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**TAX DESIGN IN TURKEY AND OTHER MIDDLE
INCOME COUNTRIES:
LESSONS FROM THE MIRRLEES REVIEW**

Laura Abramovsky, Paul Johnson, David Phillips

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PREFACE

Koç University-TÜSİAD Economic Research Forum (ERF) is a research center formed jointly by Koç University and the Turkish Industrialists' and Businessmen's Association. Established in 2004 as a non-profit and non-partisan organization, the Economic Research Forum focuses on promoting independent and objective analysis on economic growth and discusses the implications of different economic policy options.

In today's rapidly changing economic environment, the global economic structure exhibits a rapid transformation. It is crucial to attune with this economic transformation and wisely fill in the gaps emerging from it. The promise of the new economic setting has transformed how agents view economic relations and unlocked a decision-making process to an innovative set of precedence. With the expanding complexity and interdependence and information-rich environment, policy-making for faster economic growth requires new approaches and fine-tuned calibrations based on longitudinal analyses, rather than rough designs. With these ideas in mind, the business and academic community have joined their forces to launch a new forum on economic research in Istanbul.

The report titled "TAX DESIGN IN TURKEY AND OTHER MIDDLE INCOME COUNTRIES: LESSONS FROM THE MIRRLEES REVIEW" is prepared by Laura Abramovsky, Paul Johnson, David Phillips, and published as a part of Economic Research Forum Research Report Series.

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ÜNAL ZENGİNOBUZ

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EDITORS' INTRODUCTION

The Institute for Fiscal Studies in London, England is longstanding commentator on taxation with credibility in both the academic and policy worlds. In the fall of 2011, the Institute published the findings of the Mirrlees Review. The Mirrlees review brought together a group of international experts to consider the characteristics a good tax system for an open developed economy in the 21st century. The Review also considered the extent to which the current UK tax system matches this ideal, and how the UK tax system might be reformed to more closely approximate that ideal. The Review has been very positively received and generated much discussion about the appropriate design of modern tax systems. In April 2012, the Koç University - TUSIAD Economic Research Forum invited Paul Johnson, the Director of the Institute of Fiscal Studies (IFS), together with two senior researchers at the IFS, David Phillips and Laura Abramovsky, and Orazio Attansio, a Professor at University College London and a fellow of the IFS to reflect on what lessons the Mirrlees Review might offer for middle income countries and for Turkey, in particular. In this volume we present those reflections, along with responses from two Turkish experts, Mr. Ali Şanver of Tasman and Şanver Associates and Ünal Zenginobuz, who is professor of Economics at Boğaziçi University in Istanbul, Turkey.

As the authors discuss further below, the Mirrlees Review is comprised of two volumes. The first volume, *Dimensions of Tax Design* (Mirrlees et al. (2010)), brings together expert evidence across a wide range of aspects of tax reform, and presents new empirical work on labour supply and consumption behaviour in the UK. The second volume, *Tax by Design* (Mirrlees et al. (2011)), sets out the conclusions of the Review and recommendations for policy reforms. The importance of the Review stems from its ambition "to identify reforms that would make the tax system more efficient, while raising roughly the same amount of revenue ... and while redistributing resources ... to roughly the same degree." The Review initially presented a wide set of critiques and recommendations regarding the British tax system, which has received attention in the UK House of Commons* and its lessons have been discussed in a variety of contexts, including reform of the US tax system† as well as in relation to recent reviews that have taken place in Australia and New Zealand.‡ However, the lessons of the Review are only recently being discussed in the context of developing or emerging economies. Indeed, the current report being issued by the Koç University-TUSIAD Economic Research Forum presents one of the most recent attempts to examine the lessons of the Review in detail for a prominent middle-income country - Turkey - in light of the institutional

* See <http://www.publications.parliament.uk/pa/cm201011/cmselect/cmtreasy/753/753vw29.htm>

† See Auerbach, A. (2012). "The Mirrlees Review: A U.S. Perspective," *The National Tax Journal*, June (2012), 65(2).

‡ Evans, C. (2012) "Reflections on the Mirrlees Review: An Australasian Perspective" *Fiscal Studies* (2011), vol. 32 (3), pp. 375-393

and legal issues that it confronts as well as the benefits that might accrue to it from implementing the recommendations of the Review. In what follows, the re-known researchers from the Institute of Fiscal Studies together with two experts from Turkey provide a detailed overview of the lessons of the Review for middle income countries and suggest new areas for academic research and evidence-based policy initiatives for the reform of the Turkish tax and transfer system to help Turkey in meeting the challenges of moving from a middle income country to a high income one.

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EXECUTIVE SUMMARY

- The cost of taxation is inevitably higher than the sums that are raised to fund public spending: there are administrative costs to government and compliance costs to taxpayers, as well as costs resulting from people changing their behaviour (for instance, to minimise the tax they pay).
- However, the structure of the tax system plays a crucial role in determining the size of these costs, and, hence, the ability of governments' to raise revenues and redistribute effectively.
- In the fall of 2011, the Institute of Fiscal Studies in London published the findings of the Mirrlees Review. The Mirrlees Review brought together a group of international experts to consider the characteristics a good tax system for an open developed economy in the 21st century.
- The contributors to this volume set out some basic principles for thinking about the key features of a good tax system and sound tax reforms in middle income countries, drawing on the findings of the Mirrlees Review.
- The Review's three guiding principles - that a tax system should work together well as a whole to be progressive and neutral across economic activities (except where there are good reasons to deviate from neutrality) - are likely to be even more important in the context of a middle income country, like Turkey, than in the high income countries for which the Review was originally written.
- In particular, relatively weaker tax administration systems and greater opportunities for tax evasion in the pervasive informal economy mean that it is even more important to avoid complex systems that through poor design and non-neutralities give many opportunities for tax avoidance and evasion.
- There may be scope for real improvements in the efficiency and operation of tax systems in middle income countries, including Turkey, by: limited the use of exceptions and reduced rates of VAT; reforming direct taxes to improve savings incentives and remove non-neutralities that encourage distortions in the type of income one chooses to receive treated; and moving towards a more sustainable and investment-friendly form of business taxation that works for both small and large enterprises.
- A paucity of empirical work on the distributional and behavioural effects of taxes in middle income countries mean there is a real need for research before concrete conclusions on how to reform tax systems can be drawn. Key areas for new empirical work include the development of microsimulation models, estimation of taxable income elasticities and analysis of the response of tax evasion and informal economic activity to taxation to be key areas for new empirical work.

TAX DESIGN IN TURKEY AND OTHER MIDDLE INCOME COUNTRIES: LESSONS FROM THE MIRRLEES REVIEW¹

LAURA ABRAMOVSKY, PAUL JOHNSON, DAVID PHILLIPS²

¹ *The authors would like to thank Ali Sanver and Ünal Zenginobuz for interesting and helpful commentaries on this paper: earlier drafts of this paper have been much improved in response to their initial comments, and their commentaries highlight important issues on law, politics and the Turkish context, which complement our analysis. The authors would also like to thank Stuart Adam, Helen Miller and Thomas Crossley for helpful comments and suggestions. Any remaining errors are the responsibility of the authors alone. Funding is gratefully acknowledged from Koç University, in Turkey, and the ESRC Centre for the Microeconomic Analysis of Public Policy (CPP) for funding (grant number RES-544-28-0001).*

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1. INTRODUCTION

Many middle income countries face significant challenges in achieving and sustaining a sound fiscal position. As these countries grow and develop, they need to mobilize more revenue to finance expenditure aimed at reducing poverty and inequality and at improving public infrastructure, while at the same time generating sustainable economic growth. This has led several such countries to undertake, or at least attempt, a range of tax, benefit and spending reforms in recent years.³

The cost of taxation is inevitably higher than the sums that are raised to fund public spending: there are administrative costs to government and compliance costs to taxpayers, as well as costs resulting from people changing behaviour to minimise the tax they pay. However, the structure of the tax system plays a crucial role in determining the size of these costs, and, hence, the ability of governments' to raise revenues. The key challenge in designing the optimal tax system and in determining the direction for reform is to raise sufficient revenues and satisfy one's equity objectives (i.e. redistribute as much or as little as one wants) at the lowest cost in terms of economic efficiency. The importance of getting the structure of the tax system right, and hence, understanding how various taxes impact on businesses and individuals, can only increase when governments try to raise greater revenues.

The issues to consider when thinking about the design of good tax systems and tax reforms are many and complex in all countries. However, the interrelated economic, political and institutional characteristics of middle income countries, including weaker tax administration and institutional capacity, lower tax morale, and a larger informal economy (i.e. higher tax evasion), relative to high income ones, mean the challenge may be greater in such countries. A key problem is that, for many issues, there is a lack of consensus in the growing literature on tax design and reform in middle income

³ *Examples of middle income countries that introduced sensible reforms in the last decade include El Salvador and Vietnam among others. El Salvador has introduced a range of reforms, including broadening the bases of VAT and income taxes, eliminating subsidies to exports, introducing a new system of excises on tobacco and alcoholic and non-alcoholic drinks. These are thought to have improved efficiency and fairness as well reducing the burden on the tax administration and increasing tax revenues. Vietnam has recently simplified its corporate income tax regime by unifying the rate structure, removing some incentives, and VAT base has been broadened, resulting in increased tax revenues as well. See Abramovsky et al. (2012) and IMF (2011) for further details.*

economies. For example, some experts argue that value added taxes (VAT) should be used to redistribute resources in these countries given that other more efficient and suitable tools, such as the personal income tax, targeted benefits or public spending (in the form of for example education and health services) are not effectively available (see, for example, Bird (2008)). At the same time, other experts support the contrary view (see, for instance, Levy (2008)). While there are disagreements in the literature on tax design for high income economies, different opinions on how to structure taxes in a context of weaker administrative capacity and greater opportunities for evasion, mean even more disagreement for middle income economies. But, as countries improve their capacity to administer more modern tax-benefit systems and tackle high levels of evasion, such constraints become less binding, meaning that moves towards the kinds of systems advocated for advanced economies will become more feasible.

In this paper we set out some basic principles for thinking about the key features of a good tax system and sound tax reforms in middle income countries, and the implications for some particular areas of taxation. In doing this, we take as given governments' goals of certain level of revenue and of redistribution of resources to those with high needs or low incomes, and focus on how these objectives can best be delivered.⁴

Our main reference is the set of recommendations from the Mirrlees Review (2011). The Mirrlees Review, inspired by the Meade Report (1978), drew on new work and the large body of existing economic theory and empirical evidence to build a case for tax reform for modern open economies in general, and for the UK in particular. Even though middle income countries differ from advanced economies in several key respects and are themselves a highly diverse group, the principles set out in the Mirrlees Review and many of the implications flowing from them, are relevant: many of the challenges in designing an efficient tax design are similar to those faced by countries such as UK, but writ large.⁵

The Review was published in two volumes. The first volume, *Dimensions of Tax Design* (Mirrlees et al. (2010)), brought together expert evidence across a wide range of aspects of tax reform, and includes new empirical work on labour supply and consumption behaviour in the UK. The second volume, *Tax by Design* (Mirrlees et al. (2011)), set out the conclusions of the Review and recommendations for policy reforms. The main principles guiding these recommendations are that a good tax system will be

⁴ *In other words, we do not discuss what the level of taxation should be or how much redistribution should be undertaken but instead focus on the key principles of designing tax systems that meet these objectives most efficiently.*

⁵ *This view is supported by many experts in the area of tax design and reform in middle income and low income countries. See Tanzi (1999), IMF (2010, 2011), Bird (2008), and Keen (2011) among others.*

progressive - in the sense that it redistributes at a minimum efficiency cost -, neutral - in the sense that it avoids arbitrary distortionary tax differentiation across people and forms of economic activity -, and will achieve its objectives when considered as a whole, with different instruments used for different purposes. Indeed, the Review advocates that one should take this latter point further: the tax and benefits (transfers) systems - and even, where possible, spending on public services - and must be considered together at both the design stage and the analysis stage, to have a full appreciation of their equity and efficiency impacts. In order to focus on a manageable set of issues, however, the Review and this paper primarily on the tax system.

The rest of the paper is structured as follows. Section 2 compares some high-level descriptive statistics of the tax systems of middle and high income countries and highlights a number of dimensions in which the economic and institutional characteristics differ between these two groups of countries. Section 3 discusses the general principles for a good tax system drawing from the Mirrlees Review. The implications of these principles and the general economic and institutional characteristics of middle income countries for the design of selected areas of tax policy are discussed in section 4. We focus on personal direct taxes, indirect taxes, and corporate income taxes.⁶ In section 5, we provide a summary and discuss the type of empirical work we think is needed to inform the debate about sound tax design and reforms in middle income countries.

Finally, at the end of this paper, two Turkish experts on taxation provide commentaries: Ünal Zenginobuz from the perspective of an economist, and Ali Sanver from the perspective of a tax lawyer and legal scholar. The commentaries focus, in particular, on how the principles and recommendations set out in this paper relate to the specific issues affecting Turkey, and emphasise the need to consider the legal and political processes and imperatives that impact the design and operation of the tax system.

2. THE TAX STRUCTURE AND CHARACTERISTICS OF MIDDLE INCOME COUNTRIES

Middle income countries as defined by the World Bank are a group of 108 highly diverse economies, and are split in 54 lower and 54 upper middle income economies

⁶ Section 4.1 (direct taxes) covers briefly the tax treatment of savings and wealth. More detailed discussion of these areas and recommendations for other areas of taxation can be found in the Mirrlees Review: *Tax by Design* (Mirrlees et al (2011)). One area not considered by either this paper or the Mirrlees Review is the taxation of natural resources. This is obviously a highly relevant area for those middle income countries which rely heavily on revenues from natural resources, and a significant literature examining how best to obtain such revenues exists. See, for instance, Daniel, Keen and McPherson (2010) and Boadway and Keen (2009).

located across all continents.⁷ Upper-middle income countries are economies that had a gross national income per capita between nominal US\$4,036 and US\$12,475 in 2011. Lower middle income countries had a gross national income per capita between nominal US\$1,026 and US\$4,035. Even within each middle income group, there is a high degree of heterogeneity in the way countries design their tax and benefit systems, in their ability to redistribute income, alleviate poverty, and collect revenue and in their spending patterns. Turkey belongs to the group of upper middle income economies, with a nominal gross national income per capita of \$10,410, similar to that of Mexico and Brazil.⁸

2.1. The Tax Structure

Table 1 shows the revenues accruing to the government (including sub-national levels of government) and the make-up of these revenues in 2010 for a selected set of middle income and high income countries, as well as group medians. Looking at the group medians it can be seen that total revenue,⁹ social contributions (payroll taxes at least nominally linked to social security benefits) and tax revenue (columns 2, 3 and 4 respectively) increase as a share of GDP as GDP increases. This is also true for each specific tax, except for taxes on international trade and transactions (column 11). The median tax/GDP ratio was 15.8% of GDP, 19.2% and 26.2% and median social contributions/GDP ratio was 3.0%, 5.5% and 11.4% for lower middle income, upper middle income and higher income economies respectively, in 2010. The difference in total revenues is less stark than the difference for taxes and social contributions, reflecting, in part, the significant recourse to (non-tax) revenues from natural resources in certain countries.

In terms of the structure of tax revenues, the most salient difference in group medians is that revenues from the personal income tax (column 9) account for a considerably larger share of GDP in high income countries (7.6%) than in lower and upper middle income countries (2.1% and 2.6% respectively) and contribute a larger fraction of overall tax revenues. Revenues from the corporate income tax is a similar proportion of GDP in the three groups, on average, meaning its contribution to tax revenues declines, on average, as one moves up the income league table. On the other hand, taxes on goods and services account for a slightly lower proportion of GDP but a slightly bigger share of total taxes in middle income countries compared to high income countries.

⁷ *The World Bank "Country and Lending Groups" 2011, see <http://data.worldbank.org/about/country-classifications/country-and-lending-groups>, last accessed 8 October 2012*

⁸ *See "Gross national income per capita 2011, Atlas method and PPP", last accessed 8 October 2012 <http://databank.worldbank.org/databank/download/GNIPC.pdf>*

⁹ *In addition to tax and social contribution revenues, "Total Revenues" includes other revenue from property income and the sales of goods and services produced by state-owned enterprises, including the exploitation of natural resources.*

However, it is also immediately clear that there is notable within-group variation meaning that one must be wary of taking generalisations too far. Take for example, upper middle income countries. South Africa is the country with the lowest nominal gross national income of the four countries displayed in the table, with \$6,960 as shown in column 1, and its tax revenue as a share of GDP is the highest at 27.3%, higher than the median of both upper middle and high income economies. Its take from individual income tax is comparable to that of high income economies, and its tax revenues from corporate income tax are particularly high at 5.7%. It has been suggested that colonial history may be associated with tax revenue performance, with, Anglophone countries with British common law traditions seeming to be better able to raise revenues than Francophone ones among Sub-Saharan economies.¹⁰ Turkey, on the other hand, shows a tax take and a tax structure similar to the median of upper middle income countries. If anything, its central government collects a particularly high proportion of its revenues from indirect taxes, especially excises on items such as, gas, energy, alcohol, cell phone services and luxury goods at different rates as well as a special communication tax. For both these countries, the challenge is not necessarily mobilising more revenue, but thinking about how to improve their tax structure and design to maximise efficiency.

In terms of trends over the last two decades since 1990, the median tax revenue as a percentage of GDP for lower and upper middle income countries increased from around 14% and 16.5% to around 16.4% and 20.8% in 2007 before the crisis, though both groups experienced a slight decrease in their median tax-takes from 2007 to 2010.

In terms of the composition of tax revenue, in the period 1990-2009, there has been a marked increase in the median receipts from general taxes on consumption (which include value added taxes (VAT)) as a share of total tax revenues, going from around 30% to almost 50% of total receipts for both lower and upper middle income countries. This reflects the introduction of VAT in an increasing number of countries (VAT receipts as a share of total receipts went from 15% and 19% in 1990 to 35% and 38% in 2010 in lower and upper middle income countries, respectively), and accords with advice and evidence that VAT is an efficient way to raise revenues. Median receipts from corporate income tax have shown a robust increase from 13% and 12% in 1990 to 17% and 15% for lower and upper middle income countries. This reflects, in part, the introduction of base broadening measures; statutory rates have declined somewhat, as in high income countries, likely reflecting increased international tax competition. Median receipts from personal income tax increased from 7% and 10% in 1990 in lower and upper middle income economies to 14% in both groups in 2010. Finally, median receipts from international trade have decreased in importance, from around 25% to around 10% over the period 1990-2010, reflecting trade liberalisation and globalisation more generally. Taken together, these seem encouraging trends: middle income countries are increasing their tax take and relying more on consumption taxes and personal income taxes and less on international trade taxes.

¹⁰ See Keen (2011).

Table 2.1. General Government Tax Revenues And Tax Structure Of Selected Countries

Gross National Income (Nominal 2011 US\$)	Total Revenue (% GDP)	Social Contributions (% GDP) ²	Total Tax Revenue (% GDP) ³	Tax Revenue from Services (% GDP) ⁴	Tax Revenue from Goods and		Tax Revenue from Income (% GDP) ⁵		Tax Revenue from International Trade and Transactions (% GDP) ⁶	Property Tax Revenue (% GDP) ⁷	Share of informal economy (% of official GDP) ⁸	
					General sales, turnover or VAT	Excises	Total	Of which Individual Income Tax Revenue				Corporate Income Tax Revenue
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Lower middle income countries	23.7	3.0	15.8	7.2	5.1	1.7	5.1	2.1	2.8	1.5	0.4	
Ghana	1,410	-	13.6	5.6	4.1	0.8	4.7	2.4	2.3	3.3	-	38.3
India	1,410	-	15.5	6.4	-	1.7	6.5	1.6	3.9	1.6	-	20.7
Indonesia	2,940	-	10.9	4.4	3.4	1.0	5.5	-	-	0.3	0.6	17.9
Paraguay	2,970	3.6	13.7	9.1	6.9	2.0	2.4	-	2.4	1.8	0.3	37.4
Philippines	2,210	-	12.8	5.6	1.9	0.7	5.6	2.0	3.1	0.9	-	38.3
Upper middle income countries	30.7	5.5	19.2	10.1	6.7	2.7	5.6	2.6	2.9	1.2	0.8	
Brazil	10,720	5.8	25.5	14.0	13.7	0.5	6.9	2.6	4.4	0.6	1.2	36.6
Mexico	9,240	2.9	15.2	9.6	3.9	0.7	5.2	-	-	0.2	-	28.8
South Africa	6,960	0.5	27.3	10.3	6.9	2.8	14.3	8.6	5.7	1.0	1.4	25.2
Turkey	10,410	6.4	19.6	12.1	5.7	5.2	5.6	3.7	1.9	0.3	1.1	29.1
High income countries ⁹	40.4	11.4	26.2	11.5	7.3	2.9	10.7	7.6	2.8	0.3	1.2	
Denmark	60,390	1.0	47.2	15.3	9.9	4.1	29.6	24.4	2.7	-	1.9	16.9
Germany	43,980	14.2	22.1	10.7	7.3	2.6	10.4	8.9	1.5	-	0.8	15.3
United Kingdom	37,780	6.7	28.4	10.8	6.6	3.1	13.1	10	3.1	-	4.2	12.2
United States	48,450	6.5	18.3	4.3	2.0	1.0	10.7	8.0	2.7	0.2	3.2	8.4

Notes: Revenue figures refer to the year 2010. Estimates of the share of the informal economy refer to 2007, except for Paraguay (2006). "-" means there is no information available. 1/ Total revenue (column 2) includes Social Contributions (3), Taxes (4), Grants (not displayed in the table), and Other Revenue such as revenue from property income, interest, sales of goods and services including natural resources (not displayed in the table). 2/ Social Contributions (3) includes social security and other social contributions, including by employees, employers and self-employed. 3/ Total Tax Revenue (4) includes Tax Revenue from Goods and Services (5), Income Tax Revenue (8), Tax Revenue from International Trade and Transactions (11), Property Tax Revenue (12), Taxes on payroll and workforce (not displayed in the table), and Other taxes (not displayed in the table). 4/ Tax Revenue from Goods and Services (5) includes General sales, turnover or VAT (6), Excises (7) and Other (not displayed in the table). 5/ Tax Revenue from Income (8) includes Individual Income Tax Revenue (9), Corporate Income Tax Revenue (10) and Unallocable (not displayed in the table). 6/ Tax Revenue from International Trade and Transactions (11) includes revenues from customs and other duties, taxes on exports and other related taxes. 7/ Property Tax Revenue (12) includes revenue from taxes on immovable property, net wealth, estate, inheritance and gift, financial and capital transactions. 8/ Table 2 in Schneider et al (2010), estimates for the "shadow" economy. 9/ Group medians, countries included in each column vary according to whether information is available or not in the IMF data. Sources: The World Bank "Country and Lending Groups" classification 2011, International Monetary Fund data compiled from different sources, provided to the authors by IMF, and Schneider, Buehn and Montenegro (2010). See IMF (2010, 2011) for more information about the IMF data.

2.2. The Economic, Political and Institutional Context

As with high income countries, middle income countries face an environment of increasing globalization. This makes a reliance on taxing mobile bases such as capital and international trade problematic; in effect, taxes would be shifted to relatively immobile factors (such as labour, or property) and it would be more sensible to design a tax system that taxes these more directly, but also more efficiently. This is extensively discussed in the Mirrlees Review in light of new empirical evidence from the UK, and the recognition that the environment in which people and firms operate has changed dramatically in the past few decades.

However, despite the significant heterogeneity among middle income countries, there are a number of broad ways in which most middle income countries differ from most high income countries:

- Higher levels of income inequality, and a dependence on a relatively small number of big taxpayers (firms and individuals) for direct tax revenues
- A larger informal economy
- Weaker administrative capacity to tackle evasion and avoidance, and manage complex systems
- Lower willingness of the population to pay taxes and comply with tax law ('low tax morale')

These present particular challenges for tax design, which we discuss later in the paper, but it is worthwhile setting out some key facts and conceptual issues up front.

Income inequality is generally higher in low and middle income countries, especially those in Latin America and Africa, than in high income countries. For instance, the World Bank's database records the Gini Coefficient in 2009 as being 0.547 in Brazil, 0.521 in Chile, 0.567 in Colombia, 0.462 in Malaysia, 0.483 in Mexico (2008 figure), 0.43 in the Philippines, 0.631 in South Africa and 0.39 in Turkey (2008 figure). In contrast, the average figure in high income OECD countries was around 0.31 in the middle of the 2000s (ECLAC, 2011). In Latin America, at least, higher levels of inequality reflect both higher pre-tax-and-benefit income inequality and a significantly lower degree of income redistribution by the tax and benefit system (ECLAC and OECD, 2011). At least in part because of high levels of income inequality, middle income countries also tend to rely on a relatively small number of high income individuals and large companies for a large part of their revenues. Both may have implications for specific areas of tax policy, which we deal with in Section 4.

Turning to the issue of economic informality, two things are immediately clear: there is no single agreed definition of what 'informality' is; and, that even given a definition,

it is difficult to measure the size of the informal economy and understand the (interlinked) factors driving its size. In this paper we follow Schneider et al (2010) who consider the informal economy to include "...all market-based legal production of goods and services that are deliberately concealed from public authorities to avoid payment of income, value added or other taxes; to avoid payment of social security contributions; having to meet certain legal labour market standards, such as minimum wages, maximum working hours, safety standards, etc; and complying with certain administrative procedures, such as completing statistical questionnaires or administrative forms." Using the same methodology across countries, they provide estimates of the informal economy for a vast range of countries over the period 1999-2007, and they find that although the size of the informal economy has been decreasing over this period, it still accounts for a substantial portion of the economy, particularly in low and middle income countries. In countries such as Brazil, Ghana, Philippines and Paraguay, Schneider et al (2010) estimate that the informal economy represented almost 40% of the official economy (as measured by observable GDP) in 2007. In high income countries, the size of the informal economy is substantially lower; it is estimated to be only 8.4 % in the US and 12.2% in the UK in 2007.

But why does informality matter? From the point of view of revenue mobilization and efficiency, what matters most is non-compliance with the tax system (i.e. tax evasion). As highlighted in Kambur (2009) and Keen (2011), a focus on the rather vague "importance of informality" when discussing tax design in middle income countries fails to recognise the commonalities between the issues facing policy-makers in developing and developed countries. Hence, while it is true that the informal economy is larger in middle income countries, for our purposes, we can think of informality as increasing the potential for individuals to alter behaviour in order to avoid or evade tax.¹⁴ Many small traders (including street traders) and low-income self-employed may be informal but are likely to be liable for small amounts of taxes (or even none if their incomes/revenues are below tax thresholds). The revenue forgone from such informal activity is therefore likely to be relatively modest, and indeed, it may be best to tolerate non-compliance among such businesses and individuals given the magnitude of tax administration and compliance costs (Keen (2011)). On the other hand, the revenue implications of substantial tax evasion by higher income individuals, including professional workers, and by larger firms, including both domestic and multinational companies, that underpay taxes by either not reporting any of their income to the tax authorities (remaining unregistered), or reporting only part of their activities, are more significant. Each of these forms of tax-evasion poses different challenges and calls for different solutions in terms tax design and effective tax administration.¹⁵

¹⁴ *Although a large informal economy may also have longer-run dynamic implications; this can occur if it affects the growth of the economy, and hence, the growth of the tax base.*

¹⁵ *For further discussions, see Bird and Wallace (2004), IMF (2011) and Keen (2011).*

The interrelated factors that drive the size of the informal economy and the extent of non-compliance and tax evasion are complex, and may differ across different contexts. Various papers have identified the following key drivers: the design of the overall tax and benefit system and the effective burden of taxation and social security contributions,¹⁶ labour market regulations,¹⁷ the quality and quantity of public services and associated low tax morale,¹⁸ and institutional capacity and history.¹⁹

Poor administration and enforcement of tax systems, as well as high costs for taxpayers to comply with these systems, are key drivers of the high levels of tax evasion and non-compliance. The IMF argues that such administrative difficulties are often a "barrier to effective and fair taxation" and contribute to low tax morale, which acts to further undermine revenues by reducing taxpayer morale and 'voluntary compliance'. However, Daude and Melguizo (2010) suggest that in some Latin American countries poor taxpayer morale is related to perceptions that public services are of poor quality and are inefficiently (and even corruptly) managed. Thus improvements in the design of the tax system and tax administration are on their own unlikely to be enough to increase 'voluntary' tax compliance.

There is no agreed quantitative measure of the overall performance of tax administration and enforcement systems. However, a range of evidence does suggest that performance is less good in middle income countries than in high income countries. For instance, IMF (2010) cites statistics that suggest non-compliance with VAT costs "emerging economies" (which includes both middle income and post-Communist countries) an amount equivalent to around 25% of current VAT revenues, compared to around 14% of current VAT receipts in "advanced economies". High costs of complying with taxes (which may reflect overly cumbersome administrative procedures) are also evident. IMF (2011), for instance, finds that tax compliance takes firms almost 50% longer in developing countries than developed countries.

The IMF highlights a number of basic areas of tax administration that middle income countries still have particular difficulties with, including risk management, audit, collection enforcement, taxpayer services and dispute resolution. Under-resourcing, misallocation of resources across areas of tax administration and enforcement, and poor mid-level skills are also highlighted as problems.

Such limitations in administrative capacity are likely to have implications for the kind of tax policies middle income countries should pursue: both in terms of what kinds of

¹⁶ See, for instance, *Tanzi (1999), Bird (2008)*.

¹⁷ See, for instance, *Meghir et al (2012)*.

¹⁸ See, for example, *Daude and Melguizo (2010)*.

¹⁹ *Bird (2008), IMF (2011) and Keen (2011) provide a discussion about these issues.*

systems they can feasibly "manage", and because of the need to limit opportunities for evasion and avoidance. In effect, appropriately designed tax policy may ease the burden on hard-pressed tax administrations, freeing up resources for further investment in improving tax administration. It is our view that the basic principles set out in the Mirrlees Review are still relevant - and, in some cases, are perhaps even more relevant - in a context where the potential of moving into the informal economy gives additional scope for behavioural change and non-compliance, and where there is a need for the tax and benefits system to redistribute in order to ameliorate very high levels of inequality.

3. THE MIRRLEES REVIEW: GENERAL PRINCIPLES FOR A GOOD TAX SYSTEM

The *Mirrlees Review* set out to address the challenge of how to design a tax system that can raise the revenue that government needs to achieve its spending and distributional ambitions while minimizing economic and administrative inefficiency, keeping the system as simple and transparent as possible, and avoiding arbitrary tax differentiation across people and forms of economic activity.

An important benchmark for the review was the idea of a progressive, neutral tax system. Each of the three key words of that formula - "progressive," "neutral," and "system" - is important, and is suggestive of three of the key findings of the Review. First, policy makers need to think of the tax system as just that - a system. This implies that the way that different taxes fit together matters, as does being clear about the role of each tax within the system. Indeed, it is important to move beyond a consideration of just the tax system, and understand how taxes and benefits interact to meet the authorities' objectives. Second, redistribution plays a central role in the tax and benefit system, and the trade-off between redistribution and efficiency is at the centre of many debates about tax policy. The extent of redistribution will be determined by society's preferences and the impact of the system on efficiency. Third, neutrality is an important attribute. While neutrality is not always desirable, it is often valuable and will always be an important benchmark for assessing the tax system.

Whilst written specifically with the UK in mind, and more generally to be applicable to developed open economies, this basic benchmark can apply equally well to pretty much any tax system in just about any circumstances. It is a benchmark which is frequently ignored in practice and deviations from it can result in many of the complexities and problems that so many tax systems, including those in middle income countries, suffer from.

3.1. The System As a Whole

Thinking of the system as a whole has at least three important consequences. First, it implies that it is the overall effect of the system on, for example, redistribution or polluting activity that matters. Not every tax needs to be "greened" to tackle climate change as long as the system as a whole does so. And not all taxes need to be progressive as long as the overall system (including benefits) is. The specific lessons may vary according to the circumstances of the economy. The Mirrlees Review argues strongly that in the context of a country like the UK where the direct tax and benefit system can be fine tuned to achieve distributional objectives then it is on these that the system as whole should rely for achieving the desired degree of progressivity. It is inefficient in the UK context to use widespread VAT zero rating to achieve such objectives. Circumstances in middle income countries may differ where paying benefits at desired levels to all low income individuals may be difficult or where large fractions of the workforce are outside of the direct tax system.²⁰ In those circumstances using other parts of the system, such as the VAT, to achieve progressivity may be appropriate. Indeed, the current debate about whether to redistribute via VAT in middle income countries is a lively one (see section 4.2). But the general message stands: one should be clear that it is the system as a whole that matters, and the most effective means of achieving any given objective should be used (it is just that the most effective tool may differ across countries).

Second, thinking of the tax system as a whole should lead us always to consider how the different parts of the system work together. Too often policy on corporate taxes, personal income taxes and taxes on savings are designed almost in isolation. The result is inefficiency, complexity, and opportunities for avoidance. Take for example the taxation of small businesses, which include both self-employed sole traders, who in many countries are taxed as individuals under the personal income tax, and small incorporated firms, which are taxed as companies under the corporate income tax. If the tax treatment of the income derived from these activities differs substantially depending on the legal form in which they are conducted, the tax system is likely to have a significant impact on the ways in which small businesses are structured and on the incentives to convert labour income into capital income or vice versa in order to avoid tax payments.²¹ These misalignments have been prevalent in the UK over the last decade.

²⁰ For example, Galiani and Weinschelbaum (2012) show that rates of informality among salaried workers varies across Latin American countries and it could be as high as 70% in lower middle income countries such as Bolivia and Paraguay, almost 60% in Mexico, and 30% in Brazil. Informal salaried workers are defined as those employees for which the absence of social security contributions is registered in survey data for the years 2002-2004 (see Table 1). World Bank (2010), using the same definition for informal workers, show that the informality rate among non-agriculture employees was around 30% in Turkey in the year 2008.

²¹ For an extended argument about these issues see Chapter 19 in *Tax by Design* and section 4.3 of this paper.

One of the most prominent examples was the zero rate of corporation tax for low levels of taxable corporate profits in the tax years 2002-03 and 2003-04, which resulted in the widely predicted increase rate of incorporations during this period.²² This is important in any circumstances, but perhaps especially so where capacity for enforcement is limited. Another example is the double taxation of dividends, which in principle discourages investment. In Turkey, dividends were double-taxed until recently, under corporate and, once distributed, under personal income tax. In 2003, a reform to the income tax introduced a partial exemption, by which only 50 % of income from dividends received from a resident corporation should be included in the tax base, substantially reducing the disincentive to take income in the form of dividends (and hence the disincentive to incorporate).

Third, a good tax system should be structured to meet overall spending needs. Earmarking of revenues for particular purposes should be avoided. It is very difficult to justify linking spending on particular items to receipts from particular taxes. And earmarking of revenues that does not impose a binding constraint on spending is empty rhetoric - "an exercise in deceiving voters that their tax payments [control] government spending in a way which they simply will not ..." (Davis et al., 1993, pp. 64-65). Whilst such earmarking can often seem attractive in the short run, it can lead to complexity and loss of trust in the longer run.²³

3.2. Neutrality

A neutral tax system is one that treats similar activities in similar ways. For example, a system that taxes all consumption goods at the same rate would achieve neutrality over choices that people make about what to consume. A system that treats all income in the same way achieves neutrality over the choice of the form in which income is received. A system that taxes all forms of savings in the same way achieves neutrality over the form in which households save. A system that imposes the same present value of tax on consumption now and consumption in the future will be neutral with respect to the decision to save or consume out of current income.

A neutral tax system in general minimizes the welfare loss associated with distortions in household behaviour. In a non-neutral tax system, people and firms have an incentive to devote socially wasteful effort to reducing their tax payments by changing the form or substance of their activities. The tax systems in many middle income countries, like the tax system in the United Kingdom, are full of non-neutralities that are difficult to

²² See, for example, Crawford and Freeman (2010).

²³ See also Bird and Jun (2007) for a further discussion on different types of earmarking and the prevalence of this practice around the world.

justify and are likely to create welfare losses. They distort choices between debt and equity finance, between capital gains and other forms of capital income, between owner-occupied housing and other assets, between different forms of remuneration for work effort, between different forms of carbon emissions, and between different forms of business organization. These distortions create complexity, encourage avoidance, and add costs for both taxpayers and governments.

A tax system that treats similar economic activities in similar ways for tax purposes will tend to be simpler, avoid unjustifiable discrimination between people and economic activities, and help to minimize economic distortions. But a neutral tax system is not always distortion-minimizing: in some cases the efficient policy must discriminate between different activities. Important examples are taxes on alcohol and tobacco and on activities that damage the environment. In such cases, there is a compelling case that people left to their own devices will behave in ways that harm themselves and others. Moreover, there is ample evidence that the individual behaviours in question can be influenced by tax policy. Similar exceptions apply to pension saving and research and development (R&D), where society wishes to encourage behaviour that may have high social returns.

The key to good design is to be clear and careful about where deviations from neutrality should be allowed. Even where a theoretically compelling case can be made, the advantages of departing from neutrality must be weighed against the disadvantages of complicating the tax system. Defining and policing boundaries between differently taxed activities is fraught with difficulty: it increases administrative and compliance costs, and creates perverse incentives to label one kind of activity as another. One classic UK example is the case Procter and Gamble lost against the UK tax administration office (HMRC), in which the former argued that one of their products (Pringles) should not be considered a potato crisp (and therefore subject to tax) but instead a savoury cake or biscuit (and therefore zero-rated).²⁴ Investments tax incentives are a prevalent example of non-neutralities in middle income countries, although many countries have removed them recently.²⁵

In the context of middle income countries, where administrative and enforcement capabilities are weaker and the extent of corruption generally greater than in high income countries, the costs of deviating from neutrality may be especially high. For instance, differences in tax treatment across similar activities or across different forms of remuneration generates additional incentives and opportunities for tax-avoidance, which the tax authorities are less well able to police than in countries with more developed tax administration systems, or which require expensive anti-avoidance schemes which further complicate administration and compliance. Similarly, such countries may

²⁴ For more details please see <http://www.hmrc.gov.uk/briefs/vat/brief3209.htm>

²⁵ China and Mauritius are two recent examples as documented in IMF (2011).

find it particularly difficult to resist the rent-seeking behaviour by both private sector agents and civil servants and politicians once special treatment is given to one sector or activity. This suggests the hurdle for departing from neutrality should be high in such countries, requiring a strong and clear justification. The experience in most jurisdictions is that far too many non-neutralities are introduced far too easily and the cost of doing so - in terms of complexity, avoidance and loss of welfare - is high. However, in certain cases it may be more important for middle income countries to make use of relatively inelastic tax bases - for instance, because particular activities can be more effectively monitored and hence taxed by the tax authorities - even where this treats particular goods and services more harshly and others less harshly than the usual considerations of neutrality would dictate.²⁶ For example, a number of middle income countries impose special taxes on telecommunications services. This does not appear sensible on standard equity or efficiency grounds; even poorer households often have mobile phones nowadays, and it is hard to imagine there is a negative externality from the use of telecommunications. However, such a departure from neutrality may make sense if telecoms can be easily taxed with little scope for evasion or avoidance, which may not be the case for other goods (e.g. food, often subject to lower rates of tax). The importance of using neutrality as a benchmark remains in such circumstances though, providing the conceptual framework for understanding the costs and benefits of differential tax treatments.

3.3. Progressivity

Any desired degree of progressivity should be achieved as efficiently as possible. That would seem to be a statement of the obvious. But few tax and benefits systems meet this obvious standard. In the UK one of the biggest problems arises from the failure, already remarked upon, of policymakers to consider the system as a whole. They try to use consumption taxes and capital taxes to achieve redistribution when the same degree of redistribution could be achieved more efficiently by other means - in particular, using the direct tax and benefits system. As discussed above, constraints on the use of direct taxes and benefits may reduce the strength of this conclusion in middle income countries, but the costs of using other routes to redistribution need to be assessed.

Designing a system which achieves redistribution efficiently requires a rich and detailed understanding of the shape of the income distribution and the ways in which people are likely to respond to taxes. The effects of taxes and benefits on people's decisions over both whether to work (including when to retire) and how much to work matter enormously, as do other responses such as tax avoidance and migration. Looking both

²⁶ *In other words, differential ability to effectively tax different goods and services may lead to different "elasticities of taxable demand" with respect to price, thereby leading to Ramsey-style arguments for higher tax rates on goods that have inelastic taxable demand, and vice versa.*

across time and across countries the evidence that the design of tax and benefits systems affects these choices, and that those effects are big, is overwhelming. The economic costs of getting the design wrong are substantial: work is discouraged more than necessary and people engage in costly avoidance, making the trade-off between equity and efficiency much starker than necessary. Unfortunately, as we discuss in Section 5, evidence on the scale and scope of behavioural responses to taxation, how such responses vary across the population and across individuals' lifecycles and, hence, the impact of tax design on economic outcomes, is scarcer for middle income countries.

The costs of imposing high tax rates are likely to be most substantial where people are most responsive to incentives. For example, in the UK and in many other countries, mothers of school-age children and people around retirement age are particularly responsive to work incentives. They should, therefore, all else equal, face lower effective tax rates than others. In many countries the issue of incentives for people around retirement age is especially pressing and the costs of mass early withdrawal from the labour market in response to incentives created by the tax and benefit system are very big. In countries with younger age profiles another pressing issue might be getting incentives for mothers with school age children right.

3.4. Further Principles For Tax Design

Of course, there are other generally desirable features of a tax system, and the Review in particular discusses the roles of simplicity, stability, and transparency. Simplicity - to the extent that such a concept can sensibly be applied to something as complex and unwieldy as a modern tax system - is in any case likely to be closely related to the idea of neutrality. For instance, with the reduction in opportunities to avoid tax a more neutral system implies, many of the complex rules designed to prevent tax avoidance could be simplified or even scrapped. Simplicity may be even more important in middle income countries with lower tax administration capacity. IMF (2011) reports that revenue administrations in middle income economies are often under-resourced and lack technical and managerial skills. Relatively weak skills among the civil society and tax policy units, critical to understand the complexities of tax and benefits systems, are also a reason to advocate a system as simple as possible, both in terms of design and implementation.

Aiming for stability is important because tax systems that are continually changing will impose greater compliance and administration costs. Stability is likely to be especially important in the context of the taxation of savings and investments; the uncertainty generated by a lack of stability can impact negatively on decisions to invest and save, reducing the capital stock, and potentially lowering the long-run level of growth and output. However, an aim for stability should not lead to permanent inaction: there are very substantial costs of keeping in a poorly designed system in place. But the desirability

of stability does imply that, where possible, tax policy is made with a clear and communicated long-term strategy for change rather than a series of disjointed and often incompatible ad-hoc reforms.

Finally, the *Review* argues that in the long-run, implementation of sensible reforms is likely to be aided by transparency in the objectives and consequences of tax proposals. Lack of transparency can, through its negative effects on accountability, lead to poor policy making and even corruption, which is likely to lead eventually to a lack of legitimacy of the state, and hence fuel non-compliance with the tax system. This may be particularly problematic in the context of already poor tax morale and weak administration and enforcement regimes.

While such issues are clearly important in the design of tax policy, it is worthwhile examining the implications of the main principles set out in the *Mirrlees Review*. As we see in the next section, it turns out the concept of a progressive, neutral tax system is a powerful one which translates into a more specific set of recommendations for a number of areas of taxation, which are relevant - at least as benchmarks - to middle income as well as high income countries.

4. IMPLICATIONS FOR SPECIFIC DIMENSIONS OF TAXATION

We now discuss the implications of the principles outlined in the previous section for three major areas of taxation. In doing this, it is important to bear in mind that the detailed tax design (and the reforms required to get there) that would best fit one particular middle income country would not necessarily apply elsewhere; despite similarities, as we showed earlier, middle income countries are a diverse group. Differences in economic structure, administrative capacity and political institutions affect the range of tax policy options that can feasibly be implemented in particular countries, and, the tax system currently in place plays a key role in determining the direction of future reforms. In other words, to be able to provide detailed advice as to what type of reforms should be introduced in particular countries, a careful consideration of the existing tax system and economic and institutional environment is vital. Nevertheless, the principles set out in the *Mirrlees Review* together with the issues common to nearly all middle income countries (albeit to a greater or lesser extent) - such as difficulties in administering and enforcing tax systems and high levels of non-compliance - do provide a useful set of guidelines for the design of particular areas of taxation. Section 4.1 examines specific issues related to direct taxes on labour and capital income. Section 4.2 examines issues related specifically to indirect taxes, focusing on the design of value added tax (VAT). Finally, section 4.3 discusses the rationale for a corporate

income tax, before discussing how the tax base could be redefined to make the tax less distortionary, issues related to its design in the context of increasing globalisation and the importance of multinational firms, and briefly, key issues in the taxation of small businesses.

4.1. Direct Taxation

Alongside the benefit and social security system, the taxation of income is the part of the system most amenable for use in redistributing resources from richer to poorer households, and over individuals' lifetimes. But, as section 2 showed, the personal income tax and social security contributions - which to the extent they are not actuarially-fairly linked to subsequent benefits represent an additional tax on earned income - contribute to a significantly lower proportion of total government revenues in middle income countries than in high income countries. Thus, as middle income countries seek to raise more revenues to pay for public spending, it is an area from which it would seem natural to seek to raise more. However, the current structure of direct taxes in many such countries may be far from optimal, and, indeed, may contribute to compliance problems and low yields. What lessons can be learned from the Mirrlees Review and the wider literature on taxation in developing countries?

First, it is important to draw a distinction between two classes of income: earned income and capital income. A properly functioning system of income taxation must deal appropriately with both, but the issues involved (if not the underlying principles) differ.

4.1.1. General Principles Of Direct Taxation And The Taxation Of Earned Income

The principle of a progressive, neutral tax system has a number of important implications for the taxation of earned income.

First, different forms of remuneration should be, as far as possible, subject to the same effective rates of tax to limit opportunities for avoidance and in order to not distort compensation form. Hence, for instance, the (partial) exemptions for certain types of remuneration (such as overtime pay, holiday pay and Christmas bonuses) that operate in Mexico and a number of other countries represent a complication of the tax system with little apparent benefit and real costs in terms of complexity, distorted behaviour and revenue losses. In a similar manner, deductions for particular types of spending such as mortgage interest, health insurance, private education, etc, should be avoided: they distort important markets - such as the housing market - and can be regressive, benefiting the rich more than the poor.

There are particular issues related to the taxation of income derived from self-employment and small businesses which we discuss in Section 4.3. Here it suffices to say that a key aim should be to align effective tax rates on employees, the self-employed and owner-employers of small businesses to avoid distorting decisions over the legal form of employment. Lower tax rates on income from self-employment or small incorporated businesses to encourage 'entrepreneurship' or investment in small businesses, which may seem attractive, are instead, poorly targeted (investment allowances or other more direct methods are likely to be better), and increase horizontal inequities and significant opportunities for tax avoidance.

Second, it is important to realise that income tax on earned income is not the only part of the tax-benefit system that affects incentives to work, to alter how one is paid, or to misreport or not report earnings (i.e. avoid or evade taxes). Benefits, social security contributions, and even indirect taxes on consumption all discourage work (the latter, by reducing the real wage by raising prices), and the first two may be expected to have similar effects to income taxes on the incentives to correctly declare income; at least to the extent that social security contributions are considered taxes as opposed to genuinely valued social insurance contributions. Similarly, one should generally consider the combined effective tax rates from the different parts of the systems when setting the tax rates on different forms of activity or remuneration: even if they are subject to the same rate of income tax, different treatment by the benefits or social security contribution systems may still give rise to distortions in behaviour.

Third, along with the benefits system, direct taxes are the part of the tax system generally most amenable for use in "vertical redistribution" (that is from those with high income to those with low income), through the use of tax-free allowances and increasing marginal tax rates. Preferences for redistribution, the shape of the income distribution, and the size of behavioural responses to taxation interact to determine the suitability of particular tax rate schedules. In particular, there is a trade-off between redistributing to meet equity goals and ensuring sufficient incentives exist to earn and declare income (sometimes called the equity-efficiency trade-off).

The extent to which people respond to higher tax rates by working less and avoiding and evading tax can be measured by estimating the elasticity of taxable income with respect to the tax rate. A significant literature now exists for this in developed economies (see Saez, Slemrod and Giertz (2012) for a critical review of this), but few estimates exist for middle income countries. To the extent that complex tax systems, weak enforcement and significant scope for informal economic activity make avoiding and evading tax easier, one might expect taxable income elasticities to be higher in middle income countries than more developed economies, which would imply lower optimal tax rates.

As we discuss more in section 5, understanding how such responses vary across the population and across the lifecycle is an important area for future research.

Whilst our archetypal view of tax evasion in middle income countries may be the informal trader or street hawker, of much more importance for revenues is evasion (and indeed avoidance) further up the income distribution. Keen (2011), for instance, highlights the widespread evasion of tax by professionals such as doctors, lawyers, and architects, as well as the use of pervasive loop-holes and avoidance opportunities by high income individuals. While tackling such abuses inevitably means a focus on enforcement, auditing and the fostering of a culture of tax compliance, the role of tax design should not be overlooked. Understanding the effect of existing tax rate structures, allowances and deductions, and the possible impacts of changes in these, on tax compliance among high income groups is key to improving the efficiency with which income taxes raise revenue. A simpler, more neutral system of income tax (and indeed, indirect and business tax as we see in subsequent sections) would remove opportunities for avoidance, and by potentially allowing lower marginal rates, could reduce the incentive to avoid or evade tax. It could also free up administrative resources for use in tackling remaining evasion and avoidance. However, as noted in much of the literature (Bird and Zolt (2008), Enste (2010), Schneider et al (2010)), many non-tax factors encourage individuals and firms to conduct at least part of their activities "informally", and improving tax design and administration is only part of the solution.

Large-scale income tax evasion and avoidance under the nominally progressive rate schedules that exist in most middle income countries mean that, in practise, the degree of redistribution achieved is relatively limited (Bird and Zolt (2008)).²⁷ The greater potential to evade and avoid tax also means that the increases in marginal rates as income rises are likely to be more distortionary (and raise less revenue) than in more advanced economies. This has led some to advocate having a single and relatively low rate of income tax with few exemptions and deductions (sometimes called a "flat tax"). In a context of high income inequality (which characterises many middle income countries), such a tax, if complied with, combined with well-targeted (or even universal) benefits and public services can be highly redistributive (Atkinson (1997), Scott (2012)).

Of course, a key question is whether having a single rate of tax would significantly increase compliance and/or boost economic activity. Existing tax systems are too complex and create too many opportunities for avoidance; this is likely to act to push up statutory

²⁷ *Spending on cash transfers - such as the increasingly popular conditional cash transfers - and public services is typically much more important for redistribution in middle, as well as high income countries. Additionally, Bird and Zolt (2008) point out wide scale evasion means that personal income taxes in middle income countries can be characterised as a tax paid by the employees of the civil service and large formal sector firms via withholding.*

marginal rates, exacerbating incentives to avoid and evade taxes, thus causing more distortions. However, the fact that the marginal rate of tax is not constant is only a minor part of this 'complexity'; the real damage is caused by the non-neutrality of treating different forms of savings and remuneration differently, and the complex rules designed to discourage the resulting evasion. These can be tackled without resorting to a flat rate of income tax (although having a single rate may aid certain aspects of administration, such as extending the use of withholding taxes (Bird and Zolt (2008))). The empirical literature on the impact of single-rate income taxes provides mixed evidence as to their effectiveness in increasing tax yields. Two papers (Ivanova et al (2005) and Gorodnichenko et al (2009)) examine the impact of Russia's move to a flat income tax and find little evidence that the lower rate increased gross incomes but that there was a significant increase in compliance (i.e. a reduction in evasion). Gorodnichenko et al (2009) provides some tentative evidence that this was due to the changes in the tax structure as opposed to contemporaneous changes in enforcement activities (by comparing people just above and just below previous rate boundaries), but it remains unclear whether having a single rate (as opposed to a broader base and lower rates) was important. Hence, it is unclear whether moves to a flat rate of income tax would be beneficial.²⁸ What is clear, however, is that more rational income tax systems are useful in tackling evasion and avoidance, and thereby improving the efficiency with which revenues can be raised and redistributed.

4.1.2. The taxation of capital income

A full discussion of all the issues involved in the taxation of wealth and capital income can be found in the Mirrlees Review: here, instead we discuss some of the main issues only.²⁹ It turns out that the principle of neutrality plays a particularly important role in thinking about how capital income should be taxed. This is because capital income is, at least in part, a return forgoing consumption in the past in order to allow one to consume more today or in the future (i.e. it reflects the fact one has saved some of one's income in an earlier period). Because people generally have a preference to consume now rather than later, some reward (termed interest) is required to encourage people to save. Taxing capital income on the same basis as earned income would therefore distort when over their lifetime people choose to spend their income, violating the principle of inter-temporal neutrality, and reducing households' welfare. This leads the Mirrlees Review to broadly recommend exempting the normal return to saving, which among other things, in practise, might involve exempting the interest on current and cash savings accounts from tax.

²⁸ *Perceived legitimacy of a tax design may be important here. For instance, a significant majority of Turks state that they prefer a mildly progressive rate schedule to a flat rate income tax (Zenginobuz (2012)).*

²⁹ *Chapters 13 to 15 of Tax by Design discuss these issues in much greater detail.*

A number of middle income countries such as Mexico and Turkey provide tax exemptions for such accounts (albeit subject to limits in the latter case) and, in the longer term at least, further moves in this direction would probably be sensible. However, it is important to note that the Mirrlees Review does recognise a number of reasons why one might want to tax the normal return to saving, but comes to the conclusion that they are probably not strong enough, at least for developed economies, to move away from neutrality. Whether this is the case in the context of middle income countries is something that warrants further research.

The principle of neutrality also implies that one must not go too far in exempting capital income from taxation. To the extent that individuals are able to earn returns that exceed the normal returns to savings, exempting capital income from taxation would allow skilled or lucky investors to earn unlimited rewards without being taxed. This seems inequitable and provides very strong incentives and opportunities for individuals to avoid tax by disguising earned income as capital income. For instance, consider an owner-employee of a business. If capital income is exempt from taxation, rather than being paid via (taxable) wages, they would choose to be paid in dividends or hold income in the company and take them as capital gains. Hence full exemption of capital income would both reduce tax revenues and distort decisions about remuneration form and, indeed, organisation form and structure (see the discussion on the taxation of small businesses in section 4.3).

The *Mirrlees Review* recommends the introduction of a "rate of return allowance" (RRA) for risky assets and others with the potential for earning an excess super-normal return. That is, exempting from taxation a return equivalent to the risk-free rate of interest (perhaps measured by the rate of interest on medium-maturity government bonds), with taxation at the same marginal rate as labour earnings of any returns above this, and loss-offsets for any returns below this. This would exempt the normal return from taxation (thereby maintaining incentives to invest), whilst ensuring excess returns are fully taxed, and removing the incentive to convert income from labour income to capital income. It also allows income and capital gains to be treated in the same way, removing another non-neutrality that presently facilitates tax avoidance.

The *Review* concludes that operating such a system could "simplify the [UK's] capital tax system as a whole, by reducing opportunities for avoidance, and hence reducing the plethora of concomitant laws and regulations designed to minimise avoidance". However in other respects it could be more complex, and this could present particular difficulties for middle income countries attempting to implement such a system. First, is the issue of setting the rate of return allowance: the Review recommends basing this on the rate of interest on medium-duration government bonds, but is this appropriate

in a context where such yields may be more volatile or reflect perceived risk of holding such debt? Second, it would require the keeping of additional records compared to a standard income-tax treatment (although not necessarily a capital gains tax treatment).³⁰ In order to minimise administration and compliance demands for those with small risky asset holdings, the RRA system could be combined with small-scale tax exemptions for small-scale holdings. Finally, is the issue of refunds or offsets when returns are less than the RRA. In principle this is similar to the case where refunds or offsets are provided for outright losses. However, the probability of a return of less than the RRA will be greater than the probability of an outright loss, meaning many more refunds and offsets would be generated, and dealing with this would likely be especially challenging for tax authorities in developing countries.

The scope for real improvements in the taxation of capital income (removing avoidance opportunities, encouraging investment and fully taxing excess returns) means further research on whether a system of RRAs is implementable in the context of middle income countries would be useful. A number of recent papers (Alm and Wallace (2005), Bird (2009)) have argued that attempts to implement income taxes with combined rate structures for different sources of income (e.g. capital, self-employment, employment) is counter-productive in developing countries, and suggest that a move to a scheduler approach (where different tax bases are taxed at different rates) similar to the dual income tax operating in countries like Sweden may be more appropriate. The argument is one of practicality as opposed to principle, however: such an approach could be designed to rely more on withholding - e.g. via banks -, limiting the scope for tax evasion. The successful use of withholding does rely on people making use of "onshore" banks: Gordon and Li suggest that, in fact, many individuals and firms in developing countries avoid the use of financial intermediaries in order to evade taxes, making withholding via such institutions of limited use.

Lastly, a simple but key recommendation: taxing capital gains in a manner equivalent to capital income is vital to prevent significant avoidance and distortion of assets. A number of countries still do not tax capital gains, and those that do often favour certain types of assets or longer periods of holding. Such features are distortionary and often fail to meet the rationale for their existing (for instance "promoting long term investment") and should be avoided.

³⁰ *The issue of how capital gains should be treated by the tax system is dealt with extensively in the Mirrlees Review. In general, the answer is that they should be treated, as far as possible, in the same way as capital income. Many middle income countries (e.g. Brazil, Mexico, and Turkey) now tax capital gains, sometimes through income tax rather than via a separate tax.*

4.1.3. Summary

As an area of taxation that middle income countries currently raise little from, and that often generates a number of distortions (between different forms of remuneration, or between capital and labour income), the direct taxation of income is part of the system that is often ripe for reform in middle income countries (as it is in many high income countries). Particular focus should be paid to simplifying the tax code, removing exemptions and deductions, and differences in effective tax rates that distort behaviour and provide avoidance opportunities, whilst costing significant revenues.

The extent to which the direct tax system should be used to redistribute is, to a significant extent, a question of societal preferences about the level of inequality. But it also depends on the structure of the income distribution and the responsiveness of individuals, particularly at the top of the income distribution to tax levels. It does seem clear that the direct tax system is a more appropriate tool for redistribution than the indirect taxation system, to which we now turn.

4.2. Indirect Taxation

Since the 1980s, increasing numbers of lower and middle income countries have adopted value added tax (VAT), making it the most common form of consumption tax in the World. Having generally adopted VAT later than the developed economies of Western Europe, many lower and middle countries have avoided having a large number of different VAT rates, leading to a simpler, and potentially more efficient VAT system (notable exceptions include Brazil, Colombia and a number of countries in the Middle East and North Africa) (Ebrill et al (2001)). Together with other taxes on consumption, such as duties on alcohol and tobacco, VAT has become increasingly important in the revenue mix of middle income countries in recent decades.

4.2.1. The basic functioning and advantages of VAT

VAT, in principle, and generally, in practise, has a number of attractive features compared to the taxes it has often replaced (such as 'turnover taxes' or 'sales taxes'). These relate to the way the tax is designed to be collected. VAT taxes all sales, whether wholesale or retail, but allows registered traders to deduct the tax charged on the input goods and services they purchased. It is therefore a tax on the value added at each stage of the production process. Since the price of the final product sold to consumers is the total of the value added at each stage of the production process, the amount of VAT paid depends on the price of the final product and the VAT rate charged on that product. Consequently, the tax is in effect imposed on the value of the final product but is

collected in small chunks from each link in the supply chain. And because registered traders can reclaim any VAT paid on goods they use in their production process or sell on, VAT only taxes final consumption, This satisfies a key principle of optimal taxation that intermediate inputs purchased by traders as part of the production process should be untaxed (Diamond and Mirrlees (1971)): doing this means that traders' production decisions (e.g. whether to purchase an input or produce it themselves) are undistorted, allowing them to choose what is most efficient.

VAT thus operates at all stages of production via a chain of tax payments and offsetting credits (except in sales to final consumers). All else equal, this feature of VAT may be expected to increase compliance and administration costs; for instance, unlike a standard sales tax, the VAT system involves all sales as opposed to just those to final consumers, dragging more firms and more transactions in to the system. However, the VAT chain may help improve tax compliance, reduce the incentive for informality, and facilitate the collection of data and monitoring of businesses by the tax authorities.

First, most simply, when compared to a sales tax system, the incentive to evade VAT is lessened: because the system allows one to reclaim the VAT paid on inputs, evasion leads to a gain equal to the VAT paid on the value added in that stage of production only. Second, under a sales tax system, sellers are required to establish whether their customers will use their products for business or consumption and only tax the latter. But because there is little incentive for sellers to draw the distinction correctly, simple errors and purposeful misclassification may be result in significant losses of revenue. In contrast, VAT requires buyers to establish that they have used their purchases for business use, and since only registered traders can deduct VAT, misclassification of purchases actually used for consumption would normally require people to register for VAT and commit outright fraud (which, perhaps, they may be less willing to do).

In addition, in order to claim a deduction for input VAT, firms require an output VAT invoice from their supplier. This gives an incentive for purchasers to encourage compliance by their suppliers, and the symmetric invoices provide a useful audit trail for the tax authorities, allowing them to check deductions have a corresponding payment .Two recent papers examine the implications of this for middle and lower income countries. Ahmad and Best (2012) argues that in areas where tax evasion is high and administration weak, the information generated by the VAT chain can be used to improve tax administration, and, indeed, increase the revenues obtained from other taxes such as the corporate income tax. De Paula and Scheinkman (2010) examines how VAT chains affect the incentives of firms to be in the formal or informal sectors. They find (theoretically and empirically) that in sectors subject to the credit system of VAT whereby firms pay VAT on the sales and reclaim VAT on their inputs, formal firms are more likely to purchase from and supply to other formal firms, whilst informal firms are more likely

to transact with other informal firms. In sectors not subject to such a regime, such patterns are not found. There are two main implications of this. First, that higher tolerance for informal firms in one production stage increases tax avoidance in upstream and downstream sectors, hampering enforcement efforts, suggesting that tax authorities should pay attention to tax compliance across production stages (and not just the final or initial stage). Second that the VAT credit system can help spread compliance and formality once enough firms are already complying, but that it can also spread non-compliance and informality when compliance is particularly weak to start with. Of course, in such circumstances, compliance with a sales tax is also likely to be poor.

Taken together, these arguments suggest that, despite taking a more roundabout route to taxing final consumption than a sales tax, VAT is more likely to achieve this goal with minimal evasion and revenue loss (Mirrlees et al (2011)). And like all well-designed consumption taxes, economic theory suggests that a well-designed VAT is also likely to be a more efficient tax for raising revenue than personal or corporate income taxes, raising the level of GDP; empirical work finds some support for this proposition (IFS et al 2011). Thus, the key question is not "should countries have a VAT?", but "how should VAT be structured?".

Bird and Gendron's (2007) book on VAT in developing and transition economies concludes that the principles of VAT design set out in a series of IMF studies (including Ebrill et al (2001)), and subsequently advocated in the Mirrlees Review, are a good starting point when thinking about VAT in such economies. This "conventional wisdom" on VAT design argues that, as far as possible, variation in VAT rates across goods and exemptions of particular sectors should be avoided. This is because a VAT applied uniformly to all goods and services is neutral: both firms' production decisions and consumers' decisions about which goods and services to buy are undistorted.

4.2.2 VAT rate differentiation

Having multiple rates of VAT is a departure from the principle of neutrality: different goods and services are subject to different tax rates, therefore distorting people's behaviour over what goods and services to buy. In general, it will also tend to increased costs in administering and complying with the VAT system. For instance, Ebrill et al (2001) argues that having multiple rates of VAT complicates the accounting, invoicing and tax-filing requirements of businesses, makes auditing of VAT returns more difficult, and leads to more outright "refunds" (where the input VAT deducted exceeds the output VAT charged), which are particularly prone to fraud. It can also lead to costly litigation and enforcement difficulties around boundaries between goods subject to different rates of VAT. Furthermore, the presence of reduced rates for some goods may lead to lobbying for the extension of such preferential treatment to other goods (the "me too" effect), potentially resulting in a proliferation of reduced rates that severely limits the ability of VAT to raise revenues.

As we discussed previously, there may be good reasons for departing from neutrality in certain circumstances. One such reason could be that, in principle, applying a lower rate of VAT to goods that are complements to work, and a higher rate of VAT to those that are complements to leisure could help reduce the disincentives to work that taxation more generally causes. This would allow one to raise revenues and redistribute more effectively. The Mirrlees Review comes to the conclusion that the gains from such variation in general are limited, however, and probably only worthwhile in a few instances (e.g. childcare), given the additional administration and compliance costs and increased potential for non-compliance. The implications for middle income countries are not immediately obvious, however: the costs of differentiation are likely to be higher in middle income countries than in more economically developed countries, but it is not clear whether the benefits would be larger or smaller.

The presence of large informal sectors is one thing that would suggest that the benefits of VAT rate differentiation could be higher in middle income countries. If the extent to which taxes can be evaded by supplying/purchasing informally varies between different goods and services, revenue could be raised more efficiently by applying high tax rates to goods in which it is hard to shift to informal production, and low tax rates to goods for which such shifts are relatively easy. As mentioned in section 3, this may provide some justification for high tax rates on things such as telecommunications or imported goods (for which records are more likely to exist) and low tax rates on things such as food or locally-supplied services.

Perhaps the most common reason used to justify reduced rates of VAT, especially on food, and to a lesser extent fuels for domestic heating and power, is a desire to redistribute. Applying reduced rates of VAT to goods that are a larger fraction of total spending for poorer households than richer ones (such as food) acts to make VAT more progressive than it would be if charged at a uniform rate on all goods and services.³¹ However, this does not provide sufficient justification for reduced rates on distributional grounds. What ultimately matters is not whether the VAT system operates in a way that redistributes from rich to poor, but the extent to which the tax and benefit system as a whole redistributes from rich to poor. If the Government can adjust the rates and structures of the direct tax and benefits systems (which do not distort spending patterns in the same way that VAT rate differentiation does) to redistribute between the rich and

³¹ *Indeed, current VAT systems with reduced or zero rates, or in some circumstances, exemptions, for many foodstuffs and other necessities are usually somewhat progressive as opposed to regressive as is often claimed. This can be seen by considering how the proportion of expenditure that is accounted for by VAT varies across the income and expenditure distributions. The view that existing VATs are regressive seems to have arisen by examining the amount of VAT paid as a proportion of current income which, as explained in IFS et al (2011) and Abramovsky et al (2012), is not a very meaningful and a potentially misleading way of considering the distributional effects of VAT.*

the poor such measures would be able to redistribute more efficiently. The capacity of advanced economies to design and manage direct tax and benefit systems that can reasonably accurately target financial support at particular groups of people leads the Mirrlees Review to argue that redistribution is a poor reason for VAT rate differentiation in such countries.

The less well developed direct tax and benefit systems in most middle income countries means that the case for using VAT rate differentiation in order to redistribute does appear somewhat stronger: reducing the price of goods which poor households disproportionately consume may be the only way to help such households. This leads some experts to continue recommending zero or reduced rates on items that are disproportionately consumed by poorer households.³² However, in the context of expanding welfare programmes and especially the growth of conditional cash transfers for families with children and means-tested support for older people, the capacity of middle income countries to implement redistribution via methods other than indirect tax is clearly improving. Indeed several recent papers (Anton et al. Levy (2012a,b) and Ahmad and Best (2012)) focused on the design of tax systems in countries with significant levels of informal economic activity (i.e. middle income countries) argue that VAT rate differentiation does a poor job of redistributing to poorer households but does involve the loss of significant revenues, generates incentives for rent-seeking, and makes administering the tax system and collecting revenues more difficult. They argue instead for a uniform VAT, with redistribution instead carried out via a progressive income tax and an improved benefit and social insurance system funded, in part, by the additional VAT revenues. Their models suggest this would reduce incentives for informal employment, increasing compliance with the tax system, further bolstering revenues.³³

Another seemingly appealing strategy is to apply higher (lower) VAT rates to discourage (encourage) a good that is deemed to have negative (positive) externalities. However, the structure of VAT is not conducive to tackling externalities (IFS et al (2011)). There are at least two reasons for this.

First, a reduced rate of VAT provides a bigger subsidy to higher priced versions of the good to which the rate is applied. A reduced rate of VAT is therefore likely to be a well designed subsidy for a good where the social benefit of its consumption or

³² Bird and Gendron (2007), Bird (2008) and Bird and Zolt (2008) provide examples of such reasoning.

³³ Ahmad and Best (2012) conclude that "Bismarkian benefits targeted to formal sector workers and basic benefits targeted to low income households represent the least distortionary way to redistribute[...] that a uniform value added tax and a corporate income tax represent the least distortionary way to raise revenues." A fuller discussion of this paper and the work of Levy and co-authors can be found in section 5 when we discuss the need for more research on how to design tax and social security systems that take into account the interrelation between redistribution between individuals and redistribution and insurance across individuals' lifecycles.

production is strongly positively correlated to its price. However, in many cases the social benefit from using a high priced version may be no greater (and may even be smaller) than a low priced version. For instance, many countries have a reduced rate on public transport (such as trains and buses). Whilst reduced rates on peak time travel may be justifiable on the grounds of complementarity with work, they actually apply to travel at all times and therefore also subsidise leisure travel. A clearer rationale for the policy may therefore be environmental: by reducing prices for public transport, road congestion and pollution from private motor vehicles is reduced. However, a reduced rate of VAT provides a bigger subsidy to travelling in luxury as opposed to standard public transport, whilst the environmental benefit of using luxury public transport is unlikely to be larger than that from using standard public transport (indeed it may be smaller if part of the luxury is additional space which reduces the capacity of the public transport vehicle). Similarly it is not clear that it makes sense to provide a bigger subsidy for more expensive hard-back books than paper-back books (or to subsidise more expensive new popular literature than cheaper literary classics).

A second issue is that most businesses are able to reclaim VAT on inputs. This means a reduced or zero rate of VAT on the good does not reduce the price paid by VAT-registered businesses and therefore does not provide an incentive for businesses to use more of it. For instance, a reduced rate of VAT on public transport would not incentivise business to switch from private transport to public transport, whilst business use of public transport is likely to be just as beneficial in reducing pollution and congestion as use by final consumers.

With these issues in mind, it seems unlikely that using reduced rates of VAT on things like books, sporting or cultural performances, public transport and environmentally-friendly goods is a particularly good way of boosting literacy, promoting culture or helping the environment. However, as with the arguments against using VAT rate differentiation for redistribution, one must also examine whether alternative, better targeted mechanisms exist for these purposes. Middle income countries may face greater difficulties in designing and operating such specific subsidy schemes, but are also likely to face additional difficulties in coping with the compliance, corruption and lobbying pressures resulting from VAT rate differentiation; whether there is a stronger rationale for lower rates of VAT in middle income countries is therefore unclear. It is also worth noting that the problem of boundaries and the susceptibility of VAT rate differentiation to political lobbying would also affect other forms of support such as direct targeted subsidies. However, such direct subsidies may be more transparent than a reduction in the rate of VAT (Copenhagen Economics (2007)), which may not be recognised as the subsidy it actually is. This may mean that the political hurdle necessary for the extension of subsidies is greater than that for VAT reductions, meaning less scope for the proliferation of subsidies over time.

4.2.3. VAT exemptions

If the use of other instruments to redistribute or promote socially desirable consumption is felt to be infeasible, or governments feel the application of a standard rate of VAT to all goods is politically unachievable³⁴, application of reduced or even zero rates is generally preferable to exempting goods from VAT. Exemption is anathema to the logic of VAT: as with zero-rating, firms producing exempt products do not charge VAT on sales, but in addition they cannot reclaim VAT on purchased intermediate inputs. As many firms produce and sell both exempt and non-exempt goods, the need to allocate input VAT between non-exempt and exempt outputs (credit being available for the former but not the latter) can create substantial additional administration and compliance burdens, as well as increasing opportunities for tax avoidance. Such issues are likely to be especially pertinent for middle income countries given the challenges they face in monitoring firms and administering the tax system (Bird and Gendron (2007)).

More fundamentally, because firms producing exempt goods cannot reclaim input VAT, exemptions violate the key principle of tax design that intermediate inputs to production should not be taxed. Exemptions therefore creates many non-neutralities,, leading to distortions in production behaviour. Exemption creates an incentive to 'self-supply' or 'vertically integrate'-that is, it encourages firms producing VAT-exempt outputs to undertake as many links of the supply chain as they can themselves to ensure that value added at intermediate stages is not taxed. So, for example, firms whose outputs are VAT-exempt have a strong incentive to supply their own security services, technical support, cleaning services etc rather than contract them out and face irrecoverable VAT bills. It also creates distortions in competition between exempt firms and non-exempt firms - favouring exempt over non-exempt firms when selling to consumers, and favouring non-exempt over exempt firms when selling to other traders. Exemption can even raise the prices final consumers pay for final products. For instance, consider the case where basic foodstuffs (such as wheat flour or rice) are exempted but that processed foods (such as biscuits, cakes or sandwiches) are subject to VAT. The firm producing the processed food cannot reclaim the input VAT built in to the price of the basic foods, and has to charge VAT on the full sale price: this makes processed foods cost more than if basic foods were subject to the standard rate of VAT.

However, it would probably be unwise for middle income countries to rush to remove all exemptions, even though a significant reduction in their use is an important longer-term policy aim. First, Bird and Gendron (2007) argue that middle income countries

³⁴ *The recent failure of Mexico to pass legislation that would have introduced a 2% consumption tax on all goods and services - including those such as food currently subject to a 0% rate under the existing VAT - shows even modest broadening of the VAT base can be difficult.*

would be best served by focusing on general improvements to VAT administration and structure than attempting to remove VAT exemptions from areas like financial services and the public sector (the reason exemptions exist in these areas in the first place is that it is difficult to apply VAT to activities where there is often not an obvious 'sale' or 'price'). While such initiatives would be useful in developed economies, in middle income countries they would divert scarce administrative capacity away from more pressing difficulties. Second, applying an exemption to goods that one wishes to be less impacted by VAT avoids the problem of refunding VAT that can occur when a reduced or zero rate is applied instead. If, for instance, food were zero-rated, retailers of food would not charge VAT on their sales but could reclaim VAT on their inputs (for instance, the goods and services needed to run the store): the government would therefore need to refund food retailers. By definition, such refunds would not occur under an exemption regime. VAT refunds raise administration and compliance costs and create significant opportunities for fraud even in developed economies. Weaker tax regimes in most middle income countries suggest such problems are likely to be even greater. This means when shifting from exemptions to zero or reduced rates, governments should ensure that the processes for dealing with refunds are as robust as possible. Harrison and Krelove (2005) discuss best practise for managing VAT refunds, having examined the experience of developed and developing countries.

One form of exemption that makes sense, even in the long run, is for traders with low turnovers. Most countries operate a turnover registration threshold: traders with turnovers below this level do not need to register for VAT (and sometimes cannot register). The rationale for this is that the substantial costs of ascertaining VAT liabilities, record-keeping, are to some extent fixed-costs rather than proportional to turnover, and hence are particularly relevant for small businesses. In other words the revenues obtained are likely to be outweighed by the costs of administering and complying with the VAT system. Harrison and Krelove (2005) recommend setting a relatively high threshold when administrative capacity is weak; the number of VAT payers is kept manageable whilst revenue losses should be fairly small. Bird and Gendron (2007) also come to similar conclusions and argue that "it is wiser to set [the] threshold too high than too low".

Many countries operate simplified VAT schemes for small traders and these can have the benefit of bringing firms in to the tax net, collecting small amounts of revenue, and minimising compliance costs: but only when designed properly. Such schemes often involve what Bird and Wallace (2004) call presumptive taxes: traders pay an amount based on their turnover and a presumed fraction of value-added, or even a presumed amount of value-added, for instance. IFS et al (2011) shows that such schemes need to be carefully considered before introduction and then rigorously evaluated to ensure they are meeting their aims (evaluation and careful design is an important general lesson for tax policy).

4.2.4. Excise Duties

Whilst it seems clear that, over time, middle income countries should reform their VAT systems so that they efficiently raise revenue rather than attempt to deal with inequality or externalities, there is a case for using taxes on specific products to correct market failures. Many countries levy taxes on alcohol, tobacco, and to a somewhat lesser extent, road fuels such as petrol. This is sensible policy, although effort should be made to ensure that the taxes are designed to target the perceived externalities as closely as possible. For instance, countries employing ad-valorem duties should consider moves to fixed duties per item: the damaging effects of a \$30 bottle of Vodka are unlikely to be greater than a \$10 bottle of Vodka. Similarly, one must think carefully before applying different duty rates to similar products: it is unlikely to make sense to tax one form of alcohol (e.g. spirits) more highly than another (e.g. beers).

While many middle income countries (including Turkey) apply taxes to petrol and other road fuels, a number of middle income countries (such as Mexico and Indonesia) provide substantial subsidies for these items. A number of reasons for such policies have been advanced, including a desire to make transport and energy more affordable to poorer households, and as a tool to promote economic development through reducing production costs. The lower price of subsidised fuel does increase fuel consumption (and hence pollution and congestion), but such subsidies are generally regressive, and are a very inefficient way of boosting the economy. They are also costly. For instance, in 2011, fuel subsidies cost Indonesia \$18.5 billion (over 2% of GDP), of which around \$8.4 billion (around 1% of GDP) was accounted for by petrol subsidies (International Institute for Sustainable Development (2012)). Such subsidies can also significantly increase the volatility of Government budgets, especially in oil-importing countries. For instance, fuel subsidies cost the Mexican Government the equivalent of almost 2% of GDP in 2008, almost nothing in 2009 and 2010, and 1% of GDP in 2011 (although as a major oil producer, such volatility is likely to be less problematic for Mexico than many other middle income countries). Reducing and ultimately abolishing such subsidies, and using the money saved more appropriately elsewhere, should be an important priority for those countries that still subsidise fuel.

4.2.5. Summary

Our focus on the structural features of VAT and excise duties does not mean that we think that more traditional efforts to improve administration and compliance (such as improvements in auditing, online filing etc) are unimportant. However, shifts towards a broader, simpler VAT, with a single rate and fewer exemptions could help reduce administration and compliance costs and would give fewer incentives and opportunities for fraud and evasion.

In any case, it is worthwhile emphasising that when moving beyond the principles of indirect taxation discussed here, consideration of the economic and institutional features of country in question, as well as the pre-reform tax system, is vital. For instance, those countries with more developed tax administration systems would be able to tackle trickier problems (such as taxing financial services) and shift redistribution from the VAT to direct tax and benefits systems more quickly than those countries that have weaker systems, who should focus on improving administration and ensuring any exemptions and rate variation is kept as minimal as possible (because these contribute to administrative and enforcement difficulties). Similarly, whilst there may be scope for raising more revenue from indirect tax in some countries (such as Mexico), other countries (such as Turkey) are already very reliant on indirect taxes and efforts may focus on reforming the system rather than raising more revenue.

4.3. Corporate Income Taxation

Corporate income taxes raise an amount equal to around 3% of GDP in both middle and high income countries, on average, equivalent to around 15% of the total tax-take in middle income countries and 10% of the tax-take in high income countries (see Table 1 in Section 2 of this paper). In the years leading up to the financial crisis of 2007-08, corporate income tax revenues had been increasing for both groups of countries. This happened despite reductions in statutory tax rates (IMF (2011), Figure 12)³⁵ triggered by international tax competition as a result of governments' growing concerns about the ability of firms to shift profits and real corporate activity between countries to take advantage of low tax rates in order to avoid tax.³⁶ The robustness in revenues reflects, in part, that reductions in rates were accompanied by base broadening measures (such as scaling back investment allowances) in many countries. Other factors may include changes in the profitability and size of the corporate sector, and in middle income countries, an improvement in tax administration and enforcement, and a shift in profits from informal to formal businesses.³⁷

However, continuing globalisation and ongoing international tax competition means that sustaining this source of revenue will become more challenging in the medium to

³⁵ Recent evidence by Abbas et al (2012) also shows a declining trend in effective marginal and average corporate income tax rates in many developing and emerging countries.

³⁶ Devereux et al (2008) provide evidence of this for OECD economies without capital controls.

³⁷ Devereux et al (2002) provide supporting evidence for a group of advanced economies, whilst Devereux et al (2004) looks more in depth at the UK. Abbas et al. (2012) shows trends in the developments of tax systems in emerging economies are similar to those in advanced economies, with the exception of some African countries where there is a high prevalence of low-tax special regimes. All studies highlight the growth in tax payments from financial services in the period prior to the recent financial crisis as one reason corporation tax receipts were fairly robust during the 2000s.

long run. For middle income countries these challenges could be greater for several reasons. First, they face a more elastic supply of international capital, reflecting, in part, that local capital markets are less deep and there is a smaller pool of local investors (Abbas et al. (2012)). Second, they are more reliant for revenues on a smaller set large and multinational firms, who are those most able to avoid taxes via profit shifting (see, for instance, IMF (2011), Keen (2011) and Abbas et al. (2012)).³⁸ This reflects the fact that there is a 'missing middle': small and medium firms account for a smaller share of GDP or employment and are, in any case, often evading taxes or be legally exempt due to their size (see, for instance, IMF (2011), Ayyagari et al. (2003) and Tybout (2000)).³⁹ Finally, middle income countries often lack the administrative capacity to effectively counter tax avoidance by multinationals and large companies.

These difficulties mean that it is especially important for middle income countries to get the design of corporate income tax right: poor design can lead to significant revenue losses, as well as distorting economic behaviour and investment incentives. What does the Mirrlees Review have to say on the design of corporate income tax?

4.3.1. The Role of The Corporate Income Tax

The first question that needs addressing is the role of corporate income tax in the first place. Broadly speaking, there are two arguments that get made. The first, popular among the wider public and most-often heard, is that "big business needs to pay its fair share of taxes". However, ultimately, corporate income taxes are borne by 'real people' in the form of higher output prices for customers, lower profits for owners, lower wages for workers, and lower input prices for suppliers. The precise economic incidence of corporate tax is unclear but one might expect it to be on the less mobile factors of production, which is typically labour (i.e. the workers) rather than capital (i.e. the shareholders), and there is some empirical evidence to support this.⁴⁰ The second reason for a corporate income tax, and the one emphasised in the Mirrlees Review, is that it is easier to impose (at least part of) the tax on profits at the corporate level rather than at the individual level. Theoretically, it would be possible to allocate a fraction of taxable profits to each shareholder in proportion to their ownership share, and tax this under

³⁸ According to Keen (2011), the largest 1 percent of companies usually account for around 75 percent or more of all tax payments. IMF (2011) reports that the largest firms can provide between 60 and 80% of domestic corporate taxes receipts.

³⁹ Ayyagari et al. (2003) show cross-country level evidence that the contribution of small and medium enterprises to employment and GDP increases with income. In fact, Tybout (2000) show evidence that there is a missing middle in the distribution of firm size of developing countries in manufacturing sectors. Recently, Dharmapala et al (2010) show theoretically that this may result from optimal policies when there are fixed per-firm administrative costs of tax collection.

⁴⁰ See, for instance, Arulampalam, Devereux and Maffini (2012).

the personal income tax. But with companies having thousands or even millions of shareholders this would be administratively difficult, especially in the context of large cross-border shareholdings necessitating very substantial international cooperation and information exchange. Furthermore, some shareholders may also find it difficult to pay tax on their imputed share of the underlying company profits when the company retains the profits rather than distributes them in dividends. A properly-designed corporate income tax can also play a 'backstop' role in the implementation of the personal income tax, for instance, helping prevent avoidance of tax by converting income from labour income to capital income. In principle, corporate taxes can offer an efficient way to tax economic rents (those returns on excess of the "normal" return to capital), and especially those that would otherwise accrue to non-residents (which might be an especially appealing rationale for middle income countries, where much investment comes from overseas).

In the long run, if increasing international tax competition does fundamentally undermine the corporate income tax base, policymakers should give real consideration to moving from source-based corporate income tax systems that attempt (and fail) to tax profits where they are generated. Lost revenues could be made up by taxing more directly the consumers, workers and shareholders, through a greater reliance on consumption or personal income taxes, although the impact of this on inequality would have to be considered. But with countries likely to continue operating corporate income taxes for many years to come, it is worthwhile looking at some design issues and suggestions for improvement.

In all countries, the design of business tax systems is a major challenge due to the diversity of business types, which range from the operations of large and complex multinational corporations to those of a small solo operator; middle income countries with their 'missing middle' have particular concentrations at both ends of the spectrum. Whilst the income of larger incorporated companies is subject to separate (generally source-based) corporate income taxes, it is important to consider how this relates to the personal income tax system (so that income from corporate dividends is not taxed more or less highly than income from other forms of investment, for instance). The profits of unincorporated businesses and the income of the self-employed are, instead usually taxed under the personal income tax system. We thus discuss key issues in relation to both the taxation of large multinational businesses in the context of international tax competition, and the taxation of small businesses. But first, is the more fundamental issue of correctly defining the corporate income tax base, and in particular, minimising the disincentives to invest and distortions to capital structure, that result from the typical corporate income tax.

4.3.2 Avoiding distortions to investment decisions

Theory suggests that a well designed tax system should not impose any tax on 'marginal' investments - i.e. investments that earn a normal rate of return that is just sufficient to cover the cost of capital. Tax should only fall on 'economic rents' - profits that are in excess of the normal rate of return and that typically stem from the possession of a scarce resource, knowledge, or ability that is not easily replicated by other firms or from market power. The basic intuition is that a tax on the normal return will deter some investment while a tax on economic rent will not (it will still be beneficial for the firm to undertake the profitable project).⁴¹

In reality governments rarely achieve the exemption of the normal rate of return. The corporate tax base for the standard corporate tax in almost all OECD countries, and many middle income countries such as Turkey and Mexico,⁴² corresponds to a measure of company profits net of allowances for (nominal) interest payments and presumed depreciation costs. This implies that the normal returns to investments not financed through formal debt (i.e. through external equity, internal funds or informal lenders instead) are usually taxed, meaning that a higher pre-tax return is required to make such investments viable: thus increasing the cost of capital when debt finance is unavailable. Furthermore, since investments funded via debt are treated more favourably by the tax system than those funded by equity, for instance, firms decisions on how to fund investments are significantly distorted. Other common non-neutralities are introduced by the differential depreciation allowances for different assets that not necessarily match the effective working lives of assets.

The design of most corporate tax systems thus discourages corporate investment - especially investment not financed through debt- and, by favouring debt financing, may leave firms more exposed to the risk of bankruptcy. In addition, investment in some assets will be favoured (generating tax deductions for depreciation that are more generous than those implied by the fall in the value of the asset) and investment in other assets will be disadvantaged (being written off too slowly for tax purposes).⁴³ This could be

⁴¹ See Hassett and Hubbard (2002) for a review on evidence on the corporate tax effect on investment; and in relation to foreign direct investment. Abbas et al (2012) use panel data at the country level for a group of developing and emerging economies over the period 1996-2007 and show that higher effective rates reduce domestic investment and foreign direct investment, although it can raise revenues in the short term. Related to this, there is also a literature that looks at how tax affects firms' location decisions. For example, Devereux and Griffith (1998) look at US multinational and their location choices within Western Europe and show that effective average tax rates affect where mobile projects will locate.

⁴² Countries such as Brazil and Belgium do not provide a favourable tax treatment of debt relative to equity.

⁴³ In fact, many high income countries have been broadening the tax base through reducing allowances for capital depreciation and interest payments. This effectively reduces non-neutralities but in a way that increases the tax on the normal return to capital, which is not optimal.

particularly problematic in middle income countries for at least two reasons. Firstly, although investment (gross capital formation) and inward foreign direct investment levels have been increasing in the last decade in most developing and emerging economies (Abbas et al (2012)), middle income countries need to sustain high investment levels in order to build and sustain their capital stock and generate sustainable growth. Secondly, in middle income countries, small firms are more likely to finance their investments with internal funds and to some extent with informal finance, relative to large firms, in part because they cannot access formal banking services,⁴⁴ generating a clear obstacle to the growth of smaller firms, and perhaps one of the reasons for the "missing middle" of the firm size distribution.

There are a number of different ways to reform corporate income tax that would remove the non-neutralities discussed above, and fully exempt the normal return to capital from taxation.⁴⁵ An 'Allowance for Corporate Equity' (ACE),⁴⁶ would allow companies to deduct a normal return on their shareholders' funds from their profits, thereby removing the normal return on both equity- and debt-financed investment from the corporate tax base. Implementation of the ACE tax would preserve most of the structure of existing corporate income taxes, including interest deductibility, and depreciation schedules (and indeed, would remove many of the distortions that can arise if depreciation schedules are improperly defined). The operation of an ACE requires tax authorities to specify how the equity base used to compute the ACE allowance evolves over time, and which particular 'risk-free' nominal interest rate is used to compute the allowance. In most contexts, this could be approximated by the interest rate on medium-term government bonds. But, perhaps concerns about the implementability of such a regime are one reason why it is scarcely used in high income countries, despite its obvious advantages.⁴⁷ Volatile and thinner markets for government debt, as well as weaker tax administration systems may make implementing an ACE more challenging in middle income countries; but the big improvements in efficiency that could result mean it is worth real consideration.

A more radical change would be to move to a 'Cash-Flow Tax' under which the tax base is not a measure of company profits or income but a measure of net cash flow. Broadly speaking, a cash flow tax would abolish deductions for both depreciation and

⁴⁴ See, for instance, Beck (2007). On the other hand, Gordon and Li (2009) propose a model that suggests that firms can successfully evade taxes by conducting all business in cash, thereby avoiding any use of the financial sector.

⁴⁵ See Chapter 17 of *Tax by Design*, and Chapter 9 (by Auerbach et al) in *Dimensions of Tax Design*, for more details about different systems. De Mooij and Devereux (2009) compare the economic implications of two of these alternatives in the context of Europe.

⁴⁶ See Chapter 17 of *Tax by Design*. The ACE is the equivalent to the 'rate of return allowance' (RRA) in the context of personal income tax, discussed in Section 4.1.

⁴⁷ Belgium is one exception.

interest payments, and replace them with a deduction for investment expenditure when it is incurred. Investment is then treated like any other current cost and, conversely, sales of capital assets would be treated like any other cash inflow.⁴⁸ This achieves the same desirable results as the ACE, and has a certain simplicity (in many ways looking like VAT, except that labour costs can be deducted as well as input costs), but such a major change to the taxation of businesses may present real challenges for implementation.

4.3.3. Corporate Income Taxation In A World Of Capital Mobility And Multinationals

One of the key challenges in designing the corporate tax system is that it is affected more than most other taxes by increasing globalisation. First, with capital highly mobile, countries are competing with others for investments in new factories, production lines, etc, meaning that there is pressure to set tax policy in a way that makes such investments most profitable. Introducing an ACE (or equivalently, a cash-flow tax), which ensures that marginal investments face an effective corporate income tax rate of zero, would help with this. However, on its own, introduction of an ACE would lead to lower revenues (because the tax base would be narrower), at least in the short run; although, in the longer-run, improved incentives to invest might lead to more investment and ultimately, higher tax revenues. Governments may be tempted to offset some or all of this reduction in revenue by increases in the headline rate of corporate income tax.

But this is probably not a good idea. Multinational companies, with interrelated operations in many different countries, can respond to international differences in tax rates and regimes by relocating taxable profits and real activity to countries that offer more favourable corporate tax regimes. Thus, if governments choose to replace the revenues lost via the introduction of an ACE with higher corporate tax rates, this could erode the tax base if multinationals choose to move their profits to countries with lower corporate tax rates. It is a major challenge for tax authorities in high countries to determine how taxable profits of multinational firms should be allocated between different national jurisdictions (for instance, what the correct 'transfer prices' for internal transactions within a company are); the problems for middle income countries' generally less robust administration systems are likely to be even greater.

As discussed in Section 4.3.1, in open economies there are good reasons to think that the burden of a source-based tax on corporate income will generally be shifted onto domestic workers in the form of lower wages, and that workers would be better off if their wages or consumption were taxed directly. But this is not always the case: to the extent that returns on investment are 'location specific' as opposed to internationally

⁴⁸ *An example of a cash-flow tax for business is provided by the flat business tax Impuesto Empresarial a Tasa Unica (IETU) introduced in Mexico in 2008. This operates simultaneously with a more standard corporate tax.*

mobile (for instance 'firm specific'), a high rate of corporate income tax may be feasible and may tax the owners of capital rather than domestic labour. This explains why activities like oil extraction and mining are often more highly taxed than others. But the distinction may be difficult to pin down more widely in practise: for instance, are the profits of Google or Facebook company or location (Silicon Valley) specific?

A shift in taxation from corporate income tax to other taxes (such as VAT or income tax) is, of course, hard to sell to voters: this may especially be the case in middle income countries, where residents see taxing the local activities of subsidiaries of multinationals firms with headquarters in high income economies as a way of redistributing income globally.

The way that developed countries have changed their corporate income tax systems (broader bases and lower rates) tends to favour more mobile activities, even at the expense of distorting investment. Some countries have recently disallowed (at least partially) the deduction for debt interest, increasing the cost of capital and, on its own, exacerbating investment disincentives.⁴⁹ However, the accompanying lower statutory tax rates might lead to a shift in profits in to the country by multinational businesses. Furthermore, the combined effect of the broader base and lower rate might be to reduce the average tax rate, encouraging higher investment in the country (because for non-marginal investments it is the average tax rate on the investment that matters for the investment decision, not the tax rate on marginal investment). Empirical evidence based on high income countries suggests that multinational location decisions over activities that generate firm-specific rents (as opposed to location-specific rents) are more responsive to effective average tax rates (see, for instance, Devereux and Griffith, 1998; Devereux and Lockwood, 2006; De Mooij and Ederveen, 2008).

But it is important to remember that while a broad base and a low rate may be better than a narrower base and high rate, the most sensible long run response is probably a move away from source-based corporate income taxes. This may also have benefits in terms of administration and compliance costs. The increase in the international mobility of the corporate tax base has resulted in a proliferation of complex anti-avoidance legislation, particularly in high-tax countries. The current source-based tax arrangements result in very high compliance costs for international companies, and very high administration costs for tax authorities: many resources are devoted to within-companies profit-shifting and legal disputes related to these issues. Such costs are likely to be especially difficult for middle income countries to bear.

⁴⁹ *Germany provides one example. Some countries, such as France, have caps for interest deductibility in order to prevent abusive behaviour and tax avoidance by firms that are part of larger groups. However, this can also introduce further complexities in the administration of the tax system since it is necessary to distinguish between debt that can be deducted and that which cannot.*

Although the trend for base broadening and rate reductions is also seen in many middle income countries, in others there is a high prevalence of incentives for specific types of investments that in fact reduce the base and turn the effective tax rates to zero. In some instances, these are specifically targeted to multinational firms in order to attract the most mobile investments projects, although it is an open question whether they achieve their aim (Abbas et al (2012)). There have been examples of these incentives in developed countries; for example, Ireland used to have lower tax rates for manufacturing and foreign owned companies' activities. But this type of discrimination can introduce inefficiencies and complexities, which are perhaps even more problematic in countries with weak administration capacity and which are prone to corruption.

Take Turkey as an example. The taxable income of resident companies includes all profits (including capital gains, and passive income from interests, royalties and rents) derived worldwide, with some exceptions and offsetting credits for taxes paid in others countries. However, there are, in addition, a number of special regimes that have the potential to lead to significant distortions in economic activity, and loss of revenue. First, companies operating in free trade zones who have a valid operation license issued before 2004 benefit from tax exemptions. Second, a tax exemption is temporarily available for manufacturing activities, which will be applicable until the end of the year when Turkey becomes an EU member. Third, the tax rate can be reduced by up to 90% for income coming from investments in specific sectors and regions of the country.

Mexico provides further examples. For instance, there is an accelerated depreciation allowance for investments in manufacturing facilities, allowing a deduction of up to 92% of the value of the investment in the first year, although this varies significantly across industries and assets. In addition, there is a reduced tax rate of less than six tenths of the standard corporate tax rate applicable to taxable income for the 'Maquiladoras' (export-oriented companies).

Discriminating across type of firms and investments should be considered carefully and should only be introduced if the benefits outweigh the costs of doing so. Some special regimes represent genuine attempts to address real issues about how to remain attractive to footloose investors and support particular sectors of the economy, which is understandable (although other regimes seem to represent industrial policy or a response to lobbying). But improvements in the design of corporate income tax may help, and in the longer-run, it would perhaps be better to move away from corporate taxes rather than operate a complex system of special privileges for favoured firms/sectors/areas that distort investment choices and economic activity.

4.3.4. The Taxation of Small Businesses

At the other end of the scale from sophisticated multinational companies are the many small businesses, sometimes consisting of a sole trader. Such businesses represent another particular set of issues for tax authorities in middle income countries. Whilst the revenue potential from small firms is likely to be low, they are numerous, and, the design of taxes can impact on their potential for growth, their incentives for operating formally and informally, and for horizontal equity (and hence, tax morale).

As discussed in Section 4.1, the principle of neutrality suggests that it is important to ensure different legal forms of economic activity are taxed at the same rate to avoid distorting behaviour. This means ensuring that personal and corporate income taxes are aligned so that the self-employed and small incorporated businesses are taxed at the same rate. Thinking of the system as a whole means this must take into account any mandatory social contributions on earnings from self-employment. Furthermore, the rates of tax should be aligned with those on earnings from employment (with suitable allowances for a return of capital invested), to reduce opportunities for tax avoidance by converting labour income into capital income, or vice versa. Effective rates of taxation on the self-employed and small businesses are often lower than those on employees, perhaps reflecting a desire to "promote entrepreneurship". However, many small businesses are not particularly innovative and it is unclear whether there is a rationale for more favourable tax treatment. And better instruments often exist for encouraging high-growth and innovative firms such as generous capital allowances and tax credits for research.

A number of countries operate a lower rate of corporate income tax for smaller firms than larger ones (for instance, the UK). Sometimes this is advocated on the grounds that such firms are the business successes of the future, and are more innovative than large firms; again, more targeted support for innovation or investment seems more appropriate here. Other arguments put forward include a lack of access to finance, and greater problems for small firms from the asymmetric treatment of profits and losses in many corporate income taxes (in part the problems may be greater because of lack of access to finance), which may discourage risk taking among small firms. Lower rates of corporation tax are a blunt instrument to solve such problems, though: limited loan guarantee schemes or state-backed "small business banks" would probably be better targeted at credit constraints, and tax systems could (and should) be reformed to treat profits and losses more symmetrically.

A more convincing set of arguments relate to the fact that, small firms are "hard to tax". First, in middle income countries in particular, smaller businesses may be more

able to evade taxes due to their ability to hide from the tax authorities. This might mean a given tax rate causes more distortion to the behaviour of small firms than larger ones: the optimal tax rate for small firms would thus be lower than for large ones. Second, there is evidence that many of the costs of complying with the tax system are fixed costs that do not vary with the level of turnover or profits: thus the compliance costs of tax are likely to be relatively higher for smaller firms. This may offer further encouragement for such firms to operate under the radar of tax administrations. Exempting small businesses from all taxation is probably not a good idea: as well as raising some revenue, including small businesses in the tax system may incentivise bookkeeping, which can help to improve their access to finances, and may enhance taxpayer morale by signalling that everyone is taking part in the tax system. With this in mind, more research is required on the role that simplified systems of taxation for small businesses may play in the taxation of corporate income (perhaps 'presumptive taxes' in the same vein as special VAT regimes for small firms may be appropriate, see Bird and Wallace (2003)).

4.3.5. Summary

Designing and implementing a well-functioning corporate income tax is especially tricky. A good system should distort as little as possible company decisions over how much to invest, where to invest, what to invest in and how to finance that investment, and how to organise business activity. The corporate tax base and rates should be consistent with those on personal capital, self-employment and employment income to avoid distortions, and need to ensure the country remains internationally competitive. This is a tall order, particularly given the sophisticated tax planning used by multinational companies and high income individuals, and the limited administrative capacity of many middle income countries.

The introduction of an allowance for corporate equity (ACE) could remove a number of distortions that exist under the most common forms of corporate income tax, and encourage investment. It does go against the typical trend for base broadening and rate cutting seen in many high income countries in recent years; but such moves often reflect the fact that rather than thinking of the system as a whole, policy-makers have looked to fund rate reductions via other changes in corporate income taxes (i.e. base broadening). A better approach would be to raise revenue for reductions in headline rates from elsewhere in the tax system; and similarly, for funding the introduction of an ACE. In the longer run, it may be beneficial to move from source-based corporate income taxes to destination-based VATs or cashflow taxes, and personal income taxes.

5. SUMMARY AND DISCUSSION

Getting the design of tax systems correct is important: poor design can cause significant economic inefficiency and can undermine revenue-raising capacity by facilitating tax evasion and encouraging tax avoidance. In this paper we have examined what the findings of the Mirrlees Review, a study which examined the features of a good tax system for a high income country, have to say about tax design in middle income countries. Despite a number of important economic and institutional differences compared to high income countries, it is our view that the principles and a fair proportion of the specific policy recommendations set out in the Review are extremely relevant for middle income countries.

The key organising principle behind the Mirrlees Review is that policy-makers should aim for a progressive, neutral tax system: progressive in the sense that it helps with the redistribution of income from richer households or individuals to poorer ones; neutral in the sense that it does not arbitrarily tax different activities differently in a way that might distort behaviour and facilitate tax avoidance; and is designed as a coherent system, which recognises that what matters is that the system as a whole meets the various objectives of policy-makers, not that each individual tax tries to satisfy each objective. The degree of progressivity desired is, ultimately, a political choice, and the major leg-work of redistribution is generally done by cash benefits payments and public services; thus, a case can be made for not worrying too much how progressive the tax system alone is. But, we would argue that, if anything, the importance of neutrality and considering the workings of the tax system as a whole (and indeed its interactions with the benefits system), is even greater in middle income countries than in the high income countries that the authors of the Review had in mind. This judgement reflects the weaker tax administration and enforcement that still plagues many middle income countries: the reduction in complexity and fewer opportunities for avoidance that come from a simpler, more neutral tax system are therefore particularly valuable.

In order to examine what application of these principles may mean in practise, we have looked at implications for three broad areas of taxation: the direct taxation of labour and capital income; indirect consumption taxes; and the taxation of businesses' profits.

Looking first at direct taxes, neutrality implies that, as far as possible, tax systems should be designed so that different types of income-generating activity and different methods of realising that income face the same effective tax rates. Thus, rate variations or exemptions that favour earnings from self-employment, particular types of pay such as bonuses or overtime pay, capital gains over dividends, etc, should be avoided. Such

variation adds to the complexity of the tax system, and can provide large incentives for avoidance, both of which make the job of hard-pressed tax administrators more difficult (especially when complex anti-avoidance schemes have to be drawn up). Neutrality with respect to consumption now and in the future (i.e. savings) implies that the normal risk-free return to saving should be exempt from taxation; and that any 'super-normal' returns are then taxed at the same rate as labour income, to limit incentives to convert labour income in to capital income. But thinking of the system as a whole is important here: what matters is not the income tax rate applied to different forms of income, but the overall effective tax rate. Hence, if, for instance, labour income is subject to a payroll tax in addition to income tax, the tax rate applied to the super-normal returns to savings should equal the combined payroll and income tax. More generally, one must consider how all the different deductions from income and earnings contribute to the 'effective tax rate' when designing tax systems.

But while the general direction that reforms should aim for is clear (a simpler, more neutral taxation of income), there are a number of areas that need further research in middle income countries.

First, is just how responsive different groups of people are to income taxation: the size of labour supply and taxable income elasticities, and how these vary across the income distribution, the lifecycle and across demographic groups, is key to understanding how the tax rate structure should be designed, and estimating how much reforms will cost or raise. At the moment, there is little hard evidence on this for middle income countries. The best approach to such research is to utilise changes in labour supply and taxable income that follows changes in tax rates that differentially affect individuals (the simplest case being the standard difference-in-difference analysis where a policy affects some individuals (the 'treatment' group) but not others (the 'control' group)).

A critical issue is how responsive those individuals at the top of the income distribution are to income taxes. As discussed, tax avoidance and evasion is prevalent among this section of the population, particularly among professional groups and business owners, which suggests that responsiveness could be even greater than high income countries. This would imply that high marginal tax rates on high incomes could be self-defeating: reductions in work effort, and increases in avoidance and evasion could very well mean revenues are reduced rather than increased. Arguments for reliance on indirect taxation, and for less progressive rate schedules (or even 'flat rate' income taxes) also look stronger the more responsive are high income individuals.

There has been a recent wave of interest on this topic in high income economies (for example, recent interest in the UK surrounding the 50% tax rate), but to our knowledge,

published estimates of the taxable income elasticities of high earners do not exist for any middle income countries. Until such estimates are available, scenario and sensitivity analysis can be done (for instance Abramovsky et al (2011) show that different assumptions about taxable income elasticities has notable effects on the revenue impacts of tax reforms in Mexico), but such approaches are not a substitute for actual estimates. As well as estimating the overall taxable income elasticity, empirical work should seek to examine how much of this is the result of "real" changes in economic activity, and how much is the result of evasion and avoidance. This is important because, with a simpler tax system with less opportunities for avoidance, and/or a better functioning systems of administration and enforcement, there may be less scope for evasion and avoidance than under the existing more complicated and less well enforced systems. Thus reforms along the lines recommended here may reduce the taxable income elasticity, which might allow countries to raise more money via income taxation, and maintain higher marginal tax rates on higher incomes.

Turning to consumption taxes, we have argued that VAT, is in principle, a particularly appealing form of consumption tax, and that moves to broaden the base and remove exemptions would probably be a good thing. This would reduce distortions to consumption and production decisions, and could lead to significant reductions in the complexity of administering and complying with VAT for some businesses.

However, it must be recognised that the role that consumption taxes can play in redistribution in middle income countries remains somewhat controversial. Whilst, our view is that reduced or zero rates of VAT on things like food, public transport and domestic energy are an inefficient way to redistribute in countries that have increasingly better welfare and cash transfer programmes (a view shared by others such as Anton et al. (2012a,b) and Ahmad and Best (2012)), some experts have continued to argue such rate differentiation can play a role. With this in mind, research is required that examines the distributive impact of current VAT systems, and how this compares to the redistribution that could be achieved with more uniform VATs and expanded or reformed benefits or welfare programmes. This requires the development of tax and benefit microsimulation models. Ideally, such work should be combined with behavioural models of consumer demand and labour supply to examine the welfare costs that arise from distorting consumption and labour supply decisions when trying to redistribute.

Another important avenue for research is the interaction between VAT and the informal economy. First, whilst in principle differences between goods and services in the propensity to shift to the informal sector when taxed may provide a rationale for different rates of VAT, the practical importance of this issue is unclear. Estimating models of consumer demand and/or firms production decisions that incorporate a formal/informal

(or pay taxes / evade taxes) margin could allow one to ascertain which goods should be taxed differently, and the potential gains from doing this (which must be offset against the real administrative costs of differentiation). Second, further work building on the study of the impact on firms informality/formality choice of VAT chains effects by De Paula and Scheinkman (2010) would be useful in seeing just what role VAT can play in spreading formality (or informality) along supply chains. In particular, further empirical work examining whether one should focus enforcement on particular parts of supply chains, and if so where, to capitalise on these "chain" effects would be useful, as would examining the impact of VAT exemptions which break the VAT chains.

The design of the taxation of business profits is especially challenging: it must cope with both very large and complex firms that often operate across borders, and small solo traders, whilst attempt to avoid distorting and damaging incentives to invest. The present complex systems in place in many middle income countries are unlikely to meet these criteria, with a mix of special regimes for favoured sectors common, and the tendency to favour debt-financed investment over other investments. Adoption of an ACE which allows a deduction for a normal return on shareholders' equity could solve many of the difficulties with the corporate income tax. Such a policy would likely lead to reductions in corporate income tax revenues (unless additional investment led to very significant profit increases), but governments would be unwise to seek to fund this via increases in the headline rate of tax: this might drive the footloose profits of multinationals overseas. Instead, it would be wiser to raise consumption and personal income taxes; whilst this may be politically difficult, most of the burden of the corporate income tax is likely to fall on domestic labour in any case. Empirical research to confirm whether this economic reasoning is borne out in practise would therefore be useful.

But if anything, the trend in high income countries appears to be broadening of the base, including restrictions on debt finance deductability, accompanied by reductions in headline corporate tax rates, as international tax competition intensifies. This, unfortunately, leaves many of the distortions inherent in the standard corporation tax untackled (and indeed, may worsen them), but might incentivise companies to shift profits - which can then be taxed - into a country. Understanding how the impact of reductions in headline rates of corporate income tax compares to the impacts of the ACE on encouraging investment by reducing the cost of capital would therefore be useful as countries seek the best response to attract footloose international capital and investment.

Understanding just what stops small firms growing in to mid-sized firms in middle income countries also seems a pressing area for further research. Complex taxes, high compliance costs and onerous labour regulations could play a role, with small firms

staying small in order to remain legally exempt or to avoid becoming more visible to the government. Simplified regimes for small businesses might have a role to play, but more research is required on the 'unintended consequences' such regimes may have.

An issue that we have not said much about, but that is of fundamental importance as middle income countries further develop their systems of welfare and social security, is how best to design such systems. Broadly speaking, there are two main approaches one could take. First, is a contributory social insurance system, where payment of mandatory social insurance contributions entitles one to a pension and a set of insurance programmes for different kinds of shocks (e.g. unemployment, health, etc) where entitlements are linked to the amount of contributions paid. Such a system could, in principle, be funded (i.e. contributions are invested and used to pay for the benefits of the contributors when they retire) or unfunded (i.e. contributions pay for the benefits of existing benefit recipients, with any surplus placed - or shortfall taken from - in a social insurance fund, for instance), although a funded system is probably more credible. If people believe they will get a return on any extra social contributions they pay as they earn more, such a system might suffer less from the disincentive to work inherent in taxpayer funded systems.

Beginning with Chile, a number of middle income countries, particularly in Latin America, have moved towards systems of "personal accounts" for pensions, and the provision of social insurance. However, because large numbers of people are either not working, or more likely, working informally and thus not paying social insurance contributions, many people are not covered by such schemes. Thus, middle income countries increasingly operate dual systems with both contributory benefits and a system of typically somewhat less generous non-contributory benefits - typically health and pension schemes - for those not covered by the contributory system, the main motivations of which are to relieve poverty in old age and provide insurance against major health shocks. Examples of such health schemes are the Seguro Popular in Mexico, Regimen Subsidiado in Colombia, and the former Green Card scheme in Turkey. Mexico also operates a system of non-contributory pensions for the over 70s in rural areas.

High income countries also often operate hybrid systems: contributory social security combined with "safety net" income support measures for those meeting means-tests. But in middle income countries with significant opportunities for informal work outside the system of contributions, the co-existence of a system funded via mandatory contributions and a 'free' system, even if less generous, can cause problems. Levy (2008) argues that this type of dual system may contribute to high levels of informality, and thus low growth and low tax yields. Indeed, Bosch and Campos-Vazquez (2010) and Aterido, Hallward-Driemeier and Pagés (2011) find that the introductions of Seguro

Popular increased incentives to work informally in Mexico and that people responded to these incentives. Camacho, Conover and Hoyos (2010) find a similar effect of Regimen Subsidiado in Colombia.⁵⁰

As briefly mentioned in our discussion of VAT rate differentiation (Section 4.2), Anton et al (2012a,b) and Ahmad and Best (2012) examine the best way to finance social welfare programmes in economies with high level of informal economic activity and significant scope for tax evasion. They develop models of workers' and firms' behaviour and examine the implications for how the tax and benefit system as a whole should be designed to maximise welfare, taking into account both workers' and firms' incentives to pay taxes.⁵¹ Both papers suggest that a combination of payroll taxes to provide "contributory benefits" and free non-contributory benefits for those not contributing are especially damaging, and that significant improvements in economic efficiency and reductions in informality could be generated by moving towards a broad-based VAT-funded system of universal safety net benefits (with possibly, some link between benefits and earnings).

This is an interesting and potentially important message, but more research is needed to address a number of questions. If middle income countries are able to significantly improve tax administration and enforcement (which simplification and reforms as set out in this paper may aid), how does the case for moves away from contributory social insurance change? What are the impacts of a shift to VAT on behaviour and the distribution of consumption? How do these findings relate to countries that are already very reliant on consumption taxes such as Turkey?

Another key challenge for middle income countries' social insurance systems in the coming decades which we cannot begin to address here that is nevertheless worth mentioning, is the impact of demographic change and ageing populations. Countries will have to raise their retirement ages: in Turkey, for instance, the official retirement age is 58 for women and 60 for men, and many workers are able to retire even earlier. The World Bank (2010) argues that this leads to high levels of informality among older workers who can simultaneously claim pensions and work informally. Policy action, backed up by research on the effects of pension design on the behaviour of older workers, is thus a key issue.

Finally it is important to emphasise that in order to conduct the empirical research that is necessary for better policy-making, researchers need access to high quality micro-

⁵⁰ *Bergolo and Cruces (2011) study the impact of extending benefits of contributory health systems to workers' childrens and finds that workers with children in small firms are more likely to work formally than comparable workers without childrens after the reform.*

⁵¹ *Although they do abstract from important issues such as international capital mobility.*

level data on household's incomes and consumption and businesses' behaviour. In addition to household surveys, Government's should make available (suitably anonymised) administrative data, such as tax and benefit records, and should seek to collaborate with researchers to improve research capacity inside and outside of Government. There is a growing appetite for evidence-based policy-making in middle income countries, and we are therefore hopeful real progress can be made in the coming years. But, better tax design is not just a case of further research: it also requires administrative capacity, effective communication and leadership from policy makers. Some of the reforms suggested here and some of those that will be recommended by further research will be politically difficult to implement: but the gains from reform could, equally, be substantial.

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COMMENTARY 1

ALI SANVER

1. INTRODUCTION

First of all, I greatly appreciate my IFS colleagues' initiative to reflect on the *Mirrlees Review* for lessons regarding middle income economies, including Turkey. Please find, set forth below, my *Commentary* on the paper which they produced as part of their efforts “to set out some basic principles for thinking about the key features of a good tax system and sound tax reforms in middle income countries...” (the “Paper”). My *Commentary* aims to relate to the authors' findings and recommendations in selected parts of the Paper, rather than an overall evaluation (perhaps, except *part 2* below), which I find to be specific priorities for Turkey at present.

2. INDIRECT TAXATION (SHOULD TURKEY SHIFT BACK TO DIRECT TAXATION?)

I would like to start with the Paper's position on indirect versus direct taxes. The reason is that, in Turkey, many seem to be jumping to the conclusion that it is time for a shift (back) from indirect taxes to direct taxes.⁵² On that account, I find it definitely correct and useful that the Paper is pointing out to a different perspective by suggesting (in Section 2.1, *The tax structure*, page [5]) “Turkey, on the other hand, shows a tax take and a tax structure similar to the median of upper middle income countries. If anything, its central government collects a particularly high proportion of its revenues from indirect taxes, especially excises on items such as, gas, energy, alcohol, cell phone services and luxury goods at different rates as well as a special communication tax. For both these countries, the challenge is not necessarily mobilising more revenue, but thinking about how to improve their tax structure and design to maximise efficiency.” Clearly, Turkey has succeeded in developing its VAT based system of indirect taxation to a level close to those of developed countries. I wonder whether Turkey's improvements in assessing and collecting more direct taxes⁵³ and formalizing more of the informal economy⁵⁴ are a result of more VAT based indirect taxation rather than the other way around? As the Paper further refers to two recent papers (in Section 4.2.2, *VAT rate differentiation*, page [23]) “Indeed, two recent papers (Anton, Hernandez and Levy (2012) and Ahmad and Best (2012)) focused on the design of tax systems in countries with significant levels of informal economic activity (i.e. middle income countries) argue that VAT rate differentiation

⁵² See, for instance, pp. 86 – 88 of the Mutlu/Celen Report on Indirect and Direct Taxation in Turkey, © 2012 TUSIAD.

⁵³ Turkey has almost doubled its total tax revenues from 15.4% of GDP in 1985 to 31.3% of GDP in 1999 as she settled in the operation of her modern VAT system introduced as of 1st January 1985 (source: Turkish Revenue statistics, www.gib.gov.tr).

⁵⁴ A recent study by Friedrich Schneider reports that the Turkish “shadow economy” has decreased in size from 32.2% of GDP in 2003 to 27.2% of GDP in 2012 (©Prof. Friedrich Schneider, University of Linz, November 2012).

does a poor job of redistributing to poorer households but does involve the loss of significant revenues, generates incentives for rent-seeking, and makes administering the tax system and collecting revenues more difficult. They argue instead for a uniform VAT, with redistribution instead carried out via a progressive income tax and an improved benefit and social insurance system funded, in part, by the additional VAT revenues. Their models suggest this would reduce incentives for informal employment, increasing compliance with the tax system, further bolstering revenues.”, Turkey should consider -subject to due empirical analysis or comparative law review as I will discuss under part 2 below- “shifts towards a broader, simpler VAT, with a single rate and fewer exemptions” as the Paper suggests (in Section 4.2.3, VAT exemptions, and throughout) before rushing to distort a state-of-the-art VAT based tax system which was adopted from the German tax law in 1985 and taken lots of energy and resources to implement in Turkey at the level it operates today. Furthermore, I find the Paper’s reminder (heads up) on the definition and objective of excise duties (in Section 4.2.4, Excise Duties, page [26]) refreshing: “Whilst it seems clear that, over time, middle income countries should reform their VAT systems so that they efficiently raise revenue rather than attempt to deal with inequality or externalities, there is a case for using taxes on specific products to correct market failures. Many countries levy taxes on alcohol, tobacco, and to a somewhat lesser extent, road fuels such as petrol. This is sensible policy, although effort should be made to ensure that the taxes are designed to target the perceived externalities as closely as possible.” Namely, again many Turkish colleagues seem to indulge in bashing excise taxes (special consumption taxes), rushing to the conclusion that they are not progressive and thus result in unfair taxation of the poor.⁵⁵ I share the Paper’s position, however, at least certain excise duties, such as on petrol and other road fuels, have a good economic rationale for Turkey which is not an oil producing country, and thus, can never afford to subsidize her consumption of oil.⁵⁶ Only after duly reforming her VAT system (and tax system as whole) and to the extent such reforming results in more VAT (or other tax) revenue, Turkey could consider lowering its excise duties.⁵⁷

3. EVIDENCE-BASED POLICY AND LAW MAKING, HOPEFULLY FEASIBLE?

In Turkey, we have had more than enough tax policy and law making based on soft values (mainly politics of the day). So, as Seer would state it, "Turkish tax law and practice have ended

⁵⁵ See Mutlu/Celen, *Ibid* p. 44, reporting that the total take of special consumption taxes have levelled or exceeded general consumption taxes (mainly VAT) after 2005 in Turkey.

⁵⁶ See p. [26] of the Paper regarding the case of Mexico, an oil-producing country.

⁵⁷ Mutlu/Celen, although vaguely, seem to share this view (see *Ibid*, p. 44).

up in chaos⁵⁸ so that the guidance of modern tax theory (and methods) can no longer be avoided in order to revamp the system as a whole"⁵⁹.

In that respect, the Paper recommends "evidence-based policy making" on grounds of "empirical research" (throughout and in Summary and Discussion, Section 5, p. [39]). However, the definition or scope of such empirical research does not appear to be clearly provided⁶⁰. Section 5 only refers to various research prospects and methods. I presume a preliminary analysis for each country would be required before a suitable country-specific approach can be determined and designed. If so, however, I would suggest that the Paper describe such preparatory steps explicitly and perhaps provide at least the main features of design and scope for research that was previously performed (by IFS or other parties) in other countries -which are similar to Turkey, if available- and led to better tax policy⁶¹ While such a detailed analysis seems infeasible in light of the current report's objectives, I would present it as a priority for future research that would also help to more easily draw the respective authorities' attention in order for IFS (or similar platforms) to be engaged to perform further studies and research for Turkey.

In summary, I express the hope that evidence-based tax policy making will prove to be feasible for Turkey as well. But, before it does, we are much better off adhering to comparative legal analysis in order to find the most suitable tax law constructs for Turkey, and in turn, adopt and adapt them for our country-specific requirements -- an approach which has at least kept

⁵⁸ *As I write this Commentary, for instance, there is a draft income tax bill in progress which is attempting to merge the income tax code and corporations tax code without any supporting evidence. For starters, the Turkish corporations tax, enacted in 2006, is a uniform-rate code including a number of modern constructs such as APA, CFC, cross-border relief provisions in harmony with EU tax laws. On the other hand, the Turkish income tax, in effect since 1961, is based on a progressive-rate scale and full of contradicting provisions as a result of haphazard (at times purely political) law making for many years. I am afraid that merging the two will not help towards any "coherency" but taint the corporations tax code as well and cause even more chaos.*

⁵⁹ *See Seer, Tipke/Lang, p. 4, 21st edition, 2013. My hope is, of course, Seer's prediction that "all great tax codes have risen out of extreme levels of chaos in tax law and practice" holds for Turkey as well.*

⁶⁰ *Seer, Tipke/Lang, Ibid p. 6, refers to a "value-less, mostly in mathematical models quantified, optimal- taxation analysis (Optimalsteuertheorie)". He is in favor of such an econometrical approach, because he believes that an economically efficient tax design would not only serve for equitable taxation (neutrality) but also facilitate the (much desired) simplification of tax codes.*

⁶¹ *When implementing such an analysis, it is important to account for differences in the underlying institutional arrangements when conducting international comparisons. As a case in point, Turkey does not include social security contributions -which are mandatory for all dependent and independent fee earners and thus huge- in her total take of direct taxes whereas most other OECD countries do. Likewise, Turkey reports her currently very high special consumption taxes (excise duties) and import-VAT, which greatly fluctuate based on short term economic policy decisions, as part of her total take of indirect taxes (see Mutlu/Celen, Ibid p. 27 et seq). Moreover, in general, the currently available statistical data is retrospective (ex post). As such, it cannot form a valid ground for future tax policy making which would probably require country-specific (ex ante) "scenario and sensitivity analysis" as the Paper starts talking about in Section 5, p. [35].*

our legal system floating since the foundation of modern Turkey in 1920s (the recent examples in tax law are the adaptation of the German VAT system in 1985 and of Continental and Anglo-Saxon law constructs for our corporations tax code in 2006). In any event, it would be good for Turkey to engage in empirical analysis in order to improve her tax policy out of short-sighted, populist and manipulative tax law-making and enforcement. High quality empirical research would also help Turkey's comparative law reviews in adapting foreign laws more effectively into Turkish law.⁶²

4. DIRECT TAXATION

In this final part of my Commentary, I will continue reflecting on the related Sections of the Paper to raise and discuss the current agenda and practices of Turkish tax administration on tax policy, auditing and enforcement.

4.1. Has Turkish Tax Authority Got Its Priorities Right?

As the Paper refers to Keen (2011) in Section 4.11 (page [16]), there is a tendency also by the Turkish tax authority to pursue more aggressively high-level professionals (doctors, lawyers, etc.). I could not agree more with the authors of the Paper (Section 4.11, cont'd) that *"While tackling such abuses inevitably means a focus on enforcement, auditing and the fostering of a culture of tax compliance, the role of tax design should not be overlooked"*. Namely, under the current Turkish income tax law, all payments to independent professionals are first subject to an income withholding tax (20%) by their clients and then to annual tax filing by the individual professional who usually ends up in the top income bracket of 35%⁶³-- whereas incorporated businesses are subject, regardless of the amount of their earnings, to a single rate (significantly lower) income tax of 20%⁶⁴. So, as the Paper suggests (Section 4.1.1, cont'd on page [16]) *"A simpler, more neutral system of income tax (and indeed, indirect and business tax as we see in subsequent sections) would remove opportunities for avoidance, and by potentially allowing lower marginal rates, could reduce the incentive to avoid or evade tax."*

On the same token, although pursuing "lawyers and doctors" may produce "populism", as Section 4.1.1 further states *"It (re-designing tax policy) could also free up administrative resources for use in tackling remaining evasion and avoidance"*. Hence, limited administrative resources could be focused on totally informal parts of the economy such as cross-border trafficking and

⁶² Refer to Seer again, under footnote (9) above, for a similar approach.

⁶³ The top income bracket is already reached after a cumulative annual income amount of TL 88k -circa EUR 40k- for 2012 (see Article 103 of Turkish Income Tax Code) (Law No. 193).

⁶⁴ Barring the shortcomings of descriptive statistical data, as I discussed in part 2 above, Table 1 of the Paper shows that the contribution of corporate income tax in Turkey's GDP is significantly lower (1.9%) than the median for upper-middle income countries (2.9%) whereas the contribution of individual income tax (3.7%) is significantly higher than the median (2.6%).

rackeering where, notwithstanding all non-tax aspects of much higher importance such as preventing extreme levels of criminality for the sake of public order and health, the really significant leakage of tax revenue is to be found⁶⁵.

4.2. The Taxation Of Capital Income (Temporary Article 67)

Turkey has always been taxing, contrary to the recommendation of *Mirrlees Review* (Section 4.1.2, The taxation of capital income, page [18]) all interest on bank deposits⁶⁶ at a rate of 15% which is applied by way of withholding through Turkey-resident banks or other authorized financial institutions holding the deposits.⁶⁷ As I write this Commentary, the Turkish government is announcing its intentions⁶⁸ to have any amount of interest -together with dividends and any other financial income- pooled with all other income of individuals in their annual tax return which would effectively increase the tax burden on interest to 35%⁶⁹. Hence, I think it is now even more vital that a rate of return allowance (RRA), as prescribed by the *Mirrlees Review*, be considered in Turkey. Otherwise, I sense a great risk that the Turkey-resident individual, who already bears a significantly larger share of the total tax burden as opposed to the corporate taxpayers⁷⁰, could attempt to evade taxation or relocate (migrate) to countries which offer more favourable taxation⁷¹ or relocate (migrate) to countries which offer more

⁶⁵ *The UN (Racketeering Office) estimates the volume of drug trafficking alone at USD 320 billion worldwide (source: www.kom.gov.tr). If, optimistically, Turkey were affected by only 1% of such volume, we have a USD 3.2 billion magnitude to consider (USD 6.4 billion if she were affected by 2%). My rough estimate of total annual revenue for all lawyers and doctors in Turkey would barely reach USD 0.5 billion, and probably, the informal (undeclared) part thereof would not exceed 20% (USD 100 million).*

⁶⁶ *For probably at least 70% of Turkey-resident individuals, interest on bank deposits is still the only source of capital income. Income derived from other financial investments such as equity, bonds, derivative instruments, etc. mainly belong to corporate investors and benefit from zero rates or exemptions.*

⁶⁷ *See Temporary Article 67 of Turkish Income Tax Code.*

⁶⁸ *See declarations by Mehmet Simsek, Turkish Minister of Finance, "Robin Hood Style Taxation" Dunya newspaper on 31st December 2012 (www.dunya.com).*

⁶⁹ *Because, any income exceeding TL 88k for 2012 would be taxed in the top bracket of 35% according to the general progressive tariff of Article 103 of Turkish Income Tax Code. There are also constant reminders by the tax authority that especially the top bracket rate is higher (than in Turkey) in developed countries. However, the authority's first step appears to include financial (capital) income in individual annual tax returns, and perhaps in turn, consider raising the rates (see declarations by Mehmet Simsek, Dunya, 31st December 2012).*

⁷⁰ *The Paper reports (Table 1) 1.9% corporations tax and 3.7% income tax, respectively of GDP for 2010. In 2011, the uneven allocation has not leveled at all at 2.1% corporations tax and 3.8% income tax, respectively of GDP (source: www.muhsat.gov.tr, also Mutlu/Celen, Ibid Table 3.2).*

⁷¹ *In support of my worries, the Paper, also referring to Bird and Zolt (Section 4.1.1, page [16-17]), states: "Large-scale income tax evasion and avoidance under the nominally progressive rate schedules that exist in most middle income countries mean that, in practice, the degree of redistribution achieved is relatively limited (Bird and Zolt (2008)). The greater potential to evade and avoid tax also means that the increases in marginal rates as income rises are likely to be more distortionary (and raise less revenue) than in more advanced economies. This has led some to advocate having a single and relatively low rate of income tax with few exemptions and deductions (sometimes called a "flat tax")."*

favourable taxation⁷². Barring due macro-economic analysis, Turkey's internal balance of payments (fiscal budget) has been, despite the global crisis, consistently improving⁷³ whereby her total tax take has steadily provided a positive contribution⁷⁴. Also therefore, I find these present attempts to raise the tax burden on selected taxpayers, without reforming the system as a whole after due empirical or comparative legal analysis⁷⁵, to be unnecessary and potentially counter-productive (again in line with the Paper's stance in Section 4.1.1, pages [16-17]). On the longer run, I support the idea of replacing the progressive rate for individual income tax by a flat rate income tax which should no longer exceed the effective corporations' tax rate⁷⁶. In my view, that would still be in line with *Mirrlees Review's* emphasis on considering progressivity of the tax system as a whole - making the system as a whole progressive does not require every individual tax to be progressive⁷⁷.

5. CONCLUSION

As especially part 3 of my Commentary also shows, I could not agree more with the Paper's conclusion (Section 5, Summary and discussion, page [40]) that ...*"better tax design is not just a case of further research: it also requires administrative capacity, effective communication and leadership from policy makers. Some of the reforms suggested here and some of those that will be recommended by further research will be politically difficult to implement: but the gains from reform could, equally, be substantial."* On that account, provided that the procedure and scope of the required empirical research can be more clearly defined as I discussed in part 2 above, an internationally recognized institution such as IFS, on grounds as solid as the *Mirrlees Review*, could greatly help in moving Turkey's policy makers in the right direction.

⁷² Turkey-resident individuals are, in my view, more likely to migrate than Turkey-resident companies, because the latter benefit from significant tax and other financial incentives that are only locally available. Since a number of EU and other attractive countries offer nowadays, as part of their anti-crisis policies, more favorable and affordable "non-dom residency" or similar investment visa programs, Turkey should design her tax policy much more discreetly and probably differently.

⁷³ Subject to due macro-economic analysis, Turkey has been facing problems to curb its external balance of payments (imports chronically exceeding exports) for which the direct tax take is not (at least directly) a factor

⁷⁴ Table 1 of the Paper shows the Total Revenue for Turkey (32.2% of GDP) is above the median for upper-middle income countries (30.7% of GDP) in 2010. Also refer to footnote (3) above for Schneider's findings on the shrinking of Turkey's shadow (informal) economy.

⁷⁵ Please refer to part 2 of my Commentary.

⁷⁶ Currently, the headline corporations tax rate is nominally at 20%. However, due to (domestic law) tax incentives -which are only available to corporate but not to individual taxpayers- the effective corporate tax burden becomes 0% to 10% (as also recognized by the Paper in Section 4.3.3, page [33]).

⁷⁷ In parallel, see Tiley / Loutzenbiser, *Revenue Law*, 7th Edition, 2012, p. 19 in reference to *Mirrlees Review*, *Tax By Design*, p. 26.

COMMENTARY 2

ÜNAL ZENGİNOBUZ

1. INTRODUCTION AND SUMMARY

Abramovsky, Johnson, and Phillips (2013) revisit the set of recommendations of the Mirrlees Review (2010, 2011) with a view to providing guidelines for designing a good tax system and implementing a tax reform in middle income countries. Their report is very timely for Turkey, a middle income country aspiring to catch up with the high income club, whose tax-benefit system needs an overhaul if it is to take its recent growth performance to the next level.

Abramovsky et al. (2013) begin their paper by making the point that the principles of good tax design, as well as many specific policy recommendations, set out in the Mirrlees Review are relevant for middle income countries as well. The Mirrlees Review has at its focus a high income country, namely the U.K. They contend that, with appropriate tailoring of policy recommendations according to their specific economic and institutional features, the principles laid out in Mirrlees Review should also guide tax reform in middle income countries.

After a brief comparative overview of the high-level descriptive statistics of the tax systems of middle and high income countries, as well as describing the specific economic, political and institutional context for middle income countries, Abramovsky et al. (2013) lay out the key principles behind the Mirrlees Review. The basic idea behind the recommendations of the Mirrlees Review is that of a progressive, neutral tax system. Progressivity refers to how much the tax system is to redistribute income from richer households or individuals to poorer ones, and it is taken as the policy objective that is to guide the tax design exercise. A good tax system should redistribute income at a minimum efficiency cost, and in doing that the principle of neutrality, i.e. avoidance of arbitrary distortionary tax differentiation across individuals and forms of economic activity, should be the guiding principle. The system aspect of the tax structure is emphasized, i.e. the aggregate effect in the overall of all taxes together rather than what specific taxes do in isolation is what is important. Auxiliary principles for good tax design to be adhered to, all of which are related to the principle of neutrality to differing degrees, are simplicity, stability, and transparency of the tax system. Abramovsky et al. (2013) then review all of these principles for middle income countries and makes suggestions on how they should be adapted for specific dimensions of taxations in those countries, in particular for redesigning labor and capital income taxes, consumption taxes, and corporate income taxes.

I agree with Abramovsky et al. (2013) that the fundamental principles of good tax design should apply equally to the middle income countries as well. As far as the tax design problem is concerned, the weaker tax administration and institutional capacities of middle income countries, lower tax morale among their citizens, and the larger size of their informal economy are constraints to be taken into account, but tax design exercise has to pay attention to context in high income countries as well. The specifics of desirable tax structures are always an empirical

matter. Moreover, it is true that these constraints are becoming less important as middle income countries, especially the upper middle income ones - including Turkey - have been improving their capacity to administer more modern tax systems.

One point to be kept in mind for the middle income country context is the fact that political systems in middle income countries are in general less successful than those in high income countries in aggregating citizens' preferences into well defined policy objectives for the tax designer to work with. This applies both to the determination of desirable amount of redistribution and to the amount of tax revenue to be raised, two things that the optimal tax theory framework adopted by the Mirrlees Review takes as given. There is not much that economic analysis can offer on tax design if policy objectives are not clearly defined, but lack of sufficiently clear policy objectives - much more so than in high income countries - is to be kept in mind in translating the recommendations of the Mirrlees Review to middle income setting. This issue is more fundamental than related issues such as low tax morale observed in middle income countries, and may render the whole optimal tax design exercise indeterminate in their case.

Another important difference from high income countries that cannot be overstated is that the benefit and transfer systems (through cash welfare payments and public services) that in high income countries do most of the redistribution are simply not there in middle income countries. The recommendations of the Mirrlees Review regarding neutrality of various taxes and their adaptation to middle income countries by Abramovsky et al. (2013) presuppose the existence of a benefit-transfer system that complements the tax system. Abramovsky et al. (2013) recognize this issue, but the system-as-a-whole approach they advocate for designing the tax system should extend more forcefully to include the public expenditure system as well, and perhaps a joint design for the tax and benefit-transfer systems is even more relevant for middle income countries than designing the tax system on its own. The available evidence in the case of Turkey (see below) suggests that the tax system exacerbates rather than ameliorates the income inequality. Perhaps a more neutral tax system would at least not have worsened the income inequality, but in the absence appreciable redistribution through public expenditures it is not clear in which direction a more neutral tax system would change the income distribution.

Abramovsky et al. (2013) emphasize forcefully the need for empirical research for the design of a good tax system, and this is certainly the case for Turkey. Without credible empirical evidence it will be impossible to judge either the progressivity or the neutrality of any specific tax proposal, and definitely not possible to assess the tax system as a whole. The starting point for designing a good tax system would be a detailed understanding of the shape of the income distribution as well as the response of individuals and businesses to different taxes and tax rates. These parameters are key to good tax design and there are simply no reliable estimates for them for Turkey. High quality micro-level data on households' incomes and consumption and on the behavior of businesses are very scarce, if not nonexistent. There is an urgent need for the

relevant public authorities to make all the survey and administrative data at their disposal available for research and to commission and support high quality empirical research based on reliable data.

Below I will very briefly review what we know about the efficiency and equity aspects of the Turkish tax system. To provide some insight for tax reform that will gain public support, the review will also report some of the findings of a nationwide survey study on the perceptions, attitudes, and behavior of citizens regarding the Turkish tax system and the way it is implemented (Zenginobuz et al., 2010). I will then provide brief comments on more specific recommendations of Abramovsky et al. (2013) regarding tax structures in middle income countries that pertain to the Turkish tax system.

2. EFFICIENCY AND EQUITY ASPECTS OF THE TURKISH TAX SYSTEM: A BRIEF OVERVIEW⁷⁸

2.1. Total tax burden and the structure of taxes in Turkey

The Turkish government currently collects about 25% of GDP as taxes, which is not very high when compared to other countries. However, this ratio was only 15% in 1990 and thus underwent a rapid increase in 20 years.

Indirect taxes played a large role in this increase. Currently about 65% of tax revenue comes from value added tax (VAT), special excise tax (SET), and special communication tax (SCT). This ratio was about 50% in 2000. The OECD average is about 40% and Turkey's heavy reliance on indirect taxes is out of line with what is observed in most of the OECD countries.

The heavy reliance on indirect taxes is in part a consequence of inability to collect income taxes at sufficient levels. The ratio of indirect taxes to GDP is 11.3%, which is very close to the OECD average of 10.9%. However, the income taxes collected are only 5.6% of GDP, less than half of the OECD average of 13.2%.

⁷⁸ *The following review of various aspects of the Turkish tax system draws on Zenginobuz et al. (2010). The figures given for quantitative aspects of the Turkish tax system are based on OECD Revenue Statistics 1965-2010, and TURKSTAT Household Budget Surveys 2003-2008. The data on tax perceptions and attitudes of Turkish citizens come from a nationwide survey of 2,400 randomly chosen subjects interviewed face-to-face during the Summer of 2009 (Zenginobuz et al., 2010, Chapter 4).*

2.2. Redistributive impact of high consumption taxes

Since consumption taxes are employed at the same rate regardless of income, the poor who spend a much larger portion of their income as consumption compared to those with higher incomes end up paying a much larger portion of their income as taxes⁷⁹. As income taxes, which are progressive with higher rates for higher incomes, constitute a small portion of tax revenue in Turkey, the tax system as a whole ends up exacerbating the income distribution rather than ameliorating it.

Consumption taxes (VAT, SET, SCT) paid in Turkey amounted to 13.9% of income in 2003, 14.1% in 2004, 15.7% in 2005, 15.1% in 2006, and 14.1% in 2007 and 2008. The fluctuation in the burden of consumption taxes reflects the fluctuations in VAT collections, which have the largest share in the overall consumption taxes. The burden of the overall consumption taxes on the richest 20% of the households have been below the average in all of the years considered, while the burden on the poorest 20% has been 1.3 to 1.4 times higher than the average. The burden on the poorest 5% was more than twice the burden on the richest 5%. These figures bring out the highly inequitable character of consumption taxes in Turkey out into the open. While VAT collections, which have the highest share in consumption taxes, worsens the income distribution in Turkey, special excise taxes somewhat protect middle income groups, and low collection of income taxes limit their potential correcting effect on income distribution.

The Gini coefficients computed using the disposable income data from the Household Budget Surveys are 40.3 for 2003, 39.1 for 2004, 38.4 for 2005, 37.3 for 2006, 36.8 for 2007 and 38.5 for 2008. The overall consumption taxes increase the Gini coefficient (i.e. worsens the income distribution) by 1.6 in 2003, by 1.8 in 2004, by 1.9 in 2005, by 1.7 in 2007, by 1.6 in 2007, and by 2.0 in 2008. The mildly progressive income tax system in effect in Turkey, if implemented fully without any evasion, would ameliorate the income distribution considerably. The potential decrease in the Gini coefficient would be 2.7 in 2003, 2.8 in 2004, 2.3 in 2005, 2.2 in 2006, 2.3 in 2007, and 2.5 in 2005. Given the fact that only one third of potential income tax is actually collected, this ameliorating effect does not materialize, rendering the overall tax system regressive.

⁷⁹ Abramovsky et al. (2013) argue in footnote 28, page 22 that whether consumption taxes appear regressive or progressive depends on whether one classifies households as rich or poor based on their income or expenditure, and whether one presents the VAT payments as a fraction of income or expenditure (their argument draws from Caspersen and Metcalf (1993), who demonstrate that a VAT is not necessarily regressive is when one considers lifetime income as the VAT base). They further state that taking consumption taxes paid as a proportion of income is a potentially misleading way of considering the distributional effects of consumption taxes. On the other hand, as also argued by IFS et al. (2011), the best measure of lifetime living standards might be current income for some households, and current spending for other households. IFS et al. (2011) also state that it is not clear whether the "rich" or "poor" are best defined by their current income or current spending, and present their analysis of VAT burden based on both income decile groups and expenditure decile groups. Since my main concern here is to broadly assess the distributional impact of the overall Turkish tax system, i.e. not only that of the consumption taxes, I focus on income as the base of calculation and also rank individuals according to income. This also allows me to compare contribution of burdens of different taxes to the overall tax burden.

2.3. The unregistered economy and the tax wedge

The size of the unregistered economy in Turkey is estimated to be between one third and half of the official GDP (Schneider et al., 2010; Zenginobuz et al., 2010). Increased tax collection in the last two decades has meant that the taxes on registered economic activity have shot up. In addition to very high consumption taxes, the tax wedge (the difference between the gross wage paid by the employer and the net wage received by the worker) on average worker's income in Turkey is also considerably above the OECD average. For example, the tax wedge on average earnings of a single wage-earner family with two children is about 10% higher in Turkey than the OECD average (36.3% compared to 25.4% in 2010). This leads to a vicious cycle of unregistered economic activity and higher tax rates reinforcing each other.

2.4. Citizen perceptions on taxation in Turkey

Successful tax reform requires a certain degree of voluntary consent to being taxed on the part of citizens. To get some insight perceptions and attitudes of Turkish citizens regarding taxation, the results of a nationwide survey of 2,400 randomly chosen individuals, who were interviewed face-to face during the summer of 2009, prove instructive (Zenginobuz et al., 2010, Chapter 4). The survey was undertaken amidst increasing concern about the global economic crisis that has also hit Turkey rather severely in 2009. That contributed to an increased awareness of economic issues as well as of taxation on the part of citizens.

In answering the question on what they understand when they hear the word "taxation", 40% of the individuals surveyed marked "it is a coercive payment necessary for the development of the country". This was followed by "it is a civic duty" at 30%. Against these rather positive assessments, about 15% of individuals defined taxation in terms of a negative connotation, with 80% of this group (11% of the overall sample) viewing taxes as robbing the poor to give to the rich. Almost all of the individuals recognized the link between taxation and representation, and approved strongly (with an average of 8.1 on a scale of 1 to 10) the statement that paying taxes gave them the right for representation in the governing of the country. However, citizen perceptions on issues such as the state of democratic representation, the quality of public services, the efficiency of government, the transparency of government, and the accountability of government were on the overall extremely negative. The average rating accorded to efficiency of the state in converting tax revenue to public services was 3.6 out of 10, and the average rating for transparency in doing this was 3.1. Citizens' perception of corruption in Turkey was also at the considerably high level of 7.0 on a scale of 1 to 10.

About 46% of the individuals interviewed knew that most of the taxes were collected as consumption taxes in Turkey, and about 39% of the subjects viewed very high consumption taxes as the main problem with the Turkish tax system. This was followed by not taxing high

enough those with high incomes (23%) and the existence of a large unregistered economy (16%). The citizens viewed the tax audit system and its implementation as inadequate. Their perception is that big corporations, private sector professionals with high salaries and medical doctors get away with paying too little taxes, while state employees, farmers, retirees and workers pay more than they ought to pay. As the reason for why tax collection is not at an adequate level, 24% marked the inequity in the tax system, followed by unregistered economy (22%) and the failure of the state to convert taxes collected into satisfactory public services (16%).

As for what constitutes an equitable (fair, just) tax system, 68% of the individuals who were surveyed marked "taxes according to ability to pay". Individuals' evaluation of the fairness of the current Turkish tax system stood at the very low level of 3.1 on a scale from 1 to 10. An overwhelming majority of citizens (81%) believe that citizens ought to pay their taxes fully, and about 30% of subjects have a very high tendency to comply voluntarily with the tax system. The tendency for voluntary compliance is rather high and surprising, especially in view of the fact that most citizens find the Turkish tax system inequitable, non-transparent, inefficient and the Turkish public system unaccountable to citizens. This fact points to the considerable public support that a tax reform would receive were it to bring a system that will be perceived as equitable and implemented in a transparent, efficient, and accountable manner.

As for features of tax design that will be deemed desirable for Turkish citizens, 82.8% of the individuals surveyed wanted minimum wage and 56.1% wanted agricultural income to be exempted from taxation. Presented with a choice between a flat rate income tax and progressive income tax, 85% of individuals surveyed voted for the progressive tax system. Among those who voted for the progressive system, about 70% (61% of the overall sample) preferred a progressive system with the lowest rate at 15% and the highest rate at 30% over one that starts at 15% and goes up to 45%. The preferred income tax system seems to be rather close to the system currently in use.

3. DISCUSSION AND COMMENTS

The brief overview of the Turkish tax system provided above paints a picture broadly in line with the generic features of a middle income country summarized by Abramovsky et al. (2013), but with some differences. As in Latin America, there is a high level of pre-tax-and-transfer income inequality in Turkey and there is no perceptible income redistribution by the tax and transfer system. The size of the unregistered economy is considerable and the habit of informal economic activity seems to be entrenched at all levels. On the other hand, the administrative capacity of the Turkish Revenue Administration has increased considerably over the last decade, especially in terms of using information technologies - including increased use of electronic filing, to track transactions and to reduce tax evasion and avoidance. This is an important positive

development that should be of significant help in carrying out an overhaul of the tax system⁸⁰. As for tax morale, the available evidence suggests that Turkish citizens' tendency to comply voluntarily will significantly increase if an equitable tax system can be designed and implemented in a transparent, efficient, and accountable manner. Increasing tax morale will also require better alignment of public services with the preferences of citizens, both in terms of quantity and quality.

In addition to its inability to redistribute income, the Turkish tax system is also wrought with significant shortcomings with regard to promoting investments and providing work incentives. The overall tax burden is not very high but it has increased very fast, with much of the increase due to higher consumption taxes and higher taxes on registered economic activity in general. A very sharp increase in revenue from consumption taxes of one sort or the other have created a situation where the share of indirect tax revenue is out of line with OECD and EU averages. As for taxing business, corporate income tax rates have come down in recent years, but tax policies have been subjected to numerous and frequent changes for nearly two decades without an overall comprehensive strategy for fundamentally reforming the tax system⁸¹. This has created a very uncertain environment for investment and discouraged FDI as well. An excessive tax wedge on registered employment is also a significant problem that creates a vicious cycle of ever increasing incentives to remain in the unregistered economy. A related issue is heavy reliance on social security contributions, which make up a large proportion of the total tax wedge on labor (about 70 per cent of the overall tax wedge)⁸².

The observations above make the recommendations for tax design outlined in Abramovsky et al. (2013) very relevant for Turkey. I fully agree with their conclusion that the case for neutrality is significantly enhanced for middle income countries, and that is certainly true for Turkey as well. The Turkish tax system in its current form is a patchwork of fragmented legislation and regulations that were enacted over time to solve one pressing issue or the other. Its sheer

⁸⁰ *The Turkish Revenue Administration was restructured in 2005 as a semi-autonomous agency under Ministry of Finance (it had structured as a department in the Ministry of Finance until then). The autonomy it enjoys is limited (OECD, 2011, page 22). The independence of the Turkish Revenue Administration from political influence is an important issue, which continues to raise concern in the aftermath of huge fines imposed in 2009 on one of the country's biggest media groups (<http://www.aa.com.tr/en/news/33678--turkish-business-concerned-over--politicisation--of-tax-administration--koc-says--->).*

⁸¹ *For example, between 2000-2005 there were 46 amendments to major tax laws (an average of 9.2 amendments per year) while tax rates have been adjusted 157 times by the Council of Ministers (an average of 31.4 per year and 2.6 adjustments per month). On top of this, the Ministry of Finance has issued 253 tax communiqués over the same period to explain and clarify the implementation of amended tax laws and rates (see Zenginobuz, 2005, for details). In addition to the major overhaul of the corporate tax law in 2006, the income tax law was amended 11 times between 2009-2012 (Gunduz, 2012).*

⁸² *See Section A.3 of Zenginobuz (2005) for further information and discussion on social security contributions in OECD countries and Turkey.*

complexity, together with the frequency with which it has been subjected to piecemeal changes in its rules and regulations without a coherent strategy, creates enormous uncertainties for businesses and ordinary taxpayers alike. A simple tax regime with low rates will facilitate tax enforcement and compliance.

It is clear that the current structure of taxes in Turkey has to be readjusted to increase the share of income taxes in total tax revenue. Here the case for neutrality is even stronger as broadening the income tax base will require a simple structure with moderate rates. A simpler and flatter personal income tax regime with lower rates should be adopted. This should be accompanied by reduced tax expenditures and fewer tax breaks. At the same time, the government should initiate a campaign to reduce the size of the unregistered economy. Among other things, this means committing itself to a zero amnesty policy and strictly enforcing it.

Focusing on reducing unregistered economic activity in Turkey will have to go along with cutting the tax wedge on formal labor, which is also important for boosting employment. That inevitably calls for reducing mandatory social security contributions tied to employment, which constitute a large fraction of labor costs. However the social security system, with the free non-contributory benefits as well as the contributory benefits it provides, already runs considerable deficits. Thus increasing the share of income taxes in total tax revenue becomes crucial in that regard as well. Given the heavy reliance on consumption taxes, there is no further room there to compensate for a reduction in social security payments. Replacing the current social security system completely with a broad-based VAT-funded system of universal safety net benefits, as suggested by Anton et al. (2013) and Ahmad and Best (2012), is unrealistic for Turkey as the social security system is well established, it is an integral part of the formal labor market, and the Turkish social security administration has sufficiently high administrative and enforcement capacity to further increase formality in the labor market, providing it is given mandate to do so.

As for consumption taxes, the VAT system in Turkey is well established and functions adequately. However, there are reduced or zero rates on a significant number of items, including food. It is clear that adoption of a single-rate VAT would resolve VAT refund problems, as it would eliminate the arbitrage opportunities provided by more than one VAT rate, but to find public support for the neutrality recommendation by Abramovsky et al. (2013) in this case would be very difficult. As cash transfer programs are very inadequate, if not nonexistent, rate differentiation is perceived as redistributive. It is not clear whether that is so, and there is need for research on this issue. The main redistributive impact would come from increasing the share of income taxes in total tax revenue. It is also very critical that transfer and welfare programs are introduced, expanded, and reformed so that there will be both room and support for more uniform VAT rates. I agree with Abramovsky et al. (2013) that a more uniform VAT rate structure is very likely to significantly help in curbing the informal economy, but without empirical

evidence on both the redistributive impact of reduced VAT rates and the interaction between VAT and the informal economy, it is difficult to evaluate the merit of more uniform VAT rates.

Regarding taxation of business profits, Abramovsky et al. (2013) acknowledge the increased difficulties for middle income countries that the *Mirrlees Review* recommendation for adoption of an allowance for corporate equity (ACE) would imply. I agree with their assessment that, given the increased international mobility of companies, room for raising significant amount of revenue from corporate taxes is limited for middle income countries, including Turkey. Since 2006 Turkey has a much simpler corporate income tax structure with a moderate-to-low basic rate. However, the basic corporate income tax rate is not aligned with the top personal income tax rate. Whether the two can be brought closer to each other to prevent distortions and to minimize incentives for tax avoidance and evasion would require a comprehensive assessment of equity and efficiency implications of such an alignment, as well as its political feasibility.

In summary, I find the case made by Abramovsky et al. (2013) for a neutral (simple, stable, and transparent) tax system very relevant for Turkey. I also agree with them that the basic principles advocated in the *Mirrlees Review* are perhaps even more relevant in the middle income country context where the larger size of unregistered economic activity makes neutrality more compelling. On the other hand, combining neutrality with progressivity as well as assessment of the impact of all taxes together as a whole is a significantly more difficult issue in middle income countries. Credible empirical evidence to guide tax design and evaluation is simply not there in many middle income countries, including Turkey. Since transfer systems that would better redistribute income and ameliorate high levels of inequality are also not there, the assessment of appropriate mix of progressivity and neutrality is a daunting task in most of the middle income countries. The call by Abramovsky et al. (2013) to governments of middle income countries to make available all relevant tax data in their hand for research and to collaborate with researchers to improve research capacity inside and outside of Government is very well placed and is to be most welcome by tax researchers in those countries.

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