Flat personal income taxes: systems in practice in Eastern European economies

Sue Piper and Carol Murphy[1]

Several Eastern European economies have introduced flat personal income tax rates in recent years. The following article outlines the systems being used. There is no single flat personal income tax system, with most countries incorporating tax free thresholds and tax credits which add a degree of progressivity to the system as well as reducing simplicity. The countries adopting flat personal income tax systems also tend to have high levels of social security contributions and indirect taxation.

1 The authors are from Individuals and Exempt Tax Division, the Australian Treasury. This article has benefited from comments and suggestions provided by other Treasury officers. The views in this article are those of the authors and not necessarily those of the Australian Treasury.

Introduction

The creation of newly independent nation states in Eastern Europe in the 1990s has brought new governments to power with opportunities to fully restructure their economies and rebuild their tax systems. Several of these governments have chosen to introduce 'flat', rather than progressive personal income tax rates.

This article describes the various types of flat personal income taxes, and how they have been introduced in some Eastern European countries.

What is a flat tax?[2]

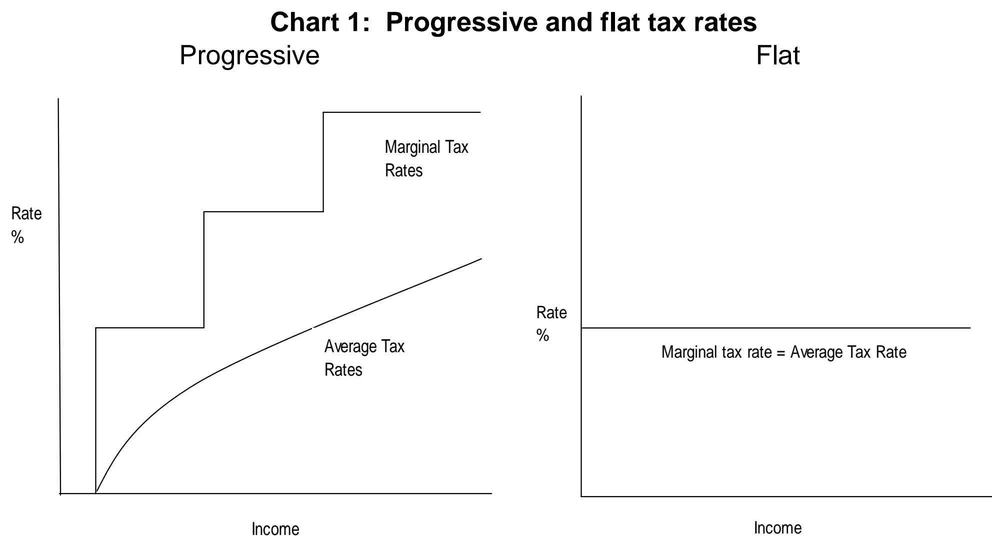
In its simplest form, a flat income tax describes a situation where income is taxed at the same percentage rate along the full range of income. For example, a flat tax rate of 10 per cent would result in a person with $1,000 of taxable income paying $100 in tax, and a person with $50,000 of taxable income paying $5,000 in tax. No tax free thresholds would exist. Marginal and average tax rates would always be the same; the tax would be strictly proportional.

Flat taxes are sometimes proposed as alternatives to progressive taxes. A tax is progressive if the average tax rate (the ratio of tax to income) rises when moving up the income scale. This is generally achieved by applying increasing marginal tax rates to a series of income brackets. A simple representation of flat and progressive taxes is shown in Chart 1 (see page 39).

The term flat tax is commonly used to describe any situation where there is a single marginal tax rate imposed on the given tax base. However, in practice there are many variations.

2 The term 'flat tax' can also refer to a form of expenditure tax (which taxes consumption rather than income) that has been advocated by Robert Hall and Alvin Rabushka.

Chart 1: Progressive and flat tax rates



The OECD has identified different types of flat taxes, which vary in terms of their complexity.[3] These are illustrated in Chart 2 (see page 40).

On Chart 2, the 45 degree line represents the points at which disposable income is the same as gross income, that is, no tax is payable. The area below this line represents points where tax is paid; and the area above this line represents points where disposable income is higher than gross income (where refundable income tax credits are paid, in order to provide a basic income).

- Flat tax type A is the simple or 'pure' flat tax, with all positive income taxed at a single flat rate.

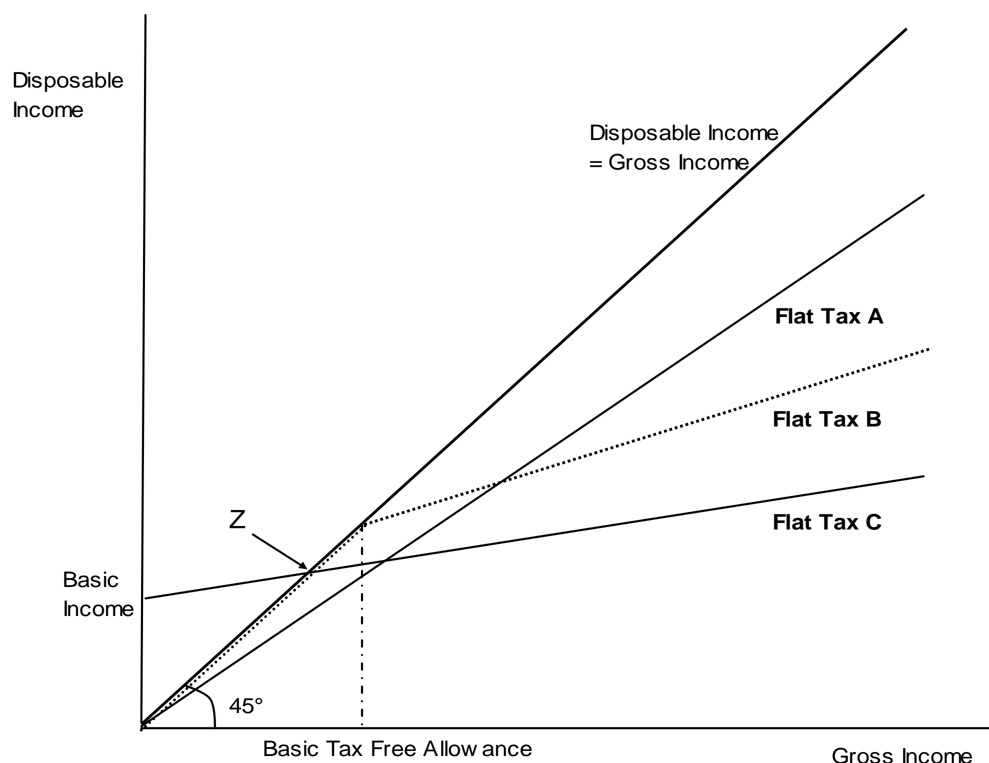
- Flat tax type B is a flat rate tax, but it only applies to income above a tax free threshold (or basic allowance). Consequently, this is not a purely flat tax. The basic allowance adds progressivity and means that low income earners pay little or no tax. Average tax rates rise towards the (flat) marginal rate as income rises.

- Flat tax type C is a flat rate tax, with all taxpayers receiving a refundable tax offset which serves as a negative income tax for those at lower income levels. This is also not a purely flat tax. As Chart 2 shows, the offset is larger than tax liability at income levels below Z, so the balance is paid as a tax refund, lifting disposable income above gross income at income levels below Z.

---

3 Forthcoming OECD (2006).

Chart 2: Different types of flat taxes - an illustration



Source: Forthcoming OECD (2006).

The economies of Eastern Europe have tended to introduce personal tax systems along the lines of the type B model. Tax free thresholds and other credits have been introduced generally or for specific types of taxpayers.

Tax policy principles

The standard tax policy principles used to evaluate the potential effectiveness of a particular tax include: equity (fairness), efficiency (causing minimum distortions) and simplicity (easily understood). In practice, no single tax perfectly satisfies all these criteria, and each criterion will sometimes conflict with the others.

With regard to equity, two dimensions are usually considered in relation to tax: 'horizontal' and 'vertical'. Horizontal equity exists when taxpayers who are in the same economic circumstances are treated equally, while vertical equity exists when those with differing economic means are treated differently, that is, where individuals with a higher capacity to pay (measured in terms of higher incomes, wealth or expenditure) pay proportionally more tax.

A pure flat personal income tax would meet the horizontal equity axiom well in cases where all types of income were taxed at the same rate. However, as a pure flat tax system would impose the same rate of tax on high and low income earners, it would be unlikely to satisfy the vertical equity criterion. The imposition of a tax free threshold or a tax offset for low income earners would slightly improve the performance of a flat tax against the vertical equity criterion because it would result in average tax rates rising as incomes rose.

The efficiency criterion relates to the extent to which the tax system collects the necessary revenue without otherwise affecting economic behaviour. The concept of 'neutrality' is used to describe taxes which do not result in taxpayers altering their economic behaviour.

A pure flat income tax imposed at a low rate over a broad base should be relatively efficient. Taxpayers should be less likely to change their economic behaviour as there would be little scope to switch to other forms of lower taxed income. In addition, incentives to avoid taxation are reduced. However, distortions caused by tax free thresholds or tax concessions will compromise efficiency.

The simplicity criterion relates to how well taxpayers, policy makers and administrators understand the system and can comply with it. Compliance costs on taxpayers should be minimised and taxpayers should be able to readily understand the tax consequences of their actions.

Proponents of flat taxes often suggest that they are administratively simple. The imposition of a flat tax on a broad and clearly defined tax base should provide certainty for taxpayers. However, the addition of complications such as refundable tax offsets (for equity purposes), and the imposition of other income related taxes such as social security contributions will reduce simplicity.

Flat personal income taxes in Eastern Europe

The map below shows the location of most of the flat tax economies in Eastern Europe.

Map 1: Flat Personal Income Tax Economies in Eastern Europe

Some other economies outside of Eastern Europe have also adopted flat taxes. For example, since 1948, Hong Kong has operated a system in which taxpayers have the choice of either using the progressive rate scale or paying a flat rate of tax (currently 16 per cent) on their salary income. The Channel Islands of Jersey and Guernsey, and Bolivia, also use a flat personal income tax system.

Estonia was the first Eastern European nation to introduce a flat personal tax regime in 1994. This was followed by the other Baltic states; Lithuania (1994) and Latvia (1995). Russia flattened its personal income tax rates in 2001, followed by Serbia (2003), Slovakia (2004), the Ukraine (2004), Georgia (2005) and Romania (2005).

Why have flat taxes been adopted?

The Eastern European economies that have adopted flat personal income tax systems have tended to share more than just geographical proximity. Prior to tax reforms, the tax systems in several of these economies were not generating sufficient revenue to finance needed government expenditure. The general issues that prompted significant reforms in some of these economies included:

- compliance with the tax system. Tax administration in some economies was extremely weak, with significant informal economic activity outside the tax system. For example, the shadow economy has been estimated to have accounted for around half of total economic activity in Georgia and in the Ukraine in 1994-95.[4] The absence of withholding systems in some countries also made tax compliance difficult, and penalties for non-compliance were also variable;

- complexity. In some economies, a wide range of taxes at various rates, combined with poor public education, made it difficult for taxpayers to understand their tax obligations; and

- some of the countries which have recently switched to flat personal income tax systems have joined, or are expected to join, the European Union, and have undertaken broader tax reforms in order to conform with European Union requirements. For example, Estonia and Slovakia have harmonized important elements of their tax system with European Union tax law, including direct taxes, mutual assistance, administrative cooperation and Value Added Tax (VAT).[5]

As Table 1 shows (see page 44), many of the flat personal income tax countries also levy consumption taxes and social security contributions, which often apply at relatively high rates.

Social security contributions are compulsory payments by employees and/or employers, which are generally levied at a flat rate on labour income, sometimes up to a maximum limit. Social security contributions are levied in many European countries (unlike Australia), and in some countries these contributions are the main element of the tax burden on labour.

4 Ivanova, Keen & Klemm (2005), page 42.
5 *European Tax Surveys* (2005); Moore (2005).

Table 1: Summary of sample flat personal tax regimes in Europe

Country	Year flat tax introduced	Personal income tax rate	Company tax rate	Consumption tax/VAT rate	Tax free threshold (Approximate $A equivalent)	Social security contributions
Estonia	1994	24%	24%[6]	18%, but 5% on some items	20,400 EEK (A$2,092) Additional amounts for dependants	Contributions of 1% by employees, 33.5% by employers[7]
Russia	2001	13%	24%	18%, but 10% on some items	Up to 4,800 RUB (A$227) Additional amounts for dependants	Contributions apply at marginal rates of up to 26% by employers[8]
Serbia	2003	14%[9]	10%	18%, but 8% on some items	Up to CSD 98,664 (A$1,831) in 2004 Additional amounts for dependants	Contributions of 17.9% by employees, 17.9% by employers[10]
Slovakia	2004	19%	19%	19%	87,936 SKK (A$3,623) Additional amounts for dependants	Contributions of up to 13.4% by employees, up to 38.3% by employers[11]
Ukraine	2004	13%	25%	20%	131 UAH (A$36) per month if income is less than 570 UAH (A$155) per month Additional amounts for certain taxpayers	Contributions of up to 3.5% by employees, up to 50.6% by employers[12]
Georgia	2005	12%	20%	18%	Nil	Contributions of 20% by employers[13]
Romania	2005	16%	16%	19%, but 9% on some items	Variable to 2.5 million ROL (A$109) Additional amounts for dependants	Contributions of up to 17% by employees, up to 46.75% by employers[14]

Sources: *European Tax Surveys* (2005); IMF (2005) Country Report No. 05/113 (for Georgia); USAID (2005) (for Georgia).

---

6 Estonian companies are subject to the 24 per cent tax rate on distributed profits only (no tax is levied on retained profits).

7 For further details of Estonia's social security contributions, see 'Box 1: Estonia' on page 45.

8 For further details of Russia's social security contributions, see 'Box 2: Russia' on page 46.

9 Serbia levies an additional personal income tax of 10 per cent at incomes above 986,640 CSD (A$18,306) (in 2004).

10 Serbian employers make social security contributions, based on gross wages, of 11 per cent for pension and disability insurance, 6.15 per cent for health insurance and 0.75 per cent for unemployment insurance. Employees make contributions at the same rates (withheld by employers).

11 For further details of Slovakia's social security contributions, see 'Box 3: Slovakia' on page 48.

12 Ukrainian employers make social security contributions on behalf of employees, based on payroll, of 32.3 per cent for the pension fund, 2.9 per cent for social insurance, 1.6 per cent for employment assistance and between 0.84 and 13.8 per cent for accident and occupational disease insurance, subject to certain limits. Employees make contributions, based on total salary, of between 1 and 2 per cent to the pension fund, between 0.5 and 1 per cent for employment assistance and 0.5 per cent for social insurance, subject to certain limits.

13 For further details of Georgia's social security contributions, see 'Box 4: Georgia' on page 49.

14 Romanian employers make social security contributions, based on gross salaries, of between 22 and 32 per cent for general contributions (up to certain limits), 7 per cent for health insurance, 3 per cent for the national unemployment fund, between 0.5 and 4 per cent for the work accident and professional disease fund, and 0.25 or 0.75 per cent to the Territorial Labour Inspectorate. Employees make contributions of 9.5 per cent for general contributions (up to certain limits), 6.5 per cent for health insurance and 1 per cent to the national unemployment fund.

A flat headline personal tax rate does not necessarily mean that the whole tax system is simple. All of the Eastern European countries with flat taxes illustrated in Table 1 have social security taxes that add to the complexity of the overall tax system faced by individuals. Social security taxes, and the use of personal allowances to provide tax free thresholds for certain individuals, have to be taken into account before making judgements about overall simplicity.

Boxes 1, 2, 3 and 4 provide details on the tax reform packages adopted by four countries in Eastern Europe. These examples demonstrate that there has not been a consistent or standard flat tax model. Georgia is the only one of these countries to have adopted a pure flat tax with no tax free threshold. Most economies have added progressivity to some degree through the granting of tax free thresholds or tax credits for some or all members of society, and have generally introduced flat personal income taxes in conjunction with broader tax or economic reforms.

Box 1: Estonia

Estonia was the first country in Eastern Europe to introduce a flat personal income tax in 1994, initially at a rate of 26 per cent.

Following these reforms, the Estonian tax system was considered to be relatively transparent, simple and efficient.[15]

Employers pay social security contributions on payments made to their employees at a rate of 20 per cent for social insurance, 13 per cent for health insurance and 0.5 per cent for unemployment insurance. Employees are required to pay social security contributions for unemployment insurance at a rate of 1 per cent (this is withheld by the employer). Estonia's VAT rate is generally 18 per cent.

Personal income tax makes up around 19.1 per cent of total tax revenue, being exceeded by the share of social security contributions at 34.0 per cent and VAT at 27.2 per cent.

The Estonian government announced in December 2003 that it would reduce the flat tax rate for individuals and companies over time, from 26 per cent to an eventual 20 per cent, with the tax free threshold also increasing.

Sources: *European Tax Surveys* (2005); IMF (2000) *IMF Survey*; IMF (2004) Country Report No. 04/358; IMF (2005) Country Report No. 05/394.

15 IMF (2000) *IMF Survey*.

Box 2: Russia

After winning the Presidential election in 2000, Russian President Vladimir Putin introduced wide ranging tax reforms, which included the introduction of a flat personal income tax rate of 13 per cent in 2001. The objectives were generally to make the tax system fairer, simpler, more stable, more predictable and more efficient. Prior to the reforms, tax evasion was widespread, particularly amongst high income earners, and hence improvements in compliance were a critical element of the reform.

The single 13 per cent rate replaced a progressive schedule with rates of 12, 20 and 30 per cent, various exemptions from tax were eliminated, social security contribution rates were reduced, and the maximum tax free threshold was increased. Subsequently, personal income tax revenue increased, which led to suggestions that the lower rate had resulted in increased revenue. However, it has been estimated that the average effective tax rate (inclusive of social security contributions) only fell by 2.5 per cent; from 34.6 per cent down to 32.1 per cent, and hence the average tax cut was quite modest. An alternative view is that the growth in personal income tax revenue was largely driven by increases in real wages, which were unrelated to the tax reforms.[16]

Employers currently pay social security contributions on payments made to their employees at marginal rates of between 26 per cent and 2 per cent (lower marginal rates apply at higher levels of payment). Russia's VAT rate is generally 18 per cent.

Personal income tax makes up around 9.6 per cent of total tax revenue, being exceeded by the share of social security contributions at 15.9 per cent and VAT at 15.4 per cent. Customs tariffs amount to 20.1 per cent of total tax revenue, and resource extraction tax amounts to 10.5 per cent of total tax revenue.

Personal income tax receipts are distributed to the regional governments.

Sources: *European Tax Surveys* (2005); IMF (2004) Country Report No. 04/316; IMF (2005) Country Report No. 05/377; IMF (2005) *IMF Survey*; Ivanova, Keen & Klemm (2005).

As shown in Table 2 (see page 47), personal income tax is not the most significant form of taxation in many flat tax economies. Social security contributions are often charged at a higher percentage rate and make a significantly larger contribution to total tax revenue than personal income taxes. When combined with the personal income tax rate, social security taxation means that the tax burden on individuals is often higher than suggested by the low 'headline' personal rate.

Indirect taxes also remain an important source of revenue in these economies. In some countries, tax revenue from VAT and excise is high, and continuing to increase, while

16 Ivanova, Keen & Klemm (2005).

personal tax rates fall. In some cases, this has been due to requirements for European Union membership.

Table 2: Tax revenue in sample flat personal tax countries

Country	Total tax revenue as a percentage of GDP (includes social security contributions)	Personal income tax revenue as a percentage of tax revenue	Social security tax revenue as a percentage of tax revenue	VAT as a percentage of tax revenue
Estonia (2005 projection)	32.4	19.1	34.0[17]	27.2
Russia (2005 projection)	40.8	9.6	15.9	15.4[18]
Serbia (2005 projection)	37.9	13.7	27.7	32.5
Slovakia (2005 budget)	30.5	7.9	43.0	27.5
Ukraine (2004)	27.5	14.5	33.5	15.6
Georgia (2005 IMF program)	18.1	12.7	11.0	41.4
Romania (2005 draft budget)	28.6	10.5	32.9	25.5

Sources: IMF (2005) Country Report No. 05/394 (for Estonia); IMF (2005) Country Report No. 05/377 (for Russia); IMF (2005) Country Report No. 05/233 (for Serbia); IMF (2005) Country Report No. 05/71 (for Slovakia); IMF (2005) Country Report No. 05/417 (for Ukraine); IMF (2005) Country Report No. 05/314 (for Georgia); IMF (2004) Country Report No. 04/319 (for Romania).

17 Includes Estonia's social security tax, medical insurance tax and unemployment insurance tax.

18 In addition, Russia has a high level of customs tariffs, amounting to 20.1 per cent of tax revenue, and resource extraction tax amounts to 10.5 per cent of tax revenue.

Box 3: Slovakia

Slovakia introduced comprehensive reforms to its taxation and welfare systems in 2004, including a flat rate of 19 per cent tax on personal income, corporate income and VAT. Slovakia is the only 'flat tax country' of Eastern Europe that is a member of the OECD, and the only one to introduce the same flat rate on personal, company and consumption taxes.

The objectives for the tax reform programme were to attract investment, eliminate existing weaknesses and distortions and improve the fairness of the tax system. The reform was designed to be revenue neutral, with tax reductions in personal income tax and corporate income tax being broadly compensated for by increases in VAT. High unemployment was also a motivation for the Slovakian reform package, with an unemployment rate of 17.5 per cent in 2003, of which around 60 per cent was considered to be long term unemployment.[19]

Slovakia's tax free threshold was more than doubled as part of the reforms, and is now 19.2 times the minimum monthly subsistence. This threshold is currently SKK 87,936 in annual terms (around A$3,623). In addition, taxpayers may also receive tax allowances for dependent spouses, and there is a refundable tax credit for dependent children.

Employees are required to pay social security contributions at a rate of 4 per cent for pension insurance, 4 per cent for health insurance, 3 per cent for disability insurance, 1.4 per cent for sick leave insurance and 1 per cent for unemployment insurance, up to certain limits (these contributions are withheld by the employer). Employers are required to pay social security contributions on behalf of employees, based on gross remuneration excluding fringe benefits, at a rate of 14 per cent for pension insurance, 10 per cent for health insurance, 3 per cent for disability insurance, 1.4 per cent for sick leave insurance, 1 per cent for unemployment insurance, between 0.3 and 2.1 per cent for accident insurance, 0.8 per cent for injury insurance, 4.75 per cent to the reserve fund and 0.25 per cent to the guarantee fund, up to certain limits. They are also required to make a contribution to the social fund, which varies between 0.6 per cent and 1 per cent of the payroll. Slovakia's VAT rate is 19 per cent.

Personal income tax makes up around 7.9 per cent of total tax revenue, being exceeded by the share of social security contributions at 43.0 per cent and VAT at 27.5 per cent.

The OECD has noted that overall taxes on labour remain high in Slovakia.

Sources: *European Tax Surveys* (2005); IMF (2005) Country Report No. 05/71; OECD (2005) Paper ECO/WKP(2005)35; OECD (2005) *Statistical Profile of the Slovak Republic* .

19 OECD (2005) *Statistical Profile of the Slovak Republic.*

Box 4: Georgia

Georgia has introduced comprehensive tax reform aimed at improving the business climate, establishing favourable conditions for investment, simplifying tax procedures and legalising the shadow economy. Commencing on 1 January 2005, a flat personal income tax rate of 12 per cent was imposed; there was a reduction in the social tax rate from 33 per cent to 20 per cent; and a reduction in the VAT rate from 20 per cent to 18 per cent (this applied from 1 July 2005).

To help offset the revenue loss, excise rates were increased, the tax base was broadened for the VAT and profit taxes, and administration was significantly enhanced.

The personal tax system is a 'pure' flat tax system, in that there is no tax free threshold. Under the old system a tax free threshold of 3,000 GEL applied.

Employers are required to pay social security contributions on behalf of employees, based on wage income, at a rate of 20 per cent for social tax. Georgia's VAT rate is 18 per cent.

Personal income tax makes up around 12.7 per cent of total tax revenue, being exceeded by the share of VAT at 41.4 per cent. Social security contributions make up 11.0 per cent of total tax revenue.

Of Georgia's 1.8 million population, 1.2 million are self-employed. Under the new tax regime, self-employed people who do not employ any other labour are exempt from income and social tax.

The IMF has noted there has been an impressive rise in Georgia's tax revenue sparked by improvements in tax administration. This has involved reorganising the Tax Department, strengthening Taxpayer Inspectorates, and establishing the Financial Police. Customs administration has also improved. A one-time write off of any undeclared taxes outstanding as of 1 January 2004 was also provided to encourage tax compliance.

Sources: IMF (2005) Country Report No. 05/113; IMF (2005) Country Report No. 05/314; USAID (2005).

Conclusion

When evaluating personal income tax rates between countries, caution needs to be applied as different countries impose additional taxes on labour income, for example through social security contributions. In this light it is important to examine the overall tax system in flat personal income tax countries, rather than just the headline flat tax rate, as social security contributions can be the main element of the tax burden on labour.

The economies that have introduced a statutory flat personal rate in Eastern Europe over the last decade or so have generally done so as part of reform packages designed to deal with issues such as tax compliance. Personal income tax is generally not the most significant form of taxation in many of these economies, making a comparatively small contribution to overall government tax revenues.

Overall, the personal income tax systems adopted in Eastern Europe in recent years have not been 'pure' flat tax systems, given the utilisation of tax free thresholds and tax credits, which add an element of progressivity, especially at lower income levels. These economies also tend to have high levels of social security contributions and indirect taxation.

References

European Tax Surveys, International Bureau of Fiscal Documentation (IBFD) Database, 2005.

IMF 2000, *IMF Survey* Vol. 29 No. 3, 7 February 2000.

IMF 2004, Country Report No. 04/316, *Russian Federation: Selected Issues*, September.

IMF 2004, Country Report No. 04/319, *Romania: First Review Under the Stand-By Arrangement and Request for Waiver and Modification of Performance Criteria*, October.

IMF 2004, Country Report No. 04/358, *Republic of Estonia: 2004 Article IV Consultation*, November.

IMF 2005, Country Report No. 05/71, *Slovak Republic: 2004 Article IV Consultation*, March.

IMF 2005, Country Report No. 05/113, *Georgia: Poverty Reduction Strategy Paper Progress Report*, March.

IMF 2005, Country Report No. 05/233, *Serbia and Montenegro: 2005 Article IV Consultation*, July.

IMF 2005, Country Report No. 05/314, *Georgia: Second Review Under the Three-Year Arrangement Under the Poverty Reduction and Growth Facility and Requests for Waiver of Performance Criterion and Conversion of an Indicative Target into a Performance Criterion,* August.

IMF 2005, Country Report No. 05/377, *Russian Federation: 2005 Article IV Consultation*, October.

IMF 2005, Country Report No. 05/394, *Republic of Estonia: 2005 Article IV Consultation*, November.

IMF 2005, Country Report No. 05/417, *Ukraine: Statistical Appendix,* November 2005.

IMF 2005, *IMF Survey* Vol. 34 No. 3, 21 February.

Ivanova, A Keen, M & Klemm, A 2005, 'The Russian Flat Tax Reform', *IMF Working Paper* No. WP/05/16,January.

Moore, D, 2005, 'Slovakia's 2004 Tax and Welfare Reforms', *IMF Working Paper* No. WP/05/133, July.

OECD 2006, *Fundamental Reform of Personal Income Tax* (forthcoming).

OECD 2005, *Slovakia's Introduction of a Flat Tax as Part of Wider Economic Reforms*, Paper ECO/WKP(2005)35, 3 October.

OECD 2005, *Statistical Profile of the Slovak Republic.*

United States Agency for International Development (USAID) 2005, *Georgia Fiscal Assessment*, 12 February.