias differs across countries in proportion to the size of the undeclared economy in each country.

- 13. The promotion of new investment, innovation and entrepreneurial activity is of great importance to countries undergoing economic transition. Initially, the Czech Republic, together with other Central and Eastern European countries, introduced a number of corporate tax incentives, principally in the form of tax holidays (time-limited tax exemptions), to domestic and foreign companies. However, experience with these programmes was unsatisfactory suggesting the need for reform.¹⁵ A lack of experience in administering the incentives and poor understanding of investors' motives meant that, in many cases, the schemes failed to stimulate growth as intended (Erdös, 1994 and OECD, 1995). In introducing its 1993 tax code, the Czech Republic abolished tax holidays as an investment incentive (with the exception of a five-year tax exemption for small-scale energy producers). These were replaced with a series of activity-specific allowances, credits for expenditure on new plant and machinery and temporary exemptions from tax; including, for foreign-owned startup activities, a three-year exemption from the 25 per cent withholding tax on interest paid on inter-company loans. In addition, accelerated depreciation (granted for the acquisition of new machinery and equipment) and investment expenditure allowances were widely used.
- 14. Low levels of foreign investment as compared with other transition countries, convinced the authorities to introduce a range of incentives in 1998. These included: relief from customs duties for certain kinds of investment goods, subsidies for education of employees and relief from income tax for certain kinds of investment. The incentives are subject to certain conditions, including that investments must exceed \$10 million, be greenfield projects and that eligible firms have at least \$25 million in capital. They carry the additional requirement that the tax credit be reinvested within two years. For the moment, the legal basis for the incentives has not been established and the government is using the state subsidy act to provide the funds. Take up of this programme has been much higher than that of the previous one, with estimates suggesting that inward foreign investment qualifying for some sort of relief has been as high as \$1 billion since its introduction. For the moment, however, it is too early to evaluate the relative costs and benefits of the programme. Such analysis should be conducted once the scheme has been operational a bit longer.

Taxation at the sub-national level

Local governments have very limited tax and spending autonomy (local provision of health care, education and social services are responsibilities of local governments but they are centrally regulated and financed). Own taxes of sub-central governments -- mainly property taxes -- account for only 1.3 per cent of total tax revenue (Figure 6) and local authorities collect only one-quarter of that amount directly (OECD 1999b), with the majority of their tax revenue and collections depending on the central government. Since 1993, revenues from property and other taxes have fallen by half as a share of GDP suggesting that the centrally-determined tax scales have not been adjusted in line with inflation. The principal source of municipal revenues is transfers from the central budget, with their size being based on the number of resident individuals and the location of the accounting office of incorporated businesses. This last feature has given rise to some municipalities offering incentives to attract company pay-offices. While such competition is beneficial to the municipality, which receives more in additional central transfers than it gives up in incentives, it results in an overall reduction in tax revenues in the economy and real-side distortions in the location decisions of firms.

-

^{15.} The principal form of corporate tax incentives available in the initial phase of transition was tax holidays of two years for new operating companies. But the tax incentives granted have sometimes led to unexpected results: some companies were not able to benefit from the tax holiday because they were running losses at the beginning; others, targeting quick returns, made use of the incentives but did not play an important role in promoting economic development.

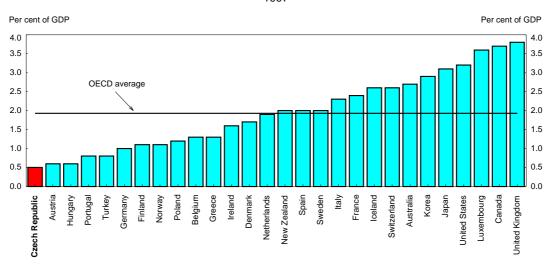


Figure 6. Property tax revenues

Source: OECD Revenue Statistics (1998c).

Administration and enforcement

16. The administration of the tax system is the responsibility of the Ministry of Finance. Overall, its task is greatly simplified by the system's reliance on withholding taxes for personal income on the one hand and the relatively high threshold for VAT-payers on the other. Nevertheless, the cost of running the system is considerable (2.6 per cent of revenues in 1998) with more than half that amount accounted for by the collection of indirect taxes. Increasingly, the Czech tax authorities are introducing the most modern tools in their efforts to enforce compliance. Thus, all tax subjects -- legal entities or physical persons -have a taxpayer identification number which is used by the administrative authorities and electronic means are being used to detect individuals or firms who are suspected of under-declaring their incomes or evading taxation entirely. Nevertheless, the government is increasingly concerned that some firms and workers are avoiding taxes and compulsory social security contributions by under declaring their wages. The self-employed are responsible for their own assessment and are a particularly difficult category of taxpayer to monitor. Here, the authorities increasingly compare data from various administrative databases (such as business permits, municipal fee records) to identify self-employed individuals who are not paying tax. Despite these efforts, tax arrears represent a growing problem for the economy. By the end of 1998 they accounted for Kc 114 billion or 6.4 per cent of GDP and their share in GDP has increased at an accelerating rate. Total arrears increased by 26 per cent in 1998 or 16 per cent in real terms, with arrears in all tax categories growing faster than nominal GDP (Table 11). The second set of columns in the table

represent a lower estimate of the share of taxes due that are unpaid each year. ¹⁶ On average at least 3.6 per cent of taxes went unpaid in 1998 and the addition to arrears was 1.4 per cent of GDP. In some categories of taxation, these rates are alarmingly high suggesting that failure to collect taxes in the past may be generating a vicious circle of non-payment. The authorities argue that as much as 50 per cent of these arrears are uncollectable, reflecting unpaid taxes of failed companies. However, their data systems do not, as yet, permit them to identify this component, making it impossible to verify the claim. Moreover, even if this figure is accurate, the rate of increase in arrears remains problematic.

Table 11. Breakdown of accumulated tax arrears

| Increas | e over previous period ¹ | Increased arr |
|---------|-------------------------------------|---------------|

| | Increas | e over previous | Increased arrears as per cent of tax due | | | |
|-------------------------------|---------------------|---------------------|--|------|------|------|
| | Increase 1993-96 | Increase 1996-97 | Increase 1997-98 | 1996 | 1997 | 1998 |
| Value added tax | 42.7 | 20.6 | 22.1 | 5.5 | 3.7 | 4.6 |
| Excises | 113.9 | 32.4 | 4.2 | 3.0 | 3.2 | 0.5 |
| Corporate tax | 37.0 | 16.0 | 68.4 | 3.7 | 1.8 | 6.8 |
| Wage tax | 52.1 | 70.1 | 57.1 | 2.7 | 2.8 | 2.5 |
| Road tax | 4.2 | 39.1 | 34.4 | 1.4 | 1.6 | 1.8 |
| Inheritance tax | 95.7 | 21.5 | 29.4 | 1.1 | 1.2 | 1.5 |
| Gift tax | 283.1 | 2.3 | 18.0 | 61.6 | 4.1 | 21.8 |
| Real property transfer tax | 133.0 | 55.9 | 38.2 | 12.6 | 14.5 | 12.5 |
| Real property tax | 8.6 | 24.5 | 28.8 | 1.5 | 3.2 | 4.4 |
| Customs duties | -10.2 | 0.9 | 52.7 | -0.5 | 0.1 | 4.1 |
| Social security contributions | 92.9 | 48.1 | 22.4 | 3.6 | 4.1 | 2.7 |
| Other taxes | 52.8 | 49.5 | 31.1 | 5.4 | 81.8 | 87.4 |
| TOTAL | 54.2 | 33.7 | 26.1 | 3.8 | 3.7 | 3.5 |

The first three columns show the percentage increase in tax arrears over the stock of tax arrears of the previous period.

Source: Ministry of Finance, OECD.

Firms complain that the system does not make sufficient distinction between innocent mistakes and wilful tax evasion. Penalties in both cases¹⁷ are the same and only a court can reduce the penalty based upon its assessment of the taxpayer's intent. This state of affairs is exacerbated by the fact that there is neither a body of precedent as in the United Kingdom nor a mechanism by which firms can get a binding ruling on various tax practices. Non-binding advance rulings can be acquired from the Ministry of Finance although there is no defined procedure to be followed. There is also an industry led-forum which, in co-operation with the Ministry of Finance, provides a regular series of opinions. Unfortunately, neither they nor the Ministry's advance rulings are binding and it is entirely possible for a penalty to be imposed

The second set of columns shows, for each tax, the annual increase of the stock of tax arrears over the total tax due in the same year. The total tax due is calculated as the sum of yearly tax revenues and the yearly increase of the stock of tax arrears.

^{16.} This is a lower estimate because the numerator includes the sum of additional non-payment less payments on pre-existing arrears.

^{17.} The tax law distinguishes three types of penalties:

a) Late payment -- if the taxpayer files a tax return and he doesn't pay his liabilities in time, he is charged with 0.1 per cent per day of the unpaid tax up to 500 days and afterwards 140 per cent of the discount interest rate of the Czech National Bank.

b) If the taxpayer files a revised tax return from his own initiative, he is charged 0.05 per cent per day of the amount by which the tax liability increased on the revised tax return. The penalty is calculated from the day when the correct tax return should have been filed.

c) If a tax administrator finds that a tax return is not correct, whether as a result of a mistake or evasion, the tax payer is charged 0.2 per cent per day of the amount by which the tax liability is increased by the tax administration.

by a given tax administrator on a treatment that had previously been authorised. Indeed, it is not unheard of for one administrator to rule in favour of a tax practice, while a second rules against it in another jurisdiction. The tax authorities are looking for mechanisms to redress this situation.

III. Problems with the system

The overall tax burden

18. As compared with other OECD countries at a similar level of development, and like Poland and Hungary, the overall Czech tax burden is high. Firms operating and investing in countries such as Ireland, Mexico, Korea, Greece, Turkey and even Spain and Portugal face much lower taxes. While Czech labour costs are relatively low, and investments there remain attractive, productivity is also low and the cumulative effect of high taxes is likely to reduce the attractiveness of the country as a destination for investment and ultimately also reduce the speed with which living standards are able to converge to the OECD average. Indeed a great deal of work done both in the OECD and elsewhere suggests that, for countries with relatively high overall tax burdens, a 10 percentage point drop in taxes can translate into as much as a 0.5 per cent increase in annual growth rates (see Box 4). Part of the distortionary impact of the current tax regime could be reduced by cutting the rates and widening the bases upon which taxes are currently imposed, but more fundamentally there may be a need to re-examine the level and composition of expenditures of which transfers and subsidies comprise fully 64 per cent of the total.

Box 4. Taxation and economic growth

The direction of tax effects on the level and growth of income is not always clear. Taxation may, in fact, be beneficial for the economy if it provides the financial basis for the provision of public goods that improve average living standards and social welfare. More and better public goods and services can serve to increase the productivity of private fixed and human capital and hence increase economic growth, while government transfers reduce poverty and improve social cohesion. On the other hand, higher taxes increase distortions and may reduce saving, investment and work incentives and adverse effects on economic efficiency may grow disproportionately with the increase in the tax burden.

As the net effect of taxation on economic performance depends on the level and structure of taxation, and whether tax revenue is spent in a productive or unproductive way, the benefits and costs of taxation are difficult to disentangle empirically. Nevertheless, a number of studies have sought to do so. Leibfritz *et al.* (1997) examined the relationship between taxation and growth for a sample of OECD countries (not including the Czech Republic, Mexico and other relatively low-income countries) and found that a 10 percentage point increase in the tax/GDP-ratio is accompanied by 0.5 percentage point lower growth. This result is qualitatively consistent with the findings of King and Rebelo (1990), Barro (1991) and Plosser (1992). But several other studies, including Easterly and Rebelo (1993), Levine and Renelt (1992) and Slemrod (1995) have found a non-significant or even positive correlation, leaving some researchers to suggest that there may be non-linearities implying a positive growth effect if taxes are increased from a low level and a negative growth effect if they are increased from a high level.

19. In the communist system the authorities promoted social goals by the extensive use of negative turnover taxes and wide range positive rates. Currently, the high proportion of goods and services subject to the reduced VAT (see Table A2 in annex) suggests that this tax (as is the case in many OECD countries) is used in a similar way. Unfortunately, as an instrument of redistribution it is not very effective, principally because the implicit subsidy it provides is equally available to the rich and the poor and the consumption patterns of each group are broadly similar. Thus, the rate of implicit subsidy received by individuals with the lowest earnings is 7.3 per cent and falls only gradually to a still high 5.6 per cent for the richest 10 per cent of the population (Figure 7). Moreover, because both groups purchase low-rated goods and services, the higher purchasing power of the rich means that they benefit, in absolute terms, three times as much from the implicit subsidy than do the poor. The importance of the subsidy derives from the unusually wide range of goods and especially services taxed at a low rate in the Czech Republic.

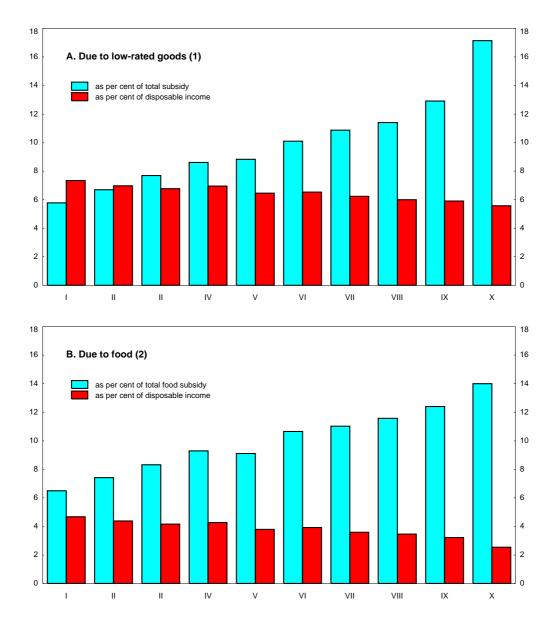


Figure 7. Distribution of implicit VAT subsidy

^{1.} The implicit VAT subsidy due to low-rated goods is calculated as expenditure on low-rate goods by decile multiplied by the difference between the standard and low VAT rates, i.e. 17%. The basket of low rate goods contains: food, rent and municipal services, central heating, hot water, household equipment and operations, personal and medical care, transport and communications, culture, education, sports and leisure services. The estimate of subsidy does not consider substitution effects between consumption and savings or within the consumption basket. Total consumption, consumption of food and disposable income by decile are from the Ministry of Finance.

consumption of food and disposable income by decile are from the Ministry of Finance.

2. The implicit VAT subsidy due to food at each income decile is calculated as expenditure on food by decile multiplied by the difference between the standard and low VAT rates, i.e. 17%. The estimate of subsidy does not consider substitution effects between consumption and savings or within the consumption basket.

Source: Ministry of Finance, OECD.

The authorities indicate that special treatment was designed to help the service sector expand its share in total output. However, it would not appear to have been very successful in this regard. The share of services in real GDP not only remains lower than in more mature OECD countries¹⁸, but has also actually declined since the VAT was introduced, from 54.3 per cent in 1993 to 51.8 per cent in 1999. Many OECD countries subject food to a lower VAT and the lower panel of the figure illustrates the redistributive impact of the low rating of food items alone. Although the variation in subsidy rates across deciles is larger (implying more redistribution), the extent of redistribution remains limited and the richest decile still receives twice as much in implicit subsidy than the poorest.

That the VAT does not succeed in significantly redistributing income despite the exceptionally wide range of low rated items would not in itself be a problem if it did not seriously distort the relative price of goods and deform the allocation of resources within the economy. While nearly every country with a VAT has exemptions and goods and services that are taxed at a reduced rate, the very low productivity of the Czech VAT suggests that the extent of the resulting distortions may be greater than is the case elsewhere. Indeed in terms of value, only 47 per cent of total goods and services consumed in 1998 were subject to the standard VAT. While it is difficult to get a sense of the economy-wide costs of these distortions, it is useful to note that the current system provides an important implicit subsidy to the consumption of a number of energy sources and constitutes a negative green tax. It may partially explain the Czech Republic's poor ranking in terms of per capita energy consumption and production of greenhouse gases (see OECD, 1999a). In addition, the fact that heating, telecommunication services and construction work are not subject to the standard VAT rate is in violation of EU regulations. ¹⁹ Applying the lower rate to almost all services other than those in the tourism sector is also an unusual practice. Reducing the number of low-rated goods would widen the base upon which the high rate is levied, raising the possibility of reducing the standard rate of VAT, which if accomplished in a revenue neutral manner would fully compensate for the inflationary impact of raising rates on currently low-rated goods and services. Indeed, unofficial estimates suggest that just raising the VAT rate on heating would allow the standard rate to be reduced from 22 to 19 per cent without loss of revenue. Subjecting an even larger range of goods and services to the standard rate would allow it to be lowered even further. Alternatively, the additional revenues could be used to reduce distortions elsewhere in the tax system -- perhaps most usefully by lowering social security contributions.

The bias in favour of capital and self-employed income

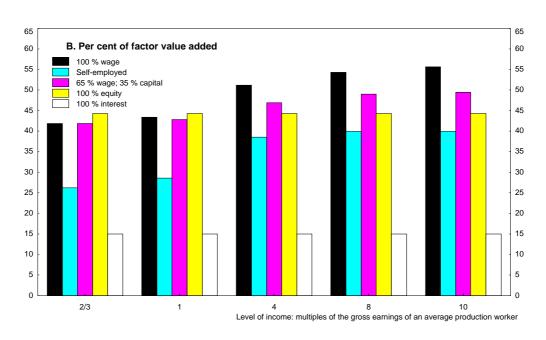
21. Generally speaking, the personal income tax (PIT) system (in combination with various benefit schemes) is a more appropriate tool for achieving redistribution goals than is the value-added tax. On the one hand, special credits and allowances can be employed to ensure that assistance is narrowly targeted on those segments of the population most in need, while, on the other, a progressive tax system can be used to ensure that the burden for this assistance is borne by those most able to pay. While the PIT schedule applied to labour and some forms of property income is progressive, the overall progressivity of the personal income tax system is more difficult to determine because the tax-treatment of self-employed income and capital income means that the principle of horizontal equity is not respected. In addition, as compared with other OECD countries relatively few people are subject to the highest rates. Finally, the flat withholding rates applied to most forms of non-labour income means that personal income from these sources is taxed well below both employee and self-employed earnings over all income ranges.

^{18.} This share was 51.8 per cent in the Czech Republic in 1998 as compared with 78 per cent in France, 63 per cent in Germany and 64 in Austria in 1996.

^{19.} Table A2 in annex provides a complete listing of the goods and services taxed at both standard and reduced rates for all OECD countries with VAT.

A. Per cent of individual income 100 % wage Self-employed 65 % wage; 35 % capital 100 % equity 100 % interest Level of income: multiples of the gross earnings of an average production worker

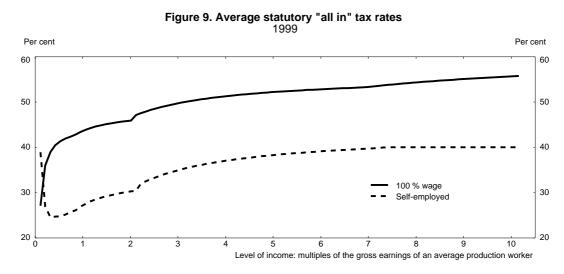
Figure 8. Average tax rates by level and type of income 1999



Source: OECD.

- 22. Panel A of Figure 8 attempts to illustrate the interaction of these factors. It reports the total taxes that would be paid by an individual (including the social security contributions of employees and the self-employed -- but not those of the employer) depending upon the source and level of his or her income. Thus, the first group of five bars indicates the differences in the average tax rate paid by an individual whose total income (from all sources) is equal to two-thirds of the annual wage of an average production worker depending upon whether his or her revenues come from: wages alone; self-employment only; 65 per cent wages and 35 per cent equity income; 100 per cent equity income; and finally 100 per cent in the form of interest. The subsequent group of histograms shows the same calculation at different levels of income. In each case, there is a significant difference in tax paid depending upon the source of income, with wage earners and the self-employed systematically paying the most tax and individuals receiving their income from interest paying the least. Not shown, because no personal income tax is paid, is the case of someone receiving capital income in the form of capital gains.
- While Panel A of Figure 8 suggests that on average a self-employed person pays more tax than an employee and that, at all income levels, those whose income is drawn from capital sources would pay the least, in fact the chart tells only part of the story. Because employers (and employees) pay high social security taxes and firms pay corporate income tax, the total "all in" tax paid on labour and capital inputs is different. In Panel B all of these factors are taken into consideration, illustrating that the total tax paid on the earnings of the self-employed is substantially lower than that of the employee at all levels of income. The difference stems principally from the smaller base on which the self-employed make social security contributions as well as the contribution ceiling from which they benefit. Indeed, it is not immediately obvious why only 35 per cent of self-employed earnings are subject to SSC. Economically, one could argue that only the salary portion of their operating surplus should generate social security -- but in that case 35 per cent would appear to be far too little. Within the economy at large, 65 per cent is closer to labour's share in value added. The third column in each group of histograms in Panel B of Figure 8 illustrates the impact on the "all in rate" of tax of imposing SSC on 65 per cent of a self-employed person's net revenue. Clearly such a change would substantially equalise the overall tax burden faced by employees and the self-employed.
- 24. The existing tax bias in favour of the self-employed is presumably the reason that it is commonplace for senior employees of Czech firms to set themselves up as independent consultants. Companies can afford to pay them substantially more at no additional cost, while they remain in what is effectively a dependent-employee relationship with a single employer. Indeed, on a per capita basis, the self-employed pay in income tax and compulsory social security payments only half of what employees pay, even though their earnings are twice as high.²⁰ A feature that is partially explained by the substantial difference between the all-in rates of taxation on self-employed over a wide range of earnings (Figure 9).

^{20.} OECD, Calculations based on Table 9.8 of the Czech Statistical Office (1998).



1. Includes income tax and social security contributions paid by employers, employees and self-employed. Source: Ministry of Finance, OECD.

The neutrality of taxes on capital income

25. Panel B of Figure 8 also makes it clear that different forms of capital income within the Czech system are taxed at substantially differing rates. Research indicates that such gaps tend to affect firms' financing decisions and the allocation of resources in the economy²¹. Indeed, the gap between the "all-in" rate on distributed earnings from equity holdings and interest payments is startling. It arises from two principal sources: *1*) the rate of withholding tax charged when firms distribute profits via different channels and *2*) the extent to which these earnings are subject to CIT (directly or indirectly through deductions allowed for some kinds of distributions). Indeed, the "all-in" tax rate on profits varies even more widely because of differences in the deductibility of dividends distributed in different ways and because of different depreciation rules applying to different forms of physical capital. As a result, depending upon the manner in which a given Kc 100 in profit is distributed, it will be taxed at anywhere between 15 and 52 per cent (Table 12). Capital that is reimbursed in the form of interest is taxed at the lowest rate as it is fully deductible from the corporate income tax base and only subject to a 15 per cent personal income

^{21.} Graham and Lemmon (1998) document that firms facing high corporate tax rates tend to have high levels of debt. This result confirms work by Schulman *et al.* (1996) for Canada and New Zealand as well as that of Desai (1997), who reports a positive cross-sectional correlation between debt usage and taxes across a sample of 51 countries. More recently, Graham (1999) found that an increase in corporate taxes has a positive effect on debt finance, while an increase of personal taxes on interest relative to equity income has a negative effect.

withholding tax. Capital gains, which are not taxed at the level of the individual, are the next most favoured form of distribution. Finally, the actual "all-in" tax rate paid on equity holdings that are distributed through dividends will depend upon the route that the dividend takes before arriving in the hands of the individual shareholder. Here rates are 44.3 per cent in the case of a dividend payment that is paid directly to a shareholder or which passes through either a mutual fund or a second firm that holds more than 20 per cent of the stock of the first. In the case where the holding falls below this threshold, the distribution is subject to a second round of taxation and the all-in rate rises to 52.2 per cent. The case of a pension fund is somewhat special as the initial distribution is not subject to withholding tax and a special lower 15 per cent withholding tax on distribution applies. Nevertheless, this lower withholding tax would have to be reduced still further if there were to be neutrality because when dividends are paid to a pension fund there is no tax allowance provided to the firm to offset its corporate income tax liability as is the case when dividends are distributed directly to shareholders.

Table 12. **Tax rates applied on capital income, by type of distribution**1999¹

| | Direct Qualifying participation | | Non-qualifying participation | Mutual fund | Pension fund | Capital gains | Interest payment |
|---|---------------------------------|------------|------------------------------|-------------|--------------|---------------|------------------|
| Corporate Income Tax (CIT) ² | 35 | 35 | 35 | 35 | 35 | 35 | 0 |
| Initial distribution Withholding tax CIT rebate ³ | 25 12.5 | 25 12.5 | 25 12.5 | 25 12.5 | 0 0 | 0 | 15 0 |
| Subsequent distribution Withholding tax CIT rebate ⁴ | n.a. n.a. | 0 | 25 12.5 | 0 | 15 0 | n.a. n.a. | n.a. n.a. |
| "All in tax" rate ⁵ | 44.3 | 44.3 | 52.2 | 44.3 | 44.8 | 35 | 15 |

- Rates are for 1st January 1999.
- As a per cent of pre-tax profit (excluding interest payments).
- 3. As a per cent of profit net of CIT.
- 4. As a per cent of distributed profit (pre-tax profit less CIT plus CIT rebate).
- 5. As a per cent of pre-tax profit under the assumption that all profit is redistributed (including any reductions in corporate tax liability arising through tax allowances).

Source: OECD.

Another way of looking at the issue of the neutrality of the taxation of capital income is to calculate the pre-tax real-rate-of-return that a firm needs to generate to guarantee an after corporate tax real rate of return equal to a bank deposit earning a 5 per cent return, depending on the source of its finance. Such a calculation has the advantage that it allows the influence of fiscal depreciation rules to be examined. In Table 13, the pre-tax rates of profit necessary to generate the required 5 per cent rate of return are reported for a number of OECD countries. The impact of the different "all-in tax rates" on various forms of distribution in the Czech Republic is reflected in the required rates of return on equity investments (7.1 per cent), capital gains (6.5 per cent) and loans (4.5 per cent). The extent of non-neutrality in the Czech Republic, as measured by the standard deviation of these rates of return, is about average; indeed only New Zealand and Norway exhibit perfect neutrality. The second block of columns in Table 13 reports the results of a similar exercise aimed at measuring the extent to which the tax system (principally through

ECO/WKP(2000)18

Table 13. Required rates of return to capital in manufacturing (cost of capital)

Top personal taxes, real rate assumed to be 5 per cent, inflation included, 1998

| | | Sources of financing ² | | | Type of assets ³ | | | | Overall | |
|----------------|-------------------|-----------------------------------|------|--------------------|-----------------------------|----------|-------------|--------------------|----------------------|--------------------|
| | Retained earnings | New equity | Debt | Standard deviation | Machinery | Building | Inventories | Standard deviation | Average ⁴ | Standard deviation |
| United States | 4.19 | 7.25 | 3.95 | 1.84 | 3.78 | 5.06 | 5.01 | 0.72 | 4.41 | 1.28 |
| Japan | 8.04 | 10.26 | 4.02 | 3.16 | 5.40 | 8.74 | 7.78 | 1.72 | 6.86 | 2.28 |
| Germany | 3.14 | 2.67 | 3.06 | 0.25 | 2.63 | 3.34 | 3.71 | 0.55 | 3.07 | 0.41 |
| France | 7.36 | 10.52 | 4.38 | 3.07 | 5.82 | 7.44 | 7.45 | 0.94 | 6.64 | 2.05 |
| Italy | 5.31 | 5.67 | 3.65 | 1.07 | 4.04 | 4.86 | 6.30 | 1.15 | 4.77 | 1.00 |
| United Kingdom | 4.44 | 5.05 | 4.06 | 0.50 | 3.96 | 4.33 | 5.34 | 0.72 | 4.37 | 0.55 |
| Canada | 6.87 | 7.59 | 3.88 | 1.97 | 4.79 | 6.67 | 7.41 | 1.35 | 5.89 | 1.51 |
| Australia | 4.32 | 4.15 | 4.15 | 0.10 | 3.76 | 4.42 | 5.10 | 0.67 | 4.24 | 0.45 |
| Austria | 4.28 | 6.22 | 3.59 | 1.36 | 3.40 | 4.52 | 5.76 | 1.18 | 4.24 | 1.14 |
| Belgium | 5.53 | 6.72 | 3.54 | 1.61 | 4.18 | 4.89 | 6.79 | 1.35 | 4.95 | 1.33 |
| Czech Republic | 6.52 | 7.15 | 4.46 | 1.38 | 5.68 | 5.88 | 6.46 | 0.41 | 5.87 | 0.91 |
| Denmark | 3.37 | 4.09 | 3.84 | 0.37 | 3.17 | 3.51 | 4.72 | 0.82 | 3.61 | 0.57 |
| Finland | 5.59 | 4.21 | 4.21 | 0.80 | 4.54 | 5.05 | 5.85 | 0.66 | 4.97 | 0.70 |
| Greece | 5.91 | 5.91 | 3.32 | 1.49 | 4.70 | 4.05 | 6.92 | 1.50 | 5.00 | 1.34 |
| Iceland | 6.46 | 6.93 | 4.31 | 1.40 | 5.33 | 5.90 | 6.56 | 0.62 | 5.76 | 0.97 |
| Ireland | 3.04 | 5.01 | 3.90 | 0.99 | 3.15 | 3.42 | 4.59 | 0.77 | 3.54 | 0.80 |
| Luxembourg | 5.79 | 4.59 | 3.81 | 1.00 | 4.38 | 4.93 | 6.39 | 1.04 | 4.97 | 0.95 |
| Mexico | 5.30 | 5.30 | 4.35 | 0.55 | 4.73 | 4.82 | 5.69 | 0.53 | 4.96 | 0.49 |
| Netherlands | 1.35 | 7.17 | 3.74 | 2.92 | 2.59 | 3.08 | 2.78 | 0.25 | 2.77 | 1.98 |
| New Zealand | 4.62 | 4.62 | 4.62 | 0.00 | 4.57 | 4.40 | 5.00 | 0.31 | 4.62 | 0.20 |
| Norway | 4.25 | 4.25 | 4.25 | 0.00 | 3.95 | 4.20 | 5.00 | 0.55 | 4.25 | 0.35 |
| Portugal | 5.62 | 8.20 | 3.40 | 2.40 | 5.04 | 5.02 | 5.35 | 0.18 | 5.10 | 1.56 |
| Spain | 5.33 | 4.35 | 3.66 | 0.84 | 4.37 | 4.85 | 5.03 | 0.34 | 4.65 | 0.60 |
| Sweden | 5.45 | 6.17 | 4.16 | 1.02 | 4.74 | 5.14 | 5.71 | 0.49 | 5.07 | 0.71 |
| Switzerland | 3.28 | 5.91 | 4.49 | 1.32 | 3.72 | 4.05 | 4.43 | 0.35 | 3.97 | 0.90 |
| Turkey | | | | | | | | | | |
| Average | 5.13 | 6.11 | 3.97 | 1.30 | 4.26 | 4.90 | 5.64 | 0.77 | 4.74 | 1.04 |

^{1.} The pre-tax real rate of return represents the cost of capital to the firm when accounting for corporate and personal tax rates. See OECD (1991) for discussion of this methodology. Wealth taxes on individuals and corporations are excluded from calculations.

Source: Gordon et al. (1998), OECD.

^{2.} The weighted average uses the following weights: machinery 50 per cent, buildings 28 per cent, inventories 22 per cent.

^{3.} The weighted average uses the following weights: retained earnings 55 per cent, new equity 10 per cent, debt 35 per cent.

^{4.} The weighted average uses weights indicated in footnotes 2 and 3.

depreciation rules) favours certain kinds of physical investment. Here, the Czech system as it existed in 1998 is even more neutral with the required rate of return for machinery and equipment almost the same as that for buildings. Inventories remain disadvantaged (as indeed they are in most countries) because they do not benefit from any depreciation allowance. Finally, it is worth remarking that in all six cases the required return from an investment in the Czech Republic was higher than the OECD average. This reflects, in part, the very long depreciation periods that were in place in 1998. While these were shortened early in 1999, OECD calculations using the new shorter depreciation periods suggest that Czech required rates of return nevertheless remain higher than average.²²

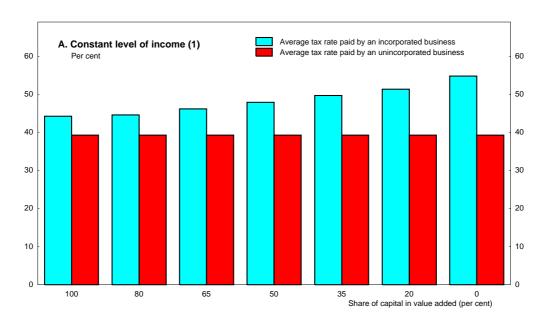
Additional issues concerning the taxation of firms

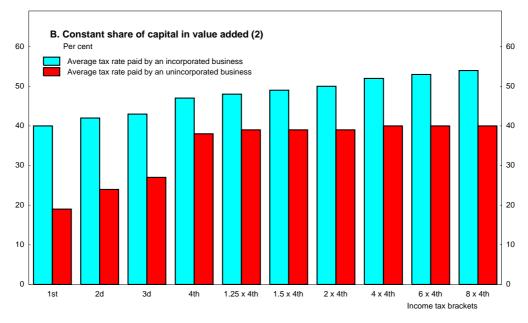
- 27. A further complication in the Czech tax code is that it does not recognise corporate groups (*i.e.* holding companies) and therefore does not permit consolidation of revenues (and losses) across members of conglomerates. As a result, each company is taxed separately and profits and losses may not be shifted between affiliated companies. This treatment creates a natural incentive for firms to favour horizontal (and potentially monolithic) corporate structures so that losses generated in disparate activities can be used to reduce the tax burden in profitable ones. To the extent that these entities succeed in consolidating their revenues and losses, they will be able to reduce their overall tax liability, and, at the limit, the prohibition on holdings will have no impact on tax revenues. It may, however, have a negative effect on overall economic efficiency if, as might be expected, such large corporate structures are more difficult to manage than smaller and more independent firms working as separate profit centres within a holding structure.
- 28. In addition to the incentive for an individual working for a firm to establish him or herself as a putatively self-employed consultant, the tax system favours more generally the operation of unincorporated as opposed to incorporated firms. Panel A of Figure 10 illustrates the total effective tax rate paid by an owner-operated firm with value added equal to twice the upper boundary of the top market of the personal income scale tax schedule. As the share of the wage bill in pre-tax value added rises from 0 to 100 per cent, the rate of tax paid by an incorporated business increases, whereas it remains constant for a non-incorporated firm that is treated for tax purposes in the same way as a self-employed worker. Panel B holds the share of wages constant at 65 per cent (the average share for the business sector as a whole) and shows the variation as income rises from the frontier of the lowest personal income tax bracket to eight times the highest bracket. Panel A makes it clear that, except in the case where almost all of a firm's value-added derives from the employment of capital, the tax system offers a clear incentive to not incorporate, while in Panel B this incentive is shown to persist even at very high incomes.
- 29. Finally, beginning in 1998 the tax system allows firms a deduction for specific bad debts.²³ Thus, a creditor can deduct 20 per cent of the value of debts more than six months overdue and 33 per cent of debts with arrears of more than twelve months. In addition, taxpayers are entitled to claim as a tax-deductible expense unpaid receivables relating to bankruptcy and liquidation proceedings due by 31 December 1994.

^{22.} Estimates suggest that using 1999 depreciation rates and tax rules the required rates of return for equity would be 6.64 per cent, for debt 4.07 per cent and for capital gains 6.02 per cent. Among asset types, they would be 4.93 per cent for machinery, 5.41 per cent for building and 6.46 per cent for inventories.

^{23.} Previously, tax relief was available only under very specific situations. For example the debtor had filed for insolvency or for bankruptcy or had gone into liquidation and the creditor registered a claim at court.

Figure 10. Average statutory tax rates on incorporated and unincorporated business 1999





Income equals twice the lower boundary of the top personal income tax rate.
 Share of capital and labour are 35 per cent and 65 per cent, respectively.
 Source: Ministry of Finance, OECD.

Implications for the labour market

- 30. The combination of high social security contributions and personal income tax rates on labour income means that statutory marginal tax wedges on labour in the Czech Republic are high, although they are broadly in line with those observed in many European OECD countries. The total labour tax wedge²⁴ for a single person is 48 per cent for someone earning a little over the earnings of an average production worker (APW) and then rises to above 50 per cent for someone with 1.7 times APW earnings (Figure 11). The wedges for married couples with two children are somewhat smaller and also less than in some OECD countries (such as Belgium, Canada, Germany, Hungary and Italy) but are much larger than in a number of other countries with which the Czech Republic competes directly (*i.e.* Greece, Ireland, Portugal and Spain) and the United States.
- 31. The OECD Jobs Study (1994) and a number of follow-up studies have shown that a high overall tax wedge -- and especially -- high social security taxes tend to raise the cost of labour which is associated with high rates of unemployment among the less-skilled and lower rates of employment. While to date the Czech Republic retains a relatively high level of employment, the recent up-surge in unemployment suggests that these kinds of effects could be materialising now. As discussed both in OECD (1998a) and OECD (2000), the disincentive effects of these high tax rates in the Czech Republic are greatly magnified because benefits form an effective floor, below which net wages of low-productivity workers cannot fall. Indeed, the combination of higher taxes and generous benefits for households with children creates serious unemployment and poverty traps with marginal tax rates (inclusive of benefit withdrawal) close to or in excess of 100 per cent in many cases (Figure 12).

IV. Suggestions for reform

Recent tax policy initiatives

32. Most recently, the government has undertaken a number of reforms in the tax system, some of which will serve to address issues raised in the foregoing.

Taxation of capital income

- As of 1 January 1998 interest income earned by legal entities and self-employed individuals on debentures issued in and after 1998 is taxed as part of the corporate income tax base. The 25 per cent withholding tax is treated as a prepayment, which is deducted from the final corporate tax liability. Previously, interest paid from Czech sources to legal entities and self-employed individuals was subject to a final withholding tax of 25 per cent.
- In early December 1998 and effective 1 January 1999 the Parliament approved an amendment shortening legal depreciation periods for most forms of physical capital (i.e. increasing the depreciation rates). These now fall within the range observed elsewhere in the OECD.
- As of 1 January 2000 the corporate income tax rate will be reduced to 31 per cent.
- Effective from 1 January 2000, the withholding tax on dividends and capital gains earned on holdings of less than six months will be lowered to 15 per cent from a previous 25 per cent.

^{24.} These include income taxes, social security contributions, and cash transfers.

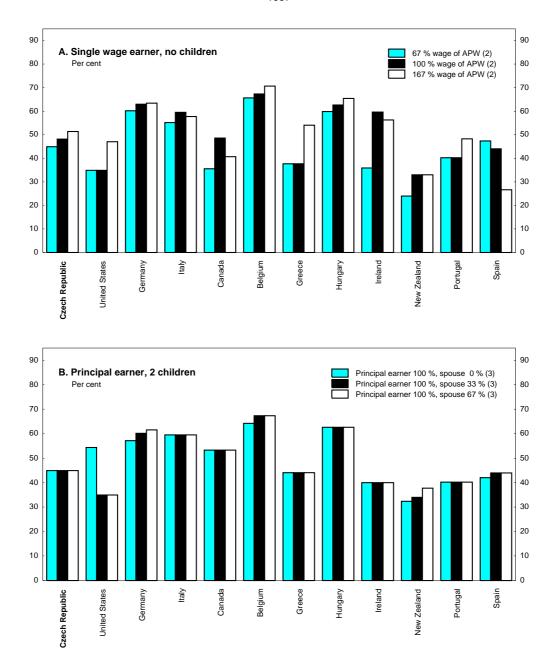


Figure 11. Marginal tax wedges by family type and wage level (1) \$1997\$

^{1.} Marginal tax rates covering employee's and employer's social security contributions and personal income tax. with respect to a change in gross labour costs.

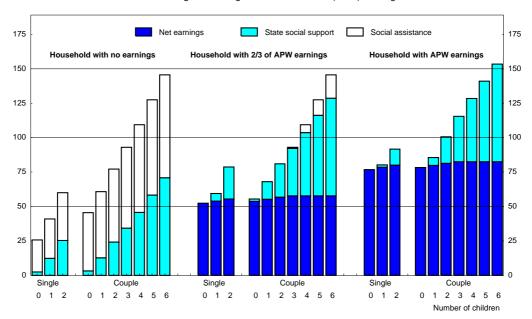
2. APW: Average production worker in manufacturing.

3. Refers to proportion of wage of APW.

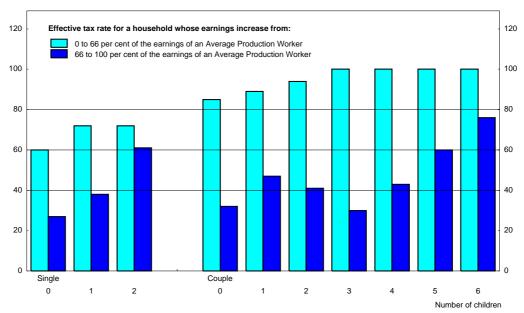
Source: OECD, Tax/benefit positions of employees (1998d).

Figure 12. The interaction of taxes and transfers

A. Net earnings and social security
Per cent of gross Average Production Worker (APW) earnings



B. Estimated effective marginal tax rates Per cent



Source: Ministry of Labour and Social Affairs, OECD.

Personal income tax

- Effective from 1 January 2000, the top personal income tax rate of 40 per cent will be abolished and the marginal personal income tax rate will drop to 32 per cent. This concerns individuals earning Kc 1.1 million (*i.e.* roughly more than \$31 000) a year or more.

Indirect taxes

- A rise in indirect excise taxes on fuel (petrol 1.39 Kc/L, diesel 1.04 Kc/L) and cigarettes (0.73 or 1.22 Kc, depending on length), effective 1 July 1999 (increasing revenues by an estimated Kc 4 billion, and increasing the price level by about 1 per cent).
- Effective from 1 April 2000, a small number of additional services have been added to the list of items taxed at the reduced VAT rate.

Scope for further action

- 33. The preceding review reveals a tax system in the Czech Republic that is broadly similar to those operated in other OECD countries. It exhibits a number of non-neutralities, some of which reflect the economy's command and control past. But most of them, like those observed elsewhere, reflect compromises between, on the one hand, the desire to minimise economic distortions and, on the other, the need to implement a system that is administratively and politically practical while maintaining at least some redistribution of personal incomes. Reform should continue in this vein. While radical changes are not called for, there is nevertheless considerable scope for reducing the distortions and inefficiencies that the tax system currently introduces (Box 5). Moreover, with Czech living standards at only 60 per cent of the OECD average, designing the tax system so as to support a rapid and sustainable rate of productivity growth is necessarily a critical policy objective.
- 34. In this context, the tax system cannot be looked at entirely in isolation from the expenditures that it is required to finance. Here, strong consideration should be given to attempting to streamline the benefit system. As is the case in Hungary and Poland, expenditures and especially transfers constitute a much larger share of GDP than they are in other member countries at similar or even higher levels of economic development. The government should undertake an in-depth examination of the redistributive impact of the tax-benefit system as a whole. While such a comprehensive examination has not been carried out here, principally because of a lack of required data, it appears that, as is the case with the implicit VAT subsidy, many programmes achieve little net redistribution, while requiring substantial sums of money to flow through the government's coffers. Focusing aid more on those most in need might be able to achieve the same redistribution but with much lower financing costs and less potential damage to overall economic efficiency. In the absence of savings on expenditures, the available evidence on the relationship between the overall tax burden a country faces and economic growth suggests that the high overall tax rate in the Czech Republic could threaten the pace of convergence with the rest of the OECD.
- 35. Without reducing the level of expenditures, the overall tax burden cannot be cut. Nevertheless, there appear to be opportunities to widen a number of tax bases and reduce some of the higher and more distortive tax rates by rebalancing the overall tax mix and eliminating certain anomalous characteristics of the system. In particular, there is opportunity to broaden the base of the personal income tax (only Greece derives a smaller share of total revenue from this source) and the VAT and to increase revenues collected from real-estate property (second lowest in the OECD), while at the same time lowering social security contributions and payroll taxes (only France and the Netherlands rely more heavily on this source). A re-balancing of revenue sources could be engineered so as to have a number of beneficial impacts.

Box 5. Summary of tax-policy recommendations

Consider reducing expenditures to lower the overall tax burden

The government should consider re-examining its tax and benefit system with an eye to reducing total expenditure on benefits, while improving the extent to which they are focussed on helping those most in need. The high tax burden required to finance the personal transfers under the current system may be having important negative impacts on the country's potential growth, thereby slowing the pace of convergence to income levels observed in other OECD countries.

Reduce the number of goods and services subject to the reduced VAT rate

The unusually wide range of services and goods subject to the low VAT rate should be reduced so as to decrease distortions. Additional revenues could be used to finance lowering of social security contributions or a reduction in the standard rate.

Reduce the importance of social security contributions in total tax revenues

High compulsory social security charges are associated with rising and high rates of structural unemployment throughout the OECD. In order to improve employment incentives for low-skilled workers these rates should be reduced by transferring responsibility for the financing of some social programmes to a broader tax base.

Increase property taxes

As compared with other countries local governments have relatively small own-tax revenues. In particular, property tax revenues have not kept pace with inflation.

Eliminate the bias in favour of self-employed work forms

The low share of self-employed earnings subject to social security contributions introduces a serious bias in favour of this work form. Raising the share taxed from 35 to 65 per cent, which broadly corresponds to labour's share in value added, would increase horizontal equity and efficiency within the economy.

Improve tax compliance

While tax evasion and avoidance are not perceived by the authorities as being serious problems the rapid accumulation of arrears suggests potentially important problems in the enforcement of tax law, while under reporting of wages may be a growing problem.

Decrease non-neutralities in the taxation of capital income

Low "all-in" tax rates on interest payments and capital gains privilege these distribution methods to the detriment of dividends. Setting the withholding tax on interest income equal to the corporate income tax rate and eliminating the taxation of capital gains and dividends within the personal income tax would provide a more even treatment.

36. As recommended in the 1998 OECD Economic Survey of the Chez Republic (OECD, 1998a), lowering payroll taxes and transferring some of the tax burden currently carried by these involuntary contributions to both labour and capital income would also serve to reduce the serious work disincentives that they generate. With the exception of health-care, these contributions are not earmarked taxes and most of the services paid for are universal in nature and not related to a recipients' work history. Budget neutrality under the current dual personal income tax system, could be ensured by increasing the rates in the progressive income tax schedule as well as the withholding taxes applied to distributed capital income. In addition to improving the functioning of the labour market (see OECD, 2000) and reducing the risk of rising structural unemployment, such a reform would, by lowering social security contribution rates, go a long way to reducing the present bias in favour of self-employment. However, more might be done in this regard and the reform should be complemented by raising the share of self-employed earnings subject to social security charges. Not only would this allow rates to be lowered, it would serve to further reduce the

bias in favour of this work form and diminish the tax advantage that unincorporated firms currently enjoy, potentially resulting in less tax evasion. Finally, to improve horizontal equity, the ceilings placed on the contributions of the self-employed should be eliminated or also be made available to employees. Of the two options, the first is to be preferred in so far as the existence of such ceilings contributes to the overall regressivity of the tax system.

- The benefits of lowering social security contribution charges would be enhanced if capital 37. income were also made to carry at least part of the burden currently borne by labour alone. Here an adjustment in the distribution of the tax burden could be accompanied by measures to remove non-neutralities in the existing taxation of capital income. At the moment, returns to capital distributed in the form of interest payments and capital gains are taxed at much lower rates than other sources of capital income resulting in a bias in favour of these forms of savings. The government's plan to further lower the corporate tax rate and to decrease the withholding tax on dividends to 15 per cent would reduce the extent to which interest income and, to a lesser extent, capital gains are privileged. However, by lowering the rate of tax on capital income in general, the relative tax burden on labour income will increase, while the bias in favour of interest income will not be eliminated. An alternative solution that would preserve the advantages of the current system's reliance on easy-to-administer withholding taxes might be envisioned. One possibility, which has been applied in some OECD countries (including Norway and Finland), would equalise the all-in-tax rate on capital income by setting the withholding tax on interest income equal to the corporate income tax rate and eliminating the withholding tax on other forms of capital income. In this way, all three forms of income from savings (i.e. dividends, interest and capital gains) would be taxed at precisely the same rate.²⁵ Further, the base widening implicit in such a reform might also offer the possibility of lowering rates.²⁶ Although other reforms could be implemented, they would tend to be administratively more difficult to put into practice.²⁷
- 38. Economic efficiency could be further enhanced by reducing the unusually large number of goods and services subject to the reduced VAT rate and using the increased revenue to lower statutory tax rates. Two options recommend themselves. The first would see the government use the additional revenue to lower social security contribution rates which would simultaneously reduce the distortions produced by this tax and serve to lower the economy's dependence on labour taxes for revenues. The second option would be to lower the standard VAT rate. By proceeding in a revenue neutral manner, the impact on inflation could be eliminated and domestic resistance kept to a minimum, while the distributional impact of the change would be small. Given that EU accession will require that a number of these services and goods (in particular central heating) be taxed at the standard rate, the timing would appear to be near ideal.

^{25.} The first two are taxed by the corporate income tax rate, while interest payments (which are deductible from the firm tax base) are taxed in the hands of recipients with a flat tax rate identical to the corporate income tax rate.

^{26.} The extent to which a lower rate would be feasible will depend on the relative importance of the offsetting revenue impacts of a higher tax rate on interest income and the lower all-in-tax rate on dividend income implied by the reform.

An alternative solution would reduce vertical and horizontal inequity by subjecting all income (both capital and labour earnings) to the same progressive income tax schedule and offering tax credits to individuals to the amount of taxes withheld at the firm level. While such a reform would widen the tax base of the personal income tax system it would also increase the "all-in" tax rates on capital income requiring that these be reduced either by giving firms corporate income tax credits in proportion to dividend payments and realised capital gains, or by adjusting the various withholding tax rates. While perhaps technically superior, this would be much more difficult to administer. In contrast to the current scheme where firms need only report the total amount of each income distributed, under this revised scheme both they and the government would have to record such information for each individual recipient.

Indeed, with domestic activity and inflationary pressures at an all time low, the probability that firms would fail to pass on the savings from the lower VAT are small.

- 39. Most observers indicate that tax evasion is not as serious a problem in the Czech Republic as in some other transition countries or even as compared with a number of western European OECD economies. However, the dramatic accumulation of tax arrears is cause for concern and there is some indication that firms and workers are under reporting earnings. While implementation of the kind of reforms discussed in OECD (2000) to improve the capacity of the government to enforce its claims on delinquent debtors will certainly help, more needs to be done to ensure that firms do not get behind in their taxes. Indeed, a clear definition of compliance and the prompt implementation of a regular programme to measure it are essential first steps. In addition, efforts should be extended to improve the tax administration's data systems so that additions to arrears from penalties on old unpaid taxes can be distinguished from new delinquencies. More generally, the government should avoid adopting a relaxed stance to collections in cases where firms are performing poorly. Rather, it should pursue restructuring or other payment solutions, as would any other creditor. Failure to do so would just encourage these firms and others to continue using the government as a lender of last resort.
- 40. Beyond the issue of arrears, the strengths of the current tax administration system can be enhanced in a number of areas. In particular, in order to reduce the extent to which uncertainty surrounding tax treatment is a factor in firms' decision-making processes, the predictability of the tax system's administration could be enhanced by introducing binding tax rulings. This would be particularly helpful in a country like the Czech Republic that lacks precedents upon which decisions could be based or, for that matter, a court system that operates on the basis of such precedents. At a minimum, there should be an explicit recognition in the statutes that, even at the initial administrative level, taxpayers who made an honest mistake (especially one based on the non-binding rulings of the tax authority) should not be subject to the same penalties as an individual acting with fraudulent intent. In addition, the allocation rule for revenues from corporate taxes should be made independent of the location of their head offices in order to eliminate harmful competition among municipalities. Indeed, redistributing these revenues on a per capita basis might be the most sensible solution to the problem. More generally, the various incentives in the tax system that favour unincorporated firms at the expense of incorporated firms and self-employment to the detriment of dependent employment, make the administration of the tax system more difficult and increase the likelihood of evasion. A number of the changes enumerated above will serve to reduce this bias in the system. However, the rapid expansion of smaller firms that are less likely to be audited and the apparently high incidence of financial fraud within the economy suggest that the authorities will need to continue to be vigilant and that undue complacency concerning compliance would be misplaced.
- 41. In the context of the creation of a new level of government, the authorities might wish to increase the importance of property taxes. As compared with most OECD countries, funding from this source is relatively low in the Czech Republic. Increasing funding would provide greater flexibility to local officials to manage the substantial programmes for which they are responsible and to compete effectively for investment. On the other hand, care should be exercised to ensure that increased own-tax revenues for municipalities do not result in an undesirable increase in the variance in the quality and quantity of services that municipalities can afford to offer.
- 42. Finally the government should re-examine existing roles concerning the tax treatment of holding companies. Given that firms can avoid the revenue implications by forming large conglomerates, it might be more efficient to relax the restriction on revenue consolidation so that they can choose the most efficient corporate form. In some cases this will undoubtedly be a conglomerate, but in others it may well be some sort of holding structure. Such a reform would, however, likely require amendments to the regulatory framework for holding companies in the Czech Republic.

Annex Details of the tax system

Table A1. Main features of the tax system

Updated to 1 January 1999

| Tax | Nature of tax | Deductions and exemptions | Rates | | |
|------------------------------------|---|--|--|--|--|
| 1. Taxes on Income | | | | | |
| 1.1. Resident Individuals | The PIT is levied on resident individuals on their worldwide income. | allowance of Kc 34 920. An additional | whose lower limit is given on the line and upper limit on the next line. | | |
| 1.1.1.Personal income tax (PIT) | Individuals with more than one source of income must return the tax-file on or before the 31 st March of the year following the tax year. The tax year is the calendar year. Income is defined as any benefit obtained regardless of whether it is in cash or in kind. Non monetary benefits are valued at their fair market value. | spouse's annual income does not exceed Kc 34 920. Further, an allowance of Kc 21 600 is granted for each dependent child living in the taxpayer's household, and an additional Kc 13 080 per payer receiving a full invalidity pension. A Kc 10 464 allowance applies if the taxpayer takes part in a systematic educational or training programme. | Taxable income Percentage on excess 0 15 102 000 20 204 000 25 312 000 32 1 104 000 40 | | |
| | Spouses or couples are always taxed as individuals, according to the basic tax schedule. | Losses can be carried forward for seven years. No carry-back is allowed. | | | |
| | The taxable base is the aggregation of separate taxable bases for each category of income: | Contributions by employees to statutory health and employment insurance and social insurance as well as payments to foreign schemes are deductible in full. | | | |
| | Income from dependent services and public services It is defined as income from present or former employment and income from the work of members of co-operatives. | Donations to municipalities and organisations which support activities such as science and education, culture, medicine, ecology etc. are deductible if the total value of the donation is at least 2 per cent of the taxable base of the donor or Kc 1 000. The total amount of deductible donation in a year may not, however, exceed 10 per cent of the taxable base. | | | |

| Tax | Nature of tax | Deductions and exemptions | Rates |
|-----|--|---|---|
| | Income from entrepreneurial activity and from independent services | The rules determining non-deductible and deductible items are the same as for corporations. | Personal income tax rates (see above). |
| | difference between the income and the related | In the case of certain activities, the taxpayer may opt for a lump-sum deduction of expenses from income in the separate branches of the category as follows: | Income from authors' contributions to newspapers and radio/television broadcast is subject to 10 per cent final withholding tax rate, |
| | | - 50 per cent of income from agriculture; | provided their contribution does not exceed Kc 3 000 per payer. |
| | | 30 per cent of income from intellectual property and similar rights; | |
| | | 25 per cent of income from trade and from other entrepreneurial activities. | |
| | 3. Income from capital assets which includes: | Capital income from the following sources is tax | Dividends and other income from profit |
| | Dividends, interest and other returns from securities or from participation in a legal | exempt:Gains from the sale of a dwelling if it was used | distribution are subject to a 25 per cent final withholding tax rate. |
| | entity; | as primary home by the taxpayer for two years; | |
| | - Profits shares of limited partnerships; | - Gains from the sale of immovable property | Interest payments from deposit accounts and |
| | Gains from the sale of shares and option rights; | (excluding dwellings) owned by the seller for at least five years if the property is a residential property; | saving books are subject to 15 per cent final withholding tax. |
| | - Discounts on bills of exchange; | - Gains from the sale of motor vehicles, | Dividends and interest paid by a Pension Fund |
| | - Interest from loans and savings deposits; | aeroplanes, and ships, which have not been used for business profits, if the assets have | are subject to a final withholding tax of 15 per |
| | - Annuities based on private insurance | been held for at least one year before disposal. | cent. |
| | (including foreign-source pensions). If employees for a consideration lower than their nominal value, the difference between the acquisition cost and the nominal value acquire shares is taxed as a capital gain on disposal only. | Gains from the disposal of securities held for at least six months; | |
| | | - Compensation for damages | |
| | | Allowances and benefits from social insurance or from other social care; | |
| | | - Most benefits from private insurance; | |
| | | Gains from the sale of movable and immovable property, which have not been used to generate business income or independent services. | |
| | | - Gains from the sale of shares repurchased by the employer. | |

| Tax | Nature of tax | Deductions and exemptions | Rates |
|-----|---|---------------------------|---|
| | 4. Income from leasing or rents | | |
| | Rental income includes leasing income from movable and immovable property. The tax base may be calculated according to the general rules or it may be reduced. | | |
| | 5. Other income | | |
| | Gains from the sale of movable and immovable property which have not been used to generate | | A tax of 20 percent is levied on winnings in public and advertising competitions. |
| | business income or independent services; | | A tax of 15 per cent is deducted from incomes |
| | Income from occasional activities including occasional leasing of movables if the total income in a tax year exceeds Kc 10 000; | | from secondary dependent activity, provided their aggregate does not exceed Kc 2 000. |
| | Other pensions primarily derived from Czech state pension schemes. | | |
| | The taxable base of <i>other income</i> is calculated according to the general rules, except that such calculations may not result in a loss. | | |
| | 6. Pension income | | |
| | Taxable income is the amount of private and other pensions, reduced by the purchase price divided over the period when the pension is payable. This period is calculated as the difference between the taxpayer's expected lifetime and the age of the taxpayer when he first receives the pension. | | |
| | Occupational pensions are treated as income from former employment and taxed according to the rules for income under 1. | | |

Table A1. **Main features of the tax system** (continued)
Updated to 1 January 1999

| Tax | Nature of tax | Deductions and exemptions | Rates |
|----------------------------------|---|---|---|
| | Foreign source income received by a resident individual is included in his taxable income | In the absence of a treaty, unilateral relief is provided by way of a foreign tax credit for income taxes paid abroad. This credit is limited to amount of Czech tax that would have been payable had the income been earned in the CR. | Alternatively, foreign source dividends and interest, as reduced by foreign taxes paid, may be declared separately and taxed at the 25 per cent withholding tax rate. |
| 1.1.2. Capital gains | Capital gains are taxable if the asset has been used to generate income or to carry on business or independent services. | For exemptions see above. | Capital gains are taxed as Other income (see above). |
| | The gain is determined as a difference between the purchase price (or nominal value) and the sale price, decreased by the expenses relating to the sale. | | |
| 1.1.3. Owner occupied | There is no tax on imputed rental income. | | |
| housing | For gains from the sale of a dwelling, see above. | | |
| 1.1.4. Fringe benefits | Benefits are treated as taxable employment income. | 12 per cent of the purchase price of company cars provided both for business and private use is included in the taxable base of the employee. | |
| | | The following benefits are tax exempt: - refresher courses for employees; - catering provided by the employer; - trips abroad as incentive award up to Kc 10 000 per annum. | |
| 1.2. Non-resident individuals | Non-residents are taxed only on their income derived from Czech sources according to the | | Withholding tax rates on certain types of income received by non-residents: |
| | rules applicable to residents. However, certain types of income received by non-resident | | 15 per cent on registered certificates of deposit |
| | individuals are subject to withholding tax. | | 25 per cent on: income from licenses and copyrights; income from bonds and other securities; interest from loans and debt-claims of every kind; rental income; income from consultancy and technical services provided in the CR. |

| Tax | Nature of tax | Deductions and exemptions | Rates |
|-----------------------------|--|---|---|
| 1.3. Business | | | |
| 1.3.1. Corporate income tax | CIT is levied on the world-wide income of legal | | 35 per cent on profits of the legal entities |
| (CIT) | entities (incorporated public companies and private companies) and on associations and foundations to the extent that they carry on a business. Limited partnerships are subject to: | | 25 per cent on profits derived by investment companies and investment and pension funds. |
| | CIT tax on the income attributable to the limited partners. | are: | Withholding tax: |
| | • | | Special tax rates apply to domestic-source income |
| | The tax year is the calendar year. | Expenses incurred in generating and maintaining taxable income (i.e. insurance | derived by resident companies. The 25 per cent final withholding tax is levied on: |
| | Taxable income equals gross income from various sources less expenses and losses carried forward | premiums, social security contributions); | - Dividends and other income; |
| | from preceding periods for up to seven years Royalties and interests; | - Interest (paid abroad) disallowed under the | |
| | Corporate income tax returns must be filed by | - Lease expenses with a leasing period above | thin capitalisation rules; |
| | 31 March of the year following the tax year. If the tax return is authorised by a chartered accountant 20 per cent of the expected useful life tangible assets and of at least three years; | tangible assets and of at least three years; | - The difference between the agreed price and |
| | the deadline is 30 June. The time limits may be extended up to a maximum of three months. | - Paid real estate tax, road tax, and other | the market price under the transfer-pricing rules (paid abroad); |
| | extended up to a maximum of times months. | items; | - Fees paid abroad to a board of directors or a |
| | | Donations, in the limit of 2 per cent of the tax base, to resident municipalities, communities and legal entities designed to finance science, education, culture and other ecological and humanitarian purposes. | supervisory board. |
| | Advance payments are required from all companies whose last known liability is more than Kc 20 000. A legal entity with tax liability of more | The main types of exempt income are interest income from securities secured by a mortgage and interest on Eurobonds issued by a resident | From 1998, the 25 per cent withholding tax on interest gains continues to apply but it is credited against the whole year's tax liability. |
| | than Kc 10 mln. for the previous year must make monthly advance payments; with tax liability | company. | Depreciation period for tangible assets: |
| | between Kc 100 000 and 10 mln. must make quarterly advance payments; and with a liability between Kc 20 000 and Kc 100 000, must make two instalments equal to 40 per cent of the tax liability of the preceding year by 30 June and 15 Dec. | Depreciation allowances are available for both tangible and intangible assets that are used for business purposes. Inventories may not be depreciated. | 4 years: Category 1 vehicles, computer equipment, hand mechanised tools; |
| | | Both straight-line and accelerated methods are allowed. The taxpayer must determine at the | 6 years: Category 2 machines not in category 1, trucks, tractors; |
| | Interest is included in the taxable income of recipient companies. Royalties are normally included in the recipient's gross income. | beginning of the depreciation process, which method to use, which cannot be changed for the entire period of depreciation. | 12 years: Category 3 machines used in specific industrial process - steel plants, paper, manufacture and certain areas of cultivation; |
| | | 47 | |

| Tax | Nature of tax | Deductions and exemptions | Rates |
|-----|---|--|---|
| | A partial integration system applies to profits | Tangible assets: | 20 years: Category 4 |
| | to individual shareholders. Double taxalion is | Depreciable assets are classified in 5 depreciation categories: | buildings made of wood or structures for energy generation; |
| | corporate income tax liability an amount equal to | A 10 per cent initial depreciation allowance is granted for the acquisition price of machinery and equipment from the taxable income of the first owner of the assets, provided it is not sold or leased within three years. This deduction does not affect the depreciable value of the asset. | 30 years: Category 5 |
| | 50 per cent of the withholding tax imposed on dividends previously paid out of profits. | | buildings not in category 4, tunnels, roads. |
| | | | All other assets are treated as falling under category 2. Leased assets may be depreciated only using the straight-line method. |
| | | Intangible assets: | Depreciation period for intangible assets: |
| | | May be depreciated if their initial price exceeds | Four years: soft-ware know-how; |
| | | Kc 40 000 and they have an expected useful life of at least one year. For lower values, intangible assets may be written off in the year of acquisition. | Five years: costs of forming a company, as well as immaterial results of research and development; |
| | | | Six years: licences, industrial rights, technical and other know-how; |
| | | | Twelve years: patents. |
| | | Accelerated depreciation: | Investment allowance |
| | | The first year depreciation is established as a quotient of the acquisition price and an initial coefficient stated in the law. To determine the amount of depreciation in subsequent years, the acquisition cost must be doubled and divided by the respective coefficient minus the number of already depreciated years. | The taxable base may be reduced by the following percentages of the purchase price or cost of production: |
| | | | 10 per cent of purchased or leased tangible assets, including machines, equipment, tools and means of transport; |
| | | | 15 per cent of equipment and machinery for sewage disposal and utilisation of waste materials; |
| | | | 20 per cent of the machinery used in agriculture and forestry. |

| Tax | Nature of tax | Deductions and exemptions | Rates |
|----------------------------|---|---|---|
| | Foreign source income is fully taxable under ordinary business income tax. | Foreign tax credit. A credit is granted for tax paid abroad on income from a foreign source. This credit is limited to the amount of foreign-source income times the Czech CIT rate. | Ordinary rates |
| | Provisions for bad debt | Transfers to provisions for bad debts are deductible for tax purposes if certain conditions are met. | Foreign source dividends, liquidation proceeds and certain types of interest constitute a separate tax base, which is subject to a 25 per cent final tax. However, if the parent company holds 20 per cent or more of the foreign subsidiary equity stock repatriated dividends are tax exempt. |
| 1.3.2. Capital gains | Capital gains are normally included in ordinary business income. Ordinary losses can be carried forward for seven years (see above). | nary losses can be be set off against similar gains during the relevant | Corporate taxpayers, other than banks, may write-off bad debts at 20 per cent for debts more than 6 months overdue and at 33 per cent for debts more than 12 months overdue. Write-off rates vary according to the maturity |
| | | | period of the bad debt. |
| 1.3.3. Tax incentives | The granting of tax incentives for direct investments were terminated in 1992, but taxpayers who were entitled to use tax incentives available under previous legislation may continue to benefit from such incentives according to the conditions provided by the legislation. | | |
| 1.3.4. Groups of companies | There is no group taxation in the CR. All entities are taxed separately. Profits and losses may not be shifted between affiliated companies. | However, a dividend received by a resident company with a qualifying participation (i.e. at least 20 per cent of the capital), and redistributed to its own shareholders holding a qualifying participation | |
| | Intercorporate dividends are taxed in the hands of the recipient corporate entity. The partial integration system explained above also applies to intercorporate dividends. | of its capital, is exempt from withholding tax. Investment funds do not qualify for this exemption. | |
| 1.3.5. Tax on payroll | It was abolished in 1993. | | |

Table A1. **Main features of the tax system** (continued)
Updated to 1 January 1999

| | Tax | Nature of tax | Deductions and exemptions | Rates |
|------|------------------------|---|---------------------------|---|
| 1.4. | Non-resident companies | Only income derived from Czech sources is subject to taxation. | | |
| | | A final withholding tax applies to dividends, interest and royalties paid to non-resident companies. The rate may be reduced under a tax treaty. | | The rate of the withholding tax is 25 per cent in all cases. |
| | | A special withholding tax applies to rental income and income from consultancy and technical services provided in the CR. | | 1 per cent withholding tax in the case of financial leasing, if the leased asset is subsequently purchased by the lessee. |
| 1.5. | Transfer-pricing | Prices agreed between related parties should not differ from prices contracted with independent customers in similar commercial transactions. Companies can however, properly document the difference in prices. Similarly, interest charged on loans between related debtors and creditors must generally equate to 140 per cent of the Czech National Discount rate (DR). This provision does not apply when the creditor has its residence abroad and the interest rate charged is below the DR. | | |
| 1.6. | Thin Capitalisation | Interest paid on loans provided by related parties in excess of the ratio 4:1 between the aggregate value of foreign value of foreign debt and all equity of the company is not deductible for tax purposes. The ratio for banks and insurance companies is 6:1. | | |
| | | Newly established companies are exempted from thin capitalisation rules in the partial year of establishment and in the subsequent three calendar years. | | |

Table A1. **Main features of the tax system** (continued)
Updated to 1 January 1999

| | Tax | Nature of tax | | Ra | ntes | |
|-----|---|---|--|---|--|-----------------------------|
| 2. | Social security contributions | Social security contributions are fixed by a percentage rate of the basis of assessment of the monthly gross income for employees and of the yearly net income for the self-employed. | At the inception of their activities carrying taxable income, legal and private persons are re register with the district social insurance administration body at the place where the legal personain offices or where the private person has his residence. | | | |
| | | | | Employee | Employer | Self-employed |
| | | Social security contributions are shared between | Health insurance | 4.5 | 9.0 | 13.5 |
| | employers and employees according to the scheme presented in the next column: | Social insurance Sickness benefit | 1.1 | 3.3 | 4.4 (Voluntary) | |
| | | · | Pension | 6.5 | 19.5 | 26.0 |
| | | Contributions by employees to statutory health and | Employment policy | 0.4 | 3.2 | 3.6 |
| | | employment insurance and social insurance as well as | Total Social Insurance | 8.0 | 26.0 | 34.0 |
| | | payments to foreign schemes are deductible. | Total | 12.5 | 35.0 | 47.5 |
| | | yearly income net of expenses incurred to generate, assure and maintain income. The maximum assessable base for social and health insurance is Kc 486000. The lowest base for health contributions cannot be below twelve times the minimum wage and the lowest base for social insurance cannot be below Kc 18300. | | | | |
| 3. | Real Estate taxes | | | | | |
| 3.1 | . Tax on land | An annual tax is payable by the owner of land. A tenant is a taxpayer of land in respect of rented land if the | Land owned by the state, accredited diplomatic repres | | The tax rates vary be 0.75 per cent. | etween 0.25 per cent and |
| | original owners boundaries no longer exist because the plots were united with others. A user is a taxpayer of land tax if the owner of land is unknown. | Plots of land forming one f building used for religious public service companies | services of churches, | 0.1 Kc per sqm in other | r sqm for building plots and er cases. These rates are ents ranging from 0.3 per | |
| | | Land tax includes taxation of agricultural land (arable land, hop-fields, vineyards, gardens and orchards) commercial forests and ponds for intensive fish farming, built-up areas and courtyards, developed land and other land. | galleries, libraries, medical care establishment, foun improvement of environmer | l establishment, social dations or used for | | coording to the size of the |

| Tax | Nature of tax | Deductions and exemptions | Rates |
|-----|--|--|--|
| | The tax base of agricultural land are average prices in the cadastre areas. These prices are derived from | Land used as parks and sport grounds for the public. | |
| | quality of soil and the calculated according to valid price decree. | Agricultural land and woodland after cultivation. | |
| | The tax base of commercial forests and ponds used for intensive fish farming are average prices according to valid price decree. | Agricultural land for a period of five years and commercial forests (up to ten years) if resituated to owners. | |
| | The tax base of built-up areas, developed land and other land is the actual area of the plot of land in square meters. | Land determined for public transport. | |
| | | To this tax are not submitted: | |
| | | Land which is subject of the building tax, protective and special woodland, water areas except ponds for intensive fish farming, land used for defence of state; | |
| | | Buildings owned by the state, by the municipality, by accredited diplomatic representatives; | The tax rates are: - Dwelling houses - Kc 1 per square meter multiplied by the coefficient in the same |
| | | Buildings used for religious services of churches, public service companies, schools, museums, galleries, libraries, medical establishment, social care establishment, foundations or used for improvement of environment; Newly constructed houses for a period of | way as in the case of developed land; Buildings for individual recreation purposes - Kc 3 per square meter, non residential area Kc 1 per square meter; Garages built separately from dwelling houses - Kc 4 per square meter. |
| | | 15 years, | Structures for business purposes: |
| | | Culture monuments for period of eight years; | used for primary agricultural production, forestry or water management Kc -1 per |
| | | Buildings used for public transport; | square meter of the built-up area, |
| | | In certain cases are the buildings exempted form the building tax provided that they are not used for business activity or leased. | used for industrial production civil construction, transport, power engineering - Kc per square meter of the built-up area; |
| | | | used for other business activities Kc 10 per square meter of the built-up area. |

Table A1. **Main features of the tax system** (continued)
Updated to 1 January 1999

| | Tax | Nature of tax | Deductions and exemptions | Rates |
|------|----------------------|--|---|---|
| 3.2. | Tax on building | An annual tax is payable by the owner of building. In case that building is managed by the Czech authorities and rented, the tenant bears the tax. | To this tax are not submitted: dams, water supply system, sewage system, structures used to distribute energy, public | Other structures Kc 3 per square meter of the built-up area These rates are multiplied by coefficients |
| | | The tax is levied on buildings and structures submitted to building inspection. | roads. | ranging from 0.3 per cent to 4.5 per cent according to the size of the municipality. |
| | | The tax base is the area of the ground plan of the overhead part of structure in square meters. | | |
| 4. | Inheritance and gift | Acquisition of movable and immovable property | Exempt from inheritance tax: | The rates in category I range from 1 per cent |
| | tax | | If the acquisition of property by inheritance concerns persons included in the first category, it shall be exempt from inheritance tax. | to 5 per cent, in category II from 3 per cent to 12 per cent and in the third category from 7 per cent to 40 per cent and when computing inheritance tax the final amount shall be multiplied by a coefficient 0.5. |
| | | Gift tax shall be imposed on the donated movable, immovable property and on the other property benefit, the taxpayer is the acquirer. | Acquisition of movable personal belongings of individuals, unless these things were for a year prior to acquisition included into the | |
| | | The inheritor and acquirer (beneficiary/donnee) are classified in three categories: | descendant's business property if the value of such property acquired by each individual taxpayer does not exceed Kc 60 000 in persons in category II and Kc 20 000 in category III. The same exempt and the same value in the both categories is in the acquisition of deposits and financial meanings. The tax shall be collected only on that part of the value of movable property or from the finance by which it exceeds the said limits. | |

Table A1. **Main features of the tax system** (continued)
Updated to 1 January 1999

| Tax | Nature of tax | Deductions and exemptions | Rates |
|-----------------------------|--|---|---|
| | I. Spouses and relatives in the direct line (children, grandchildren, parents). | Exempt from gift tax: | |
| | II. a) Other relatives in the collateral line, namely siblings, nephews, nieces, uncles and aunts; | Acquisition of movable personal things of individuals (unless the things were included in | |
| | b) Children's spouses, husband's children and parents, spouses of parents and individuals living with the heir, donor or decedent in a common household for at least a year prior to the transfer or prior to the death of the decedent and who for that reason took care of the common household or who were dependent on the heir, donor or decedent of their support. | the donor's business property for a year prior to acquisition) if the value does not exceed Kc 1mln. per persons in category I., Kc 60 000 in category II. and Kc 20 000 in category III. The same sums in the same categories are exempt concerning deposits and financial meanings. | |
| | III. All other persons. | | |
| 5. Real estate transfer tax | Real estate transfer tax is paid by the transferor (seller). | | The rate of real estate transfer tax shall be 5 per cent of the tax base. |
| | The tax base is the price determined by the Act on Property Valuation, with effect from the day when the real estate concerned is acquired. The price determined by the Act shall be apply in case the contracted price is lower that the price determined by the Act. If the contracted price is higher than the price determined by the Act, the tax base shall be calculated from the contracted price. | | |

| | Tax | Nature of tax | Deductions and exemptions | Rates | | |
|------|---|--|---|---|--|--|
| 6. | Domestic taxes on goods and services | | | | | |
| 6.1. | Value-added tax | Subject to VAT | Threshold for registration | 5 per cent low rate: foodstuff, pharmaceutical | | |
| | | the supply of goods and services effected for consideration | Individuals and legal entities must be registered to VAT if their turnover (excluding turnover for exempt taxable supply) exceeds Kc 750 000 per previous three month. | products and most services. 22 per cent standard rate. | | |
| | | the importation of goods. | | Zero-rated: exportation of goods and services. | | |
| | | Supply is defined to include goods on which VAT was wholly or partially deductible, forming part of a taxable person's business assets and which are used for private purposes or disposed of free of charge or for purposes other than those of the business. | | | | |
| | | Taxable amount | Exemptions | | | |
| | | The taxable amount is everything which constitutes the consideration which has been or to be obtained by supplier from the purchaser (selling price) including taxes, duties, levies and charges excluding VAT. | Postal services, broadcasting, hospital and medical care, welfare and social security work, education, financial services, supply of building and parts thereof after two years, rental of real property. | | | |
| 6.2. | Excises | Excise taxes are levied on specified goods. The tax is levied under a value-added system up to the wholesale level. | Exempt: Heating gas oil (by system of refund of the duty) | Beer: Kc 24 ¹ Wine: Kc 250 – 2340 ² Alcoholic beverages: Kc 23 400 ³ | | |
| | | In imports, the tax is assessed by the tax administrator (customs authority) in accordance with the Customs Act. The customs duties are also calculated by the customs authority. | | Mineral oils: Kc 8 700 - 12 950 Tobacco: Kc 740 – 803 | | |
| 7. | Taxes on international trade and transactions | | | | | |
| 7.1. | Import duties | Customs duties are levied on the customs value of most imported goods. See Excise duties. | | | | |
| 7.2. | Export duties | There are no taxes on exports. | | | | |

Table A2. Trends in value-added taxes -- tax parameters

| | Year VAT introduced | Initial standard rate | 1998 standard rate | Zero rated goods | Lower rated goods (major items) |
|---------------------|---------------------|-----------------------------|-----------------------|--|--|
| United States | none | none | none | | |
| Japan | 1989 | 3 | 5 | none | None |
| Germany | 1968 | 10 | 7 | None | Books, food, newspapers, transport |
| France | 1964 | 20 | 20.6 | None | Medicine, equipment for the disabled, books hotels, entertainment, authors' rights, museums, transport, travel, passenger travel, accommodation, agriculture, books, catering, food, newspapers and water |
| Italy | 1973 | 12 | 20 | Books, newspapers, scrap iron, recycled paper | Food, medicines, telecom, weekly publications and accommodation |
| United Kingdom | 1973 | 10 | 17.5 | Children's clothing, food, passenger transport, books, newspapers, domestic sewage and water, prescription drugs, medicine, certain supplies for the disabled | |
| Canada ¹ | 1991 | 7 | 7/15 | Medicine, basic groceries, exports, certain financial services, certain agricultural and fishing products, medical devices, international travel and transportation services, agriculture, precious metals | None |
| Australia | None | None | None | | |
| Austria | 1973 | 16 | 20 | None | Agriculture, books, food, forestry, hospitals, newspapers, art, culture, letting transport, wine |
| Belgium | 1971 | 18 | 21 | Cars for handicapped, newspapers and certain weeklies | Agriculture, original art, clothing, food, coal and coke, gold |
| Czech Republic | 1993 | 23 | 22 | Postal, broadcasting, financial and social security services, exportation of goods and services | Most food products, animals, water, pharmaceutical products, aids for the disabled, thermal energy, newspapers, periodicals, books, new buildings, construction activities, recreation, cultural and sport activities, transportation, telecommunications, funerals and all remaining services (excluding road transport freight, accommodation, tourism and most repairs) |
| Denmark | 1967 | 10 | 25 | Newspapers | None |
| Finland | 1969 | 11.1 | 22 | Newspaper and magazine subscriptions, some printing services, vessels and international transport | Food, non-alcoholic drinks, animal feed, medicine, books, passenger travel, accommodation, TV licence admission to cultural entertainment, sporting events and to the cinema |

Table A2. Trends in value-added taxes -- tax parameters (continued)

| | Year VAT introduced | Initial standard rate | 1998 standard rate | Zero rated goods | Lower rated goods (major items) |
|-------------|---------------------|-----------------------------|-----------------------|--|--|
| Greece | 1987 | 16 | 18 | None | Books, culture, food, medicine, newspapers |
| Iceland | 1989 | 22 | 24.5 | International transport, food, fuel and equipment delivered for use in ships and aircraft engaged in international traffic, shipbuilding | Food, newspapers, books, hotels, warm water, electricity and fuel oil used for the heating of houses and swimming pools |
| Hungary | 1988 | 25 | 25 | International transport, food, fuel and equipment delivered for use in ships and aircraft engaged in international traffic, shipbuilding | Most food products, water, washing, dry-cleaning, pharmaceutical products, aids for the disabled, electricity, household fuel, newspapers, periodicals, books, social housing, hotels, motels, boarding houses transportation, funerals |
| Ireland | 1972 | 16.4 | 21 | Books, children's clothing and footwear, oral medicine, certain medical equipment, certain goods, seeds fertilisers | Newspapers and certain periodicals, fuel for certain purposes, electricity, works of art, veterinary services, agricultural services, car and boat hire, driving instruction, photographs, concrete, holiday accommodation, restaurant/hotel meals, building services, immovable goods, repair services, waste disposal, certain foods, cultural and sporting events |
| Luxembourg | 1970 | 8 | 15 | None | Agriculture, books, food, fuel, medicine, newspapers |
| Mexico | 1980 | 10 | 15 | Patent medicines, most food products (except luxuries and soft drinks), exports, most animals and plant products (except rubber), gold, sales of jewellery and art | 10 per cent rate applied along the US border |
| Netherlands | 1969 | 12 | 17.5 | None | Accommodation, agriculture, books, catering food, supplies to the disabled, medicine, newspapers, passenger transport, water, entrance fees for sports, art and antiques |
| New Zealand | 1986 | 10 | 12.5 | Fine metals from refiner to dealer, exports | Long-term stays in a commercial building |
| Norway | 1970 | 20 | 23 | Books, newspapers, certain aircraft and ships, transport services by ferrying vehicles, second-hand vehicles | None |
| Poland | 1993 | 22 | 22 | Basic medicines, newspapers, periodicals, books, housing units, feed, fertilisers, pesticides, farm machinery and equipment, domestic air services | 7 per cent rate for food products (unless exempted), children's goods, medicines, medical supplies, building materials, basic appliances, passenger transportation, telecommunications. 17 per cent rate for electricity, fue |

Table A2. Trends in value-added taxes -- tax parameters (continued)

| | Year VAT introduced | Initial standard rate | 1996 standard rate | Zero rated goods | Lower rated goods (major items) |
|-------------|---------------------|-----------------------------|-----------------------|---|--|
| Portugal | 1986 | 16 | 17 | None | Books, food supplies to the disabled, medicines, entertainment, newspapers, fuel, transport, electricity accommodation and restaurant services |
| Spain | 1986 | 12 | 16 | None | Books, social lodgings, catering, certain cultural and entertainment services, food, hotels, restaurants, supplies to the disabled, medicines, transport, newspapers, public amenities, burial services, agriculture and forestry, domestic passenger transpor |
| Sweden | 1969 | 11.1 | 25 | Commercial aircraft and ships, aircraft fuel, prescription medicine, printing of certain publications | Accommodation, food, passenger transport, ski-lifts, newspapers, certain works of art, imported antiques, collectors' items |
| Switzerland | 1995 | 6.5 | 6.5 | None | Water, food, medicine, books, newspapers, non-commercial television |
| Turkey | 1985 | 10 | 15 | None | Agriculture, leasing, second-hand cars, newspapers, books, magazines, basic foodstuffs, natural gas, certain entertainment and cultural services |

^{1. 15} per cent Harmonised Sales Tax (HST) applies in those provinces that have harmonised their provincial retail sales tax with the federal GST (the 15 per cent GST is composed of a provincial component of 8 per cent and a federal component of 7 per cent.

Source: First column, Owens J. and E. Whitehouse (1996), "Tax reform for the 21st century", Bulletin for International Fiscal Documentation, vol.50, No.11/12. Others, adapted by OECD from Consumption Tax Trends, OECD (1999, 3rd edition).

BIBLIOGRAPHY

- Barro, R.J. (1991), "Economic growth in a cross-section of countries", *Quarterly Journal of Economics*, Vol. 106, No.2.
- Bratkowski, A., I. Grosfeld and J. Rostowski (1998), "Investment and Finance in de novo Private Firms: Empirical Results from the Czech Republic, Hungary and Poland", *CASE -CEU Working Paper Series*, No. 21, Center for Social and Economic Research, Central European University, Warsaw, October.
- Czech Statistical Office (1998), Statistical Yearbook of the Czech Republic, Prague.
- Desai, M. (1997), "A multinational perspective on capital structure choice and internal capital markets", Manuscript Harvard University.
- Easterly, W. and S. Rebelo (1993), "Fiscal policy and economic growth: an empirical investigation", *Journal of Monetary Economics*, Vol. 32, No.2.
- Erdös, G. (1994), "Tax incentives fall short", International Tax Review, Vol. 5, No.3.
- European Tax Handbook (1998), International Bureau of Fiscal Documentation, Amsterdam.
- Gordon, K. and H. Tchilinguirian (1998), "Marginal effective tax rates on physical, human and R&D capital", OECD, *Economics Department Working Paper* No.199.
- Graham, J. R. and M. Lemmon (1998), "Measuring corporate tax rates and tax incentives: a new approach", *Journal of Applied Corporate Finance* Vol. 11, No. 1.
- Graham, J. R. (1999), "Do personal taxes affect corporate financing decisions?" *Journal of Public Economics* Vol. 73, No.2.
- Heady, C., N. Rajah and S. Smith (1994), "Tax Reform and Economic Transition in the Czech Republic", *Fiscal Studies* Vol. 15, No.1.
- King, R.G. and S. Rebelo (1990), "Public policy and economic growth: developing neo-classical implications", *Journal of Political Economy*, Vol. 98, No.5.
- Leibfritz, W., J. Thornton and A. Bibbee (1997), "Taxation and economic performance", *OECD Economics Department Working Paper* No.176.
- Levine, R. and D. Renelt (1992), "A sensitivity analysis of cross-country growth regressions", *American Economic Review*, Vol. 82, No.4.

OECD (1991), Taxing profits in a global economy: domestic and international issues, OECD, Paris.

OECD (1994), Jobs Study, OECD, Paris.

OECD (1995), Taxation of Foreign Direct Investment in Central and Eastern Europe, OECD, Paris.

OECD (1998a), Economic Survey of the Czech Republic, OECD, Paris.

OECD (1998b), Consumption Tax Trends, OECD, Paris.

OECD (1998c), Revenue Statistics, OECD, Paris.

OECD (1998d), Tax/Benefit Position of Employment, OECD, Paris.

OECD (1999a), Environmental Performance Reviews Czech Republic, OECD, Paris.

OECD (1999b), "Taxing Powers of State and Local Government", Tax Policy Studies No.1, OECD, Paris.

OECD (1999c), Economic Outlook, June, OECD, Paris.

OECD (1999d), Revenue Statistics, OECD, Paris.

OECD (2000), Economic Survey of the Czech Republic, OECD, Paris.

Owens, J. and E. Whitehouse (1996), "Tax reform for the 21st century", *Bulletin for International Fiscal Documentation*, Vol. 50, No.11/12.

Plosser, C.I. (1992), *The search for growth, Policies for Long-Run Economic Growth*, Federal Reserve Bank of Kansas City.

Schulman, C.T.D., K. Sellers and D. Kennedy (1996), "Effects of tax integration and capital gains tax on corporate leverage", *National Tax Journal* Vol. 49, No.1.

Slemrod, J. (1995), "What do cross-country studies teach about government involvement, prosperity and economic growth", *Brookings Papers on Economic Activity*, Vol. 2.

Véghelyi, M. (1998), "Czech Republic: Taxation of corporations and Taxation of individuals", *European Tax Handbook*, International Bureau of Fiscal Documentation, Amsterdam.

ECONOMICS DEPARTMENT

WORKING PAPERS

- 244. The Tax System in Norway: Past Reforms and Future Challenges (May 2000) Paul van den Noord
- 243. A Changing Financial Environment and the Implications for Monetary Policy (May 2000) Paul Mylonas, Sebastian Schich, Gert Wehinger
- 242. Carbon Emission Leakages: a General Equilibrium View (May 2000) Jean-Marc Burniaux and Joaquim Oliveira Martins
- 241. The Healthcare System in Hungary (April 2000) Eva Orosz and Andrew Burns
- 240. Comparing Semi-Structural Methods to Estimate Unobserved Variables: the HPMV and Kalman Filters Approaches (April 2000) Laurence Boone
- 239. New Issues in Public Debt Management: Government Surpluses in Several OECD Countries, the Common Currency in Europe and Rapidly Rising Debt in Japan (April 2000) Paul Mylonas, Sebastian Schich, Thorsteinn Thorgeirsson and Gert Wehinger
- 238. Regulation, Industry Structure and Performance in the Electricity Supply Industry (April 2000) Faye Steiner
- 237. Regulation, Market Structure and Performance in Telecommunications (April 2000) Olivier Boylaud and Giuseppe Nicoletti
- 236. Predicting the Evolution and Effects of the Asia Crisis from the OECD Perspective (April 2000) Pete Richardson, Ignazio Visco and Claude Giorno
- 235. Modelling Manufacturing Export Volumes Equations A System Estimation Approach (April 2000) Keiko Murata, Dave Turner, Dave Rae and Laurence Le Fouler
- 234. *The Polish Tax Reform* (March 2000) Patrick Lenain and Leszek Bartoszuk
- 233. The Tax System in Mexico: a Need for Strengthening the Revenue Raising Capacity (March 2000) Thomas Dalsgaard
- 232. *EMU*, the Euro and the European Policy Mix (February 2000) Jonathan Coppel, Martine Durand and Ignazio Visco
- 231. The Tax System in Japan: a Need for Comprehensive Reform (February 2000) Thomas Dalsgaard and Masaaki Kawagoe
- 230. The Size and Role of Automatic Fiscal Stabilisers in the 1990s and Beyond (January 2000) Paul van den Noord
- 229. Enhancing Environmentally Sustainable Growth in Finland (January 2000) Ann Vourc'h and Miguel Jimenez

- 228. Finance and Growth: Some Theoretical Considerations, and a Review of the Empirical Literature (January 2000) Kotaro Tsuru
- 227. What the Yield Curves Say about Inflation: Does It Change over Time? (December 1999) Sebastian Schich
- 226. Summary Indicators of Product Market Regulation with an Extension to Employment Protection Legislation (December 1999) Giuseppe Nicoletti, Stefano Scarpetta and Olivier Boylaud
- 225. Some Issues Related to the Equity-Efficiency Trade-Off in the Swedish Tax and Transfer System (November 1999) Henning Strand
- 224. The Economic Effects of Employment-Conditional Income Support Schemes for the Low-Paid: An Illustration from a CGE Model Applied to Four OECD Countries (October 1999) Andrea Bassanini, Jørn Henrik Rasmussen and Stefano Scarpetta
- 223. The Use of Financial Market Indicators by Monetary Authorities (September 1999) Paul Mylonas and Sebastian Schich
- 222. *Tax Reform in Switzerland* (August 1999) David Carey, Kathryn Gordon and Philippe Thalman
- 221. Trends in Market Openness (August 1999) Jonathan Coppel and Martine Durand
- 220. Technology Upgrading with Learning Cost: A Solution for Two "Productivity Puzzles" (July 1999) Sanghoon Ahn
- 219. Testing for a Common OECD Phillips Curve (July 1999) Dave Turner and Elena Seghezza
- 218. Sustainable Economic Growth: Natural Resources and the Environment (July 1999) Paul van den Noord and Ann Vourc'h
- 217. Coping with Population Ageing in Australia (July 1999) David Carey
- 216. Estimating Prudent Budgetary Margins for 11 EU Countries: A Simulated SVAR Model Approach (July 1999) Thomas Dalsgaard and Alain de Serres
- 215. The Problems and Prospects Faced by Pay-As-You-Go Pension Systems: A Case Study of Greece (June 1999) Paul Mylonas and Christine de la Maisonneuve
- Greek Public Enterprises: Challenges for Reform (May 1999) Paul Mylonas and Isabelle Journard
- 213. The Levels and Cyclical Behaviour of Mark-Ups Across Countries and Market Structures (May 1999) Joaquim Oliveira Martins and Stefano Scarpetta
- 212. Poverty Dynamics in Four OECD Countries (April 1999) Pablo Antolín, Thai-Thanh Dang and Howard Oxley Assisted by Ross Finnie and Roger Sceviour