

Pavia, Università, 7 - 8 ottobre 2004

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pubblicazione internet realizzata con contributo della

società italiana di economia pubblica

MAIN TAX POLICY ISSUES IN THE NEW MEMBERS OF THE EU

by

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Abstract

This paper is part of a wider research program on Taxation in New EU Members, carried on at the University of Pavia, under the direction of L. Bernardi, M. Chandler and L. Gandullia, and the supervision of V. Tanzi. After the initial executive summary, the second section discusses the recurrent argument according to which New Members' Government would be still oversized. We find that some reduction of spending/revenue levels may be worthwhile and feasible, even without dramatically cutting down social programs. The third section considers main issues of total fiscal pressure and of equity and efficiency of the whole tax system. Some scaling down of fiscal pressure seems feasible and useful. The equity-efficiency trade-off looks very binding. We suggest some general and specific interventions to reach an acceptable compromise. The final section critiques the structure of the main taxes and the recent changes implemented by New member states. It discusses the biases in their taxation of income, their greater efficacy of VAT collection and the frailty of their social security systems.

JEL Classification numbers : H10, H20, H24, H25 *Key words*: Tax Policy, Tax Reforms, EU New Members *E-mail Addresses*: luigi.bernardi@unipy.it; mark.chandler@ssriga.edu.lv

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1. Executive summary*

Main taxes purpose is to finance public spending. Hence it is worthwhile to scrutinize (paragraph 2) the size and the scope of government in New Members, before considering their tax structure. Speaking of this topic, it has often been argued that governments in some transition economies, as the New Members, are too big relative to their tax capacity and the need not to interfere with economic development. Public expenditure/GDP ratio is at present not far from 42 per cent in the New Members' average. This figure is just a little below what is observed for far higher income countries and well over the level reached by other transition economies at the same level of per capita income.

However one must notice the lack of robustness which characterizes all empirically estimated relationships between tax or spending /GDP ratio and per capita incomes. Usually a statistically significant fit does exist but countries' scatter plot is much dispersed. The correlation looks still weaker inside the worldwide sub-sample of transition economies. Hence -not surprisingly at all- other variables contribute to explaining a higher/lower than "normal" level of public spending. Actually many factors, economic, political and social in nature, seem at work to pull up spending in the New Members.

By better focusing our attention on the problem, we observe however that in transition economies as well large spreads in public spending are almost entirely due to public sector's engagement in the provision of welfare treatments and services. Once more the particular situation of New Members should call for a relevant public intervention in the welfare area. However in some New Members there has been a move towards partially funded private pension schemes and itemized social insurance funds targeted to single risks. Time will tell what has been the best chosen way.

After the first years of transition to market economy and excluding the period around the Russian crisis of 1997, New Members' rates of growth have generally been enough satisfactory and apparently they were not curbed by too cumbersome governments. Notwithstanding their bigger governments, New Members outperformed both CIS and Latin America countries while only the catching up Asian tigers did better. However both statistical evidence and economic theory suggest that there exists a negative even though weak link between the level of taxes and public spending on one side and growth rates on the other. Therefore, non minimal and well-targeted tax cuts could contribute to further enhancing growth, which indeed would help to reduce the current painfully high unemployment. Some

^{*} The authors thank R. Puglisi for careful reading and suggestions in a number of areas.

scale down of public expenditure is hence called for. Detailed analyses on the issue mainly suggested the need to redirect and better target social programs, to make a more efficient use of resources in education, health and public administration and finally to strengthen budgetary procedures.

According to authoritative opinions, also total fiscal pressure is too high in the average of New Members and should not exceed about thirty per cent, a level more consistent with their tax capacity and more supply friendly, but which stays around eight point under the last years figure. Furthermore the tax mix should be changed. Direct taxes look comparatively low with respect to indirect taxes. Social contributions remain very high. At a first check, we find that total fiscal pressure may go down, also if by some point less than the just quoted normative prescription. This is the case if one wants to avoid the disruption of public contributions to welfare treatments and services. By adding up some increase in direct taxes to the scaling down of total expenditures and taxes, a basket of (tentative) about six-to-seven GDP points might be allocated to the higher priority tax cuts. Where are they to be allocated it is not a question immediate to answer.

According to the structure of taxation by economic function and to implicit rates the trade-off between efficiency and equity in taxation not just arises but appears particularly binding. From the point of view of efficiency, New Members' tax structure overburdens labor and hits in a very different degree the various (productive and rent) components of capital and business (i.e. national accounting operating surplus). From the point of view of equity, consumption taxes stay high, are traditionally considered as regressive and may be particularly painful in New Members, because of the -low- level and the -uneven- distribution of personal incomes.

In these circumstances, it is quite difficult to strike a welfare maximizing balance between efficiency and equity. A somewhat formal solution would be to equally divide the resources' basket between efficiency -lighter tax wedge on employed labor, via social contributions' cut- and equity -income tax' enlargement and consumption taxes' squeezing.

This chapter also examines separately the four main categories of taxation in the New EU member States. The first of these is the personal income tax. Although some countries have clearly attempted to implement a uniform taxation of income, they remain in the minority. We discuss several explanations for the non-uniform taxation of income in these former command economies. The special interest explanation may explain why taxation of income from profits is lower than taxation of income from labor when social security payments are accounted for. Another plausible explanation is the attempt to minimize tax evasion and take account of the

limited capacity of tax authorities in these countries. Making income tax more progressive is a debated issue, and the solutions adopted by single New Members vary considerably, on economic, social and political grounds. Progressivity is very low in some of the States and this appears to be determined by a combination of factors including neighbors, expectations of taxpayers, and the ability of high earners to cooperate effectively to pursue their interest against progressivity. An alternative is to widen the base via the inclusion of incomes that at present are generally exempt or just slightly taxed and -even more- through the recovery of tax evasion, particularly from the wide sea of the hidden economy.

The taxation of corporate income has also been imaginative in the New member States. Estonia has abolished it in 2000 and others have reduced the rates substantially. Estonia's radical action does not appear to have been a major constraint on the collection of the personal income tax. However, reductions in the corporate income tax are only weakly correlated with the capacity of entrepreneurs to speed the economic catch up of New member States with the rest of the EU. Poland, for example, offers the least freedom for businesses among New member States and yet has the most lenient taxation of profit relative to labor income. Dynamic efficiency requires that mild taxation of corporations should be maintained, to favor the enlargement of entrepreneurship and to attract FDI also after the privatization decade. However corporation (or at least dividends) tax should not vanish, especially to impede the diffusion of avoidance activities.

The -painfully increasing- harmonization of excises to EU standards is mandatory, just lightened by a long transition period. VAT structure hence becomes the only degree of freedom to relieve consumption taxation. Exemptions and reduced (perhaps in few cases also negative) rates should therefore be well targeted also according to the empirical evidence of Engel's curves. Still more, as to equity, we have already noticed that New Members have to redirect their social programs. All in all, the more equity improving should be welfare programs that are effective in relieving the living conditions of the poor. From this point of view, implanting a social safety net is the main step to do.

By comparing the efficacy of the VAT with that of the personal income tax in the region we find the tax base of VAT is at least 80 per cent larger than that of personal income in these countries. This implies that replacement of personal income taxation with VAT on the margin may yield unusually large efficiency gains. We also compare the efficacy of VAT collection across the region, and find that the Visegrad region performs less well than the Baltics. We should be careful with such comparisons, however, since it is likely that the Baltic states suffer from relatively large under-recording of GDP, and this would bias their recorded VAT efficacy upwards.

Radical changes to the social security system in several New EU member States have left their populations somewhat more at risk from instability in the financial markets for their pensions. This may be understandable given the instability of collective institutions over the longer term in this region, and the resulting low trust in them among the population. However, it is interesting to observe that the nations that would be commonly held to be the most capitalism savvy, the Czech Republic and Slovenia, have retained the collective pooling of risk common in the rest of the EU.

2. The size and scope of Government

It has often been argued that government in some transition economies, as the New Members, is too big relative to their tax capacity and the need not to interfere with economic development. A clear updated version of this argument, particularly useful for our purposes, has recently been presented by Mitra and Stern (2003) (see also Begg and Wyplosz 1999). The Authors observe that, after the shift to market economy, the share of public expenditures in CSB (Central, Southeastern Europe and Baltic states, including all the New Members) countries has decreased but just of about five points of GDP, from about 47 per cent in 1992 to near 42 per cent in 2000. This share is about five points higher than the correspondent value on the trend line which fits a set of public expenditure/GDP ratios against corresponding per capita incomes for a sample of near 50 developed and developing countries in the year 2000. Furthermore the level of public expenditure in CSB countries is just 0.5 points under the value observed for high-income OECD countries, while it is about 13 points higher than the correspondent value of CIS (Commonwealth of Independent – post U.S.S.R. – states), which decreased by almost 20 points from 1992 to 2000¹. A broad discussion of the previous argument can be synthesized around the following three main issues.

2. 1 Public Expenditure/GDP ratio and per capita income

¹ The PPP per capita income is evaluated at about \$ 9,350 for CSB countries, \$ 3,850 for CIS countries, and \$ 26,200 for high-income OECD countries. A wider picture about the decline of government size in transition economies may be found in Gupta, Leruth, de Mello and Chakravarti (2001).

The econometric performance of Mitra and Stern's (and also of other Authors) relationship between public expenditure/GDP ratios and per capita incomes does not look very robust: the resulting R^2 is not higher than 0.3^2 . Highest-income countries show an expenditure/GDP ratio variable within a range from 25 to 55 per cent, lowest-income countries within a range from 15 to 50 per cent.

We may briefly go further on the topic. Table 1 shows a more definite albeit small sample of transition economies pertaining to main world areas. Tax (= more or less spending) /GDP ratios may be contrasted to per capita GDP. High values of taxes to GDP ratios are reported for all New Members, where the per capita incomes stay almost always at middle values³ usually reported for transition economies and not far from their own average. At broadly comparable levels of per capita income, Latin America countries show very large differences across countries in the tax/GDP ratio. In any case the specific ratios stay well below New Members' values. CIS countries tax/GDP ratios are widely dispersed too. There is no discernible and statistically significant correlation with per capita incomes, which stay well below both those of New Members and of Latin American countries. Low per capita incomes are showed also by East Asian countries, with the exception of Malaysia and in this area tax/GDP ratios are generally quite low.

Therefore, the multi facet explanatory factors (Burgess and Stern 1993; Gupta, Leruth, de Mello and Chakravarti 2001) of the size and scope of government go well beyond the per capita income relationship suggested by the Wagner's law (Wagner 1883), as it has been recognized for a long time by the most authoritative literature (Musgrave 1969). Given this conclusion we have then to notice that broadly speaking many factors might keep up the level of expenditure in New Members: the level of literacy, the relatively small size of the agricultural sector, the degree of urbanization, an ageing population, the long-term legacy of communist social aims on voters' preferences and lobbies' activities, weak budgetary

² Burgess and Stern (1993) show a similar estimated relationship for the ratio of taxes to GDP. Here also total explained variability is quite low ($R^2 = 0.03$); constant term value is high; the coefficient associated to (log of) pro-capita income is higher than one and statistically significant at five per cent. However this means that countries' scatter plot is very dispersed, that public goods are superior goods, but the percentage average (not marginal) increase of expenditures or taxes/GDP ratio is less than for per-capita income, within any observed range. Also Gupta, Leruth, de Mello and Chakravarty (2001) give about the same results, for 148 countries, considering the period 1970-98.

 $^{^{3}}$ The exception is Slovenia, whose per capita income reaches a value (> 6,000 US \$ per year) commonly ascribed to high-income countries.

NEW MEMBERS	Rev. /GDP	Per cap. GDP	Growth	CIS	Rev. /GDP	Per cap. GDP	Growth
Czech Republic	41.1	4,940	2.9	Belarus	44.3	860	5.8
Estonia	38.7	3,510	6.4	Kazhakstan	19.6	1,230	1.7
Hungary	44.0	4,550	3.8	Russia	37.0	1,730	3.5
Poland	40.4	4,100	4.1	Turkmenistan	23.4	850	1.8
Slovenia	43.3	9,160	4.8	Ukraine	34.2	640	6.0
LATIN AMERICA	Rev. /GDP	Per cap. GDP	Growth	EAST ASIA	Rev. /GDP	Per cap. GDP	Growth
Brazil	32.9	4,310	0.8	China	16.5	780	8.0
Chile	19.3	4,630	5.4	Philippines	12.7	1,050	4.0
Colombia	16.2	2,290	2.8	India	15.6	440	7.2
Mexico	12.1	4,790	6.9	Malaysia	20.1	3,390	8.3
Venezuela	8.5	3,150	3,2	Thailand	14,2	2,010	4,4

Tab. 1 Government revenue/GDP percentage ratios, per capita incomes and rates of growth - Selected transition economies - Year 2000

Sources: New Members and Cis countries, Mitra and Stern (2003); Latin America: Martner and Tromben (2003); East Asia and growth rates: U. N. Statistical Yearbook, 2002.

Notes: Per capita GDP values are in US \$ at 2000 exchange rates and not PPP corrected. Some data refer to 1999.

institutions and so forth.

More specifically however, the supposed over-sizing of New Members' governments is almost entirely due to the level of social security and welfare expenditures. According to Mitra and Stern's data, in New Members these programs together account for the 14.0 per cent of GDP, against 15.6 per cent observed in high-income countries, and just the 7.8 percent of CIS countries. Here the welfare programs have been seriously cut in the post-communist era, particularly in Asian states. The remaining functional structure of public expenditure does not differ too much among country groups (including Education and Health, this latter with the exception of CIS countries, which cut it down to 2.2 per cent of GDP as to 2002). It is then the (public) provision of welfare services which makes the difference among the observed levels of public expenditure also in transition economies. This is not an uncommon feature when one looks at a wider set of countries at various stages of development (Burgess and Stern 1993), including those with a high pro capita income (Richards *et all*. 1994).

Political economy views may give a first explanation of the survival of wide welfare programs in East European transition economies (Milanovic 1999). It is commonly reported (Tanzi 1993 for all) that almost in any country an increase in poverty and a more unequal distribution of incomes went with transition process. As a consequence most social indicators went down and this stimulated electoral support for income maintenance programs also intended to avoid the disruption of social cohesion.

Furthermore, population ageing shared by almost all New Members pushes social security and health care expenditures further up. Other factors seem to suggest the difficulty of scaling down education, health care and social protection programs in New Members (Heller and Keller 2001), as it has been accomplished in other countries (Tanzi and Schuknecht 1997). A large share of population is unemployed and/or poor and anyway requires public intervention against income and disability risk as well not to be excluded from proper level of health care and education. New programs are required to meet the specific social risks of market economies (Kopitis 1993). However it should be noticed that many albeit not all New Members are moving toward "three pillars" pension schemes and itemized public insurance funds to cover other social risks. Pros and cons of this move are discussed at length afterward in the chapter (par. 4.4).

A final remark is however necessary. Any suggestion to preserve wide cope and aims of social programs and public services might be challenged, by alleging the high level of corruption which characterizes public sector in most transition economies, the post-communist ones' especially. Generally speaking, the answer to this must not necessarily be

found in scaling down public activities to the level of the "minimal state" (Burgess and Stern 1993). More precisely, it has been argued that corruption can be fought by speeding up structural reforms. Still, we must point out that almost all of our selected New Members stay at the top of the structural reforms index in transition economies, as well as at the bottom of the corruption ranking (Abed and Davoodi 2000)⁴.

2. 2 Size of Government and economic performance

After the first years of transition to market economy and excluding the period around the Russian crisis of 1997, New Members' rates of growth have generally been satisfactory and apparently they were not curbed by too cumbersome governments. As it is shown in Table 1, at present Czech Republic runs at three per cent of increase of GDP yearly; Estonia and the other Baltic states perform far better at more than five per cent yearly; Hungary stays around four per cent as substantially also Poland and Slovenia do.

Transition economies of CIS countries as well as those of Latin America do not perform generally better and a clear cut relationship with taxes to GDP ratios looks very difficult to be found. "Asian tigers" outperform all other transition economies' growth: here, as it has just been seen, the size of Government is generally small (20-25 per cent of GDP). A necessary caveat to be raised here is that the direction of causality in this relationship is quite uncertain, especially for transition economies. Furthermore in Asian countries the level of income per capita is still low, thus reducing somewhat the demand for public goods. Economies are still passing through the catching-up stage. Households' cohesion of the peasant society does survive. On the contrary inside more urbanized societies as the New Members, the supply of public goods and the provision of welfare services might give a contribution not just to equity, but also to efficiency (Atkinson 1999).

More broadly speaking, cross countries correlation analyses $(Agell \ et \ all. \ 1997)^5$ as well as a diversified but converging stream of theoretical literature (Bernardi 2003)⁶ came to the conclusion that there is a weak negative link between the level of taxes and public spending

⁴ The average value of structural reform index for New Members is about 50 per cent over the corresponding average of the other post communist European and ex- U.S.S.R. states. Corruption ranking performs more than twice better in the average with respect to the same sample of other countries, the only worse exception being Latvia and Lithuania (in fact ex-U.S.S.R. republics), but not Estonia.

⁵ A large number of such analyses were performed during last thirty years. The emerging relationship between the level of taxes & public spending and GDP's rate of growth all in all was found weak and unstable. It turned out that crucial control variables are the stage of single countries' development (if in the catching up phase or not) and the share of old people on total population.

⁶ This holds true for labor market models, and for both exogenous and endogenous growth models.

on one side and growth rates on the other. Therefore, only huge and well-targeted tax cuts can contribute to sustaining economic growth. Then, some cuts in public spending, together with a shift in tax bases should take place, for a total not minimal amount. We come back to this issue in the following paragraphs.

2.3 More efficient and lower spending

New Members can be included in the group of transition economies that seem to do better in raising tax revenue as well as in spending it (Gupta, Leruth, de Mello and Chakravarti 2001), on the basis of selected indicators of governments' tax burden and spending benefits. This does not imply that some social programs need not to be revised, in order to perform better, to be less costly, and to become more appropriate with respect to the targets. There are three main strategies that could be jointly pursued, in order to decrease by some points the spending/GDP ratio, so to make possible an equivalent cut down of taxes (see paragraph. 2.4).

i) Redirecting social protection – The process (Kopitis 1993) of adapting social security programs to the needs and constraints of a market economy must be still accomplished. Public pension and income maintenance plans should be better tailored to the emerging demographic decline⁷ and to the persisting high level of poverty and inequality. Unemployment benefits should be targeted to the recovery of a work position and not only to a passive income support. A universal means tested social security safety net is still lacking almost everywhere.

ii) More efficient resources' use in education and health – It has been convincingly reported that resources are not efficiently employed both in education and in health services (Gupta, Leruth, de Mello and Chakravarti 2001). Education is too concentrated in pre- and initial levels as well as in the top ones. Intermediate levels are suffering, especially by considering the fact that they must supply the new human capacities required by fastening growth and the modernizing of both private and public services. Health requires a re-balancing between preventive and curative activities, a reduction of hospital beds and times of hospitalization. Both services look overstaffed.

iii) Public Administration, civil service and budgetary procedures – As it is reported in other parts of this research, present working of Public Administration looks generally poor and

⁷ See par. 4.4 below for a discussion concerning the alternative of public PAYIG or partially private funding pension schemes.

inefficient. Regulatory activities remain cumbersome. Corruption has been cut down, but not eliminated. Public employment must still be downsized to the more limited dimensions required by the aims of Government in a market economy. Public pay is in turn comparatively high. However improving all these aspects is not an easy task. Well established vested interests and powerful lobby groups may resist any reform. They will be more easily subdued when hopefully stronger budgetary procedures will progressively enter in force, both at the central and local levels of government.

3. Taxation structure and main effects

3.1 Taxation level and structure

Mitra and Stern (2003) have also outlined something like an "optimal" tax level and structure which would not damage efficiency and growth (see also Buiter 1997). Total fiscal pressure and tax mix are basically set according to the level of per capita income: here we consider suitable figures for the average of New Members. Income tax basis accounts for about half of GDP, which is a small figure, mainly due to the difficulties to tax widespread small informal business. Given a (not low) average net rate of 20 per cent, the yield could stay around eight per cent of GDP. International competition would suggest in turn not to raise corporation tax over two-to-three points of GDP.

VAT should be limited to about seven per cent of GDP: it would be difficult to enlarge its basis, when both the tax and the administration are new; too high rates might be distortionary. Excises duties may total an average of 2.5 per cent of GDP: this burden is already heavy by considering that they are levied on a tax basis which amounts to about five percent of GDP. Social contributions should not stay over a level of around 11 per cent of GDP, un order not to exert a disincentive effect on labor supply and not to promote the shadow economy. To sum up, according to Mitra and Stern's view, total fiscal pressure should not exceed about thirty per cent as average of New Members, i.e. around eight point under the last years figure. Mitra and Stern go on by observing that Eastern European tax-mix looks more similar to developing than to developed countries' model and is imbalanced both on efficiency as well as on equity grounds. Direct taxes look comparatively low with respect to indirect taxes. Social contributions remain very high. Their present level would be a legacy

	Czech Republic	Estonia	Hungary	Poland	Slovenia	Unweighted average	'Optimal Values'	EU 15
Direct Taxas of which	9.0	11.1	8.7	11.2	7.8	9.6	10.5	13.7
Direct Taxes, of which Income tax	9.0 5.2	8.5	6.7 6.5	8.3	7.8 6.6	9.0 7.0	8.0	9.3
Corporation tax	3.7	2.6	2.2	2.9	1.2	2.5	2.5	3.0
Indirect taxes, of which	12.4	14.3	16.3	14.4	18.9	15.3	9.5	13.9
Value added tax	6.6	8.8	7.9	7.9	9.1	8.1	7.0	7.0
Excises duties	3.7	3.8	4.2	3.9	4.4	4.0	2.5	3.5
TOTAL TAXES	21.4	25.4	25.0	25.6	26.7	24.8	20.0	27.6
Social contributions	16.9	12.1	13.9	12.2	13.8	13.8	11.0	15.0
TOTAL FISCAL REVENUE	38.3	37.5	38.9	37.8	40.5	38.6	31.0	42.6

Tab. 2 Taxes/GDP percentage ratios: selected New Members and EU 15 (late 1990s) and 'optimal values'

Sources: EU Commission (2000) for New Members and Eurostat (2000) for EU. Mitra and Stern (2003) for 'optimal values' (see text). *Notes*: Data fom New Members differ from those in Tab. 1, because of the change in source and reference year.

both of the communist era and of the need to preserve social cohesion during the first years of transition, by means of largely diffused social transfers. Therefore the Authors' suggestion is to update the tax mix, through a rise in the share of direct taxes, particularly personal ones', balanced by a reduction of domestic indirect taxes⁸ and social contributions.

We may try a first check of Mitra and Stern's suggestions, by looking at the data on Table 2. Some room to increase income tax should be possible to find, especially by enlarging its basis (see par. 3.3 below). Corporations should not be taxed more heavily and possibly less, especially to attract FDI. On the contrary, some burden could be imposed on capital incomes and gains as well as on immovable wealth, which at present are widely exempt or very little hit.

In the average of New Members VAT level doesn't differ much from the "optimal" value. Excises duties will trend upwards as a consequence of a progressive harmonization to EU's levels. Other indirect taxes (not considered by Mitra and Stern) should rather be somewhat reduced, especially the (low) remaining custom duties, but will continue to give some GDP points of yield (non-consumption and stamp taxes). Therefore as a tendency and on the whole indirect taxes seem to be destined to remain around their present level. Some cut should be required to lighten their worsening inequality level.

Social contributions stay some points over the "optimal value" and are still higher than the level suitable to deter underground economy and to relieve unemployment, by reducing the tax wedge on labor (Tanzi 1993b).

To conclude, the aforementioned expenditure cuts (see par. 2.3) should allow reducing by some point's total fiscal pressure even if the target suggested by Mitra and Stern seems difficult to reach, without disrupting the previously discussed public support to welfare programs and services. By adding up some feasible enlargement of direct taxes the bundle for tax cuts does increase. Where should they be concentrated? A brief deepening of the analysis seems worthwhile to find a proper answer.

3.2 Taxation by economic function and implicit rates

The structure of taxation by economic function and according to implicit rates may give a clearer picture of the efficiency and equity effects of the tax burden, rather than the simple classification by institutional items we have up to now considered.

⁸ A similar suggestion might be found also in Burgess and Stern (1993) both for developing and transition countries.

i) Efficiency - According to a traditional rule, growth-enhancing taxes should be mainly imposed on consumption and rents, while leaving productive factors less hit. Table 3 shows that by economic function New Members' consumption taxes stay on average around 13 per cent, within a max-min interval of about +/- 2 percentage points. Still according to economic function, EU 15 consumption taxes are somewhat lower than in New Members. The difference becomes smaller by considering implicit rates. Both these results are mainly due to the higher propensity to consume of New Members in comparison with that of EU. Employed labor is heavily hit in New Members, according both to the taxation structure by economic function, and to implicit rates. Average values of both figures do not vary much among countries and stay just very few points below EU ones. Finally, taxes on capital and business give a yield in GDP terms which is more than one third lower than the EU average. This wide gap is mainly due to the shadow economy's wide evasion and to the generous exemptions allowed to financial capital incomes. To sum up, from the point of view of efficiency, New Members' tax structure overburdens labor and hits in a very different degree the various components of capital and business (i.e. national accounting operating surplus). On the contrary, notice that consumption taxes stay at a comparatively high level.

ii) Equity - Consumption taxes are traditionally considered as regressive. In New Members they may be particularly painful, because of the low level of per capita income, the wide share of unemployed and low pension's drawers and as a consequence of the dismantling of consumption subsides. Taxes on labor are quite less heavy to be suffered. They are paid only by working people, and they largely finance welfare programs from which these people benefit. Thus the trade-off between efficiency and equity in taxation not just arises but appears particularly binding.

3.3 Some more issues on the efficiency-equity trade-off

In these circumstances, it is quite difficult to strike a welfare maximizing balance between efficiency and equity. Inequality in the distribution of incomes went up during the years of transition, thus redistributive policies are called for (Tanzi and Tsibouris 2000; see also Aghion and Commander 1999). Can tax system contribute to these policies, without damaging efficiency? A first step could be to reduce the high levels of social contributions,

	Czech Republic	Estonia	Hungary	Poland	Slovenia	Average New Members	EU 15
Economic functions % GDP							
Consumption	11.2	12.7	13.8	13.0	16.0	13.3	11.4
Labor Employed	18.5	19.8	19.9	14.0	20.1	18.5	21.2
Labor self-employed	2.9	1.3	1.2	5.1	-	2.6	2.3
Capital and business	5.7	0.3	5.0	4.2	4.4	3.9	7.5
Implicit tax rates							
Consumption	15.6	15.5	18.9	16.3	21.0	17.5	16.8
Labor employed	38.6	39.4	41.9	37.2	38.4	39.1	41.9
Capital and business	-	-	-	-	21.5	-	31.1

Tab. 3 Structure of taxation by economic function and implicit rates in New Members and EU 15 (late 1990s)

Sources: EU Commission (2000) for selected New Members and Eurostat (2000) for EU 15 (1997 unweighted average).

Notes: Total taxation according to economic function is over Total fiscal revenue in Tab. 2, because of some double counting. Implicit rates for capital and business are not available for all New membres, except Slovenia.

leaving room for an increase in personal income tax, also to partially finance social programs, as we have already suggested.

Doing this step also by making income tax more progressive is a debated issue, and the solutions adopted by single New Members vary considerably, on economic, social and political grounds (see below, par. 4.1). One should also consider the need to make the tax as simple as possible, to avoid unaffordable difficulties of administrative enforcement (Tanzi 1993; Bernardi and Majocchi 1994). Furthermore the redistributive effects of steeper graduated tax rates should not be over evaluated, just because incomes are highly concentrated around their (low) modal value. To sum up, a higher contribution of personal income tax to redistributive policies rests on two main conditions: a certain substitution of it for social contributions and the enlarging of its basis. The latter may be performed via the inclusion of incomes that at present are generally exempt or just slightly taxed (se below, par. 4.1⁹) and -even more- through the recovery of tax evasion, particularly from the wide sea of the hidden economy¹⁰. A more uniform treatment of different incomes will improve also efficiency (still below, par. 4.1).

Efficiency requires the cutting down of social contributions. In principle, they should be replaced not only by giving a more important role to income (and wealth) taxation but also without lessen the present heavy consumption taxes. However this way would be somewhat extreme, because of the stringent equity argument already dealt with. The current satisfactory New Members' rates of growth do not impose it. The resources' basket (remind: tentatively about six-to-seven GDP points of income tax increase and expenditure cuts) might be equally divided between efficiency -lighter tax wedge on employed labor, via social contributions' cut- and equity -income tax' basis enlargement and consumption taxes' squeezing.

The mandatory harmonization of excises to EU standards was already planned to gradually take place during a transition period o0f up to ten years so to avoid the reduction of the living standards and the growth of illegal markets (see below, par. 4.3). VAT structure, as to exemptions and reduced (perhaps in few cases also negative) rates, should be well targeted also according to the empirical evidence of Engel's curves. This is the only degree of freedom to lighten consumption taxation¹¹.

Efficiency's targets require that, the mild taxation of corporations should be maintained,

⁹ Here we may anticipate that labor income generally is more heavily taxed (including social contributions) than saving vehicles. This is a specific case too of equity-efficiency trade off.

¹⁰ This task should be accomplished through a large recourse to presumptive and minimum taxes (Tanzi 1994).

¹¹ Notice however that VAT outperforms PIT as "productive" efficiency in almost all New Members (see below, par. 4.3).

to favor the enlargement of entrepreneurship and to attract FDI (Easson 1998; Funke and Strulik 2003), also after the privatization decade and whatever may be the complaints of neighboring EU countries (Germany especially). Low general rates are also the best way to allow the dismantling of too favorable regimes for offshore firms, which are contrary to the EU code of conduct for business taxation. However corporation (or at least dividends) tax should not vanish, especially to impede the diffusion of avoidance activities (see below, par. 4.2).

We have already noticed (see also par. 4.4 below) that most New Members have already introduced or are planning to start reforms which are aimed at increasing the sustainability of welfare programs. We repeat now that many of these changes should be definitely applauded (e.g. the entitlements required for age pensions or the means test for other benefits); some of them are very questionable (e.g. the diffusion and itemizing of contributions to public social program funds), while on some others the jury is still out (the shift to mixed PAYG-funded systems for pensions). All in all, the more equity improving should be welfare programs that are effective in relieving the living conditions of the poor. From this point of view, a social safety net is the main step to do.

4. A closer look to the most critical features of the main taxes

4.1. The Personal Income Tax

The standard prescription of orthodox economics is that the most efficient income tax is one that is uniform. The claim is that efficiency is highest when rates of taxation are the same across all types of income. This leads automatically to a further oft-quoted requirement that the tax base should be comprehensive, including all items that provide real income, since the tax cannot be uniform if some types of income are untaxed. However, in the vast majority of countries we observe that income tax is not as uniform as it could be, partly because the tax base is not comprehensive, but also for other reasons. We might have hoped that countries that largely created a tax system from scratch around 1990 would have had an opportunity to implement a uniform income tax. However, what we see in the New EU member states today is far from this, and it is thus pertinent to ask why.

In order to consider this further it is necessary to review the assumptions on which the orthodox recommendation is based, especially given the normative nature of any discussion

of efficiency. Firstly it is based on a Paretian definition of efficiency, with no attempt to make social welfare trade-offs with non-Pareto optimal states. Secondly it is static, saying nothing about the impact of prior choices on economic decision-making. Thirdly, the prescription assumes that static economic (narrowly defined) efficiency is the primary goal of policy, disregarding social, political and other costs. A challenge to any of these three assumptions has the potential to provide a public interest explanation for departing from uniform taxation.

However, we must also recognize that narrow interests have played a role in the formation of tax policy in the New EU member states. Following Olson (1965), the more narrowly a group can define itself the more success we would expect it to have in reducing its tax burden. Hence we might expect taxation of capital gains to be relatively less burdensome than taxation of a more wide-ranging category such as labor income. To some extent this type of phenomenon may form part of the political costs of forming winning coalitions behind legislative programs, but it may also result from more structural inefficiencies in the political process. We might test this prediction against the taxation of dividends. To take into consideration the double taxation of this form of income Table 4, below, lists the rates of corporate income tax and tax on dividends, calculates the combined rate and compares it with the general income tax rate.

Country	CIT	Dividend	Combined Tax on Income from Profit	Ordinary income PIT	Social security contributions		Combined labor tax
			-		Employer's	Employee's	
Czech Republic	15.5 ^a	25.0 ^b	36.625	15.0-32.0	35.0	12.5	44.9-55.9
Estonia	0.0°	26.0	26.0	26.0	33.5	1.0	45.1
Hungary	16.0	20.0	32.8	18.0-38.0	29.0	11.5	43.7-57.5
Latvia	15.0	0.0	15.0	25.0	24.1	9.0	45.0
Lithuania	15.0	15.0	27.75	$33.0(15.0)^{d}$	31.0	3.0	50.4(37.1)
Poland	27.0	15.0	37.95	19.0-40.0	18.4	18.7	44.4-58.8
Slovakia	19.0	0.0	19.0	19.0	34.7-36.5	13.4	47.9-48.6
Slovenia	25.0	30.0	47.5	17.0-50.0	16.1	22.1	44.3-66.5

Tab. 4 Corporations, dividends and PIT rates in selected New Members

Sources: Corresponding country chapters of this research; Ernst and Young and Centre for European Economic Research (ZEW) (2003), p. 11; Yakimova (2003), p. 101; Cok (2003); MSI (2004); http://www.socmin.lt/?1845851012; http://www.cato.org/research/articles/tupy-040204.html; KPMG (2003); owns calculations.

Notes: ^a this rate only applies to dividends; ^b non-pension fund dividends; ; ^c26 per cent on profits repatriated abroad; ^d the lower rate applies to creative works.

The results are mixed. In five of the eight countries in this sample the combined dividend tax rate is lower than the top rate of income tax, and in only one case is it higher. Since we might expect shareholders to be in the top income tax bracket in most of these countries, that is a relevant comparison. However, it must also be noted that for individuals in the lowest income tax bracket, investing in shares, for example through their pension funds, implies higher tax rates than on ordinary income in five of the eight countries. This latter comparison has special relevance in Poland, since over 90 per cent of taxpayers there are in the lowest tax bracket. In Estonia and, from the beginning of 2004, Slovakia we observe the orthodox rule of equal tax rates across income types, achieved by not taxing profit at the corporate level in the former case and by non-taxation of dividends combined with equal corporate and personal income tax rates in the latter.

This picture changes considerably when we take into consideration social security contributions. Adding the social security taxation to the calculation of tax paid on labor income implies that labor income is taxed more highly than dividends in all countries. Only within the lowest personal income tax bracket in Slovenia is labor income taxed more lightly than dividends. There are two caveats to this finding. Firstly, in many countries there is a cap on social security payments, hence the marginal rate of labor income taxation for top earners is only the top rate of personal income tax. Secondly, not all of the social security contribution is lost to the individual; some provides income in kind through increased unemployment, disability or pension insurance. This is in contrast to personal income tax payments, which provide no marginal benefits to the individual. However, it should be noted that in most of the New member states it is young people who have proved the most entrepreneurial, and these persons' valuation of state social insurance is naturally low due to uncertainty over the future of the system.

Another example of non-uniform income taxation is the non-taxation of interest income in Latvia. Combined with the non-taxation of dividends in this country and the deductions for expenditure on education and health there is an apparent distortion in favor of investment in financial and human capital and against consumption. A counter-argument to this is that, since investments come from funds that are already taxed as income once, taxation of such investments would be a distortion in favor of consumption and it is the Latvian structure that is neutral. Perhaps the strongest critique of this Paretian efficiency view is that it ignores equity. We may object on equity grounds to a system that does not tax high incomes gained from investments, especially since we know that many of the assets were accumulated illicitly during the chaotic early independence years. And the equity view is not entirely divorced from efficiency; if we accept the diminishing marginal utility of income we might well expect that total social welfare would increase as we shift the tax burden from labor to investment income. Orthodox consideration of dynamics tends to assume that taxation of investment reduces economic growth to a sub-optimal level. However, to show this would require consideration of the size of positive externalities from one investment on returns or risk of another.

There may also be inefficiencies in the EU New Members' income taxation due to oversight, providing ready opportunities for reform. Such oversight can result from the weak public administration and government capacities in the former Soviet block countries. However, the rapid development of these economies likely contributes to the continuous creation of new areas for reform that are yet to be addressed, thus increasing the challenge for New member state governments.

While the forgoing relates to the legal structure of taxation, the illegal evasion of tax has also had important consequences for universality in the new EU member states. By putting payment of taxes on an *ad hoc* basis, or worse making it dependent on manipulation of the bureaucracy, evasion reduces the efficiency of the tax system considerably. The existence of this type of distortion in the tax system also opens up the possibility of a trade-off between legal distortions and evasion. Hence, in Lithuania the income tax rate on creative work is 15 per cent in contrast to the 33 per cent standard income tax rate. While this may be criticized for distorting the labor market in favor of non-standard labor contracts, it is clearly an attempt to take account of the relative ease with which individuals that create products independently can evade the income tax.

Progressivity is an issue on which the New EU member states have found a surprising variety of solutions. While the orthodox Paretian efficiency position has demanded no progressivity, standard Western practice has implemented it on equity grounds and the "ability to pay" theory. We might also argue for it on the basis of the benefit principle if we accept that higher income individuals benefit more from the State than lower income individuals¹². It should be noted that all current income tax systems are to some extent progressive since they all have personal exemptions. However, among the New EU member States the three Baltic States and Slovakia have all now rejected multiple tax rates and, combined with very low personal exemptions, this means that their average income tax rates hardly vary across the income range. While there has been some debate on the introduction of

¹² This argument is based on the idea that it is the State that guarantees the institutions of private property that give rise to the current distribution of income

multiple tax rates, particularly in Lithuania, these have so far not been supported by any Baltic government. Indeed, the trend appears to be in the opposite direction, with Slovakia's recent abandonment of multiple rates.

Although the equity argument would appear critical in the Baltics at this time, there are a number of conditions of their transition that have perhaps contributed to the absence of multiple income tax rates there. Firstly, for young people especially, the Baltics might be seen as places where one's income level is very hard to predict, with plenty of opportunities for increasing it rapidly. Hence, even those on low income may prefer the dream of low tax on high income in the future. This, however, implies a surprising love of risk given the uncertainty level. Perhaps a more plausible explanation of this idea is that voters are generally optimistic about their opportunities to move up the income scale, although this is not something that seems congruent with most public opinion survey results. An alternative is that there is a public interest in encouraging entrepreneurs to earn high income by generating economic activity, thus creating a dynamic positive externality for all. This may be particularly acute in the relatively low income Baltic States. Also, it may be an attempt to limit tax evasion, in recognition of the greater ease with which high income earners would evade, or even, avoid tax. This may be accentuated partly by the small size of the Baltic States, and also by their relative lack of capacity in tax collection, being the only New EU Members to have emerged from the U.S.S.R. itself. Lastly we should not ignore the influence of the special interest of high-income individuals. These form small enough groups in the Baltic States to be able to effectively lobby governments against any increases in their tax rates.

In contrast the country with the most progressive income tax rates, and the largest range in its tax rates on non-exempt income, is Slovenia. This is also a small country, within the size range of the Baltic States; hence size does not appear to have been a crucial factor easing tax evasion and avoidance here. This suggests that neighbors may also be important here; Slovenia neighbors relatively high tax States such as Croatia and Italy, whereas the Baltic states neighbor Russia with its flat 13per cent income tax rate. However, we might also expect the arguments about the Baltics to apply in reverse to Slovenia. Slovenia has, perhaps, a more stable social structure than the Baltics, Slovenians may be more realistic about their chances to change their position in society, Slovenians may expect less positive externalities from entrepreneurs (possibly due to greater integration with other EU States), and may have more confidence in the tax authority's ability to impose high tax rates on them. Lastly there may be a more disperse group of high income earners in Slovenia and political institutions may be more adept at resisting interest group pressure.

4.2. The Corporate Income Tax

It is well known that the role of the corporate income tax, or profit tax, in the tax system has been controversial at least since the development of Musgravian public finance and this controversy has been played out graphically in the New EU member States. We may just recall that orthodox public finance theory criticizes the profit tax as a cause of the double taxation of dividends. This, it is often argued, compounds the injustice of taxing investment from income that has already been taxed resulting in a triple taxation of such funds, before they are even spent. Furthermore, economists argue that the fiction of taxation of a "legal person" only serves to hide the true burden of the tax on real persons. As we have already seen, Latvia and Slovakia have prevented the double taxation of dividends by making dividends tax exempt. Estonia took another course, abolishing the corporate income tax from the beginning of 2000 and taxing only profits distributed abroad, while leaving domestic dividends taxed at the same rate as ordinary income. This has, however, brought Estonia into conflict with the European Commission, since it implies prejudicial tax treatment of dividends paid to non-Estonian versus Estonian corporate shareholders.

Arguments in favor of taxation of corporations can be divided into the income measurement dilemma and the practical. The income measurement dilemma is that the retained profits of a corporation may give real benefit to its owners even if never distributed and the shares are never sold. Shareholders gain financial security and economic and social power through the increased strength of their company. Hence the only way to tax this real benefit would be at the corporate level. The practical argument is that, even in advanced EU Members, Finance Ministries believe that without the corporate income tax the scope for avoidance and evasion of the personal income tax and social security payments would be significantly higher since the incentive for corporations to show employment expenses would vanish. With corporations no longer required to declare their expenditures, evasion would become significantly tougher for the authorities to prevent possibly leading to a weakening of the personal income tax and social security system. In particular, if persons who incorporated themselves (e.g. doctors and lawyers) would face no profit tax they would find it much easier to hide personal income from the tax authorities. Hence we observe continued corporate income tax rates of up to 31 per cent in the Czech Republic. Note that even at that rate the

incentive to hide employment expenditure still exists; it is more financially advantageous to pay 31 per cent on retained earnings than even the lowest 15 per cent income tax rate on wages due to the 35 per cent social security tax on wage income in that country. This pattern is repeated everywhere so profit tax is only a partial offset to the cost of honestly declaring wages.

While the income measurement dilemma is of a more normative nature it is potentially useful to ask whether the Estonian experiment in eliminating the corporate income tax for domestic investors has led to the damage to personal income tax collections predicted by the practical argument. While recent data on personal income tax revenue are not readily available for Estonia, the overall level appears to have held steady at about eight and a half percent of GDP from 1999 to 2002, despite a dip of about a percentage in the initial two years of reform¹³.

We know that there is a third, more fundamental, argument in favor of taxes on profit, however. A truly uniform tax system must not discriminate against labor income. However, labor income can also be interpreted as a return on investment in human capital. Much of that investment may not be financial but an investment of effort, for example while undergoing schooling. Hence to completely remove taxation of income from financial investments while retaining it on investments in human capital would create a bias. It would mean that persons would have an artificial incentive to pay more attention to studying the stock market than to studying more traditional subjects that create real productivity. From a truly orthodox economic perspective there is no reason to tax returns on an investment of saved financial resources any differently from an equivalent return on an investment of leisure time.

The foregoing looks only at static welfare considerations, however. States have often felt that there are dynamic benefits from encouraging economic agents to shift to profit seeking activities rather than labor. An individual is likely to be more dynamic and flexible when involved directly in profit seeking activities than when working for labor income. This may spill over to faster growth in GDP for the State as a whole. In addition, since individuals are risk averse, while the State can afford to be risk neutral with regard to a particular investment, there may be good reasons to expect under-investment in more risky activities by individuals. The State can reduce taxation of profit to increase efficiency in both cases. How much optimal profit tax would then differ from tax on labor income would then vary from country to country depending on the types of profit seeking activities likely to be encouraged, the

¹³ These comparisons are based on the top rates of labor income taxation.

varieties of labor likely to be discouraged and their relative dynamism in the economy in question. Generally we might expect that the optimal differentiation between labor income tax and profit tax would be negatively correlated with the flexibility of the labor market and institutional hindrances to business in the economy. However, flexibility of the labor market also improves the business conditions for entrepreneurs and thus the overall effect of this factor might be relatively weak.

Comparing the ratio of disposable income from profit and from wages across the New member States we find labor taxed relatively the most in Poland, Latvia and Hungary¹⁴. If we

Country	Without social security	With social security
Czech Republic	0.75-0.93	1.15-1.44
Estonia	1.00	1.35
Hungary	0.82-1.10	1.19-1.58
Latvia	1.13	1.54
Lithuania	1.07(0.85)	1.46(1.15)
Poland	0.85-1.15	1.24-1.67
Slovakia	1.00	1.55-1.58
Slovenia	0.63-1.05	0.94-1.57

Tab. 5 Disposable income of shareholders vs. wage earners from equal total factor earnings

Source: See source for Tale 4. Own calculations.

include social contributions and look at the ratios of disposable income the greatest disincentive to sell labor is in Poland, Slovakia and Hungary (see Table 5). The countries with the most even-handed treatment of dividends and labor income are the Czech Republic and Estonia. We may compare this data with the data from the Heritage Foundation on which countries have the greatest economic freedom, and thus the best conditions for entrepreneurial dynamism¹⁵. The Heritage Foundation data shows starkly that Estonia is much more economically free than the other New member States. Hence it is surprising that Estonia is one of the countries with the least tax incentive to switch from labor to profit seeking. This appearance may be illusory, however, since in Estonia investors may defer taxation by retaining earnings within the company, providing a greater tax bias against labor than is apparent from the tax rates alone. Conversely Slovenia and Poland are estimated to be the countries with the least favorable business conditions. Hence it is surprising to see that Poland has the largest tax incentive to switch towards entrepreneurship. Slovenia has a middle-sized tax incentive against labor, again contradicting the expectation that such incentives are less

¹⁴ These comparisons are based on the top rates of labor income taxation.
¹⁵ Miles, Fuelner and O'Grady (2004).

useful in countries with less supportive business environments. Overall, then, the pattern is mixed with good reason to suppose that business lobbying that is not in step with the public interest drives some countries' reductions in profit tax.

There is also a question of international competition to lower corporate taxation. Some countries may be tempted to attract foreign investment by imposing a relatively low rate of tax on profit¹⁶. It is often argued that foreign direct investment has positive dynamic externalities for the economy by accelerating introduction of more efficient management. Profits repatriated by foreign investors in Estonia are subject to a 26 per cent tax, thus this small Baltic State cannot be accused of using the repeal of the profit tax to compete aggressively for foreign investment. This criticism could more logically be aimed at Latvia, Lithuania and Hungary, all of which have taxed profits at less than 20 per cent for some time. There is some evidence that these low tax rates are having knock-on effects throughout the region. In 2004 there have been dramatic reductions in the profit tax rates in Poland and Slovakia, combined with a further easing in Latvia and Hungary. Whether these rates are moving below what would be optimal is difficult to say definitively, given the previous arguments justifying the presence itself of a corporate tax. The most extreme case is Poland, where profit seekers keep a 67 per cent larger proportion of their earnings than kept by top income tax bracket individuals dependent on wages.

4.3. The Value Added Tax and Excises

It is worthwhile to recall that value added taxes, like the income taxes, were originally seen as a way to tax total GDP. Rather than tracing income, VAT uses the value added at each stage of production as the tax basis. Hence it is revealing to compare the success of the VAT in raising revenue with that of the income tax. This comparison is less precise in countries with multiple income tax rates. Moreover, the exemptions and deductions of the income tax and the exemptions of the VAT mean that the tax bases are not the same. However, from the orthodox economic perspective, all these differences are sources of inefficiency and not necessarily less pernicious than evasion of taxes. Hence it is still of interest to compare the efficacy of these two taxes in terms of revenue raised. Table 6 makes this comparison. To take the example of Lithuania, in 2000 its personal income tax and VAT each raised 7.6 per cent of GDP despite the fact that the basic income tax rate was 33 per cent while the VAT rate was only 18 per cent. Hence, the average efficacy of a percentage of VAT was almost double that

¹⁶ This issue is discussed at length inside an other part of the whole research.

of a percentage of income tax. Any deviation of either of those taxes from a comprehensive tax on GDP is a source of inefficiency according to economic theory, whether that deviation results from legal or illegal activity. So this very raw number provides a strong argument in favor of shifting the balance of taxation from the personal income tax towards the value added tax in that country. In Hungary, by contrast, a significantly higher rate of VAT did not result in proportionately higher revenue and hence was not as demonstrably more efficacious than its multiple-rate personal income tax.

Czech Republic ^a 10.0-40.0 5.2 0.13-0.52 22.0 7.6 0.35 0.6-2.7 Latvia 25.0 6.0 0.24 18.0 7.8 0.43 1.8 Estonia 26.0 7.7 0.30 18.0 9.5 0.53 1.8 Hungary ^a 20.0-40.0 7.0 0.18-0.35 25.0 8.6 0.34 1.0-1.9 Lithuania 33.0 (15.0) 7.6 0.23(0.51) 18.0 7.6 0.42 1.8(0.8) Poland ^a 21.0-40.0 5.5 0.14-0.26 22.0 8.0 0.36 1.4-2.4 Slovakia ^a 17.0-42.0 5.2 0.12-0.31 23.0 7.6 0.33 1.1-2.4	Country	PIT rates	PIT	PIT	VAT	VAT	VAT	VAT/PIT
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			revenue	efficacy	rate	revenue	efficacy	efficacy
Latvia 25.0 6.0 0.24 18.0 7.8 0.43 1.8 Estonia 26.0 7.7 0.30 18.0 9.5 0.53 1.8 Hungarya $20.0-40.0$ 7.0 $0.18-0.35$ 25.0 8.6 0.34 $1.0-1.9$ Lithuania $33.0 (15.0)$ 7.6 $0.23(0.51)$ 18.0 7.6 0.42 $1.8(0.8)$ Polanda $21.0-40.0$ 5.5 $0.14-0.26$ 22.0 8.0 0.36 $1.4-2.9$ Slovakiaa $17.0-42.0$ 5.2 $0.12-0.31$ 23.0 7.6 0.33 $1.1-2.9$								ratio
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Czech Republic ^a	10.0-40.0	5.2	0.13-0.52	22.0	7.6	0.35	0.6-2.7
Hungarya $20.0-40.0$ 7.0 $0.18-0.35$ 25.0 8.6 0.34 $1.0-1.4$ Lithuania $33.0 (15.0)$ 7.6 $0.23(0.51)$ 18.0 7.6 0.42 $1.8(0.8)$ Polanda $21.0-40.0$ 5.5 $0.14-0.26$ 22.0 8.0 0.36 $1.4-2.6$ Slovakiaa $17.0-42.0$ 5.2 $0.12-0.31$ 23.0 7.6 0.33 $1.1-2.6$	Latvia	25.0	6.0	0.24	18.0	7.8	0.43	1.8
Lithuania $33.0 (15.0)$ 7.6 $0.23(0.51)$ 18.0 7.6 0.42 $1.8(0.8)$ Poland ^a $21.0-40.0$ 5.5 $0.14-0.26$ 22.0 8.0 0.36 $1.4-2.0$ Slovakia ^a $17.0-42.0$ 5.2 $0.12-0.31$ 23.0 7.6 0.33 $1.1-2.0$	Estonia	26.0	7.7	0.30	18.0	9.5	0.53	1.8
Polanda $21.0-40.0$ 5.5 $0.14-0.26$ 22.0 8.0 0.36 $1.4-2.0$ Slovakiaa $17.0-42.0$ 5.2 $0.12-0.31$ 23.0 7.6 0.33 $1.1-2.0$	Hungary ^a	20.0-40.0	7.0	0.18-0.35	25.0	8.6	0.34	1.0-1.9
Slovakia ^a 17.0-42.0 5.2 0.12-0.31 23.0 7.6 0.33 1.1-2.8	Lithuania	33.0 (15.0)	7.6	0.23(0.51)	18.0	7.6	0.42	1.8(0.8)
	Poland ^a	21.0-40.0	5.5	0.14-0.26	22.0	8.0	0.36	1.4-2.6
Slovenia ^a 17.0-50.0 6.4 0.13-0.38 20.0 15.4 0.77 2.0-5.9	Slovakia ^a	17.0-42.0	5.2	0.12-0.31	23.0	7.6	0.33	1.1-2.8
	Slovenia ^a	17.0-50.0	6.4	0.13-0.38	20.0	15.4	0.77	2.0-5.9

Tab. 6 Rates of PIT and VAT compared with their revenue as per cent of GDP in 2000

^a1999-2000 average. Sources: Yakimova (2002); Mitra and Stern (2003); country chapters of this research.

Perhaps a more robust comparison is to compare the success of VAT across countries. Here we see that the VAT efficacy, which is equivalent to the ratio of the VAT tax base to GDP, ranged from 33 per cent in Slovakia to 77 per cent in Slovenia. Slovenia stands out as a success story here, and underlines the room for other New member States to improve. But it is interesting to note that the other more advanced countries in the group, the Visegrad countries, do not do well and are superseded by the Baltic States. Hence we may ask why does Estonia do so well at collecting VAT and why does Hungary do so badly? One drawback of this simple approach is that it ignores the underestimation of GDP that results from tax evasion. Hence the Baltic States may appear to have higher VAT efficacy than the Visegrad countries only because the latter have done a better job at measuring GDP.

Excise taxation is an area of some controversy as the New member states integrate into the European Union. During the accession negotiations the European Commission felt that the low excise duties in many accession states threatened the taxes of existing member States and demanded increases. This was clearly going to be politically unpopular in the accession States. Their governments' dilemma was increased by the fact that excise taxes had proved to be the most easily evaded and hardest to implement. In countries that border Belarus or the countries of former Yugoslavia the opportunity for smuggling cigarettes, alcohol and petrol was high. Hence New member States negotiated transition periods of up to 10 years, during which they would gradually increase excise duties to EU norms, while trying to clamp down on smuggling and evasion. Such excises can increase the efficiency of the taxation system by taxing goods with relatively low price elasticities of demand and negative externalities. However, a jump up in taxation that leads to expansion of evasion will only serve to weaken the taxation system, along with other social institutions.

4.4. Social security contributions

As is well known, governments have long decided that some benefits should be allocated to individuals based on their tax history. Certain benefits would be conditional on the individual having paid taxes over a minimum period, others would also vary according to the amount of taxes paid. Governments started using this approach with regard to pension benefits, and have gradually extended it to other areas. Hence government provided a type of collective insurance of individuals against the "risk" of reaching old age and viewed this differently to other benefits. There was a distinction between welfare "Beveridgean" payments to ensure the elderly a minimum standard of living and "Bismarkian"pension benefits based on how much an individual had paid in during their working years. Hence taxes paid for social security became viewed differently to other taxes that had no effect on the individual's eligibility for benefits.

This system raises a number of interesting questions that it is worthwhile to recall here, because they have been answered in different ways by the New member states. The first question might be what is the government role in providing these benefits? If individual benefits depend on individual premiums why can't the private insurance market efficiently serve this demand? One answer to this for risk-averse individuals is that collective provision allows for more comprehensive risk pooling. Private insurance will seek to discriminate among individuals based on their riskiness, and individuals themselves will self-select insurance pools based on their knowledge of their own riskiness. To avoid the uncertainty generated by lack of knowledge of their future risk level individuals rationally decide to organize the insurance collectively without heed to individual characteristics that affect risk. The collective has no incentive to discriminate, which private insurance companies would have even if they were legally forbidden from doing so. Another argument in favor of collective provision of pensions is that it gives a benefit to middle class voters, hence

strengthening support for collective benefits that would otherwise go only to the poor. This may increase social welfare due to the diminishing marginal utility of income.

While the foregoing arguments seem to continue to garner support as a basis for social security systems there is a third that appears less widely respected, particularly in several of the New member states. Individuals saving for their retirement are initially considering investments of 30 years or longer. This is a long enough period to see through several cycles of financial markets but not necessarily all. In the financial history of the twentieth century there have been 30-year periods during which stock market indices were lower at the end than at the beginning. Individual investors face even more risk in practice since their investment portfolios are unlikely to mirror stock market indices precisely. Hence, even over these relatively long periods, considerable financial risk remains for an individual. Collective provision of social security is a way to remove this risk.

However, in a number of New member states the financial risk has been returned to the individual through implementation of the "three pillar" pension system. This leaves in place a reduced basic pension based on pay as you go contributions of current workers, but diverts some social security taxes to investment in individual accounts with returns dependent on the success of the fund the taxpayer decides to invest in. The third pillar then consists of favorable tax treatment of any additional non-mandatory investments the individual makes to these funds. The states that have implemented the three-pillar pension system include Hungary, Poland and the Baltic states (Lithuania significantly later and more cautiously than the other two), and most recently, Slovakia. Interestingly the Czech Republic and Slovenia have resisted such moves, perhaps demonstrating the greater credulity of the populations of these more capitalism savvy nations to the vagaries of financial markets.

Another element of the experience of several New EU member states has been the expansion of the public insurance principle to other benefits. It is perhaps natural that workers' accident compensation is related to their income at work and a similar case can be made for maternity leave and disability benefits. The level of social contributions tax rates depends on the generosity of the benefits relative to average wages and the dependency ratio of benefit recipients to taxpayers. It ranges from 26 per cent of the total cost of employment in Latvia to 38 per cent in Hungary. The high rate of social security tax in Hungary is partly governed by its low labor force participation rate, less than 60 per cent until 2000 compared to over three quarters in Latvia. Social contributions are a larger proportion of the total cost of employment than the personal income tax in all New member states, e.g. 38 per cent versus a maximum of 24 per cent, respectively, in Hungary. Thus it is often social contributions that

are primarily blamed for creating incentives for businesses to hide wage payments. Continuing the Hungarian example, it is preferable to pay 16 per cent profit tax on a sum than show it as expenditure on employment and pay a minimum of 50 per cent of it in tax, consisting of 38 per cent social contributions and a minimum of 12 per cent personal income tax.

As mentioned above many analysts have traditionally not considered social contributions as taxes because they provide a direct benefit to the individual payer. However, we must recognize that social contributions are still involuntary levies collected by the state, and that many of their benefits may not be of practical use. In traditional pay-as-you-go pension systems the contributions of workers made no difference to their benefits at the margin unless they were in their last ten years of employment. In the three pillar systems that have swept the region many contributors might well heavily discount their expected returns based on the greater financial risk. Higher income individuals, especially, are likely to find state pension schemes, particularly in the relatively poor New member states, inadequate and prefer private insurance for disability, unemployment and pensions. All individuals in these relatively unstable societies are likely to assign low probabilities to welfare benefits being available for them when needed. Hence for a successful entrepreneur in the New member states, who is likely to be young and have high income, social contributions payments may represent a true tax in the sense that they provide little expected benefit.

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