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Property taxation and enhanced tax administration in challenging times

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Property taxation and enhanced tax dminiistration in challenging times

Proceedings of the workshop organised by the Directorate General for Economic and Financial Affairs held in Brussels on 24 November 2011

Edited by
Christian Gayer and Gilles Mourre

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Rima Igoseva and Savina Princen contributed to the editing of these proceedings. Patricia Tuite provided excellent administrative support to the organisation of the workshop and the preparation of its proceedings.

1. Introduction

1.1 Purpose of the workshop

The financial and economic crisis continues to weigh heavily on Member States' government revenues. Fiscal consolidation has become more urgent as concerns about sustainability have become more acute and spread to hitherto unaffected countries. The weakening real economy, fragile public finances and the vulnerable financial sector appear to be mutually affecting each other in a vicious circle. Confidence and growth will only return once this negative interaction is interrupted.

Following a wide range of tax stimulus measures over the period 2008-10, the focus of tax policy has clearly shifted towards a much needed consolidation of public finances. Several Member States will have to consider increasing tax revenues – as a complement to expenditure control – to consolidate their public finances. This is particularly relevant for countries that show unsustainable budgetary situations but, at the same time, have room for potential tax revenue increases.

In this context good tax governance is more than ever needed. Combatting tax fraud and evasion, reducing tax gaps and improving the efficiency of tax collection can play an important role in raising additional revenues.

At the same time, improving the growth-friendliness of the overall structure of taxation is an important element of the universal challenge to enhance the growth potential of the EU economies. While growth is a goal per se it is also a condition for making public finances sustainable. Research on the growth-taxation nexus has shown that shifting the tax burden away from labour and capital towards housing can contribute to reducing the distortions caused by taxation.

The present conference proceedings gather together the views of academics, national policy-makers and international institutions on these topical issues of great policy-relevance at the current juncture. The part on 'Housing taxation' touches upon different aspects of housing taxation and their characteristics with respect to economic efficiency/distortions, macroeconomic (de-)stabilisation and equity/distributional considerations. Country-specific contributions provide insights into facts and recent reforms of national housing tax policies. The theoretical contributions focus on the link between housing taxation and macro imbalances and the efficiency of current housing tax provisions, including their impact on low income households. Given political resistance against increasing housing taxation, limiting mortgage interest rate deductibility is suggested as one way forward in reforming housing taxation. Up-to-date valuation systems are found to be of high importance for an effective, efficient and fair taxation of housing property.

The part on 'Efficiency of tax administration and improving tax compliance' discusses the main avenues in fostering voluntary tax compliance, improving tax administration efficiency, reducing compliance costs and complexity and safeguarding effective tax auditing and enforcement. The importance of third-party information for compliance is highlighted, as third-party information can dramatically lower the taxpayer's ability to misreport taxes. Furthermore, audit selection criteria and the effects of tax audits on compliance of audited taxpayers are discussed. Finally, country-specific contributions present some experiences with combatting the underground economy and the role of tax administration. Setting the incentives right appears to be vital for voluntary tax compliance, including through an improved understanding of non-economic factors determining taxpayers' behaviour. One important conclusion is that, in particular at the current juncture, attempts to increase tax revenues need to be carefully balanced against the long-term erosion of voluntary compliance and trust.

The contributions collected in this volume were presented at the workshop 'Property taxation and enhanced tax administration in challenging times' organised by the Directorate General for Economic and Financial Affairs of the European Commission on 24 November 2011. We thank all the participants of the conference for their vivid presentations, insightful discussion and fruitful contributions.

The Commission (DG ECFIN) pursued analysis in these two fields, by publishing two occasional papers in the *DG ECFIN European Economy* series, respectively on tax governance and housing taxation[1].

[1] Jensen, J. and Woehlbier, F. (2012), Improving tax governance in EU Member States: Criteria for successful policies, DG ECFIN European Economy, Occasional Papers, No. 114, European Commission and Johannesson Lindén, Å. and Gayer, C. (2012), Possible reforms of real estate taxation: Criteria for successful policies, mimeo.

1.2 A few lessons from the 2011 Commission report 'Tax reforms in EU Member States'

Gilles Mourre *

1.2.1 The policy context

The European Semester, which is the new cycle of integrated economic coordination, pays attention to growth friendliness of tax systems/policy and sizeable consolidation need in some countries. These priorities are captured in the 2011 issue of the Annual Growth Survey, which launched the 2012 European Semester (AGS, 2011). The Euro Plus Pact, adopted in March 2011, by euro area Member States plus other volunteers, also calls for labour tax reforms, pragmatic tax coordination and structured discussion on tax issues. The 2011 issue of the 'Tax reforms in EU Member States' Report (TRR), jointly published by Commission services (DG ECFIN and DG TAXUD) on 10 October 2011, contributed to this discussion and serves as an analytical input to the 2012 European Semester.

The 2011 TRR strongly benefited from discussions with Member States at the Economic Policy Committee attached to the ECOFIN Council. It represents an important step towards clarifying the analytical underpinning of policy recommendations in the area of tax policy. Further dialogue with Member States appears mutually beneficial to dig deeper into country dimensions and to go beyond the indicator-based identification of challenges. The report can be downloaded using the following web link: http://ec.europa.eu/economy_finance /publications/european_economy/2011/pdf/ee-2011-5_en.pdf. The forthcoming 2012 issue of the TRR will dig deeper into some aspects already covered in the 2011 issue, in particular with respect to housing taxation and tax governance, and extend the coverage of the analysis to all the EU Member States, including non-euro area countries.

The TRR describes the structure of tax systems in the EU and their evolution over time and provides an overview of tax reforms implemented by Member States in 2010 and 2011. On the basis of individual country information, an attempt is made to identify common trends across countries. The TRR also discusses the multi-faceted concept of ‘quality of taxation’, reviewing the theoretical and empirical literature. The focus of this discussion is on the effects of taxation and tax reforms on GDP and on sustainable economic growth. Lastly, the report aims to identify the macroeconomic challenges that individual euro area Member States are facing in the area of taxation and tax policy in difficult times.

1.2.2 General scope of the analysis: tax policy challenges in EU Member States

The 2011 TRR also suggests a first identification of tax policy challenges in EU Member States, using an indicator-based screening. The later offers a cross-country consistent method to provide preliminary indication of issues in national tax systems, deserving further investigation to avoid the one-size-fits-all fallacy. The last chapter of the report first focuses on two key macro-economic dimensions, namely i) the contribution of taxation to the

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sustainability of public finance and ii) growth-friendly tax structures and the potential for a tax shift from labour to consumption/housing taxation. The report also examines a set of cross-country issues, related to the specific design of individual types of tax, such as reducing tax expenditures in direct taxation, correcting the debt bias in corporate and housing taxation, increasing VAT efficiency (policy and collection gap) and moving toward environmentally-friendly taxation. Lastly the report identifies challenges related to improving tax governance.

Table 1. Summary of the indicator-based screening of tax challenges

Country	Contribution of tax increases to consolidation	Need and room for tax shift	Cutting tax expenditure in direct taxation	Debt bias in corporate taxation	Debt bias in housing taxation	Increasing VAT efficiency	More environmentally friendly taxation: Review			Tax governance challenges
							Reduced VAT on energy	Company car taxation	Excise duty rates on fossil fuels	
BE		X	X		X	X	X	X	X	X
DE		X						X	X	
EE					X					
IE	X						X			
EL	(X)		X	X	X	X	X	X	X	X
ES	X		X		X	X		X		
FR		X	X	X		X	X		X	
IT		X	X		X	X	X	X		X
CY	X									X
LU				X	X		X	X	X	
MT				X		X	X			
NL		(X)			X				X	
AT		(X)	X			X		X		
PT	(X)		X		X	X	X	X	X	X
SI		(X)						X		X
SK	(X)					X		X	X	X
FI		X			X				X	

Source: Commission services, 2011 Report on Tax reforms in EU Member States

As an example of the methodology used in the report, the horizontal screening undertaken to gauge whether there is scope for taxes to contribute to the fiscal consolidation challenge is carried out systematically and stepwise. The need for fiscal consolidation on the revenue side is assessed based on the fiscal sustainability assessment. The availability of tax space is determined considering the current level of the tax-to-GDP ratio and two complementary criteria (the extent of past increase in tax-to-GDP ratio and the scope to increase the least distortionary taxes, i.e. the share of indirect/consumption taxes of GDP). Based on this analysis, Table 1 shows that tax policy in the first half of 2011 (corresponding to the cut-off date of the report) might have a potential to contribute to consolidation in a few euro area countries.

A systematic screening is also conducted to examine the need and scope for tax shifting with a view to raising the economic efficiency and employment friendliness of tax structures. It was appraised by examining the magnitude of the tax burden on labour, both in aggregate terms and on specific vulnerable groups. The employment rate in most euro area Member States is below the 75% target (20 to 64 years) set out in the Europe 2020 strategy. A tax shift from taxation of labour to other sources less detrimental to growth, making work pay, could help increase the employment rate. Low-skilled workers and those weakly attached to the labour market, such as second earners, often face a high inactivity trap. Furthermore, the responsiveness of these groups with respect to tax changes is particularly high. Reduction in the tax burden on labour should be targeted to these specific groups facing high disincentives to work. The scope for tax shifting is assessed through the relatively low level of indirect taxation, in particular consumption taxes and recurrent taxes on housing, which are supposed to generate less economic distortions than other revenue sources.

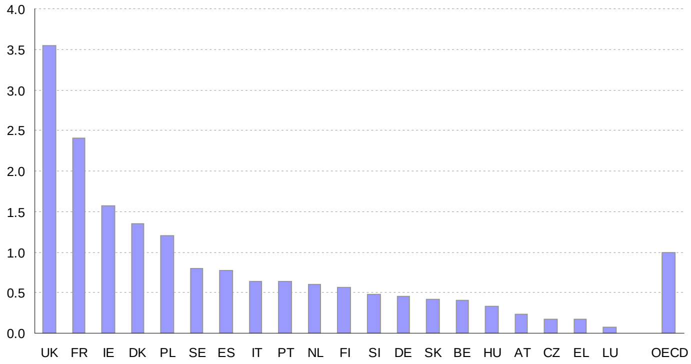
1.2.3 Challenges in the area of housing taxation

Shifting away from transaction to recurrent taxes and from labour to recurrent taxes

Transaction taxes discourage property transfers, impact resource allocation negatively and reduce labour mobility. While it is sometimes claimed that they could possibly deter speculation and, thus, reduce the risk of housing bubbles, the empirical relationship is ambiguous. A shift towards recurrent taxes on real estate would reduce distortions and improve economic efficiency.

Beyond the issue of shifting tax within property taxation, there may be a need to use property taxes, in particular recurrent taxes on housing, to shift tax away from labour. Recurrent taxes on housing have indeed been found to be among the taxes least detrimental to growth (OECD, 2008). Greater reliance on this tax base would be more growth-friendly for the economy, if the rise in recurrent taxes is revenue-neutral and allows for the reduction in labour taxes. Member States in which revenues are low and that do not levy a tax on imputed rents have scope to increase.

Graph 1. Recurrent taxes on immovable property (in % of GDP, 2009)



Source: OECD

Tax neutrality and debt bias in personal income taxation

The tax deductibility of mortgage interest rates favours debt leverage. This type of tax relief is considered to have contributed to the increase in housing prices and thereby to the housing market bubble. There is evidence that countries that favour homeownership through favourable tax treatment of mortgage debt financing also have higher ratios of mortgage debt to GDP.

One of the aims of the tax system is to achieve neutrality *vis-à-vis* the taxation of other assets, to avoid distorting the resource allocation and impede overinvestment in specific types of capital assets. Housing would 'ideally' be taxed as other investment goods. Thus, a rental income net of depreciation allowances and interest payments may be taxed as part of personal income. This involves that the imputed rental income of owner-occupied housing should be covered by taxation, whilst recurrent real estate tax should be based on the market value of the house, rather than out-dated cadastral values, to justify interest rate deductibility. Only very few Member States explicitly tax imputed rental income, but in all cases considerably below a level corresponding to the current market value of the house.

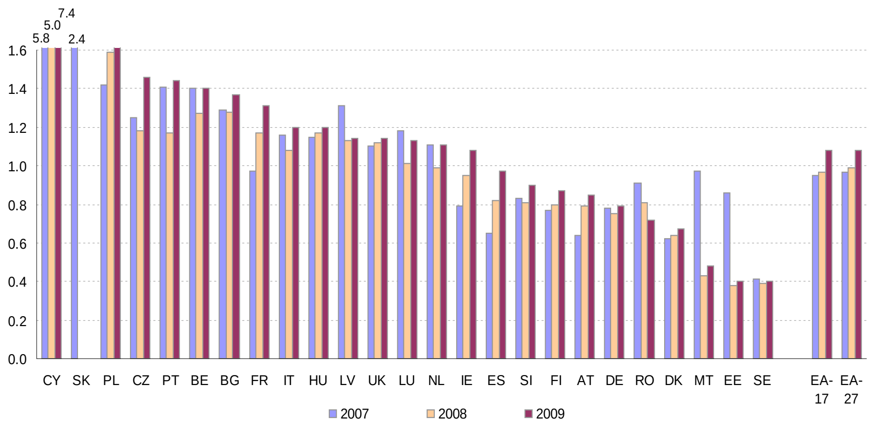
Recurrent property taxes could act as a second-best solution to the absence of taxation of imputed rents. However, their rates and/or bases are often too low for the tax to reflect actual rents paid for housing. Moreover, considerations of political economy often render it difficult to tax property at the level required to make the tax system neutral. Liquidity constraints of low-income earners and the nature of the asset, i.e. an illiquid asset providing a necessity service, make it socially difficult to treat homeownership in the same way as other financial assets. Another option could therefore be to reduce the debt bias by removing - or at least reducing - the interest rate deductibility in the tax systems. As a rule, tax deductibility of mortgage interest payments could be strictly targeted at low-income households and/or first-time homebuyers. However, subsidised loans - as currently applied in a limited number of countries - could potentially be even more efficient to well target certain categories of homebuyers.

1.2.4 Challenges related to improving tax governance

Many Member States have room for improving the efficiency of tax administration and better preventing tax evasion. The current economic and financial crisis heightened the need to improve tax governance by reducing the size of the shadow economy and fighting against tax fraud. Three different indicators tentatively define the challenge: i) the size of the shadow economy, based on Schneider (2010) but also Eurostat data; ii) administrative burden of the tax system for a mid-sized company (i.e. total hours to comply) computed by PricewaterhouseCoopers (PwC, 2011) and showed in Graph 2; and iii) administrative cost per net revenue collected, computed by the OECD.

Graph 2. Cost of tax collection

Administrative costs per 100 units of net revenue, 2007 to 2009



Note: No data available for Greece. Data for Slovakia are limited to year 2007.
Source: OECD.

As examples, the 2011 TRR mentioned the following measures, which could be considered to enhance tax governance:

- The recourse to third-party information on taxpayers' wage and interest income crucially reduces the possibility of under-declaring income. Tax authorities' resources may then be directed towards other segments.
- Audit resources could usefully target the biggest revenue risks (e.g. self-employed, large companies, shadow economy) by segmenting taxpayers by class of risks of revenue losses and by using 'flag systems' based on the analysis of audit data.

- Legal sanctions against purchasers of undeclared work and the obligation to use electronic payment systems for purchases over a certain amount may deter tax fraud.
- Paying taxes could be facilitated by appropriate IT systems making it easy to declare taxes, but also by a simple tax system.

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2. Summary of the workshop

Christian Gayer[*] *and Rima Igoseva* **

2.1 Introductory address

Responding to two of the key challenges on the current agenda of taxation policy, the workshop 'Property taxation and enhanced tax administration in challenging times' discussed the role that property taxation and enhanced tax administration can play in addressing high consolidation needs, whilst optimising the impact on growth. It included speakers from national authorities, academia, the IMF, the OECD and the European Commission.

Reforms of housing taxation and enhanced tax governance are of high importance in times of severe consolidation needs in many Member States. As stressed by Lucio Pench (European Commission, DG ECFIN) in his introductory words, good tax governance is more than ever needed and combatting tax fraud and evasion, reducing tax gaps and improving the efficiency of tax collection can play an important role in raising additional revenues. Moreover, and backed by research on the growth-taxation nexus, improving the growth-friendliness of taxation, including through shifting taxes from labour towards housing, is one important element in enhancing the growth potential of EU economies.

Gilles Mourre (European Commission, DG ECFIN) gave a keynote address presenting the main housing taxation and tax governance related results of the recently published Commission report 'Tax reforms in EU Member States 2011'[2]. He pointed to three issues in housing taxation: (i) Member States with low revenues from recurrent taxes on housing and not levying taxes on imputed rents have scope for shifting taxes away from labour, thereby improving the growth-friendliness of the tax structure; (ii) within housing taxation, a shift from transaction taxes towards recurrent taxes would reduce distortions and improve macroeconomic efficiency; and (iii) tax deductibility of mortgage interest rates in many Member States favours debt financing and increases house prices and debt leverage, potentially contributing to house price bubbles and misallocation of investment. To justify interest rate deductibility, imputed rental income should theoretically be taxed reflecting properties' market values.

On tax governance, Mourre presented the indicators used in the report to identify challenges in Member States: the size of the shadow economy, administrative burdens on enterprises and administrative costs of revenue collection. Measures to enhance tax governance could include wider use of third-party information to reduce under-declaration, targeting audit resources using segmentation and flag systems, and obligatory use of electronic payments to fight the shadow economy and more efficient tax collection systems.

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**Rima Igoseva was a Commission intern at the time of the workshop.
2 The report is prepared jointly by DG ECFIN and DG TAXUD of the European Commission and can be downloaded at http://ec.europa.eu/economy_finance/publications/european_economy/2011/ee5_en.htm

The presentations and discussions in the session on housing taxation dealt with different forms of housing taxation and their characteristics with respect to economic efficiency/distortions, macroeconomic (de-)stabilisation, and equity/distributional considerations. Country-specific contributions provided insights into facts and reforms of national housing tax policies.

2.2 Session on housing taxation

Russell Krelove (IMF) gave a presentation on 'distortions from housing taxation provisions'. He stressed that within a comprehensive income tax, fully neutral taxation of owner-occupation would require full taxation of imputed rents and capital gains on housing, and deductibility of mortgage interest payments, thereby treating housing similarly to any other asset yielding a flow of returns. In practice, however, imputed rents and capital gains on primary residences were rarely taxed, creating a general bias towards housing, reinforced by mortgage interest relief and the fact that alternative investments were usually less than fully taxed. While the distributional impact of mortgage interest relief was complex, it likely favoured the better off. However, externalities arising from home ownership could also support some tax preference to encourage ownership. Recurrent property taxes have a potential appeal both in serving as user charges reflecting the value of local public services – often being allocated to lower-level governments – and in being less vulnerable to tax competition than other taxes.

Krelove stressed that the impacts of taxation on prices and leverage are interrelated, as rising prices encourage removing equity through increased borrowing, the availability of cheap loans drives up prices, and the expectation of price increases raises the expected return on borrowing to acquire housing assets. Favourable tax treatment is likely to be capitalised in prices, as reflected in the rate of house price inflation, and possibly increasing house price volatility. For the US, deductibility and other tax features on average provided an estimated tax subsidy equivalent to around 19% of the user cost.

Looking at effective average tax rates, calculated as the ratio of the present value of total taxes over an expected holding period to the sum of the present value of imputed rent and capital gains, Krelove concluded that Spain, France, and to a lesser extent Denmark, have relatively high tax rates across a range of assumptions, while Italy (standing out as having almost consistently negative effective average tax rates), Ireland and the US have low effective average tax rates. Taxation did not appear, however, to have been the main driver of house price developments over the last decade, since strong price increases occurred in all countries, including in the high tax group, and changes in tax rules could not clearly account for housing price movements either. Krelove presented evidence that countries offering more favourable tax treatment for home ownership have higher ratios of mortgage debt. Econometric evidence for the UK and US confirmed that mortgages fell significantly relative to home value after reforms reducing the value of mortgage interest relief.

In terms of policy responses, alleviating tax distortions would improve efficiency and help avoid macroeconomic imbalances, but Krelove stressed that timing was important given that some reforms toward greater tax neutrality could reduce house prices and/or construction activity, and so be pro-cyclical at present. For the short-term, creating more tax breaks for housing should be avoided, though he saw scope for reducing transaction taxes, thus removing impediments to efficient trading, increasing prices, speeding up clearance of excess stock of unsold houses and possibly improving labour mobility. When housing markets regain robustness, other distortions could be addressed, including taxing imputed rents and capital gains, phasing out mortgage interest relief (if imputed rents remain untaxed) or fully taxing first sales of residences under VAT (and perhaps taxing gains on subsequent transactions). As to the social objectives underlying distortions, he stressed that they could be achieved through better-targeted measures (such as outright grants). Importantly, to the extent that they are capitalised in house prices, existing tax subsidies do not even help first-time buyers.

Krelove pointed to the important potential for revenue mobilisation in housing taxation. For high income countries, raising taxation to the average revenue ratio of the five 'best performers' would yield a collection potential of about 2.7% of GDP.

On the question of whether (recurrent) property taxation could act as a close substitute for taxing imputed rents, Krelove was sceptical, pointing to the many budget constraints involved in local-level property taxation, thus requiring a system of inter-jurisdictional transfers. Considering political economy issues, governments preferred to use the property tax to pay for 'property-related' services rather than 'people-related' services; turning the property tax into 'general revenue' may therefore be difficult and undesirable. Moreover, he questioned the often held view that the property tax base was relatively immobile. While this was true for unimproved land of no or little value, the base could become mobile when tax increases were not tied to increased benefits from property. Krelove's final point was that since property was subject to significant non-price control and regulation, any reforms should combine tax changes with changes in regulations.

In his discussion, Gaëtan Nicodème (European Commission, DG TAXUD) complemented Krelove's analysis with some lessons for housing taxation from the Mirrlees Review. It was important to distinguish between land, business property, owner-occupied housing and rental housing. Moreover, taxation of acquisition had to be distinguished from taxation of housing services and housing as an asset. For the former, VAT, including on improvements, was appropriate, while transaction taxes were not. Housing services should be taxed as a substitute for VAT, while the taxation of housing as an investment should exempt the normal return to capital. He stressed the importance of fitting all these elements together, avoiding the distortions inherent in current taxation systems. The treatment of owner-occupied and rental property should be levelled out. He also restated the reform proposals of the Mirrlees Review for housing taxation in the UK. The main problems in reforming property taxation were related to issues in tax assignment, the treatment of windfall gains and losses in the transition phase and political economy considerations.

Dan Andrews (OECD) gave a presentation on housing taxation for stability and growth, drawing on two OECD studies. The first part of the presentation looked into the distortionary effects and thus the impact on GDP of different tax categories. The resulting 'tax and growth' ranking shows that corporate income taxes are most harmful to growth, while recurrent taxes on immovable property are least harmful. A revenue-neutral reform that shifts the tax revenue base away from corporate and personal income taxes towards a greater reliance on recurrent taxes on immovable property and consumption taxes has the potential to be growth-enhancing.

Andrews stressed that taxes on capital transactions are highly distortionary since they discourage transactions that would allocate these assets more efficiently. Recurrent taxes on property, on the other hand, did not distort the decisions of economic agents to supply labour, to invest in human capital, to produce, invest and innovate to the same extent as other taxes. Moreover, since real estate is highly visible and immobile, these taxes were more difficult to evade and the immovable nature of the tax base may be particularly appealing at a time when the bases of other taxes become increasingly mobile. Recurrent property taxes can also increase the progressivity of the tax system (e.g. by the exemption of low value properties), provided that special arrangements are made for people with low incomes and illiquid assets. Given the key role of housing supply rigidities in explaining developments in OECD housing markets, Andrews stressed that linking cadastral values to market values may increase incentives for developing land as market prices also reflect the development potential of land. Against this background, he stated that taxes on immovable property were under-utilised compared to other revenue sources.

The second part of the presentation focused on the OECD housing study (2011). Andrews demonstrated that in many OECD countries owner-occupied housing is taxed favourably compared to other investment, with imputed rental income generally not being taxed and capital gains on the primary residence being tax exempt (albeit after some holding period in some countries). At the same time, many countries allowed tax deductibility of mortgage interest payments and the value of this mortgage interest subsidy tended to be much higher than the taxation (if any) on the income stream from owner-occupied housing. While most countries used recurrent property taxes, these taxes were often not high enough to offset the mortgage subsidy and property values for tax purposes lagged well behind market values. Andrews presented estimates of the wedge between the market interest rate and the after-tax debt financing cost of housing, pointing to particularly high tax relief in the Nordic countries, the Czech Republic and the Netherlands.

He then discussed the rationale for subsidising homeownership. While it is often argued that it gives rise to positive spill-overs for society (better child outcomes, more community engagement, a pre-commitment device for saving), related studies were plagued by endogeneity problems. Given that homeownership may unduly constrain labour mobility, he concluded that the jury was out as to whether a tax subsidy can be justified. However, there are arguments not necessarily lending themselves to econometric verification, e.g. that homeownership may provide the most stable tenure arrangement to satisfy basic household needs and that it may interact with the retirement income systems and be an important device to maintain living standards in old age. Assuming that there is some basis for subsidising owner occupation, the question is whether current policy settings achieve this goal in an efficient and equitable way.

Andrews presented econometric evidence that housing demand shocks tend to get capitalised into house prices more in countries with generous tax relief on mortgage debt financing. As an example for the impact on house price volatility, he quoted estimates showing that a modest increase in the generosity of tax relief – roughly equivalent to moving from Spain to the US – was associated with a 4% increase in annual real house price volatility. Moreover, he stated that tax relief for mortgage debt was regressive, with higher income households being more likely to be homeowners and tax relief usually taking the form of a deduction against earned income as opposed to a tax credit. Generous tax relief gets capitalised into house prices which squeezes financially-constrained households out of homeownership at the margin. In this context, he provided evidence that favourable tax treatment diluted the benefits that financial deregulation brought in terms of expanded access to finance.

On transaction taxes, he provided evidence that higher costs in purchasing property are associated with lower residential mobility. Reducing transaction costs from the high level observed in Greece (14%) to the average level among the countries included in the OECD study (approximately 8%) would increase the annual probability of moving by around ½ percentage point. Moreover, transaction taxes disproportionately undermined the mobility of younger households. From this perspective, transaction taxes are harmful from an efficiency and equity perspective.

Andrews stressed that the design of housing taxation policy in OECD countries was far from perfect and that its effects were particularly unacceptable at the current juncture, where growth is required to reduce unemployment and aid fiscal consolidation. In terms of policy responses, he proposed to tax housing and alternative investments in the same way, ideally by properly taxing imputed rent, allowing mortgage interest deductibility and taxing capital gains. However, capital gains taxes levied on a realisation basis may undermine labour mobility since any move would trigger a tax and capital gains taxes levied on a yearly accruals basis may be practically difficult for financially constrained households. A practical issue was that by definition, imputed rent is unobservable. Over time, there is a risk that the system will regress to one that subsidises homeownership (via mortgage interest deductibility) and is costly from a fiscal perspective. A second-best approach was therefore to either remove mortgage interest deductibility or to scale-up recurrent property taxes (as a possible substitute for tax on imputed rents) by levying them on cadastral values aligned with market values.

For countries with relatively low yields from taxes on immovable property, annual static revenue gains of at least ½ percentage point of GDP were possible from a shift to the OECD average. These could be used to reduce more distortionary types of taxes – including transaction taxes. Regular updating of cadastral values would increase housing supply responsiveness, which reduces the price sensitivity of housing markets to demand shocks and aids labour mobility. Some practical issues are that updating the tax base is costly, at least up-front, with subsequent on-going costs more modest and that in many countries, these taxes are set at the local level, thus posing challenges for intergovernmental fiscal frameworks.

Jonathan van der Heijden (Ministry of Economic Affairs, the Netherlands) gave an overview of recent reforms in the Dutch housing market policy. Starting from the importance of the housing sector for the Dutch economy, he presented some recent developments in house selling prices and transactions. The budgetary costs of mortgage interest reduction and exemption of net housing wealth from capital gains tax largely surpassed revenues from taxes on imputed rents, local property and transaction taxes, leading to an overall budgetary cost of roughly 2% of GDP in 2010. Past policy measures included the introduction of a 30 year limit on mortgage interest deductibility (2001), the exemption of capital gains from a previous dwelling from interest deductibility for a new mortgage, as an incentive to limit debt financing (2004), non-taxation of imputed rents when mortgage has been paid off, as an incentive for amortisation (2005) and the gradually increased taxation of imputed rents for high value properties (2009). Recent policy measures were focused on reducing the risk of household indebtedness and on financial stability. To support the housing market, transaction taxes were temporarily reduced from 6% to 2% and new mortgage lending rules were introduced, including a cap on the loan-to-value ratio of 106%.

Geert van Reybrouck and Christian Valenduc (Federal Public Service Finance, Belgium) presented facts and reforms of housing taxation in Belgium, giving an overview of the housing market, tax instruments and the main trends in effective tax rates for owner occupied housing. Remarkable features are the high share of owner-occupied housing and the clear tax privilege compared to other investments. Van Reybrouck presented reform measures put in place in Flanders (concerning registration duties) and Antwerp (concerning an immovable property surtax). Valenduc gave an overview of the 2005 federal reform and its effects on the housing market. While prices increased strongly, there was no clear pattern in the number of transactions. The reform year saw large capital gains for sellers and an increase in mortgages, particularly from refinancing loans. On a general note, tax incentives did not increase supply for low income earners and seemed to be capitalised into house prices.

Neva Žibrik (Ministry of Finance, Republic of Slovenia) presented the reform of real estate taxation towards market-based valuation in Slovenia. Slovenia ranks among the countries with the lowest property taxation, while labour taxation is among the highest. Against this background, Žibrik explained that the idea of modernising the property tax system based on market values and raising the revenue share from property taxation got broader support in the course of the crisis. The development of a modern real estate taxation started with establishing a centralised real estate register and developing a mass valuation system, which was introduced on 1 January 2012. The main goal of the real estate tax reform is to set the tax base in line with market value and increase tax revenues by raising tax rates and the number of taxed properties.

The ensuing discussion focused on the link of housing taxation with macro-imbalances and the efficiency of current housing tax provisions, including their impact on low income households. The discussion highlighted that favourable tax treatment of housing was normally capitalised in house prices, rendering housing tax incentives targeted at low income households rather ineffective. Given political economy related resistance against increasing housing taxation, limiting mortgage interest rate deductibility was suggested as one way forward in reforming housing taxation.

2.3 Session on tax administration and tax compliance

The session on tax administration and tax compliance discussed the main avenues in fostering voluntary tax compliance, improving tax administration efficiency, reducing compliance costs and complexity and safeguarding effective tax auditing and enforcement. The chair of the second session, Thomas Carroll (European Commission, DG TAXUD), stated that improving taxpayer's compliance and administrative efficiency could offer largely untapped potential for consolidation and sustainable public finances in many countries. However, it is vital to limit the negative repercussions of consolidation on domestic demand. Enhancing tax administration and fighting tax evasion can play an important role in this context, while avoiding unpopular and potentially damaging tax hikes and raising the fairness of tax systems. Tax administration is a complex field and while general principles to increase its efficiency are rather easily agreeable, the devil is in the detail and the main challenge lies with their implementation. Facilitating a constructive dialogue with all stakeholders will be a determining factor in this respect.

Lynne Oats (University of Exeter) opened the session with a presentation about the key principles for efficient tax administration and main reform challenges. Firstly, the top level strategies for efficient tax administration were discussed. The importance of fostering voluntary compliance by broadening the base of the compliance pyramid was stressed. The attention was focused on the topics of fostering trust in the tax authorities and understanding taxpayers, as well as the effective risk management and the importance of monitoring best practices. Secondly, improvements in operational processes, among those the aspects of customer focus, cost reduction and improved technology, were discussed.

Finally, internal and external reform challenges were presented. The section on internal challenges covered the problems related to cost reductions, performance measurement, consistency of decision making and implications of academic research for taxation. The discussion of external challenges looked into problems regarding the pressure to collect more revenue with fewer resources, increasing pressure of cooperation, engagement with intermediaries and constraints on tax reforms through pressure for uniformity across countries. The main conclusion of the presentation highlighted that attempts to increase revenue needed to be carefully balanced against the risk of a long term erosion of voluntary compliance and trust.

Discussing Lynne Oat's presentation, Jonathan Leigh Pemberton (OECD) stressed the importance of segmentation of taxpayers and different strategies for small and big companies. The need to address the middle segment of the compliance pyramid in order to broaden the base of voluntary taxpayers was pointed out. Leigh Pemberton stressed the costs of audits and their limited return and concluded that enforcement needs to be accompanied by fostering compliance and reducing complexity. He was somewhat sceptical about the gains from using internet and emails as communication channels with taxpayers, given that the traditional use of paper forms persisted in parallel. Finally, discussing benchmarks and measures of success for tax administration, he considered the 'tax gap' concept not helpful at the operational level and stressed the need for a basket of indicators.

Claus Thustrup Kreiner (Danish Economic Council) proceeded with a presentation on an audit experiment in Denmark focusing on the factors which make taxpayers comply. The results of the experiment stated that the reasonably low tax gap in Denmark is due to the difficulties of evasion rather than good morale of the taxpayers. It was shown that the key distinction in a taxpayer's reporting decision is whether income is subject to third-party reporting or if it is solely self-reported. The key factor is the third-party information from employers, banks, trade unions, etc. It is a highly effective instrument for reducing the under-reporting of income. Still, it is difficult to obtain third-party information on the income of the self-employed. Moreover, third-party information is effective in modern economies with sophisticated production and large firms, but not necessarily in underdeveloped countries.

Tax audits have positive behavioural effects and the detection of evasion/mistakes has large effects on tax compliance behaviour the following year; however, knowledge of a high audit probability has a positive, but rather small effect. The problem of high evasion on self-employment income is difficult to solve since self-employed are very expensive to audit. As a main conclusion it was stressed that audit selection criteria should focus on income information variables, since socio-economic factors do not seem to improve the selection significantly. It is also important to take into account that audits have a positive behavioural effect. However, cost-benefit analyses are difficult to carry out and do not necessarily give the socially optimal level of resources spent on audits. Given that audits are very costly and eliminate only a part of tax evasion, enforcement resources may be better spent on expanding third-party reporting than on audits of self-reported income.

Marcel Gérard (Catholic University of Louvain) discussed several theoretical models on tax evasion. He stressed that not only the probability of detection and costs of cheating be taken into account, but also the psychological or cultural aspects of the income reporting decision. Examples of empirical research on the relevance of tax morale were discussed. Aspects related to difficulties in measuring tax evasion, problems of collusion between the taxpayer and the third-party and the fact that self-employed people face larger compliance costs were considered as well. It was emphasised that the main issue with third-party reporting is the controlling and auditing of the third-party.

The second session of the workshop was closed by Adam Balog (Ministry for National Economy, Hungary). He presented the role of tax administration and issues in combatting the underground economy in Hungary. He considered that people in Hungary did not appear to see the link between the taxes they pay and the services they are being provided, such as health care, pensions and other governmental services. Communication between taxpayers and tax authorities was crucial. Therefore, the government should address tax issues through the public media more often. The shadow economy in Hungary is among the highest in the EU. Inefficient sanctions and surveillance of tax authorities, loose tax laws offering many loopholes and a poorly regarded quality of government services contributed to the low willingness to pay taxes. However, the Hungarian government has taken some measures to improve the situation, by introducing a proportional flat-rate income tax, reducing the number of taxes, simplifying the system with a view to easing compliance, introducing stricter sanctions and new types of tax inspections and by simplifying conditions for temporary employment and introducing new schemes to support employment.

2.4 Concluding policy panel

The concluding policy panel discussed the link between reforms in housing taxation and enhanced tax administration and fiscal consolidation. Questions were raised on the scope for increasing property taxes, and possible ceilings for increasing housing tax rates. The need to broaden the tax base to keep tax rates as low as possible was pointed out. The search for higher tax revenues should focus on sources that minimise the adverse effect on growth. Given that taxes on immovable property were the least distortive way of raising revenue, they were under-utilised in many OECD countries.

It was stressed that taxes on housing were very unpopular, because people think it is unfair to tax something they already possess and thus cannot avoid paying by changing behaviour. This 'counter-economic' perception was an important factor to be taken into account. Panellists highlighted the importance of up-to-date valuation systems as a basis for an effective, efficient and fair taxation of housing property. Elimination of the preferential tax treatment of owner-occupied housing was deemed important. Mortgage interest deductibility in a setting where income from housing was barely taxed was hard to justify and gave rise to unintended consequences. Removing this tax bias could improve the allocation of capital and boost growth in the medium term, reinforcing efforts to consolidate public finances. There was agreement that transaction taxes can hinder labour mobility and slow down economic recovery. Recurrent taxes were to be preferred.

As to tax governance, it was considered important to set the incentives right for voluntary tax compliance, including through an improved understanding of non-economic factors determining taxpayers' behaviour. Since tax compliance was not purely driven by economic aspects, but was also a social issue, it was argued that anthropologists, historians and sociologists should be involved in its analysis. Third-party information should be introduced wherever possible. One promising way to fight undeclared work was to punish buyers if the seller does not pay the appropriate tax on the transaction, unless the buyer makes the payment by electronic means. Thus, panellists agreed that new technologies could to some extent contribute to fighting tax evasion.

Discussing tax increases in general, it was argued that people should see an improvement in the quality of services provided by government to be sure that the money they pay through taxes is used properly. High corruption in the public sector discourages people to pay their taxes. One important conclusion was that, in particular at the current juncture, attempts to increase tax revenues need to be carefully balanced against long-term erosion of voluntary compliance and trust.

3. SESSION I: Housing taxation

3.1 Distortions from housing market provisions

*Russell Krelove**

3.1.1 Introduction

Housing is commonly subject to special tax treatment that may have increased household leverage and house prices. Taxation does not explain the recent widespread house price boom – that occurred in countries with very different tax systems – and there are no obvious tax changes that might have triggered its collapse. But taxation does create substantial distortions in a market of central macroeconomic importance. This is one of the major conclusions of a recent IMF analysis of crisis-related issues in tax policy.[3] This note follows the main part of the seminar presentation in summarising the argument in that study. The first section looks at the tax treatment of housing. The next section reviews the data on the impact of that treatment on house prices and leverage. The final section discusses possible policy responses.

3.1.2 The tax treatment of housing

Within a comprehensive income tax, fully neutral taxation of owner-occupation would require full taxation of imputed rents and capital gains on housing and deductibility of mortgage interest payments. Compared, for instance, to renting and investing in fully taxed assets, taxation of imputed rents – the consumption value of housing services – is needed to match the payment of market rents from taxed income; taxation of capital gains is needed to match the capital gains tax (CGT) liability on other financial assets; and deductibility of mortgage interest is needed to match the taxation of the interest available from investing in other assets.[4]

In practice, imputed rents and capital gains on primary residences are rarely taxed, creating a general bias towards housing that mortgage interest relief – where it remains – is likely to reinforce. Very few countries bring imputed rents into the income tax (the Netherlands and Switzerland being exceptions).[5] Some tax capital gains on owner-occupied housing, but typically more lightly than other income or only beyond a high threshold (or both). Even in the absence of distortions on the financing side, these features would tax-favour owner-

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[3] International Monetary Fund: *Debt Bias and Other Distortions: Crisis-Related Issues in Tax Policy*. This can be found at: http://www.imf.org/external/np/pp/eng/2009/061209.pdf . The role of real property taxation in revenue mobilisation is discussed in two IMF publications: *From Stimulus to Consolidation: Revenue and Expenditure Policies in Advanced and Emerging Economies*, 2010; and *Revenue Mobilization in Developing Countries*, 2011. A more detailed analysis of the role of real property taxation is found in: John Norregaard, *Taxing Immovable Property*, IMF Working Paper, forthcoming 2012.

[4] The treatment of housing under a personal expenditure tax can be problematic. The simplest approach would be to subject new housing fully to the VAT, but this would not incorporate the progressivity of the income tax, and nor would it tax returns to housing in excess of normal. The usual way of achieving the latter would mean allowing housing purchase as an immediate deduction (with carry forward of any loss at interest) and fully taxing sale proceeds, eliminating liability for many taxpayers.

[5] Several countries charge VAT on first sales of residences, which—to the extent that house prices are the present value of housing services—amounts to an implicit tax on imputed rents, though one that is not tailored to household circumstances in the same way that the income tax is.

occupation relative to renting. And mortgage interest costs attract tax relief, subject to limits, in a number of countries (including Denmark, France, Italy, Spain, Italy, France, and the US). Since borrowing to acquire other assets is generally not deductible, this makes investment in housing even more favoured.

Mortgage interest relief would not tax-favour mortgage finance if the alternative to borrowing were investing less in fully-taxed assets and other interest were also deductible – but that is commonly not the case. If alternative investments were fully taxed, mortgage interest deductibility would mean that the opportunity costs of acquiring housing by borrowing and by running down other assets would in each case be the after-tax interest rate – so mortgage finance would not be tax-favoured. Many countries, however, tax other forms of saving (such as pensions) at reduced rates. In that case, if the return on those assets matches the pre-tax interest rate on mortgage debt, there is an arbitrage gain from leveraging against housing and investing own-funds in the non-housing asset. And while interest on loans used to finance consumption is generally not deductible, home equity loans have provided (within limits) just such a tax-favoured way to borrow and spend.

The distributional impact of mortgage interest relief can be complex, but deductibility likely favours the better off. Higher income individuals may be more likely to face constraints on their access to tax-favoured assets (since this is often subject to caps), so that their opportunity cost of investing in housing is the after-tax return. This creates an argument for some tax relief to ensure that the less well-off also pay an after-tax rate. Against this, however, deductions are worth more to the better-off as they take them against a higher marginal rate of tax. The latter effect would be avoided if relief were provided – as many countries do – not as a deduction but as a credit (reducing tax paid, rather than the income taxed).

Ownership/occupation and transaction taxes also play an important role. Many countries charge substantial recurrent taxes based on ownership or occupation. These have potential appeal both in serving as user charges reflecting the value of local public services – hence they are often allocated to lower-level governments – and, to the extent that these and other features are location-specific, as being less vulnerable to inter-jurisdictional tax competition than the CIT and other taxes on more mobile bases. There is indeed evidence that such taxes (along with consumption taxes) have significantly less adverse effects on growth than income taxation. Housing transactions themselves are often subject to tax, sometimes in significant amounts (up to 9% in Ireland).

3.1.3 Impact on prices and leverage

Favourable tax treatment is likely to be capitalised in house prices, may be reflected in the rate of house price inflation and can also increase housing price volatility. In the short run, when the physical stock of housing is virtually fixed, most taxes (or tax subsidies) will be fully capitalised in housing prices, with the incidence mainly on the seller (though the effect may be mitigated by changes in the supply of housing offered for sale). A reduction in the rate of CGT on housing, for instance, would be expected to increase house prices (with some offset as sellers enter the market to realise deferred gains). It might also lead to a slower – not, as one might expect, a faster – rate of house price appreciation (because a lower pre-tax gain is needed to yield the required post-CGT return). In the longer term, supply responses will ease price effects, but since the long run elasticity of supply of housing is unlikely to be infinite, marked effects can remain. There is also evidence that more favourable tax treatment of housing is associated with greater volatility of its price.

Tax effects can substantially reduce the user cost of – and hence increase the demand for – housing. A recent study for the US, for example, finds that mortgage interest deductibility and other tax features on average provided a tax subsidy equivalent to around 19% of the user cost. This means that, for households facing a user cost of capital of, say, 8%, the favourable tax treatment of housing was equivalent to a reduction of 200 basis points, a magnitude that can be regarded as having significant macroeconomic effects.

Effective tax rates on housing (reflecting also transactions taxes) vary enormously across countries, and with the circumstances of the investor and investment. An effective average tax rate (EATR) on housing can be calculated as the ratio of the present value (PV) of total taxes over an expected holding period to the sum of the PV of imputed rent and capital gains. EATRs can be very high – sometimes more than 100% – when investors keep a house for a short period and are subject to high transaction taxes. They can also be negative, for example for investors with large mortgages in countries that allow mortgage interest deductions but do not tax imputed rents and alternative assets. EATR calculations indicate that Spain, France, and to a lesser extent Denmark, have relatively high tax rates across a range of assumptions; Italy (which stands out as having almost consistently negative EATRs), Ireland, and the US have low EATRs.[6]

Special vehicles may have created further tax biases towards housing. Real Estate Investment Trusts (REITs) provide CIT exemption for corporations whose main business is property investment (subject to fulfilling certain criteria, notably distributing a large share of profits to shareholders); dividends are taxed at shareholder level, potentially at low rates. This makes investing in property through REITs tax-favoured relative to doing so directly (which would attract tax, and deductions, at ordinary income tax rates).

Taxation does not appear, however, to have been the main driver of house price developments over the last decade. Strong price increases occurred in all countries, including in the high tax group. The same conclusion flows from the diverse experience of local markets: in the US, for example, booming property markets in coastal cities went with more stagnant developments inland, despite relatively small inter-state variation in tax rates. Nor are there changes in tax rules that clearly account for housing price movements over the period. Some commentators attach importance, for instance, to a substantial increase in the CGT exemption for housing in the US in 1997, something of an inflection point for house prices. The impact of this change is not clear cut, however, since it eliminated rollover relief,[7] which for some taxpayers was a marked reduction in generosity.

[6] See Figure 1 in IMF: *Debt Bias and Other Distortions.*
[7] This provided that any gain on disposal of a house would not be taxed if the proceeds were reinvested in another property: so no tax liability arose as long as taxpayers traded up with each move.

Mortgage interest tax relief encourages the build-up of (gross) housing debt if alternative investments are less than fully taxed, which as noted above, is often the case because, all else equal, the after-tax return on other investments then exceeds the cost of mortgage-backed borrowing.

Data shows that, in countries offering mortgage interest relief, EATRs fall markedly – in many cases changing from positive to negative – as leverage increases. This effect is strongest for the US, reflecting the high upper limit for mortgage interest deduction (interest on debts up to USD 1 000 000). Where the limits are lower (Ireland, Italy and Spain) or deduction is only against relatively lightly taxed capital income (Denmark), the tax advantage to leverage vanishes sooner.

There is evidence that countries offering more favourable tax treatment for home ownership do indeed have higher ratios of mortgage debt.[8] Econometric analyses for the UK and the US confirm that mortgages fell significantly relative to home value after reforms reducing the value of mortgage interest relief. Of course, other factors are also at work, notably regulatory limits on maximum loan-to-value ratios and enforcement of realistic appraisals. As a result, even some countries without mortgage relief – such as the UK, since 2001 – have experienced substantial growth in housing debt and housing price bubbles.

3.1.4 Possible policy responses

The social objectives underlying these distortions – realising the beneficial externalities from owner occupation for which there is some evidence – can be achieved through better-targeted measures (such as outright grants). And to the extent that they are capitalised in house prices, existing tax subsidies do not even help first-time buyers. Some reforms towards greater tax neutrality may be inappropriate in a period of weak aggregate demand. Current policy nevertheless should be guided by longer-term objectives.

For the short-term, creating more tax breaks for housing should be avoided, but there may be scope for reducing transactions taxes. Special tax preferences ultimately reinforce the policy-induced bias that ought to be redressed. Transactions taxes can be easy to collect, but scaling them back would remove an impediment to efficient trading, increase prices, and speed up clearance of any excess stock of unsold houses. It would also be helpful for labour mobility.

When housing markets regain robustness, other distortions should be addressed. Since housing tax regimes vary widely, so too should reform priorities. Possibilities – to be coordinated with both each other and any wider changes in the tax system – could include:

- Taxing imputed rents (perhaps proxied by market values) and capital gains on housing. The former in particular goes to the heart of the bias towards housing, and would be appropriate under both income- and expenditure-based approaches to personal taxation.

[8] See Figure 2 of IMF: *Debt Bias and Other Distortions.*

- If imputed rents remain untaxed, phasing out mortgage interest relief, where it remains. Experience in the UK indicates that this can be done without undue controversy or adverse impact.

- Fully taxing first sales of residences under the VAT (or other sales tax). This is structurally attractive irrespective of the income tax treatment of housing – since anything else distorts consumption decisions to no obvious purpose – but may also serve as a proxy for income taxation of imputed rents. It would raise (tax-inclusive) house prices, including of existing houses, but (by reducing the tax-exclusive price on new sales) adversely affect construction activity.

- Raising ownership taxes. As well as providing a relatively efficient revenue source this would go some way towards implicitly taxing imputed rents – but would likely require improved valuation practices in many countries.

The desirability of many of these reforms has long been recognised – the question is whether experience with the costliness of housing market distortions will increase willingness to address them.

3.2 Discussion: The tax treatment of housing

*Gaëtan Nicodème**

The taxation of real estate[9] has gained some policy attention recently. The Annual Growth Survey 2012 – a document that sets out the EU's priorities for the coming 12 months in terms of economic and budgetary policies and reforms to boost growth and employment (European Commission, 2011) - stresses that "greater efforts should be made to shift taxation away from labour towards taxation which is less detrimental to growth: for example, increasing consumption, environmental, wealth (for example, high value property) taxation can help to alleviate the tax burden on labour thus making hiring more attractive".

This policy recommendation comes from the findings of empirical economic studies (see Arnold, 2008; Johansson et al., 2008) that draw a ranking of taxes with regards to their harmfulness for growth, with corporate taxes being the most harmful, followed by personal income taxes, and then consumption taxes. These studies find that recurrent taxes on immovable property appear to have the least impact. Intuitively, as one cannot run away with his/her real estate property, this potential tax base can be considered as relatively immobile and may therefore constitute an interesting source of tax revenues that is both stable and relatively non-distortive.

As mentioned by Russell Krelove in this volume, current designs of property taxation trigger however many distortions and inefficiencies in most developed economies. First, there is often an unequal treatment between the costs and the revenues from property that lead to a subsidy. For example, interest (and sometimes part of capital) repayments on mortgage can be tax-deductible at the personal income tax while imputed rents (and sometimes actual rents) bear no or low taxation[10]. This unequal treatment generally finds its rationale in the desire of policymakers to promote home-ownership, especially for those with relatively modest revenues. However, the design of the tax too often favours the wealthiest as interest deductibility is made against the top income tax rate. Second, high transaction taxes on housing create large switching (sunk) costs for owners, affecting labour market mobility. It also potentially affects the attractiveness of acquiring real estate for investment purposes as compared to other investment assets. Third, transaction taxes, recurrent taxes and subsidies on properties are capitalised into prices, especially since the supply of housing is rather inelastic.[11] Fourth, the favourable tax treatment of housing seems to exert incentives for personal mortgage indebtedness, even though the role of taxation in this phenomenon could be of second-order magnitude compared to other explanatory variables such as regulation (see Hemmelgarn et al., 2012). In summary, property tax policy could be better targeted and more effective.

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* European Commission, DG TAXUD. Views expressed are those of the authors and shall not be attributed to the European Commission.

[9] In this contribution, unless specified, we use interchangeably the terms real estate, housing and property taxes.

[10] With often light or no taxation of capital gains.

[11] This has also consequences on the way one shall think about the mobility of property tax bases. The base itself may be physically immobile but its economic value is not. This issue is relatively overlooked.

The recent Mirrlees Review (Institute for Fiscal Studies, 2011) offers an interesting way to think about housing tax issues. Three essential points shall be made. First, there are various ways of taxing mortgages. The important point is to insure consistency between the treatment of investment and the treatment of the return on investment. Second, the tax system could make distinctions between the types of assets (land, residential building, commercial properties, etc.). Third, it should try to avoid tax distortions based on the use of the property when this is not appropriate. Let's take these findings in turn.

The Mirrlees Review makes a parallelism with the taxation of savings and looks whether the financial flow is exempted (E) or taxed (T) at three stages: (a) when using the money to buy the property (i.e. the money usually comes from post-tax income but some treatment could foresee that it comes from pre-tax income), (b) when net returns accrue (e.g. rents received and mortgages repayments made), and (c) when the property is sold. Current systems of property taxation are usually in the form of an earnings tax (TEE) or a comprehensive income tax (TTE), with this latter having the effect of taxing savings and subsidising borrowing. However, some Member States may have a tax discrepancy by having full deductibility of interest (and sometimes of part of the principal) while not taxing actual or imputed rents in full. As alternatives, the Review correctly points to the fact that a consumption tax (EET) would create too large cash flows as e.g. the entire purchase price would be tax deductible, and in final, the Mirrlees Review argues in favour of a rate-of-return allowance (labelled TtE) which leaves the normal return to investment in housing exempted and only taxes the excess return. This could be achieved either by allowing an allowance of x% on the purchase price to be deductible against rental income while fully taxing capital gains when the house is sold, or by taxing rental income in full and allowing a deduction of x% per year of holding of the property to capital gains.

Next, the Review offers a nice distinction between the types of assets. Land could be taxed at a separate specific rate and offer a form of non-distortive tax as land provides its owner with location-specific rents. Next, in line with the tax treatment of other production inputs, commercial buildings should be exempted. Finally, owner-occupied housing and rental housing shall be subject to closely similar tax treatments.

Finally, the Review distinguished between the consumption of housing services and housing as an investment asset. In essence, the value of a property shall indeed reflect the net present value of all future housing services. As for the consumption of any other services, the consumption of housing services could simply be taxed at a flat rate based on the actual value of the property. [12] This could be a model for owner-occupied housing. However, if one sees property as an asset for investment with rental income as the investment return, the Review argues in favour of the rate-of-return allowance mentioned above (TtE). Since one policy goal would be to ensure equal tax treatment between the two situations, this latter solution should probably also be applied to owner-occupied housing.

Needless to say, several practical hurdles need to be removed to achieve this result. First, there is an issue of coordination as the tax assignment differs between different elements of

[12] There is a parallel with VAT on other services. The Review (IFS, 2011) provides an insightful discussion on the application of VAT to building and improvements (pages 380-381).

the tax. For example, property taxes are often levied at the local level while capital gains and mortgage deductibility against personal income is often dealt with by more centralised levels of governments. Hence, there is a need for coordination to ensure the coherence of the system. Second, there are transition problems with any tax reform proposal as changes in the system will generate windfall gains and losses. Gradualism in reforms may be needed in this respect. Third, the usual political economy problems are at stake with losers being often more vocal than winners. This is particularly the case because property taxes are very visible to taxpayers.

To conclude, I would like to make two additional general considerations. The first is that current systems of property taxation are far from being optimal. Too often, a policy response is to add provisions that create additional layers of complexity and move the system even further away from efficiency, while this discussion shows that housing tax systems could be both simple and coherent. The second consideration is that this discussion shows that in the debate on tax shifts away from labour towards property taxes, one shall pay extreme attention to the details of the proposals. Too bold reforms could actually worsen the economic efficiency of our tax systems.

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3.3 Housing taxation for stability and growth

*Daniel Andrews**

3.3.1 Introduction

My aim is to discuss the findings from some recent OECD research on taxation and housing (see Johansson et al., 2008; Andrews et al., 2011). The main point that I would like to make is that the design of housing tax policy has important conceptual shortcomings which give rise to unintended consequences that are bad for both economic growth and equity. On paper, this makes the case for policy reform compelling but of course, there are some practical reform issues to be considered.

3.3.2 Tax structures and growth

A tax and growth ranking

The distortionary effect of collecting revenue from different sources can vary significantly. Indeed, OECD empirical evidence suggests that taxes can be ranked, in terms of their adverse effect on GDP per capita as per Figure 1.

Figure 1. A tax and growth ranking

1. Corporate income taxes	*Most harmful to growth*
2. Personal income taxes	↓
3. Consumption taxes	
4. Recurrent taxes on immovable property	*Least harmful to growth*

Source: Johansson et al. (2008).

Taxes on corporate income are particularly distortionary because they lower the after-tax return on investment, reducing incentives to invest and innovate, while taxes on personal income distort labour supply decisions. By contrast, consumption taxes and recurrent taxes on immovable property are less harmful to efficiency and growth. It should be noted that taxes on capital transactions are highly distortionary since they are discouraging transactions that would allocate these assets more efficiently.

A key conclusion of Johansson et al. (2008) is that policymakers should "broaden the tax base, reduce the tax rate and eliminate tax exemptions". Indeed, re-designing taxation along these lines within each of the broad tax categories could ensure sizeable efficiency gains. Moreover, a revenue-neutral reform that shifts the tax revenue base away from corporate and personal income taxes and towards a greater reliance on recurrent taxes on immovable property and consumption taxes has the potential to be growth-enhancing.

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Recurrent taxes on immovable property are relatively efficient but under-utilised

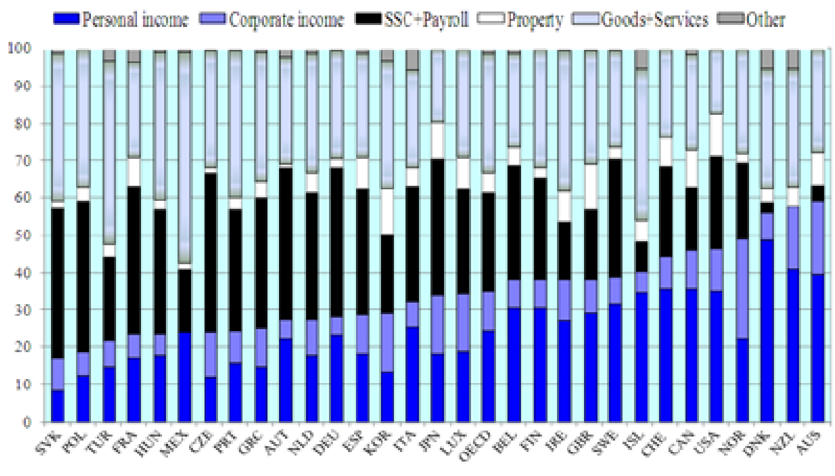
Recurrent taxes on immovable property do not distort the decisions of economic agents to supply labour, to invest in human capital, to produce, invest and innovate to the same extent as some other taxes (i.e. they are relatively more efficient). They are desirable for other reasons, including:

- Since real estate is highly visible and immobile, these taxes are more difficult to evade and the immovable nature of the tax base may be particularly appealing at a time when the bases of other taxes become increasingly internationally mobile.
- Recurrent property taxes, with regular updating of valuation, can increase the progressivity of the tax system (e.g. by the exemption of low value properties), provided special arrangements are made for the groups of people with low incomes and illiquid assets.
- Linking the assessment value to market value may increase incentives for developing land as market prices also reflect the development potential of land. This is important given the key role that housing supply rigidities play in explaining price developments in OECD housing markets (Andrews et al., 2011).

While there are many reasons why governments should rely on recurrent taxes on immovable property, such taxes are under-utilised in practice. Graph 3 shows the composition of tax revenues by type of taxation in OECD countries. Property tax revenues are marked in white and on average account for about 5% of tax revenues across OECD countries. Thus, there is much scope for governments to increase their reliance on recurrent taxes on immovable property – a topic which I return to in Section 5.

Graph 3. The structure of taxation revenues in OECD countries, 2008

Share of total tax revenues by type of tax, per cent



Source: OECD Revenue Statistics.

3.3.3 Housing is tax favoured in many OECD countries

For most investments, the income streams (benefits) are taxed while the expenses (costs) are tax deductible. But in many countries owner-occupied housing is taxed favourably, because:

- The imputed rental income stream of owner-occupied housing (i.e. the benefits) are generally not taxed (there are some exceptions, including Switzerland, Luxembourg and the Netherlands) and capital gains on the primary residence are typically tax exempt (albeit after some holding period in some countries).

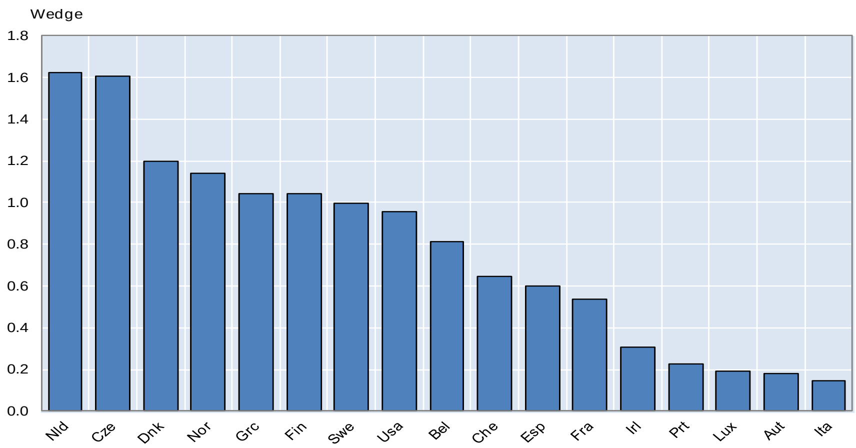
- At the same time, many countries allow tax deductibility of mortgage interest payments (i.e. expenses) and the value of mortgage interest subsidy tends to be much higher than the taxation (if any) on the income stream from owner-occupied housing.

While most countries use recurrent property taxes (a possible substitute for tax on imputed rents), these taxes are often not large enough to offset the mortgage subsidy. Moreover, the property value for tax purposes lags well behind the market value (e.g. the administrative value dates back to 1991 in the UK, 1970 in France and 1973 in Austria).

The wedge between the market interest rate and the debt financing cost of housing (the after-tax interest rate) provides one indicator of the extent to which the tax system favours owner-occupied housing with respect to debt financing (see Andrews et al., 2011). While this simplified measure is imperfect, it nevertheless serves as a useful indicator since households generally finance their house purchase with debt. According to this indicator, tax relief is most generous in the Netherlands and effectively zero in countries where mortgage loans are not tax favoured (Graph 4).

Graph 4. Tax relief on mortgage debt financing, 2009

Wedge increasing in the degree of tax relief



Note:. This indicator takes into account if interest payments on mortgage debt are deductible from taxable income and if there are any limits on the allowed period of deduction or the deductible amount, and if tax credits for loans are available.
Source: Calculations based on OECD Housing Market questionnaire. See Johansson (2012) for details.

The rationale for subsidising homeownership is unclear

The main economic argument for subsidising homeownership is that ownership may give rise to positive spillovers for society – e.g. better child outcomes, more community engagement, owner-occupation as a pre-commitment device for saving – although the case for subsidising homeownership is far from clear (see Andrews and Caldera-Sanchez, 2011). In some instances, it is likely that homeownership is mistakenly attributed a causal influence for outcomes that are actually due to unobserved individual or household characteristics.[13] Nevertheless, focusing too closely on such identification issues may unduly divert attention from the broader idea that homeownership provides the most stable tenure arrangement to satisfy basic household needs – a plausible hypothesis that does not necessarily lend itself to econometric verification.

If we assume for the moment that there is some basis for subsidising owner-occupation, the question then becomes: do current policy settings achieve their goals according to some criteria? As argued in Andrews et al. (2011), the evidence suggests that current housing taxation arrangements in OECD countries perform poorly if assessed in terms of two criteria: efficiency and equity.

Favourable tax treatment of housing has unintended consequences

Andrews et al. (2011) identify three undesirable consequences of the favourable tax treatment of owner-occupied housing, which imply costs to efficiency and equity:

- Favourable tax treatment leads to excessive housing investment and crowd-out more productive investments adversely affecting growth.
- Favourable tax treatment encourages excessive borrowing and speculative behaviour by lowering the cost of mortgage finance thus undermining macroeconomic stability. Indeed, panel econometric analysis (see Andrews, 2010) reveals:
    - Housing demand shocks tend to get capitalised into house prices more in countries with generous tax relief on mortgage debt financing. For example, financial deregulation was associated with a 30% rise in real house prices in the typical OECD countries, but this estimate rose to 45% in environments with very generous tax relief on mortgage debt financing.
    - Real house prices tend to be more volatile in countries with generous tax relief on mortgage debt financing.
- Tax reliefs for mortgage debt tend to be regressive, reflecting two ideas:
    - Higher income households are more likely to be homeowners and tax reliefs usually take the form of a deduction against earned income as opposed to a tax credit.
    - Generous tax relief gets capitalised into house prices which squeezes financially-constrained households out of homeownership at the margin (Andrews and Caldera-Sanchez, 2011).

3.3.4. Transaction taxes in OECD housing markets

Transaction taxes vary across OECD countries

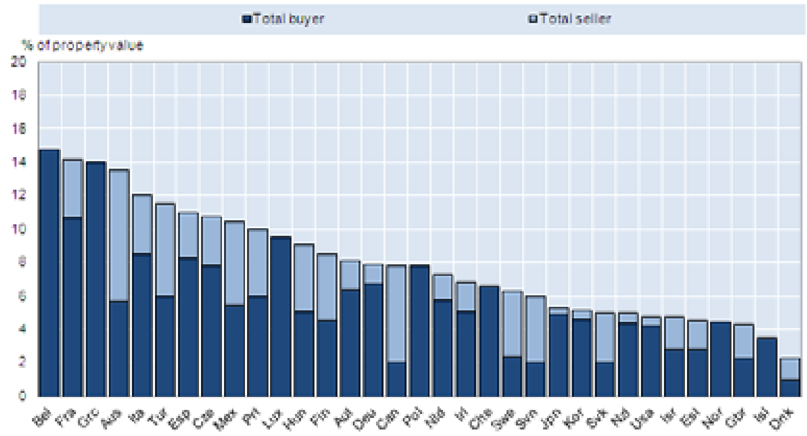
The OECD has constructed indicators of transaction costs in property markets, based on the following components: transfer taxes levied at the sale or purchase of property (e.g. stamp duties, acquisition taxes etc.); fees incurred when registering the property in the land registry

[13] For example, it is typically argued that children of homeowners perform better at school than those of renters. But this finding may simply reflect the impact of unobserved factors, such as the possibility that parents with a view to the longer term may be more likely to purchase a home and invest in their children.

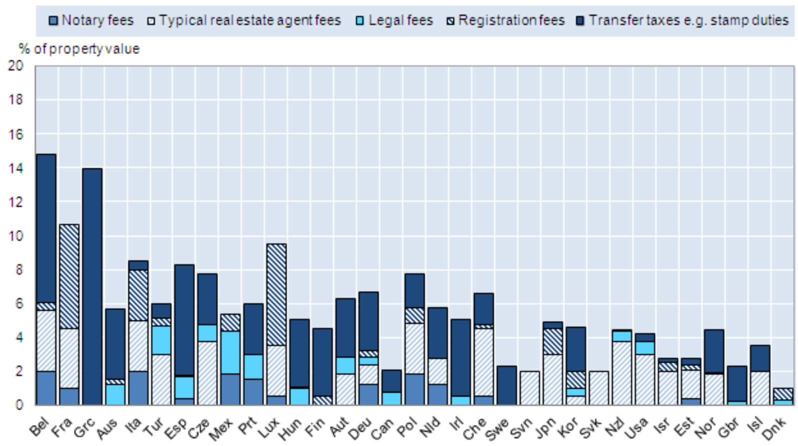
(e.g. registration of property title and details of owner of property); notary or other legal fees (the use of a notary is mandatory in some countries to witness and verify the signatories); and real estate agency fees. According to this measure, transaction costs are comparatively high in Belgium, France and Greece – 14% or more – and significantly lower in some Nordic countries and the United Kingdom (Graph 5, panel A). In general, the bulk of the cost falls on the buyer, although in some countries the seller also pays a substantial part. Panel B of Graph 5 shows that real estate transfer taxes are a key component of our indicator of transaction costs in housing markets. Transfer taxes and registration fees account for, on average, around 50% of overall costs as indicated by the navy blue column. Typical real estate agency fees are also a large part of overall costs in many countries, while in some countries notarial and legal fees are important (e.g. Italy, Mexico, Portugal, Poland, Belgium).

Graph 5. Transaction costs in OECD housing markets, 2009

A. Transaction costs on buyer and seller



B. Transaction costs on buyer by type

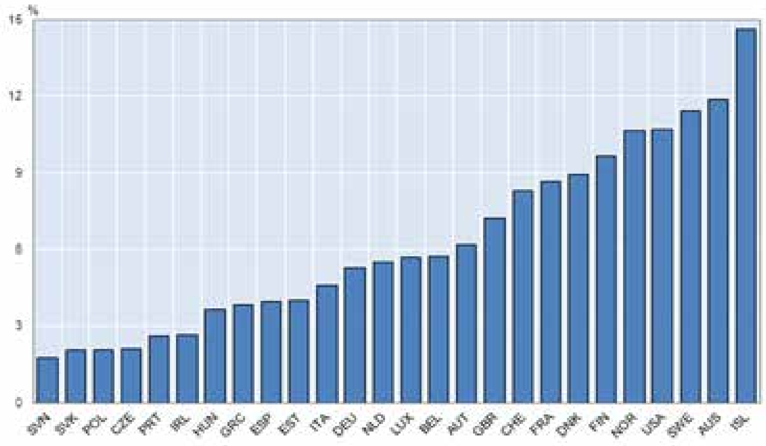


Source: Calculations based on OECD Housing Market questionnaire. See Johansson (2012) for details.

Transaction taxes undermine labour mobility

The picture that emerges is that transaction costs, particularly real estate transfer taxes, are relatively high in many OECD countries. As it turns out, these taxes have important implications for the functioning of labour markets, particularly labour mobility. To test this hypothesis, we martial household micro data for 25 OECD countries and construct a proxy for labour mobility, based on how often households changed residence. According to this measure, households are fairly mobile in the Nordic countries, the US and Australia, while mobility is lower than the average in the central, eastern and southern European countries and Ireland (Graph 6)[14].

Graph 6. Residential Mobility in OECD countries, 2007
Per cent of households which changed residence in one year period



Source: Andrews et al. (2011).

Controlling for a range of household characteristics, OECD estimates show that higher costs in property purchase are associated with lower residential mobility (Caldera Sánchez and Andrews, 2011). For example, reducing transaction costs from the high level observed in Greece (14%) to the average level among the countries included in the study (around 8%) would increase the annual probability of moving by around ½ percentage point. Furthermore, transaction taxes disproportionately undermine the mobility of younger households, who are more likely to be financially constrained. From this perspective, transaction taxes are harmful from an efficiency and equity perspective.

3.3.5. Housing tax policy reform options for stability and growth

In light of the evidence presented above, the design of housing taxation policy in OECD is far from perfect. The favourable tax treatment of housing gets capitalised into house prices and amplifies volatility in housing markets, which can potentially undermine macroeconomic stability. It is also highly regressive and costly from a fiscal perspective. Transfer taxes on real estate transactions carry non-trivial efficiency costs and reduce labour market mobility, thereby making recovery from the current crisis more difficult. Indeed, these outcomes seem particularly unacceptable at the current juncture, where growth is required to reduce unemployment and aid fiscal consolidation. So what is to be done? I see two possible policy reforms.

Tax housing and alternative investments in the same way

This would ideally be done by properly taxing imputed rent, allowing mortgage interest deductibility (MID) and taxing capital gains (CGT). But there are some practical issues to consider. First, CGT levied on a realisation basis may undermine labour mobility since any move would trigger a tax and CGT levied on an accruals basis (i.e. yearly) may be practically difficult due to financial constraints for certain households (e.g. the 'asset rich but income

[14] At the aggregate level, the indicator shown in this chart shows a high correlation with aggregate measures of labour market mobility, such as worker reallocation rates (see Andrews et al., 2011).

poor'). Second, there may be implementation difficulties, given that imputed rent is, by definition, unobservable. Finally, there is a risk that over time, the system will regress to one that subsidises homeownership (via MID) and is costly from a fiscal perspective.

In light of these potential difficulties, a 'second best' approach might involve either:

- Remove MID: provided the interest subsidy is phased-out over a number of years, this will not necessarily impose significant adjustment costs on housing markets; or
- Scale-up recurrent property taxes (a possible substitute for tax on imputed rents) by levying them on cadastral values (administrative tax values) that are aligned with market values.

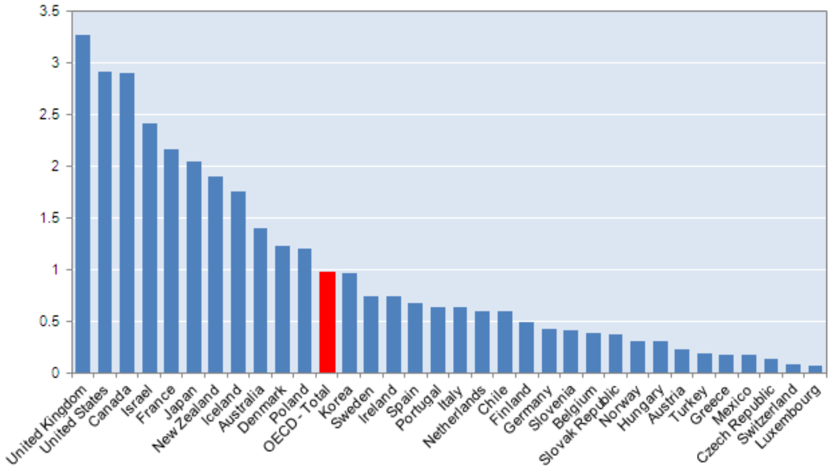
Since a group of OECD countries currently do not allow MID on the primary residence (e.g. Australia, Canada, Germany, Poland, the UK etc.), I will focus my remarks on recurrent property taxes.

Scale-up recurrent taxes on immovable property

A greater reliance on recurrent taxes on immovable property is desirable for a number of reasons. First, it raises new revenue in a fashion that is least harmful to growth (see Section 3.3.2). Indeed, casual inspection of Graph 7 suggests that the scale of potential revenue gains are impressive: for countries with relatively low yields from taxes on immovable property, annual static revenue gains of at least ½ percentage point of GDP are possible from a shift to the OECD average.

Graph 7. Recurrent taxes on immovable property, 2008

Tax revenues as a per cent of GDP



Source: OECD Revenue Statistics.

Second, greater reliance on recurrent property taxes will allow governments to reduce more distortionary types of taxes – including transaction taxes – in a revenue-neutral but also growth-enhancing way. Third, regular updating of administrative values may reduce rigidities on the supply side of housing markets, thereby reducing the price sensitivity of housing markets to demand shocks and increasing labour mobility.

Of course, there are some practical issues to consider. For example, updating the tax base is likely to be costly although the majority costs may be incurred up-front with subsequent on-going costs more modest. Furthermore, in many countries, these taxes are set at the local level which presents challenges to intergovernmental fiscal frameworks. While these are difficult political economy issues, current housing taxation policy settings give rise to many undesirable outcomes, and thus serious consideration should be given to re-designing housing tax policies in a way that is more equitable and promotes macroeconomic stability and growth.

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3.4 Taxation of housing in Belgium: facts and reforms

Geert van Reybrouck and Christian Valenduc[*]

3.4.1 Introduction

The purpose of this contribution is to give a few insights into the taxation of residential property in Belgium. Belgium is frequently quoted in OECD and EU publications as having a low level of property taxation (see European Commission, 2011). As the 'Tax and growth' policy recommendations suggest a shift from labour taxation and other distortive taxes to property taxes (see Johansson et al., 2008; OECD, 2010), there seems to be potential for an increase in property taxation.

The contribution starts with a presentation of facts. We briefly describe the taxation of residential property in Belgium and turn next to an effective tax rate, which aims to capture in a single indicator the various components of residential taxation in Belgium. Section 3.4.3 describes the main reforms of property taxation. We start with regional and local taxes, than discusses the political economy issues relating to property valuation and we end-up with the 2005 reform of the PIT tax incentives. Section 3.4.4 concludes.

3.4.2 Facts

How is immovable property taxed in Belgium?

The taxation of residential property is quite complex: as in many OECD countries, transaction taxes interact with property taxes and (deemed or current) income taxation. Tax incentives add an additional layer of complexity. Let us consider the basic process: a citizen invests in an owner-occupied house, holds it and sells it.

Registration duties apply on any transaction on the secondary market. This means that acquisition will be subject to tax, at a rate that varies according to the region where the transaction takes place. The standard rate is 12.5% in Wallonia and in Brussels, 10% in Flanders. A basic exemption applies in Flanders and in Brussels. All regions have a reduced rate for small property. Moreover, Flanders introduced a carry-over provision in 2002 (see below). VAT will be charged in the case of new property and no registration duties will be paid.

When holding a property, the citizen has to pay an annual tax (*précompte immobilier*, i.e. withholding tax on income from real estate). Fifty years ago, that tax was clearly defined as a component of the income tax system and the amount due was credited against the PIT liability of the property owner. Crediting has been limited over time and the tax is now an autonomous one, with no or very few link with PIT liability of the property owner. It now works like a property tax.

The tax base is the cadastral value, dating back to 1975. A yearly indexation provision applies since 1991. The basic rate is set up by the regions while provinces and municipalities

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add surcharges on that basic rate. For example, for property located in Namur (Gent), the basic rates are 2.5% (1.25%), the provincial rates 18.56% (7.38%) and the municipality rates 36.25% (in both cities).[15] This means that most of the income of the property tax accrues to local governments.

Imputed income (the cadastral value of property) of the owner occupied housing is no longer included in the PIT base since the 2005 reform. Prior to 2005, inclusion was de facto inexistent, or very scarce: the taxpayer was allowed to offset the imputed income with mortgage interest payments while a tax allowance applied to roughly any income in excess of mortgage interest payments.

The acquisition of residential property benefits from tax incentives when debt-financed. Many changes have been introduced to these tax incentives. To keep it simple[16]:

- Prior to the 2005 reform, a distinction was made between new property and existing property on the one side, and between interest and capital repayments on the other side. The general rule, that applied for existing property, was a deduction of mortgage interest up to the indexed imputed income of that property, and a tax credit (valued at the marginal tax rate) for mortgage repayments, up to EUR 1 870 per year.[17] An additional mortgage interest deduction applied in the case of new property. The property tax was credited against PIT up to a 12.5% rate.
- The 2005 reform abolished the distinction between interest from mortgage and mortgage repayments. Both are now included in the same box. The ceiling of the tax allowance was EUR 1 870 per spouse in 2005 (EUR 2 120 in 2011) with an additional EUR 620 (EUR 720 in 2011) for the first ten years. The additional deduction of mortgage interest for new property and the crediting of property tax against PIT have both been abolished.
- Old rules (those in force prior to 2005) remain for on-going contracts but refinancing mortgages may qualify for the new rules.

There is no taxation of capital gains, except on a short term basis.

The effective tax rate (ETR) of owner-occupied housing

Valenduc (2003) sets out a methodology for the computation of the ETR on savings and applies it to a set of assets, including owner-occupied housing. The ETR is defined as the tax wedge divided by the real rate of return

$$ETR = \frac{R_g - R_n}{R_n - \pi}$$

where R_g is the gross rate of return, R_n the net rate of return and π the inflation rate. The tax wedge includes: (a) the taxation of acquisition (registration duties or VAT), (b) the yearly property tax (and potentially its credit against PIT) and (c) the net present value (NPV) of the incentive. (a) and (c) are spread over the holding period, assuming an infinite one. The net

[15] Here, all rates are expressed as percentage of cadastral income. The all-in rate totals 56.06% of cadastral income in Namur (and 46.13% in Gent).
[16] For further developments, see *Tax Survey, 2011, pp. 18-22 and pp 37-50*
[17] The limit of EUR 1 870 applied to the sum of mortgage repayments and life insurance premiums.

effect has thus to be interpreted as the lower bound and clearly underestimates the burden for short term investors.

Table 2. ETR on owner occupied housing versus the benchmark

	2000	2004	2005	2010
Existing property, debt-financed	7.2%	6.7%	9.1%	9.6%
Existing property, no debt-financed	11.2%	10.2%	10.2%	10.3%
New property, debt-financed	7.3%	6.9%	9.4%	9.7%
New property, no debt-financed	11.5%	10.5%	10.5%	10.5%
Benchmark 10 years government bonds	27.6%	30.4%	79.2%	40.9%

The obvious conclusions from Table 2 are that: (a) there is a tax preference for housing, (b) the tax benefit used to be larger in the case of debt-financed investments and (c) the specific support for new properties disappeared over time.

3.4.3 Reforms

The 2002 reform of registration duties in Flanders

The registration duties on property transactions are rather high in Belgium. In 2002, on the occasion of the shift of the tax competence from the federal to the regional level, the Flemish region introduced a rate cut, as well as two fundamental reforms.

First, the standard rate was lowered from 12.5% to 10%, while the reduced rate for property with low cadastral income was lowered from 6% to 5%. Second, for dwellings serving as main residence of the purchaser, a zero-rate band of EUR 12 500 was granted. This added a second progressive element to a traditionally rather proportional tax.

But the most important, and by far the most controversial, innovation concerned the introduction of the portability of previously paid duties. From 2002 onwards, Flanders reduces the registration duties on the purchase of a house by those paid earlier on another house up to EUR 12 500 and provided the house was located in Flanders. The measure clearly intends to increase the propensity to move and in particular to enhance labour mobility. It stimulates the turnover on the property market by smoothening the lock-in effect of high transaction taxes.

Table 3. 2002 reform of the registration duties in Flanders
Effect of the portability on purchase probability

Age	Before reform	After Reform
< 30	17.14%	+0.54%pt
30-40	34.28%	+0,30%pt
40-50	20.73%	-0.20%pt
50-60	11.49%	-0.21%pt
60-70	5.14%	-0.12%pt
No purchase	11.21%	-0.31%pt

Source: Capeau et al., 2005

According to an ex-ante impact analysis, the 2002 Flemish reform package would indeed increase the purchase probability and would encourage buying a house. Table 3 shows that the portability of previously paid duties mostly increases the purchase probability of people younger than 30 year, while reducing the probability that people never buy a house. Despite the progressivity features, the reform would however remain regressive. Overall, and simply because they tend to be more active on the property market, high income earners would benefit more than low income earners.

Since registration duties paid in other Member States are not credited against those that need to be paid in Flanders, the European Commission considered that the Flemish portability rule was contrary to the EC Treaty. It sent a formal request in the form of a Reasoned Opinion in July 2005 and referred Belgium to the Court of Justice in January 2007. The Commission argued that “rules which tax EU citizens moving from one Member State to another more heavily than citizens moving within a Member State are against the EC Treaty." (see European Commission, 2007).

Eventually, after years of uncertainty, the Court of Justice accepted the Flemish portability rule in December 2011. Although the Court agreed that the limitation to duties previously paid in Flanders has a somehow restricting impact, it considered that “the restriction on the free movement of capital is justified by reasons which relate to the safeguarding of the cohesion of the tax system. (...) In those circumstances, the complaint alleging infringement of the free movement of capital is unfounded.” (see Court of Justice of the European Union, 2011). In short, the Court ruled that the discrimination was not too bad and judged that it is acceptable for Flanders (and its budget) not to extend the portability to duties paid elsewhere. Consequently, the Commission’s action was dismissed.

Meanwhile the other Belgian regions considered their own reforms. While the Walloon region remained reluctant, waiting till 2009 to introduce only minor reductions, the Brussels region reacted more boldly. In 2003 Brussels abolished its reduced rate but replaced this concession by an abatement of up to EUR 45 000 (up to EUR 60 000 in some urban renewal zones). In 2006, Brussels even increased the generousness of the abatement to EUR 60 000-75 000, thus enhancing the progressivity feature of the registration duties. While waiting for the Court decision in the portability case, Flanders not only raised its standard abatement (up to EUR 15 000 from 2007), in 2009 it also introduced a complementary abatement (up to EUR 10 000-20 000) for mortgage financed purchases of main residences.

New plans for reforming the registration duties remain on the drawing tables. Flanders, for instance, is reconsidering the criteria for granting the reduced rate. The application of the lower rate is still linked to a cadastral value threshold, although it is generally agreed that the actual cadastral values are a poor benchmark since they are completely out-dated. For social reasons, Flanders is considering to replace the lower rate by a 'house reduction' which would rather depend upon income criteria and/or the surface area of the house and the garden. Of course discussions regularly arise about an in-depth modernisation of the property tax bases, and the cadastral values in particular, for all regions. It is however unlikely that the existing cadastral values will be replaced or updated soon.

How to define the local tax: the aborted 'Antwerp' reform

At the end of 2011 a short, but fierce, discussion about the possible reform of the local provincial taxes raged in the province of Antwerp. Although the amounts involved are modest, this case reveals a lot about the policy rationale for and against.

The province used to depend upon two types of tax receipts: a surtax on the regional immovable property tax and a provincial lump sum tax on families, self-employed and companies. Given that the scope for provincial taxes is limited anyway (e.g. surtaxes on PIT or CIT are not allowed), the province first intended to rationalise the tax collection by abolishing the lump sum tax and to increase the immovable property surtax.

There were many arguments in favour of the reform and at first sight it fitted very well with the recommendation of international organisations to shift part of the burden to recurrent taxes on immovable property (e.g. OECD 2008, 2010). The main arguments referred to equity. The relative burden of the lump sum taxes was judged unequal (antisocial) “since millionaires pay only as much as unemployed persons”. Further, the possession of property is supposed to mirror the ability to pay taxes: those who can afford a huge house can be asked a high contribution. Moreover, they might consume more local environmental services. It also seems fair to spare those with no or only small property.

A second group of arguments referred to economic efficiency and allocation. In particular, the abolishment of the lump sum tax would have an income effect and lower the tax burden on economic activity and employment and thus would enhance the competitiveness of companies. Finally, the abolishment would reduce the administrative and collecting costs of the province significantly, and the compliance costs of the taxpayers would shrink as well.

But as soon as the province had communicated its intentions (Province of Antwerp, 2011), a storm of protest did arise. The equity arguments were challenged in particular. The fact that the actual immovable property valuations are out-dated forms a main obstacle. The cadastral values still refer to the 1975 situation. However, over the consecutive decades the rise and fall of areas has been very uneven: some (urban) quarters decayed, while other (suburban) districts prospered. The setting of the tax base being outside their competence, the local authorities can only adapt the (surtax) rate. However, since local governments must apply a single rate to all property in their territory, there is little or no possibility to correct a distorted tax base by rate differentiation. To some extent small and more or less homogenous municipalities might attempt to adapt their rate in line with the evolution on the local property market, but this is very hard to implement in larger and less homogenous municipalities. A fortiori, it is impossible at the provincial level.

Apart from that, the ability to pay argument was questioned. In particular pensioners with low current income but large houses might be faced with a relatively high tax to income ratio. Moreover, the cadastral values do not reflect the family size. Although reductions for large families exist, singles pay in principle as much immovable property taxes as couples.

The incorporation of certain (self-employed) activities was put forward as another argument against the shift to higher immovable property taxes. These taxes qualify as deductible costs for e.g. 'villa companies', enabling some high income earners to avoid part of the tax burden. From this angle, the lump sum taxes at stake offer better loophole-proof guarantees. Another argument pleading against the abolishment of the lump sum tax is linked to the benefit principle: all inhabitants, renters as well as house owners, consume provincial services, so they should all contribute to the financing of these services. However, at least formally, renters pay no immovable property tax (although part of the burden might be shifted to them through inclusion in the rental price).

After considering pros and cons, the province of Antwerp quickly decided to withdraw its reform plan. In particular, the flaws in the design and implementation of the immovable property tax settled the issue. The discussion around the abolishment of the lump sum taxes illustrates the trade-off between efficiency and equity. It would have improved equity, but the lump sum tax might be seen as more efficient than the proportional one.

The political economy of property valuation

As indicated above, the tax base for the property tax is out of date. Cadastral values were set in 1975 and entered into force in 1980. An indexation provision applies since 1991 but this does not solve the issue since the indexation is made according to the consumer price index (CPI) across the country, with no reference to price developments in the local real estate market.

Any decision of property revaluation has been postponed since more than two decades. In the eighties, the main reason for that was the - wrong - believe that when entering into force in 1980, the 1975 revaluation disrupted the market[18].

The main reason for which the issue of valuation is politically locked lies in the financing arrangements of the federal system in Belgium. As indicated above, most of the revenue of the property tax accrues to the regions and to the local governments. The federal level just raises PIT on imputed income from private rental of properties. This means that, when taking the decision to revaluate the cadastral value, the federal Minister of Finance should have to assume the full political responsibility while getting no additional revenue from property tax and a small amount of additional revenue from PIT. In addition to bearing the political cost, the federal government is not in a position to compensate those who would lose from the reforms.

The 2002 reform of the federal system changed the devolution of taxing powers between the federal government and the regions. Regarding property tax, the main change is that, while the federal government is still the only one that may change the cadastral values, regions may set their own tax base for the property tax. They may decide, for example, to opt for the value of property instead of relying on deemed income. This solves the 'asymmetric effect' (political cost for the federal government, revenue for regions and local governments). Despite this improvement, regions have not used their power to change and to update the base of the property tax.

The 2005 federal reform of tax incentives

In 2001, the Minister of Finance asked the High Council for Finance (HCF) for a report on tax expenditures in PIT (Conseil Supérieur des Finances, 2002). The HCF reviewed the main tax expenditures, among them the tax incentive for housing. The proposal of the HCF was to rationalise the long list of tax allowances and tax credits and suggested to pull them in three baskets of which the first one was 'housing and long term saving'. Each of these baskets

[18] See Conseil Supérieur des Finances (1997), pp. 15-16 for the counter-arguments.

should have a ceiling inferior to the current limits, in view of limiting the amount of tax expenditures. The HCF also suggested abolishing the distinction between interest and mortgage repayments, with both deductible in the same basket. The main argument was that, taking into account that most investors were using constant annuity loans, most tax benefits from the tax incentives arise when the loans reach maturity, while young investors hardly benefit from any tax relief. The proposal of the HCF was to redistribute the benefit of the tax incentive to the beginning of the period, when the budget constraint is more severe.

The reform was implemented in 2005. The government did not create any basket and, as opposed to the HCF recommendation, the ceiling was increased with an additional allowance for the 10 first years of repayments. In fact, the government took the point of 'improving the situation of the youngest' but in a costly way, while the HCF suggested to make the reform budgetary neutral. At the same time, the reform repealed the crediting of the property tax on PIT. Table 4 indicates the effect of the reform on the ETR of owner-occupied housing.

Table 4. Effect of the 2005 reform on the ETR of owner-occupied housing

	Before reform	After reform
ETR	6.7%	9.3%
Of which:		
•Net property tax	6.8%	9.7%
•Taxation of acquisition	0.5%	0.5%
•NPV of tax incentives	-0.6%	-0.9%

The reform resulted in an increase of the ETR. The result might be driven by the infinite horizon assumption (see above), that lowers the effect of the change in tax incentive while the non-crediting of the property tax has an immediate and stronger effect on the ETR. From a cash perspective, there is a positive effect at the beginning of the period, offset by a negative one in a later stage, when the non-crediting of property tax on the PIT liability of the investor more than offsets the benefit of the incentive change (if any, after 10 years repayments, when the additional allowance is lost). So a myopic investor may believe that the new regime is more favourable than the previous one. An information bias favouring the 'new tax incentive' added to this.

What about the effects? Given that most investors were considering the new tax incentive as more favourable; it is presumed that this should have boosted demand and prices, due to the short term inelasticity of supply. It is very difficult, when examining changes in the secondary market for that period, to determine the part that can be explained by changes in tax incentives. In addition to the usual difficulties – that may only be solved by a difference in difference approach – we have to account for the effects of the 2004 tax amnesty. A significant part of the funds that were repatriated were invested in the real estate market, also pushing demand up[19]. When looking at facts, there is a strong increase in price after 2005, roughly no change in the number of transactions, and, on the financial market side, a strong

[19] Recent econometric work on the modelling of registration duties indicates that the NPV of tax incentives performs better than a dummy variable in 2005 to explain the change in registration duties. As registration duties are highly correlated with the aggregated value of transactions on the secondary markets, this indicates that the change in the tax incentives may be the most important factor when explaining the “ceteris paribus” change in prices in 2005.

increase in the refinancing of mortgages. The increase in prices resulted of course in (untaxed) capital gains for those who sold properties at that time.

To sum up, evidence suggests, but does not prove in a formal way, that the effect of the change in tax incentives was capitalised into prices. This has two consequences: (1) tax incentives benefit the seller, not the investor; (2) repealing them with no phasing-out rule will strongly penalise those who are using the tax incentive. In other words, intergenerational equity requires a phasing-out rule if the government should decide to repeal or even to make any significant change in the tax incentives.

3.4.4 Conclusion

Housing taxation is very complex in Belgium. Transaction taxes interact with tax incentives that favour debt financing, and with a property tax, which base is out-dated. The splitting of taxing powers between the regions and the federal government adds a layer of complexity and makes comprehensive reforms difficult. The ETR on housing, that capture the combined effects of these provisions, indicates a tax preference for housing, compared to the benchmark, and an additional tax preference for debt financing. Transaction taxes are very high but tax incentives compensate for that, in the case of debt financed investment.

Reforms have taken place over the past decade. Flanders and Brussels have been reducing transaction taxes, and have made them progressive rather than proportional. Moreover, the introduction of the portability in Flanders should have improved mobility. The 2005 federal reform of tax incentives has ambiguous effects: while it increases the ETR on a long term basis, the immediate effect is favourable on a cash basis. The reform pushed up demand what, combined with inelastic supply, pushed prices up, so that the change in tax incentives seems to have been capitalised into prices.

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3.5 Development and enforcement of a market based mass valuation system for real properties in Slovenia

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3.5.1 Introduction

In 1999 Slovenia, based on the agreement and encouragement from the World Bank, started a complex Real Estate Modernisation Registration project. The aim of the project was mainly to modernise land book registration, reducing the waiting time and modernising real estate records including establishing a building register, which did not exist before. At the same time, the Slovenian government decided to modernise the real estate taxation system by setting the tax base at market values, resulting in the subproject 'Development of a valuation system for taxation purposes'. The whole project was performed from 2000 till 2005. On the base of the projects' results two significant laws were approved in parliament in 2006: The Real Property Registration Law and the Mass Valuation Law. At the Surveying and Mapping Authority of the Republic of Slovenia the Valuation Office was established and the implementation phase of the valuation system started with the establishment of the sales price register in 2007. In 2010 a first experimental valuation was carried out by sending notes about the 'generalised' market values of properties to all owners. After a revision, following complaints, the first mass valuation was completed in 2011, calculating values for all 6,5 million properties in the newly established real estate property register.

3.5.2 Development of the valuation system

The Slovenian government issued the first draft of the property taxation law in 1996 aiming to base the tax on market values. At that time the property market was not developed enough and, more importantly, not supervised to establish the mass valuation system based on market values. In the late nineties the property market in Slovenia expanded, fulfilling the conditions necessary to start developing the system. Along with the World Bank loan the valuation system for taxation purposes was developed from 2000 till 2005. The leading organisation of the project at the start was the Ministry of Finance. Understanding soon that the mass valuation system needed multi–disciplinary skills like geodesy, GIS, statistics and economics, the Ministry of Finance formally invited the Surveying and Mapping Authority (SMA) to join the project in 2002. Experts from the SMA were therefore working on the development of the system from the beginning and also helped to carry out pilot projects for testing the proposed mass valuation concepts. Development was supported by experts from the US and Sweden. Therefore, the Slovenian solution combined the experience of the CAMA system and discrete valuation models used by some Scandinavian countries.

For high quality mass real estate market valuation a few basic components are needed: a complete real estate register with data on real estate characteristics, registration of market data (prices and rents) and professionals with special skills. The development of the real

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estate mass valuation system would not have been possible without the cooperation of all of the responsible sectors.

Key problems identified

To develop the computer-based mass valuation system, all data and information about the properties were needed in digital format of an appropriate quality level. To develop the valuation models, sales data and information of good quality was necessary and available in quantities to fulfil minimum statistical standards. The quality of the valuation system can be measured through the quality of the market values calculated on the basis of the property data and valuation models.

At the start of the valuation system not much information was available on the buildings and parts of buildings, such as type, size, year of construction, etc. The valuation system became an important driving force for collecting this property information (in establishing the real property register) that today is helping many other state organisations in fulfilling different kinds of public needs and tasks. It was also a starting point for establishing a database collecting market information.

Given that experience with valuation at the universities in Slovenia was (and still is) scarce, establishing the Valuation Office with adequate experts was not an easy task. Knowledge on mass valuation issues was gathered through international support and consultancy and 'learning by doing'.

After the development project of the valuation system, the Ministry of Finance and SMA have prepared the Mass Valuation Law and changes to the Real Property Registration Law. The main changes to the latter were devoted to establishing the real property register. The law defines in a very detailed manner which property information must be measured by the licensed surveyor and which information could be maintained by the questionnaires. On the other hand the Mass Valuation Law defines all key elements of the valuation system, like who is responsible for valuation, properties that must be valued, establishment of the sales price register and valuation models register, indexation processes in the valuation system, etc.

Generally the enforcement of the valuation system on an operational level has officially started with the Parliament's approval of the Mass Valuation Laws in May 2006.

Property registration system

The property registration system in Slovenia consists, like in many other countries, of three main pillars: land cadastre, building cadastre and land register (land book). The SMA is responsible for the land and building cadastres, while the Supreme Court is responsible for the land register. The land cadastre is in digital form and data covers the whole country. The land book is also completely digitalised, enabling a link to the land cadastre. Digitalisation of both systems was accomplished within the Real Estate Modernisation Registration project from 2000 to 2005.

The building cadastre was established and started operating in the year 2000. Since 2005 all buildings are registered with a unique identification code, but only approximately 20% of all parts of buildings (apartments, business premises, etc.) are registered in the building cadastre.

Moreover, the latter are usually not providing all the required information as demanded by the property market and valuation models for the time being.

The land cadastre, land book and building cadastre are evidence of the legal status of real estate, so they depend on the legal procedures of the parties involved. If the owner does not propose the registration of his property in the land book, the property is not evidenced in it, and neither in the building cadastre. The objective of the new valuation and taxation system was to value and tax all properties in the country. The fact that a big portion of properties (buildings and parts of buildings) was not registered in the system presents a huge problem.

The solution was to establish a real property register (RPR) as a database of all real estate in the country (all parcels with adjoining buildings and parts of buildings) according to their actual condition, identified by a unique identification code. The legal base for the register was provided by the Real Estate Registration Law. At the time of approval of the Real Property Registration Law there was a lot of discussion on whether this kind of register is acceptable from a privacy protection point of view. It was decided that data on real estate are not private data and that only personal data on owners should not be made public. The law was confirmed in parliament in 2006.

The first data on real estate was collected from different public evidence (local communities, infrastructure service providers, photos etc.). This information was the base from which to collect more detailed information of buildings and parts of buildings through the field inspection project. For all real estate, basic data such as area, height of the buildings, etc. was collected. The field inspection project would not have been initiated without the strong demand to develop the valuation system for property taxation from the Ministry of Finance. None of the state and municipal organisations had shown interest in collecting information on buildings and parts of buildings before. Even the owners of the apartments in condominiums were not aware at the time of their responsibilities. Demand for detailed information on buildings and parts of buildings was strong also on the side of the Statistical Office. Their objective was to collect all the information required for replacing classic procedures with electronic census on the basis of public registers in 2012.

The project on the field started in 2006 and was running approximately one year. It took another year to finally formally establish the RPR in 2008.

Today all property data and information in the RPR are managed in digital format and all daily changes in the register are updated overnight. At the moment it contains approximately 6.5 million properties. The property type structure in the RPR is as follows: 540 000 houses, 330 000 apartments, 130 000 garages, 30 000 industrial properties, 40 000 business premises, 40 000 offices, 3 000 000 parcels of agricultural land, 450 000 agriculture objects, 1 500 000 parcels of forest land and other properties approximately 440 000. The register is available on the internet free of charge.

With costs of approximately EUR 11 million, the project was (and still is) considered as very costly by the general public and politicians. However, the costs are one-off and the amount represents only about 6 % of annual revenues from property taxation, not taking into account the positive effect of the register on diminishing the costs for the statistical census (savings of a few million EUR) and for the local communities in collecting property data.

Property market

The property market in Slovenia started to grow in the late nineties, and especially from 2003 onwards, when yearly sales in the property market reached approximately 20 000. At that time only the tax authority had some data about sales, but it did not collect them systematically. The data derived from the Property transfer law was treated as a 'tax secret'. On the basis of an agreement between the Surveying and Mapping Authority (SMA) and the tax authority, data from 1999 to 2003 were analysed for the purposes of the project for developing the mass valuation system. It turned out that a lot of sales data were not useful. Already at that time (in 2005) contacts with the tax authority were established with a view to improving the quality of sales data. The tax authority used the resulting joint questionnaire as part of the tax declaration for property transfer taxes. Until the RPR was established, all detailed property information was collected through the questionnaire from the tax authority.

One of the most important elements of the Mass Valuation Law was to establish the sales price register. It started to operate (systematically collect data) in January 2007. From that date all real estate sales have been collected in the register through different sources and are available on the internet free of charge (http://prostor3.gov.si/ETN-JV/). Due to the opening of the sales price register the property market started to become very transparent and the quality of sales data and information improved. Information about property sales from the sales price register is very important today for many property stakeholders such as governmental organisations, private valuators, banks, investors, real estate agencies, etc. Data are used for preparing reports for various users, calculating indexes, and most importantly for developing and calibrating the valuation models.

3.5.3 Enforcement of the valuation system

Valuation office

The Valuation Office at the SMA was established at the end of 2006 on the basis of the Mass Valuation Law. The office is responsible for the analysis of sales and the preparation of property market reports, the improvement of the sales data for designing the valuation models, designing and calibrating the valuation models, the notification of the owners of property values in the general valuation phase, resolving complaints from the owners and calculating the values of all properties registered in the RPR. Today the Valuation office employs 24 experts, 12 on the central level and 12 on the regional level.

Designing and calibrating the valuation models

During the development project (2000-05) nine valuation models were designed. The concepts of the developed models were based on the availability and the quality of the sales data and property information at the time when the property market was growing (and changing). After establishing the sales price register, the valuation office started to work mainly on the property market analysis for different types of properties. The results of the property market analysis were used as a basis for developing the models. According to the Mass Valuation Law all properties in the RPR must be valuated, resulting in a need to develop valuation models for all types of properties. The development and calibration of the valuation models took place between 2008 and 2009. In January 2010 experimental valuation was completed and approximately 1.2 million notices to property owners and co-owners of approximately 6.5 million properties were sent out. For about 550 000 properties, owners filed complaints, 33% of which were on the properties' values. Of these 70% were on agriculture and forest land, showing a strong need for changing the valuation model, about 10% on houses, 10% on apartments and 10% on other types of properties. Based on these complaints some models were modified or updated.

From January 2012 all 22 valuation models are approved by the State and publicly available on the web free of charge (http://prostor3.gov.si/zvn/zvn/ZVN.html).

Introduction of the valuation system

From January 2012, values (generalised market values) for all 6.5 million properties are available in the RPR on the web (http://prostor3.gov.si/javni/login.jsp?jezik=sl). The information can be checked through the identification number or the address of the property. Personal data of owners is not public.

All the properties in the RPR reflect the market value derived from the mass valuation system on the 1st of July 2010. For 2012 an indexation project is underway to adjust the property values to correspond to the situation on 1st January 2012. Provisions related to social affairs will be the first "beneficiaries" of the valuation system with the objective of estimating the property asset of applicants for social aid (scholarship, kindergarten/apartment/travel cost and other subsidies). Conforming to the law, valuation data will also be used for calculating compensation in the case of compulsory purchases of properties.

The property tax law which was the "driving force" for the development and enforcement of the mass valuation system in Slovenia is still not introduced and waiting for a final political decision.

3.5.4 Conclusion

The development and introduction of a mass valuation system is a long term process highly dependent on the state of the property and other public registers and other property-related data and information. The development stage of the property market is crucial for establishing the valuation model that would fit supply and demand conditions on the property market, where systematic and high-quality collection of sales is crucial. A lot can be done by simulation methods when designing the valuation models. The development of a multi-purpose valuation system for different kinds of public use, tasks and processes, independent from the taxation system, was a very important and right decision for Slovenia.

4. SESSION II: Efficiency of tax administration and improving tax compliance

4.1 Key principles for efficient tax administration and main reform challenges

Lynne Oats[*] and Jonathan Leigh Pemberton[**]

4.1.1 Introduction

Over the past 10 years there has been considerable improvement in tax administration, partly as a result of increased attention by supranational bodies, but also as a result of an upsurge of academic interest in operational aspects of tax systems. New models have been developed, and adopted by different administrations, with varying degrees of success. The post 2008 environment is now, however, introducing new constraints on tax administration as well as new challenges. In this paper, recent developments in tax administration are first outlined, in terms of both top level strategies and operational processes. The paper then turns to the main reform challenges, which are both internal and external to the tax authority, before offering some cautionary conclusions and some thoughts on future trends.

4.1.2 Efficient tax administration

Top level Strategies

Fostering voluntary compliance

In most tax administrations the traditional view of compliance that prevailed until around the end of the last century was that the job of tax administrations was to detect and deter tax evasion. Caricaturing the position somewhat, the view was that given the opportunity and absent effective control by the tax authority, taxpayers would naturally tend not to comply. This meant that there was an emphasis on 'policing the beat' to deter wrongdoing, which in practice meant an emphasis on numbers of compliance interventions, particularly in areas that were perceived as inherently risky, such as the small business segment. Success tended to be measured in terms of numbers of interventions and their yield and there was a sense that if you could only do more audits, you would inevitably get more yields.

A number of changes in the external environment led to a rethink. Taxpayers were more assertive and expected tax administrations to be able to justify their interventions. The recognition of taxpayers' rights, as well as their responsibilities, became more explicit in many jurisdictions. Closer analysis of actual compliance demonstrated that levels of voluntary compliance were often quite high and inconsistent with the view that taxpayers naturally tend towards non-compliance given the opportunity. Public sector reform programmes in various countries were challenging tax administrations to deliver savings in the direct cost to government of running the tax system and at the same time the cost of compliance for business was an increasingly common policy concern. Increasingly approaches to compliance that assumed that all taxpayers are the same, or at least respond to tax regulation in the same way, did not look fit for purpose. Instead tax administrations began to think more about the root causes of non-compliance and how these could be addressed.

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And they found that the concept of responsive regulation, which grew out of an analysis of regulatory regimes in areas as diverse as health care and the mining industry, had something to offer (Ayres and Braithwaite, 1992).

Fostering voluntary compliance is consequently a key goal for all modern tax administrations; obviously the greater the degree of voluntary compliance, the lower the cost of administration. The widespread adoption of self-assessment across a range of taxes has shifted much of the burden of compliance, monetary and otherwise, to the taxpayer. But maximising voluntary compliance is easier said than done, particularly for less developed administrations (e.g. developing and transitional jurisdictions). It entails a number of subordinate strategies.

Fostering trust in the tax authorities

There is evidence of a correlation between the trust that citizens have in the tax administration to operate the tax system fairly and efficiently, and their propensity to voluntarily meet their tax obligations (Feld and Frey, 2002). Indeed, Kirchler et al. (2008) describe a 'slippery slope' model of compliance that stresses that maximum voluntary compliance requires both power and trust: the tax authority needs the power to enforce compliance, but also the trust of citizens. An absence of either or both of these reduces the efficiency of tax collection.

Securing the trust of the taxpayer population includes ensuring providing certainty and reliability in the interpretation and application of tax rules. It also includes ensuring consistency between the tax policy as widely understood and the way that policy is operationally implemented by the tax administration at a practical level.

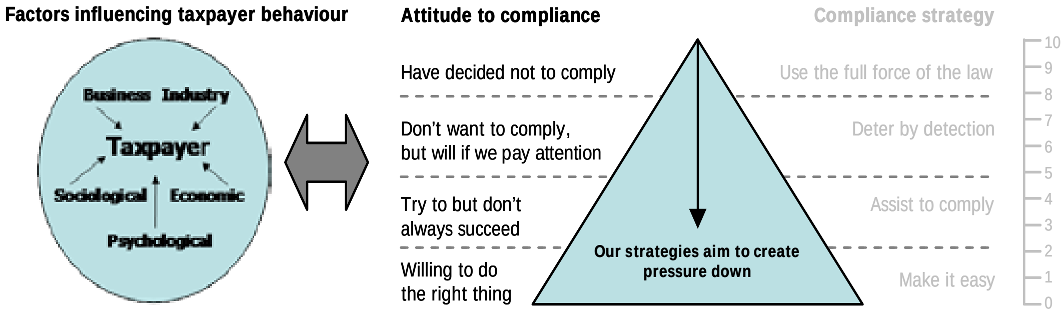
Understanding taxpayers – segmentation models/responsive regulation

There is a growing body of research into taxpayer behaviour and attitudes that is helping to develop a better understanding of what motivates taxpayers to comply, or not, with the requirements of the tax system (OECD, 2010a). This is feeding into the development of taxpayer segmentation models which seek to respond to different categories of taxpayers in different ways, in recognition of the need to develop treatment strategies that match appropriately with taxpayer characteristics.

Responsive regulation at its simplest, depicts the taxpayer population as forming a pyramid shape, where at the base is the majority who are willing to comply, but may need to be educated as to their obligations. At the peak of the pyramid are those taxpayers who refuse to engage with the tax system. Categorisation of taxpayers according to their willingness to comply allows for the development of alternative strategies for dealing with them, in recognition that different taxpayers respond to different enforcement tactics. As an organising principle, responsive regulation has been adopted by several administrations, including Australia (where the model was developed), New Zealand, and the United Kingdom (for the US context see Leviner, 2009 and Ventry, 2008).

Building on research by Valerie Braithwaite, the ATO developed a compliance model that represents the range of motivational postures of taxpayers and the regulatory strategies associated with them, as a pyramid (Braithwaite, 2007). The thinking also recognised that the taxpayer's attitude to compliance would be the result of a number of different factors that affect their behaviour. These factors fall into five categories: the business profile (is it a sole trader or larger, how long has the business been around, is it international etc.); the industry (is it regulated, what are the profit margins and levels of competition); sociological (what is the general attitude to paying tax); economic (is the economy growing, what is happening to inflation); and psychological (fear of the tax authority, concerns about fairness). The overall model this gives of tax compliance is represented in Figure 2 below.

Figure 2. Factors influencing taxpayer behaviour – Attitude to compliance



This model of tax compliance greatly enriches the range of options available to deliver the desired outcome. It creates a clear framework for complementing traditional audit interventions, with actions that are intended to prevent non-compliance arising in the first place. So efforts to educate taxpayers about their responsibilities so that they get things right can take their place alongside the effective detection, correction and deterrence of deliberate evasion.

Effective risk management

Risk management in this context entails evaluating taxpayer population as to propensity to fail to meet compliance obligations, and to direct administrative resources towards those categories of taxpayers who represent the greatest risk to revenue collection. In conjunction with responsive regulation (above) effective risk management is generally thought to entail directing administrative resources towards the top of the pyramid, where the most recalcitrant taxpayers can be found. In some jurisdictions risk management has been translated from a loose guiding strategy to a more formalised scoring process that seeks to ascribe values to various taxpayer attributes with a view to determining which taxpayers are most likely to be non-compliant.

Meta risk management has been proposed as the 'risk management of risk management' (Braithwaite, 2003), which essentially involves incorporating into risk evaluations the taxpayers own systems of risk management/internal control. The more robust the taxpayers' demonstrated internal controls and risk management procedures, the less 'risky' they are from the tax administration point of view. More recently this concept has been extended into the Tax Control Framework (see for example Hoyng et al., 2010; OECD, 2010b).

Monitoring best practice – learning from other jurisdictions

Recent work by a variety of international bodies, OECD Forum on Tax Administration, African Tax Administration Forum, World Bank etc., aims to generate dialogue between tax administrations to identify, evaluate and disseminate good practice. Examples of such dissemination include disclosure regimes requiring advance notification of participation in tax avoidance ‘schemes’ which originated in the US, establishment of large business units to concentrate administrative resources on the largest taxpayers, and similarly establishment of administrative units dealing specifically with high net worth individuals, whose affairs are generally complex and can put significant sums of tax at risk.

A word of caution from the OECD’s Forum on Tax Administration however: "National revenue bodies face a varied environment within which they administer their taxation system and jurisdictions differ in respect of their policy and legislative environment and their administrative practice and culture. Similarly, a standard approach to tax administration may be neither practical nor desirable in a particular instance. Care should always be taken when considering a country’s practices to fully appreciate the complex factors that have shaped a particular approach" (OECD, 2010c).

It is important to remember that any comparison of tax systems, policies and procedures across differing jurisdictions is fraught with danger. Even the very act of gathering and presenting statistical information about the operation of tax systems is necessarily arbitrary given the wide disparity in collection and recording of relevant information coupled with differences in the way various taxes are categorised (e.g. PwC, 2011).

Operational Processes

Some recent developments in the practical operation of tax administrations include:

Customer focus

In some jurisdictions a move towards viewing taxpayers as ‘customers’ or ‘clients’ is changing the dynamics of the relationship and allegedly improving compliance levels. For example in the UK, the appointment of ‘customer relationship managers (CRM)’ for large businesses has been received positively by ‘customers’. The CRM manages the relationship with the large business; most usually a multinational group of companies, across all HMRC administered taxes to which it is exposed, direct and indirect. The allocation of relationship managers is now being rolled out to other categories of taxpayers.

Cost reduction (administrative and compliance)

The operating cost of any tax system comprises both administrative (tax authority) costs and compliance (taxpayer costs). Different jurisdictions will have different balances between these two components, and it is important to appreciate that often any attempt to reduce administrative costs can result in a concomitant increase in compliance costs, which are notoriously difficult to measure.

There is a clear link between compliance costs, particularly for business taxpayers, and willingness to comply. The growing use of regulatory impact assessment is important in this regard, as tax administrations seek to estimate the monetary impact of policy and procedural change on taxpayers.

Here also there is a trend towards improved levels of consultation with taxpayers and practitioners prior to introducing changes, in order to better assess the impact of changes. Consultation can be, however, a double edged sword, potentially opening the doors to excessive lobbying that can skew the development of effective tax policy and its implementation.

Improved Technology
The rapid expansion of electronic services – e-filing, e-payment etc., has enormous potential to help to lighten the compliance burden for taxpayers. E-administration also holds considerable potential to reduce administrative costs (as long as it works). Technology is also helping tax administrations to better detect non-compliance and facilitate targeting of audit activities through data mining techniques.

The increased use of technology by taxpayers requires new skills to be developed by tax administrations, to equip them to deal with auditing taxpayer internal control systems.

Real time working
Revenue guidance and rulings are particularly important in jurisdictions with very complex and/or rapidly evolving tax rules. If taxpayers are able to obtain rulings/clearances at the time of undertaking taxable, or potentially taxable, activities the result will be reduced costs for all involved, compared to ex post evaluation of transactions already completed.

4.1.3 Main reform challenges

Internal

Cost reduction through management 'solutions'
In times of economic downturn, there are obvious attractions in looking to current management practices in both the private and public sectors with a view to implementing them in the interests of improved efficiency within tax administrations. The limitations of management 'solutions', which are often developed in with-profit organisations and then 'transposed' to the public sector, need to be recognised. For example, 'Lean' was developed in the manufacturing sector and has been adopted in a number of public sector organisations in the UK, including HMRC, with mixed success. Cascading such models of organisational change throughout the organisation is very difficult, and securing 'buy in' from front-line workers in a tax authority is particularly challenging.

The peculiar nature of tax regulation compared to other forms of governmental regulation makes it a particular complex organisation such that 'solutions' developed in other areas do not necessarily transpose easily into the tax administration environment.

Performance measurement
Recent experience in jurisdictions where 'New Public Management' is prominent reveals that performance indicators used for measurement purposes need to be developed very carefully (see van Stolk and Wegrich, 2008). There is substantial evidence that 'what gets measured gets managed', so the selection of appropriate measures is crucial to prevent 'gaming' behaviour. Staff morale is also an issue here as pressure to achieve collection targets increases, particularly if they are unrealistic.

Recently there have been attempts to measure the 'tax gap', between the revenue that could be theoretically collected under a given set of tax rules and that which is actually collected. As a measure of performance, this needs to be treated with great caution and is useful only as an abstract benchmark. The ‘tax gap’ can never be ‘real’, in that it cannot be accurately measured, and attempts to do so may create unrealistic expectations among lay populations (such as non-government organisations).

Consistency in decision making - Appropriate use of discretionary powers
The question of discretionary power goes back in part to the related question of the mismatch between the tax rules (and the policy positions that underpin them) and their implementation by tax authorities (see Evans et al., 2011). In all tax systems, there will be some degree of discretionary power that smooths the process of revenue collection. However too much discretion, potentially erodes trust and creates costly uncertainty, which can have an adverse impact on tax morale at an aggregate level. Recent accusations of ‘deals’ between tax officials and large multinational companies in the UK, whether justified or not, have caught the attention not only of the media, but also parliamentary enquiries.

Procedural justice
Procedural justice is important: taxpayers need to feel that the tax system is being administered fairly and that tax liabilities are not arbitrarily determined (Murphy, 2003). In this regard, public appeals to the importance of taxpaying in the citizen/state relationship can help to increase awareness, and contribute to an improved tax ‘culture’, in which payment of taxes becomes a societal norm.

Implications of academic research in taxation
There has recently been a substantial growth in research into tax compliance, policy and practice, much of which seeks to shed light on the problem of tackling avoidance and evasion (and distinguishing the two). Both avoidance and evasion are components of the ‘tax gap’, but are quite different activities requiring different interventions. Tax authorities themselves are undertaking in-house research as well as commissioning external research, although perceptions of a gap between theory and practice in tax are a concern.

In considering the implications, and limitations, of academic research it is important to recognise the disciplinary boundaries that exist in academe. For example, there is growing body of research into compliance and taxpayer decision making, primarily from economics and psychology (e.g. Kirchler, 2007; Braithwaite, 2009). However notwithstanding its contribution to our overall understanding of taxpayer behaviour, not all of it is capable of feeding into operational decision making due to the (often hidden) assumptions made in the research design.

External
Pressure to collect more revenue with fewer resources
In times of fiscal stress there is pressure from government to reduce the tax gap, which includes not only tackling tax avoidance and evasion, but also improving debt collection. In many jurisdictions there are concurrent pressures to reduce administration costs, for example with reductions in staffing levels.

At the same time there is also pressure from NGOs, who are raising public awareness of tax, in particular highlighting the alleged failures of large taxpayers, multinationals and high net worth individuals, to contribute their ‘fair share’ of tax (see e.g. Trades Union Congress

2008). Social media such as blogs, Twitter and YouTube, fuel skewed public perceptions of tax compliance as well as the overall fairness of tax systems more broadly.

The danger here is reactive policies that have the potential to further erode the trust of taxpayers in both the tax system and its administration. For example, a failure to distinguish tax avoidance and tax evasion as distinct activities can lead to inappropriate penalties and reputational damage (see e.g. Oats and Sadler, 2011). In addition, sudden changes in interpretation of legislation can disrupt established patterns of tax planning practices and create mistrust among tax intermediaries large and small (see e.g. Gracia and Oats, 2011).

Increased pressure for cooperation
In recent years there has been a substantial increase in cooperation and information sharing between tax administrations, partly stemming from the work of the OECD etc. on harmful tax competition. The growth of formalised cooperation between tax administrations includes the emergence Commonwealth Association of Tax Administrators (CATA), the OECD Forum on Tax Administration, the Joint International Tax Shelter Information Centre (JITSIC), the Leeds Castle Group and the Seven Country Working Group on Tax Havens.

Joint audits, where two or more countries combine resources to perform a single audit on a multinational taxpayer, hold promise in terms of cost savings for both the taxpayers concerned and the relevant tax administration. A report by the OECDs FTA suggests that the joint audit has potential to take other, more circumscribed, forms of cooperation to a new level. The FTA cautions that proper planning and well-defined processes are necessary, and it has accordingly produced a 'roadmap' for the conduct of joint audits in practice (OECD, 2010c).

Engaging with intermediaries
The OECD (2008) study and others highlight the key role played by intermediaries in the operation of tax systems in all jurisdictions. Managing the relationship with intermediaries is quite different to managing the direct relationship between tax authority and taxpayer, but is increasingly important particularly in light of globalisation not only of taxpayers but their advisers too. The dissemination of information to intermediaries, and the way this is managed within intermediary organisations is an aspect of the relationship that is frequently overlooked (see Hasseldine et al., 2011). The OECD report urges tax administrations to build cooperative relationships, particularly with large corporate taxpayers (see Freedman, 2010).

Pressure for uniformity of tax rules
A final pressure that is changing the tax administration landscape is a tendency to isomorphism, that is increasing mimicry across jurisdictions in terms of both broad policy and specific rules and procedures. In Europe in particular the incremental influence of European Court of Justice decisions is having a constraining effect on the development of tax legislation in Member States. Arguably the very process of globalisation creates similar, if less easily identifiable, pressures.

This non-exhaustive list of external pressures indicates clearly that tax administrations are no longer masters of their own destiny, which threatens efficiency and makes them even more complex organisations to manage.

4.1.4 Some (cautionary) conclusions

Tax administrations are extremely complex organisations, charged with a variety of functions beyond mere regulation across a diverse population of regulatees. They are unlike other regulatory agencies because they are not only policing adherence to government regulation, but also charged with extracting revenue from often reluctant citizens. Many tax administrations are also further charged with delivery of social security benefits in the guise of tax credit systems that further complicates their objectives and practical functioning.

Current economic conditions are putting enormous pressure on tax administrations. Attempts to increase revenue need to be carefully balanced against the long term erosion of voluntary compliance and trust. It is important to recognise that there is no 'silver bullet' that deals with the complex and nuanced issue of non-compliance in all its various guises. It is also important to acknowledge that there are no 'one size fits all' solutions, and the transposition of policy and procedures from one jurisdiction to another needs very careful planning and monitoring. Nonetheless, it is clear that the trend towards greater cooperation between tax administrations will continue and deepen.

Looking to the future, there are two emerging issues that are likely to grow in importance and attract further study within and beyond tax administrations.

In the past, issues of transfer pricing and offshore subsidiaries may have been seen as the preserve of large multinationals. If that was true in the past, it increasingly is not true now. Modern means of communication, trade liberalisation and in Europe the development of the single market mean that cross border transactions are increasingly common features of medium sized businesses. Generally this is a good thing from an economic point of view. But it does mean that international tax risks will be distributed more widely. And many of these businesses do not have the external constraints, in terms of audit and oversight by external shareholders and regulators, that are a feature of large businesses. This is a reminder that tax administrations work in an increasingly dynamic environment and thinking about segmentation and the distribution of risk needs to remain flexible and up to date.

This paper has already touched on the issue of performance measurement and the tax gap and tax administrations and international organisations are increasingly interested in improving the way they measure success. When the focus of compliance work was on investigations into returns, measuring success was relatively straightforward and it meant counting the number of audits and additional yield. Modern compliance strategies place a greater emphasis on prevention, as we have seen. But this raises more complex issues of measurement and evaluation. At the macro level we have the concept of the tax gap but it is problematic and, at the operational level, of doubtful value as a performance indicator. Increasingly tax administrations are using a mix of performance measures to help them understand the effectiveness of their tax strategies, make improvements and facilitate learning.[20] This area and the intelligent comparison of performance between jurisdictions, that takes account of the differences in national contexts, will be an on-going area of work.

[20] See the FTA's Guidance Note "Evaluating the Effectiveness of Compliance Risk Treatment Strategies", http://www.oecd.org/dataoecd/59/3/46274278.pdf

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4.2 What makes taxpayers comply? Lessons from a tax audit experiment in Denmark

Claus Thustrup Kreiner[*]

4.2.1 Background

How big a problem is tax evasion? Why do people evade taxes? What is the optimal tax enforcement strategy to fight tax evasion? How many resources should be devoted to tax enforcement? Academic researchers are trying to provide answers to these fundamental questions but it is notoriously difficult to measure evasion behaviour, tax enforcement policies are secret, and researcher access to tax agencies' data on evasion is normally limited. Reviews of the academic literature on tax evasion and tax enforcement, including discussions of these measurement problems and statistical problems that plaque existing empirical studies, have been provided by Andreoni et al. (1998) and Slemrod and Yitzhaki (2002). A way forward to avoid many of the problems faced by the existing literature is to carry out controlled experiments as often done in many other disciplines such as Medicine, Biology and Physics. Unfortunately, experiments dealing with important economic questions are often difficult, or even impossible, to carry out.

In 2007 and 2008 the Danish tax collection agency (SKAT) carried out a large-scale tax audit experiment, involving more than 40 000 individual tax filers, in collaboration with three academic researchers from the London School of Economics, University of California at Berkeley and the University of Copenhagen, respectively. This type of collaboration between tax authorities and researchers working on tax issues was quite unique and has provided important new results that enhance our understanding of tax evasion behaviour and the impact of tax enforcement policy. The construction and the design of the experiment are described in Kleven et al. (2011).

4.2.2 Overview of main results

The different results obtained from the experiment are described in detail in SKAT (2009), Kleven et al. (2011), the Danish Economic Council (2011), and Boserup and Pinje (2010). Below I present a short overview of some of the main results.

Size of the tax gap

The total income reported on the individual tax returns is too low for 9% of the taxpayers, while 2% of the taxpayers seem to 'cheat themselves' by reporting too high income. However, the total amount overreported is only 0.1% of total net income (measured as the sum of all income components minus all deductions), while the amount underreported is 2.3% of net income, implying that taxpayers on average underreport 2.2% of net income. The corresponding loss of tax revenue is 2-3%, which is reasonably low, in particular when taking into consideration the high marginal tax rates in Denmark compared to most other countries.

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It should be noted that these numbers only reflect 'detectable' tax evasion, i.e., how much would tax revenue increase if all tax returns were scrutinised very carefully. On the other hand, 'detectable' tax evasion is the type of input you need for a policy analysis of how many resources to give to the tax agency.

Tax evasion determinants and the importance of information

Table 5 below shows the evasion rate on different income components. It shows that evasion rates are very low on personal income, which is primarily earnings, while high noncompliance rates are associated with self-employment income and stock income. This compliance pattern across income components has also been found for the US and other countries, and it has been suggested that information reporting of income from third-parties might be a main reason behind this difference in compliance rates (Slemrod, 2007). Nearly all earnings are third-party reported by the employer in Denmark, while third-party information of self-employment income is more or less impossible to obtain. The analysis of Kleven et al. (2011) used the third-party information data obtained by the Danish tax authority on the different items on the individual tax return to shed further light on this hypothesis. As shown in the last two rows of Table 5, tax evasion rate is close to zero for income subject to third-party reporting, but substantial for self-reported income (around 40%). Thus, attempts at declaring less income than third-party reported income are extremely rare, while failures to self-report income that are not subject to third-party reporting are quite common. This indicates that third-party information is a very effective instrument to reduce tax evasion, and that the overall evasion rate is modest in Denmark because most income (95%) is subject to third-party reporting. The results also indicate that tax evasion is low, not because taxpayers are unwilling to cheat (i.e. good tax morale), but because taxpayers are unable to cheat because of third-party reporting.

Table 5. Evasion rate on different income components

	Share of total net income (%)	Evasion rate (%)
Total net income	100	2,3
Personal income	102	1,1
Deductions	-4	2,2
Capital income	-5	2,6
Stock income	3	5,0
Self-employment income	5	15,7
Third-party reported income	95	0,3
Self-reported income	5	41,5

In general, women and members of the church evade less than others, and non-compliance is more common for persons working in small companies and in construction, fishery and agriculture. These results confirm the received perception on cheating behaviour. More interestingly, the results show that these factor and, more generally, socioeconomic factors have only little power in predicting evasion behaviour compared to factors reflecting existence and size of income that is difficult to detect. This shows that the optimal audit selection strategy 'follows the money' rather than the characteristics of the individual, which is also the strategy pursued by the Danish tax agency.

The results also show that marginal tax rates have a positive impact on tax evasion of self-employed, but that this effect is small in comparison with other responses such as legal tax avoidance and behavioural responses.

Impact of tax enforcement on evasion behaviour

In an evaluation of the effectiveness of tax enforcement policy, it is important to take into consideration that audits not only raise tax revenue through the income detected but potentially also through its effect on the compliance behaviour of the taxpayers. The results from the experiment indicate that knowledge of a high audit probability has a positive, but rather small, effect on compliance behaviour.[21] Much more important is the detection of evasion/mistakes conditional on audit. In the experiment, an audit adjustment gives rise to a change in compliance behaviour the year after and raises thereby tax revenue the year after by around 40% of the original audit adjustment.

Effect of tax evasion and enforcement policy on the distribution of income

The main reason that taxes depend on income is to achieve redistribution from high-income individuals to low-income individuals. An important result of the theoretical literature is that the tax system becomes less redistributive because of tax evasion, the so-called regressive bias hypothesis. On the other hand, with third-party reporting this is not necessarily the case (Scotchmer, 1987). Using the data from the Danish audit experiment, Boserup and Pinje (2010) show empirically that the Danish tax system is not characterised by regressive bias, exactly because of the systematic use of third-party information reporting.

A cost-benefit analysis of the Danish audit strategy

The Danish Economic Council (2011) used the data from the tax audit experiment to carry out a cost-benefit analysis of the resources used on audits. The results from such type of analysis should be interpreted with caution. It is difficult to measure marginal costs and benefits of audits. Moreover, a revenue-maximising level of audits does not necessarily coincide with the socially optimal level of resources spent on audits (Slemrod and Yitzhaki, 1987).[22] Nevertheless, a cost-benefit may provide an important input for the practical policy decision on the level of resources spent on audits.

The overall conclusion from the cost-benefit analysis is that the current level of audit resources in Denmark does not seem far away from the revenue-maximising level. A comparison of audit resources used on self-employed and wage earners shows that the benefit per tax return is much higher for self-employed (as expected) but it turns out that the costs of auditing the tax return of a self-employed is also much higher, implying that an hour spent on the tax return of a self-employed does not give a higher revenue than an hour spent on the return of a wage earner. Finally, the cost-benefit analysis revealed that the net-benefit of those with an audit flag is large, while it is negative for those without an audit flag. This shows that the Danish audit selection system works as it is supposed to.

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[21] It was not possible to carry out this part of the experiment for the self-employed. The result that knowledge of a high audit probability (e.g. 100%) does not spur large increases in tax revenue because of behavioral effects is in line with the results from a similar experiment carried out in Minnesota (Slemrod et al. 2001).

[22] In an economy with both tax compliers and tax non-compliers, it is possible to show under certain assumptions that the revenue-maximising audit level coincide wit the socially optimal level of audits if the marginal Euro obtained by non-compliers is assigned no social value.

4.2.3 Lessons for tax administration

A main conclusion from the experiment is that the widespread use of third-party information by the Danish tax agency has been very successful in increasing tax compliance. Denmark has expanded third-party information even more after the experiment was carried out. The 2009 Danish tax reform introduced full third-party reporting of stock income, i.e. reporting of buying/selling prices in addition to the current reporting of dividends, and introduced also third-party information on certain fringe benefits. With the current widespread use of third-party information, it is difficult to go much further in that direction in Denmark.

An expansion of third-party information seems to be a way forward to enhance tax compliance in many other countries. However, a word of caution is in order. According to the theory in Kleven et al. (2009), third-party information is very effective in modern economies with sophisticated production and large or medium-sized firms but not necessarily in less developed countries with small firms and/or simple production. The reason is that employers and employees may jointly decide to misreport information to the authorities and share the gain from a lower taxation. This type of collusive behaviour is difficult to sustain in a modern economy where many individuals/tasks are involved in the production process, implying that firms will need to keep book records that may be used to prove that tax evasion has taken place, and also because it becomes difficult to maintain information about evasion within a small group of individuals.

Another broad lesson from the experiment concerns the audit strategies of tax agencies. The results indicate that audit selection strategies should focus on income/wealth information variables, i.e. 'follow the money', rather than socioeconomic characteristics of taxpayers. Moreover, in deciding on how many resources to use on audits, it is important to take into account that audits also have strong positive behavioural effects that increase future tax compliance and tax revenue. Finally, it is important to take into account the large differences in the costs of audits. In the Danish experiment, the average increase in tax revenue generated by an audit of a self-employed was nearly twenty times higher than the revenue increase from a wage earner but the audits costs were more than twenty times higher.

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4.3 Discussion on 'What makes taxpayers comply'

Marcel Gérard[*]

4.3.1 Introduction

This note provides a discussion of the presentation made by Claus Kreiner, which was based on his joint article with Kleven, Knudsen, Pedersen and Saez (Kleven et al., 2011). The comments especially focus on some aspects of the article, supposed to be relevant for a policy debate. Therefore the aim of this discussion is not to comment on its technicality but rather to focus on the theoretical framework and on the use of the paper for policy debates.

In order to provide a short summary of the paper, let us follow the phrasing of the abstract of the article, that the paper analyses a tax enforcement field experiment in Denmark. Two years are considered; in the first one, called the base year, a sample of over 40 000 individual income tax filers was selected for the experiment. Half of them were randomly selected to be thoroughly audited, while the rest were deliberately not audited. The following year, threat-of-audit letters were randomly sent to tax filers in both groups. Three main empirical findings arise from that experiment, according to the authors. First, using baseline audit data, the tax evasion rate appears to be close to zero for income subject to third-party reporting, although that rate is substantial for self-reported income; since most income is subject to third-party reporting, the overall evasion rate is modest. Second, authors find that marginal tax rates have a positive impact on tax evasion for self-reported income, but that this effect is small in comparison to legal avoidance and behavioural responses. Third, prior audits and threat-of-audit letters have significant effects on self-reported income, but no effect on third-party reported income. All these empirical results, the authors argue, can be explained by extending the standard model of (rational) tax evasion to allow for the key distinction between self-reported and third-party reported income.

The following discussion is divided in two parts. The first one surveys the theory through a framework encompassing various approaches of the issue at stake i.e. (1) the seminal Allingham-Sandmo model which in some sense argues that *taxpaying 'homo economicus' cheats rationally*; (2) the view suggested by the debates at the 1993 Annual Congress of the International Institute of Public Finance (IIPF), dedicated to Public Finance and Irregular Activities, which delivered the good news that *people are honest because cheating makes them ashamed*, a view at the very root of the tax morale literature; and (3) what we may call the Kreiner cynical view according to which *people are honest because they are unable to cheat*. That first part is supplemented by a remark on the determinants of the compliance costs based on an empirical study by Vaillancourt (2010) of the compliance cost in Canada.

In the second part of the discussion, two applications are considered. The first one starts with the apparent dichotomy between income of self-employed persons and income of salary earners; but it ends up with another dichotomy, now between those payees whose possible third-party income reporter is highly motivated for such reporting and those whose reporting agent has a low motivation for reporting income. The second application copes with cross

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border savings; two cases are then considered. The first one focuses on the EU Savings Directive and opposes the treatment of interest income and that of other forms of savings income. The second one analyses the contrasting EU-US approach in terms of international savings taxation, opposing the EU Savings Directive and the US Foreign Account Tax Compliance Act (FATCA).

Although the EU Savings Directive is well known to a European audience, it is useful to mention that the FATCA is a "legislation that has been enacted by the US Congress to fund the employment boosting measures included in President Obama's HIRE Act. The purpose of FATCA is straightforward. It aims to ensure that certain US investors with financial accounts outside of the US pay tax on their income. To achieve this, FATCA will require all global financial institutions – not only banks – to report the names and account details of all US persons on an annual basis. To kick start the process, all foreign financial institutions will be able to enter into an agreement with the US Internal Revenue Service by July 1, 2013, committing them to meet a series of reporting and withholding obligations."[23]

4.3.2 An encompassing framework

Using a standard economic approach, let us assume an individual who wants to maximise an objective function defined as the sum of her reported income (a fraction of her total income) and her evaded income. Reported income is taxed at a standard positive rate while evaded income is either non-taxed at all, in line with the probability of not to be detected as a tax evader, or taxed at the standard rate multiplied by a penalty factor, if detected. Moreover evasion itself has a cost.

In such a framework the optimal evaded income increases with the tax rate but decreases with the probability to be detected, the size of the penalty rate and the cost of the evasion activity. Let us now review three specific approaches of that model.

The Allingham-Sandmo (1972) seminal model

The approach followed by Allingham and Sandmo (1972) (AS) is perfectly in line with that model, as recognised by Kreiner and co-authors when they write that "the economics literature on tax evasion follows on the seminal work of Allingham and Sandmo (1972), who considered a situation where a taxpayer decides how much income to self-report when facing a probability of detection and a penalty for cheating." (Kleven et al., 2011). Then, self-reported income is equivalent to reported income and thus the complement of the evaded income determined by the model.

The IIPF 1993's good news: the role of social stigma, shame and morale sentiments

The quotation thereafter, from Kleven et al. (2011) again, illustrates quite well the dominant view at the 1993 Annual Congress of the International Institute of Public Finance (IIPF) held in Berlin in 1993 "(…) an AS-type setting predicts much less compliance than we observe in practice, at least in developed countries. (…) the AS model misses important aspects of the real-world reporting environment (…) several authors have argued that observed compliance

[23] http://www.kpmg.com/Global/en/WhatWeDo/Industries/Financial-Services/Pages/facta-background.aspx; see also the IRS website http://www.irs.gov/businesses/corporations/article/0, id=236667,00.html; both were consulted on January 13, 2012.

levels can only be explained by accounting for psychological or cultural aspects of the reporting decision.” Indeed we may mention Erard and Feinstein (1994) who conducted an empirical investigation based on data from the state of Oregon, and de Juan et al. (1994) who used Spanish figures.

In line with that view, also illustrated by other authors, it turns out that the cost of evading income needs to include more dimensions. Then that cost is pushed up by socioeconomic and psychological elements, as well as by morale sentiments, and the evasion is going down or, in other words, compliance increases.

The purpose of de Juan et al. (1994) “is to test whether taxpaying behaviour is only influenced by the variable modelled under the theory of decision under uncertainty, or whether fiscal behaviour is also influenced by demographic, socioeconomic and psychological variables.” They use binary logit models tested using qualitative data from Spanish income taxpayers and the results that they obtain “are partially in line with those of the classical model of tax evasion behaviour: fiscal compliance increases as the probability of detection and penalty rate increase.” Nevertheless, they add, “there is a plurality of individual and sociological variables that also help us explain this complex behaviour.” Interestingly their empirical investigations set forth that next to a high perceived penalty rate and a high perceived probability of detection, factors decreasing the predisposition to evade taxes include the level of education – attaining university level –, a social-orientation – as opposed to a self-orientation –, the association of a social stigma to tax evasion and a low perceived level of tax evasion in taxpayer reference group. Interestingly, that article proposes in appendix an overview of many studies covering both AS type and socioeconomic, psychological and morale variables.

For Erard and Feinstein (1994) “the standard expected utility model of tax compliance substantially overpredicts both the frequency and level of non-compliance among US individual income taxpayers.” Therefore, in order to improve the realism of the model, they “extend it to address two important issues: the role of moral sentiment, specifically guilt and shame, in taxpayer decision-making; and the relationship between taxpayer perception of the probability of audit and the true audit function.” Using detailed tax and audit information from the state of Oregon and the US Internal Revenue Service, they “provide an indication of the roles of audit misperceptions and moral sentiments in shaping compliance behaviour. In particular (…) evidence of considerable heterogeneity and a general upward bias in audit perceptions among filers, and (…) that the importance of the sentiment of shame in explaining reporting behaviour is much more sensitive than the sentiment of guilt to the degree of bias in audit perception.”

Tax Morale

That good news paved the way for tax morale literature, illustrated by the two quotations below. Alm and Torgler (2006) “estimate the determinants of an individual’s intrinsic willingness to pay taxes – what is sometimes termed 'tax morale' – using information from the World Values Survey for a wide range of countries over several years of data.” They find that “United States have the highest tax morale (…) followed by Austria and Switzerland.”

They also observe “a strong negative correlation between the size of shadow economy and the degree of tax morale in those countries”.

One year later, Frey and Torgler (2007) ask the question: “Why so many people pay their taxes, even though fines and audit probability are low (…)”. Then their paper “provides empirical evidence for the relevance of conditional cooperation, using survey data from 30 West and East European countries.” They “find a high correlation between perceived tax evasion and tax morale (…) also observe a strong positive correlation between institutional quality and tax morale.”

Kleven et al.

Kleven et al. (2011) adopt another point of view when they note that “While we do not deny the importance of psychological and cultural aspects (…) we show that the key distinction in the taxpayer’s reporting decision is whether income is subject to third-party reporting (T) or if it is solely self-reported (S). (…) For self-reported income, our empirical results fit remarkably well with the basic AS model: tax evasion is substantial and responds negatively to an increase in the perceived probability of detection (…).” That idea was already present at the IIPF 1993 congress though presumably not as much documented.

Two groups then need to be distinguished, one group consisting of taxpayers who report their taxable income by themselves, and another one consisting of taxpayers whose income is reported by a third-party, most usually the employer. Should we assume no collusion between the employer and the employee to pay compensations in black money – partially or even to a large extend – the cost of evasion is larger, even close to infinity, for the latter group.

However we cannot ignore that, in some countries at least, such collusion is systematically at work in some sectors, like hotels, restaurants and cafés. That collusion between the worker – either a blue or a white collar – and the beneficiary of the work is also extensively developed in industries and services where the beneficiary is a private individual not subject to books examination and auditing. In those cases the worker is most often a self-employed deemed to report her taxable income spontaneously. Then, since the cost of evading is smaller for self-reporting people than for taxpayers subject to third-party reporting, tax evasion is larger in the former group. The authors add “For third-party reported income, tax evasion is extremely modest and does not respond to the perceived probability of detection, because this probability is already very high.”

All that justifies that the “key distinction in the taxpayer’s reporting decision is whether income is subject to third-party reporting (T) or if it is solely self-reported (S)”. Then, as the authors write, “third-party reporting is a very effective enforcement device. Given that audits are very costly and eliminate only a part of tax evasion, enforcement resources may be better spent on expanding third-party reporting than on audits of self-reported income”. That sentence is, in my view, the core policy message of the paper.[24]

[24] Cases of potential collusion between the payer and the payee as well as agency aspect, especially costs for third-party, are examined by Kleven et al. (2009) where authors write that “the key mechanism that makes third-party tax enforcement successful is the combination of verifiable book evidence that is common knowledge

Now before turning to the policy debate let us consider evidence regarding the compliance cost.

The compliance cost

So far we rest on the view that (1) the cost of evading taxes, especially income tax liabilities, is determined by the institutional device – low for a taxpayer not subject to third-party reporting, and high in the opposite case – and (2) that the compliance cost, the cost for the taxpayer to fulfil her tax obligations, is inversely related to the cost of evading taxes.

An additional observation deserves interest. In case of self-reporting, the compliance cost might be high because most people belonging to that category have to gather a lot of documents to compute and correctly report their income. That cost may be high not only because gathering all the invoices issued throughout the year is a time consuming activity, but also because that time cannot be devoted to earning money; and moreover the services of an external tax expert are costly. There is thus a true opportunity cost for those, most often self-employed, people. Therefore, some self-employed may decide not to dedicate enough time and effort to full tax compliance simply because the opportunity cost of such compliance is too large or because such activity is much too demanding in terms of time and money. That issue is investigated for Canada by Vaillancourt (2010)[25].

Table 6. The compliance cost in Canada (Vaillancourt, 2010)

Independent variables	Total time	Total spending	Total $ value
Women	−0.7243*	0	−21.5276*
Completed undergraduate	2.0374***	0	53.3311***
Post-graduate degree	3.4533***	0	49.3242**
Single	0	−21.2314***	−56.5836***
Self-employment income	2.4163***	44.3371***	130.2143***

Source: Vaillancourt (2010), Table 9, p 41.

As reported in Table 6 (extracted from that study), the compliance cost increases – and thus the cost of evading income tax decreases – with the level of education and the fact of being self-employed, in terms of time devoted to filling the tax return, of money dedicated to that aim and of dollar value which presumably includes a value for the time spent. It turns out that filling a tax return correctly is more demanding for self-employed and for high skill people, maybe because they like – or are able to – gain profit from sophisticated tax strategies while women find little interest for such strategies or are less likely to belong to the other categories.

4.3.3 Policy debate

Where do we meet such dichotomy between self-reported and third-party reported income? The most obvious case is the one of labour income taxation including the institutional difference between the income of self-employed and the income of salary earners in both the public and the private sectors. However that dichotomy needs to be deepened. But there is

within the firm and a large number of employees, as any single employee can denounce collusive tax cheating between employees and the employer by revealing true books to the government".

[25] See also Vaillancourt and Reid (1989).

another room for that debate, which is nested in international taxation, especially the taxation of cross border savings. I will develop some avenues to illustrate the latter case, within the framework of the EU on the one hand, and within the contrasting EU-US approach on the other hand.

Individual labour income

As mentioned in the introduction, the first application starts with the apparent dichotomy between income of self-employed persons and income of salary earners; but it ends up with another dichotomy, now between those payees whose possible third-party income reporter is highly motivated for such reporting and those whose reporting agent has a low motivation for reporting income.

Self-employment income versus salaries is indeed the first possible application of the paper. It first raises the issue of the measurement of tax evasion. Though such measurement seems to be easy to conduct for public sector employees since their wages are a priori known by the government, the issue is much more complicated when true income is unknown.

However another issue deserves our attention. The cost of evading income for the payee is actually not entirely exogenous, but depends on the interest that the payer may have in the evasion. In other words, the cost of evading income is shared between the payee and the agent in charge of reporting the income. The distinction is thus not between self-employed and salary earners but between those earners whose payers have a low degree of motivation for reporting the paid income and those earners whose payers have a high degree of motivation for reporting that income.

To take a simple example, consider the case where a lawyer (payee) provides an opinion to a client (payer). If the client is a private person who is not entitled to deduct the lawyer’s fee from her taxable income, no party will be worse off if the income remains unreported. In this case the cost of evasion is low because the motivation of the payer for such reporting is low. On the other hand, if the client is a company, the lawyer's fee is deductible against the corporate tax base of the company. In order for the expense to be tax deductible, the company is compelled to provide both the lawyer and the tax administration with a form designed by the public authorities. If the expense is not reported and deducted anyway, it can be subject to special taxation. The income payer is therefore motivated to report the income. However, when the company has to hire a gardener for a couple of days, it may find its best interest in non-reporting the income paid e.g. in order to escape social security contributions. The worker, in contrast, needs the income to be reported at least partially, in order to benefit from social security coverage.

Such potential collusion between the payer and the payee as well as agency aspects, especially agency costs for third parties, are examined by Kleven et al. (2009). It turns out that third-party motivation or monitoring is a key issue for the efficiency of such institutional device.

Cross border savings income

As announced, the second application copes with cross border savings: two cases are considered. The first one focuses on the EU Savings Directive and opposes the treatment of interest income to that of other forms of savings income. The second one analyses the contrasting EU-US approach in terms of international savings taxation, opposing the EU Savings Directive and the US FATCA legislation.

Under EU international tax legislation, third-party reporting applies to interest income while self-reporting applies to other capital income, primarily dividends and income from insurance contracts. Supposing that governments perform their job accurately, the European bondholder has no room to escape taxation on interests from bonds at a rate decided by tax authorities of her country of residence, provided she invests in a financial institution located in an EU Member State but Austria and Luxemburg. In contrast, an investor has to report voluntarily her dividend income to the administration of her country of residence. The outcome of such dual process should be, according to theoretical prediction, that interests are more extensively reported than dividends. To the best of our knowledge, no empirical work is available on this issue.

However, can we actually assume that interests are correctly reported across borders? For interests paid out by a foreign EU bank to a domestic individual investor, the agent in charge of the third-party reporting is the foreign bank, which needs to report to the tax administration of its own country. We may assume that the bank correctly reports to the administration of its country of residence (or that it provides the quantity and quality of information that its government requires). But the quantity and quality of the information exchanged between that latter tax administration and the tax administration of the country of residence of the investor raises question. Indeed the former government has little incentive for correctly reporting since it gets no revenue from the exchange of information and is subject to no auditing either by an EU-wide body or by the country of residence of the investor. Under the EU Savings Directive mechanism indeed, the power to tax is only in the hands of the country of residence of the investor while no withholding tax might be levied at source by the foreign tax administration.

At this stage we may suppose that the fraction of foreign income reported to the tax administration of the country of residence is close to zero for dividends and larger for interest. How much larger? That depends on the commitment of the third-party reporting agent in the source country, i.e. the foreign bank and the foreign tax administration.[26]

In contrast with the system set up by the EU Savings Directive, the US FATCA legislation makes the foreign bank the sole third-party reporting agent *vis-à-vis* the US tax administration. The tax administration of the source country is (or may be) by-passed and then may play no role at all in the process of exchanging information. But the main point for our discussion is that, unlike what happens with the EU Directive mechanism, the third-party reporting agency now has a strong incentive to fulfil its obligations correctly. Indeed, the bank might be audited by a body designated by the US and if it reveals that the bank has not correctly reported income paid, it is subject to a penalty tax of 30%.

[26] Notice that Austria and Luxemburg are permitted to levy a withholding tax at source and to keep 25% of the revenue, which is an incentive to actually levy the tax.

The latter case is particularly interesting, both intellectually and politically. Let us consider interest income only. Within the framework of the EU Savings Directive, there is a sequence of two third-party reporting agents, first the local financial institution and, second, the tax administration of the source country. For instance, if a Belgian resident has an interest paid in Germany, the German bank is responsible for reporting to the German tax administration, and that latter is responsible for transferring the information to its Belgian counterpart. In contrast, under the US FATCA legislation, and previously under the QI system, there is only one third-party agent, the local financial institution, in charge of directly reporting to the US tax administration. Moreover, under the US FATCA, the US tax administration may audit the third party, i.e. the financial institution, while this is not the case under the EU Savings Directive.

Therefore we may suggest that the reported fraction is closer to unity under US FATCA than under the EU Savings Directive. Some lessons may be learned from the US to improve the EU system.

4.3.4 Conclusion

Based on this discussion, some policy recommendations arise. We can certainly share the authors' view that “third-party reporting is a very effective enforcement device” and that “given that audits are very costly and eliminate only a part of tax evasion, enforcement resources may be better spent on expanding third-party reporting than on audits of self-reported income”. However we also need to be cautious and to dedicate effort to an in depth investigation of both the degree of motivation of the third-party, to be sure that it performs its task accurately, and the degree of motivation of the tax administration in charge of monitoring the reporting process. In that framework, the comparison of the EU Savings Directive and the US FATCA legislation, though their coverage is clearly different, might contribute to the debate in an interesting way.

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4.4 Combating the underground economy and the role of tax administration: the case of Hungary

Adam Balog[*]

4.4.1 The underground economy and tax evasion in Hungary

The underground economy comprises legal, hidden and illegal activities. The exact size of the underground economy is difficult to quantify. It is estimated to be significant in relation to total GDP in Europe, accounting for about 8-17% of GDP in Western Europe and even 16-33% in Eastern Europe. In Hungary it accounts for about 23% of GDP (Schneider and Kearney, 2011). The underground economy places a heavy burden on the economy and the central budget. The Hungarian government and parliament have devised clear objectives to reduce the underground economy, which for various reasons is a complex task.

The willingness to pay taxes cannot be interpreted as a fully rational decision. The benefits gained from evasion are generally higher than the expected penalties, i.e. sanctions weighted by the probability of getting caught. However, other effects may play a role in tax evasion. The most significant factors are tax morale and trust in the government. Torgler and Schaffner (2007) point out that the willingness to pay depends on tax morale. In turn, the authors found that tax morale is positively and significantly correlated with an appropriate operation of tax authorities, a positive perception of the tax system and trust in the society.

On the basis of statistical surveys, Hammar et al. (2005) found that taxpayers have different opinions on fraud concerning different taxes. More than 70% of respondents think that tax evasion is common for the wealth tax, but this rate is 17% when it comes to gasoline and diesel taxes. The authors stressed the importance of the burden and unfairness of individual taxes in tax evasion. If taxpayers feel taxes are unfair then tax evasion is higher.

The exact size of the shadow economy is difficult to define. Estimates put tax evasion and fraud at about 15-20% of yearly tax revenues in Hungary. Although tax evasion has several aspects, evasion in two tax categories is responsible for about 80% of the missing revenues.

Tax evasion is especially high in the case of wage-related taxes. It accounts for about 50% of the shadow economy in taxation. Evasion of the personal income tax is most common among small enterprises: reporting employees as part-time workers, alleged employment at the minimum wage and the self-employed hiding their income (fictitious invoices) are the most wide spread means. Torgler and Schaltegger (2005) point out that employees have a lower willingness to pay than self-employed workers. Undeclared work is difficult to quantify, because in most cases hidden work is beneficial for both the employers and the employees.

The second main field is evasion and fraud in VAT, which accounts for 30% of the shadow economy in taxation. VAT is usually evaded by hiding domestic sales and thus hiding income originating from sales activity. In addition to this, a certain share of personal consumption tends to be counted as a deduction in the tax base and a VAT refund is requested, even

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though personal consumption is not eligible for it. Both customers and providers/sellers have a material incentive to purchase without invoices. Customers benefit from price reductions through discounts offered by salesmen and the latter avoid paying taxes.

The reduction of the shadow economy is a very important but difficult task. Tax evasion is not unequivocally rejected by society. Taxpayers have many incentives to hide their income and avoid taxes. Usually the main reasons for tax evasion and low tax revenues are inefficient surveillance by the tax authorities, insufficient sanctions, loose tax laws (exploitation of loopholes) and poor quality of government services. Society's behaviour depends on how effectively and efficiently the government utilises its contributions. The willingness to pay taxes is lower if taxpayers perceive the quality of state institutions as low. Compliance is usually higher for local taxes than overall compliance as taxpayers can see how the tax revenues are used for the provision of local public goods.

Torgler and Schaltegger (2005) examined the tax morale in Switzerland and found a significant positive correlation between high tax morale and transparency in taxation. Payment of taxes is positively related to morale in society. Taxpayers are more willing to pay if they believe that other individual taxpayers are fair as well with regard to their tax obligations. Lastly, they confirm that the lack of tax revenues is related to little trust in the state and government.

4.4.2 Policy response

A simple and proportional tax system

The shadow economy places a large burden on society and cannot be ignored by government. A large number of measures focus on evasion and fraud. A simpler tax system can lead to less tax evasion. Governments can take 'positive' and 'negative' measures, having different effects on society. Negative measures consist of new stricter regulations and penalties. While limiting the number of tax evaders, they can increase the dissatisfaction with government and parliament. Positive measures can decrease tax evasion through incentive schemes for new employment and taxes.

There is no clear evidence that lower tax rates on consumption will decrease tax evasion, but a lower number of taxes and lower flat-rates in wage-related taxes are expected to decrease evasion.

The Hungarian government has taken several measures to combat the underground economy in 2011 and 2012. As a first measure, a new simple and proportional PIT system was introduced. Following a proposal by the government, the parliament introduced a 16% flat rate PIT, decided to eliminate the wage tax credit and to phase out the 'super grossing principle' in PIT gradually. The Hungarian taxation system has been simplified and 10 minor taxes have been eliminated over the last 18 months, resulting in lower compliance costs for taxpayers and authorities.

Undeclared work is widespread in household services, such as cleaning, babysitting, and teaching. Countries can take measures to reduce undeclared work by introducing simpler conditions for temporary employment and developing new schemes to support employment in general.

Improved tax collection and combating the shadow economy

The tax and customs authorities play a big role in combatting the shadow economy with a view to revealing loopholes exploited by taxpayers. The Hungarian government and parliament have developed new tax collection forms and regulations over the last 18 months and have modified the authorities' competences in accordance with the fight against the underground economy.

The National Tax and Customs Administration (NAV) was reorganised in 2011 and the tax and customs authorities were merged. This reorganisation has improved the efficiency of tax collection and decreased tax administration costs. NAV has introduced more frequent, more efficient and stricter inspections in 2011. As a result, tax revenues have grown for the last 12 months.

The government expects to increase the efficiency of tax collection due to the the new administrative instruments in 2012. The parliament has decided to reinforce the tax authorities and introduce a number of new instruments to combat the shadow economy.

The NAV has been provided with new tools, e.g. new types of tax inspections. Covert test shopping and the inspection of individual economic events will make the work of inspectors more effective and efficient.

4.4.3 Summary

The Hungarian government and parliament have taken several measures to combat the underground economy in 2011 and 2012. The new simple and proportional Hungarian tax system, simplification in administration and improved tax collection processes are expected to reduce the size and impact of the shadow economy.

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