



OECD Tax Policy Studies

Taxation of SMEs

KEY ISSUES AND POLICY CONSIDERATIONS

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Foreword

This report releases findings of a study on the taxation of small and medium-size enterprises (SMEs) carried out jointly by Working Party No. 2 on Tax Policy Analysis and Tax Statistics of the OECD Committee on Fiscal Affairs, and the Working Party on SMEs and Entrepreneurship of the OECD Committee on Industry, Innovation and Entrepreneurship. Aside from interest in revisiting an important policy topic, a main purpose in preparing this report is to present, discuss and analyse information gathered from a questionnaire issued to OECD countries in 2006 on current policy and administrative aspects of taxing SMEs, used as background material to discussions at the 17-19 October 2007 International Tax Dialogue (ITD) conference on Taxation of Small and Medium Enterprises. Questionnaire responses from 20 OECD countries participating in the study, covering a range of issues, are supplemented by further information on the characteristics and tax treatment of SMEs in all OECD countries. The report covers a broad range of SME taxation issues, including possible effects of taxation on the creation and growth of SMEs, and considerations arising from a relatively high compliance burden.

The report first considers characteristics of SMEs in OECD countries, including the percentage of firms that are SMEs and the contribution of SMEs to employment, by sector; the percentage of unincorporated versus incorporated firms, measured for firms of varying sizes based on employment; and the distribution of the number of firms by taxable profits and business form. These data highlight the importance of the SME population and encourage policy makers to consider the diversity of SMEs in terms of their size, age, risk characteristics, growth potential, and market and framework conditions under which they operate.

The income taxation of SMEs is then reviewed, with income thresholds, rates and levels of taxation depending on a business's structure. The taxation of unincorporated and incorporated SMEs is discussed, with the analysis of incorporated SMEs accounting for taxation at both the corporate level (often at concessionary small business corporate tax rates) and at the personal level upon distribution to shareholders. A comparison of average statutory tax rates is made in order to investigate possible distortions to business structure decisions due to income taxation (with countries reporting the same or similar main tax base provisions for unincorporated and incorporated businesses). The analysis focuses on the single business owner/worker scenario, and is undertaken for all OECD countries. Four country case studies supplement this analysis by incorporating social security contributions into average tax rate calculations, and relaxing a number of assumptions. The analysis considers two decision margins – whether to move from dependent employment to establishing a business, and whether to structure an SME in unincorporated or incorporated business form – in investigating the possible impact of taxation on SME creation and growth, with tax considerations found in some cases to be a discouraging factor.

The report also considers tax incentives to encourage investment in SMEs, reviewing arguments for and against their use. Traditional market failure arguments are considered, as well as arguments that address whether certain basic tax provisions, with uniform application to firms of all sizes, may result in a relatively high tax burden on SMEs, possibly creating impediments to SME creation and

growth. Main types of income tax incentives are considered, and country examples are provided of tax incentives to encourage SME investment based on the questionnaire responses.

Lastly, the report addresses the second main component of the overall tax burden on SMEs, in addition to tax liability (payments to government) – namely, compliance costs, which typically have a significant fixed cost component, tending to impose a relatively higher burden on SMEs. Approaches to reducing compliance costs borne by SMEs are identified, and country examples are provided of policy and administrative measures implemented to reduce compliance costs based on the questionnaire responses.

This report was written by W. Steven Clark and Alastair Thomas of the OECD Secretariat, drawing on information and comments received from Delegates of Working Party No. 2 of the Committee on Fiscal Affairs, and Delegates of the Working Party on SMEs and Entrepreneurship of the Committee on Industry, Innovation and Entrepreneurship. A summary of country responses to the SME tax questionnaire was prepared by Professor Alfons Weichenrieder. Financial support from the Government of Japan is gratefully acknowledged.

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Executive Summary

This report considers findings of a study on the taxation of small and medium-size enterprises (SMEs) carried out jointly by the Working Party on Tax Policy Analysis and Tax Statistics of the OECD Committee on Fiscal Affairs, and the Working Party on SMEs and Entrepreneurship of the Committee on Industry, Innovation and Entrepreneurship. Aside from interest in revisiting an important policy topic, a main purpose in preparing this report is to present, discuss and analyse information gathered from a questionnaire issued to OECD countries in 2006 on current policy and administrative aspects of taxing SMEs (the "SME tax questionnaire"), used as background material to discussions at the 17-19 October 2007 International Tax Dialogue (ITD) conference on Taxation of Small and Medium Enterprises.

Responses to the SME tax questionnaire cover the following 20 OECD countries: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Germany, Greece, Ireland, Italy, Japan, Mexico, New Zealand, Norway, Poland, the Slovak Republic, Spain, Sweden, the UK and the US. As outlined below, in addition to reporting detailed information for these 20 countries, the paper presents further information on the tax treatment and characteristics of SMEs in all OECD countries, gathered by the OECD Centre for Tax Policy and Administration, and the OECD Centre for Entrepreneurship, SMEs and Local Development.

Characteristics of SMEs

Chapter 1 begins by discussing characteristics of SMEs in OECD countries, including the percentage of firms that are SMEs, by sector (manufacturing, industrial, service sectors), with a percentage breakdown distinguishing micro, small and medium-size firms; the contribution of SMEs to employment, by sector; the percentage of unincorporated versus incorporated firms, measured for firms of varying sizes based on employment; and the distribution of the number of firms by taxable profits and business form. These data, provided as background information relevant to policy analysis in this area, highlight the importance of the SME population, while encouraging policy makers to consider the diversity of SMEs in terms of their size, age, risk characteristics, growth potential, and market and framework conditions under which they operate.

A simple yet striking fact from the data is that most firms are SMEs (whether looking at industrial, manufacturing or service sectors), with the smallest of firms (micro-firms) generally the most common. Perhaps then not surprisingly, SMEs typically also account for the bulk of employment. The predominance of SMEs serves to heighten interest in ensuring that tax rules do not place SMEs at a competitive disadvantage with regard to the tax burden on other firms, taking into account not only taxes paid to government (tax

liabilities), but also resources involved with the "compliance burden" of preparing, documenting and filing tax returns.

The prevalence of firms in a tax-loss position is also shown to be an important consideration, although the data do not provide a breakdown of loss-making firms that are small, medium-size and large. While this detail is needed for a thorough assessment of SMEs most affected by tax-loss offset provisions, it is recognised that the development of certain SMEs involves long gestation periods with limited revenue from sales but significant start-up costs – implying business losses for one or more years. This fact, combined with data showing a prevalence of firms in a tax loss position, serves to encourage policy makers to ensure that tax-loss offset rules are not impeding to risky investment in young, innovative firms.

Finally, the data also show that incorporation is increasingly common the larger is firm size. In particular, for small firms that begin as unincorporated businesses, growth to a significant size (e.g. 10-50 employees, and up) is likely to involve incorporation. One possible reason is that SMEs may need to issue equity shares to raise sufficient capital to grow, with investors possibly attracted by the continuity of business life that incorporation can provide. Another possible reason is that incorporation may provide investors with more limited liability than an unincorporated business. Where governments aim to avoid policy-related impediments to growth, it follows that tax rules should aim on balance to not discourage (or encourage) incorporation, where relevant considerations include scope for double taxation of corporate profits, while recognizing at the same time that incorporation generally involves application of relatively low corporate income tax rates on reinvested profits of growth-oriented firms.

Income taxation of SMEs

Chapter 2 reviews income taxation of SMEs in OECD countries, where taxable income thresholds, tax rates, and levels of taxation depend on business structure. The review begins with unincorporated businesses, including sole proprietorships and other flow-through entities including partnerships, where unincorporated (personal) business income is subject to personal income tax rates. The chapter reports top marginal personal tax rates and average personal statutory tax rates calculated at different income levels, using multiples of average wage earnings in each country (as per Taxing Wages) to enable comparable information.

Turning to incorporated businesses, involving two levels of income taxation (corporate and personal shareholder-level taxation), the review first considers the use of graduated (tiered) corporate tax rate structures in 11 OECD countries, versus reliance on a single (basic) corporate tax rate in the other 19 countries, and within the former group different approaches in the targeting of small business (low tier) tax rates to SMEs. As when analyzing the tax burden on unincorporated businesses, average corporate statutory tax rates are reported at various multiples of average earnings for the countries with a graduated rate structure, in order to capture the influence of different marginal rates and different thresholds.

The above-noted information is used to consider how statutory income tax rates on unincorporated business income compare with corresponding tax rates on incorporated business income for a top personal income tax (PIT) rate investor, taking into account the

treatment of returns to labour and capital invested by an owner/worker in an SME. (Social security contribution systems are not considered as part of this analysis, but are included in average tax rate calculations for selected countries in Chapter 3.) Such comparisons are useful where policy makers wish to address cases where the tax system has the potential to impede or distort the choice of business form, recognising that structuring a business in an unincorporated form may provide certain non-tax advantages relative to incorporation, or possibly the reverse, depending on a taxpayer's situation.

Establishing an unincorporated business may be relatively less costly if significant legal fees and other resources are involved in drafting and registering articles of incorporation, and may give business owners (sole proprietors, general partners) greater control over business decisions. On the other hand, incorporation may be relatively attractive in enabling improved access to finance, continuity of life, and greater protection of personal assets. In general, efficiency losses may arise where the choice of a particular business form, offering a taxpayer greater non-tax advantages on balance relative to another, is discouraged by the tax system. While avoiding certain distortions imposed by a tax system may not be administratively feasible or otherwise possible, policy makers are generally interested in establishing where distortions exist, to help establish policy approaches to take.

For a top PIT rate taxpayer, differences in the overall income tax rate on unincorporated versus incorporated business income arise where the tax rate on capital income differs between the two cases. For countries with non-dual income tax systems, differences arise where the combined average corporate plus top personal tax rate on distributed corporate profits differs from the top personal income tax rate on self-employment income. For dual income tax systems, the relevant comparison is with the flat rate applied to prescribed capital income of an unincorporated business.

In comparing statutory tax rates on corporate profit with top PIT rates on personal business income, dividend tax rates (DIVTR) are reported which factor in both corporate income tax (CIT) and shareholder-level personal income tax (PIT) and represent the "mature firm" case involving immediate distribution of earnings. Also compared are CIT rates alone that exclude shareholder-level taxation, representing a "high-growth" company case involving indefinite profit retention and deferral of shareholder taxation of dividends.

Looking first at the 19 countries with a flat CIT rate structure, for mature firms ASTR differences are shown (of varying magnitudes) favouring incorporation in eight countries, discouraging incorporation in seven, with four countries found to be neutral (three due to full imputation systems, one through exempting dividend income and aligning corporate and top PIT rates). For high-growth firms, ASTR differences favour incorporation in 16 of 19 countries, discourage incorporation in one country, and are neutral in two. Turning to the 11 countries with tiered CIT rate structures, illustrative ASTRs are provided for corporate profits equal to four-times average earnings in the respective country. In the mature firm case, incorporation provides a lower ASTR in five countries, and a higher ASTR discouraging incorporation in five (although the concessionary small business tax rates are generally found to reduce the bias against incorporation), with neutrality found in one country (with a dividend tax credit fully offsetting corporate tax). For high-growth firms, an ASTR difference favouring incorporation is found in all 11 countries.

The preceding results for polar cases (immediate distribution vs. indefinite retention) may be generalised. In particular, where earnings are initially retained but later distributed, implying that shareholder taxation is deferred but not indefinitely, the present value of

future dividend taxes factors into statutory tax rates (STRs) for the incorporated business case, with values falling between the polar cases, tending to the retention/tax deferral case the longer the growth (reinvestment) period.

As a general result, incorporation may involve a higher income tax burden on a top PIT rate investor, owing to some degree of double taxation of profit (with this difference pronounced in certain countries, and not in others with imputation/integration systems). For firms reinvesting their earnings (generally a cheaper source of finance than new equity), the taxation of corporate profits at a low rate, compared with a top PIT rate on personal business income, combined with the ability to defer shareholder taxation of profits, tends to increase the relative attractiveness to profitable SMEs of incorporation as a choice of business form, at least for a top personal tax rate investor, and in particular where small business tax rates apply.

For SME owner/workers without other sources of income, the average personal STRs on unincorporated business income will be less than the top PIT rate (the applicable rate for a top personal tax rate investor, considered in the results discussed above), and determined by the level of business income and the structure of the tiered personal tax rate schedule [i.e. marginal PIT rates, levels and thresholds, basic personal allowance (if any)]. For relatively low levels of business income, the average personal STR on unincorporated business income may be below the basic corporate tax rate. Thus for relatively small firms, incorporation may involve a higher tax rate being applied to business profits even for growth-oriented firms reinvesting their earnings.

It should be noted that the preceding comparisons, while useful in considering how statutory tax rates may factor in to potentially distort decisions over the choice of business form, may or may not reflect differences in effective income tax rates upon which decisions are presumably based. To the extent that tax base and tax credit differences arise, the statutory tax rates may be misleading indicators. Also, the differences in STRs across countries cannot be used in any case to infer differences in effective tax rates across countries, given differences across countries in both tax base and tax credit rules. Last to recall is that the results ignore SSC and consider only the case of top PIT rate investors. These two assumptions are relaxed in Chapter 3 of the paper.

Tax distortions to SME creation, business structure and growth

Chapter 3 comprises four country case studies that examine possible tax distortions created by personal and corporate income taxation and social security contributions (SSC) in influencing two decision margins: 1) the decision to move from dependent employment to establishing a business (whether incorporated or unincorporated); and 2) the decision to structure an SME in incorporated or unincorporated form. The first is relevant for SME creation, while the second is particularly relevant for SME growth if it is accepted that in many, if not most, cases the incorporated form is the preferable legal form for a business to gain sufficient outside capital to develop and grow.

The analysis adds to that in Chapter 2 by introducing social security contributions, where contribution rates, base and thresholds may differ by business form. Unlike the analysis in Chapter 2 that considers a top PIT rate investor, the taxpayer considered in this chapter is assumed to have no other sources of taxable income, so the entire personal tax rate schedule is applicable in determining ASTRs. The countries considered are: New Zealand,

Norway, Sweden and the UK. The analysis of possible tax distortions is based on calculating and comparing "all-in" ASTRs (corporate and personal income tax, plus social security contributions) for a hypothetical individual taxpayer who provides both labour and capital inputs to derive income in one of three ways: as a dependent employee; as a single owner/worker of an unincorporated business; and as a single owner/worker of an incorporated business. If in business, the individual is assumed to have no employees. The calculations assume that the individual is single with no dependents.

The tax burden of the hypothetical taxpayer will vary depending on three key factors that need to be controlled for: the amount of income earned; the relative contributions of labour and capital inputs in deriving the income (which may vary significantly by type of business activity, and may be able to be manipulated), and dividend distribution policy. To take account these factors, ASTRs are provided for fixed income levels, differing levels of capital income (as a proportion of total income), and differing dividend distribution policies. As with the analysis in Chapter 2, the fixed income levels are set equal to a multiple of average wage earnings in the relevant country, so as to provide comparability across these countries. (The base case is two-times average wage earnings.)

While the case studies are both country specific and based on a number of assumptions, the illustrative results demonstrate the potential for tax to influence both decisions over whether to create an SME, and how to structure one, and also how these decisions depend on capital versus labour intensity. In two of the four case studies (Sweden and the UK) a tax distortion is found towards formation of an SME at most capital income proportions, irrespective of dividend distribution policy. For the other two (New Zealand and Norway), the potential distortion varies with both distribution policy and capital intensity. However, a tax incentive to form an incorporated SME is found in both countries where a significant fraction of corporate profits is retained, and where the business is not highly capital intensive.

As regards the SME business structure decision, the case studies show a general bias towards incorporation with full retention of profits (as with the general trend in the income tax analysis in Chapter 2). This is largely because incorporation tends to reduce SSC, and avoids possible additional taxation of capital income on distribution. Even with some distribution of profits, the incorporated form is still generally favoured in the UK, New Zealand and Norway. Sweden is the clear exception, where the ability to both retain unincorporated business income within the business, as well as have distributed income split into both capital and labour components, make the unincorporated form attractive from a tax perspective.

More broadly, the case studies also show that the capital income proportion can substantially influence the ASTR faced by an SME. In general, for the UK, Sweden and Norway, ASTRs fall as the capital income proportion increases, while in New Zealand there is a range of capital income proportions over which the ASTR is minimised. This raises two policy considerations for tax policy makers to be aware of, in addition to the possible distortions to business creation and structure decisions. First, taxpayers may have an incentive to shift production structures (e.g. capital/labour mix) towards factor combinations that are tax favoured but possibly not production efficient.

Second, taxpayers may have an incentive to artificially recharacterise (generally to increase) their true capital income proportions to minimise tax liability. While the nature of a business will determine broadly the capital/labour income ratio, there is likely to be a margin around the "true" capital/labour income ratio that can be exploited. This could be

achieved by, for example, the owner/worker paying him/herself a below/above-market wage for their labour input. Audit activity would be expected to prevent gross recharacterisation away from true ratios, but may not detect small alterations.

Tax incentives for SMEs

Chapter 4 of the paper considers the use of tax incentives to encourage investment in SMEs, reviewing arguments for and against their use; main categories of income tax incentives; and country examples of tax incentives to encourage SME investment based on the SME tax questionnaire responses. As noted in Chapter 1, with data showing most businesses being SMEs, and accounting for the bulk of employment, it is understandable that governments are keen to ensure that tax and non-tax policies do not place SMEs at a competitive disadvantage, for example through relatively high effective tax rates. Moreover, recognizing that large companies are typically created as small or medium-sized companies, governments are equally keen to ensure that policies are supportive of SME growth. The undeniable importance of SMEs in the economy raises questions over whether SMEs should be targeted for special tax treatment.

Advocates of special tax incentives for SMEs often rely on "market failure" arguments. These may be based on assumptions of positive spillover benefits to society of SME investment not taken into account by private investors (leading to under-investment), or asymmetric information, leading to various forms of capital market imperfection (involving adverse selection or moral hazard) creating difficulties in raising finance or other impediments to SME investment.

However, market failure arguments themselves raise certain questions and an assortment of practical difficulties. One question is whether positive spillover benefits and asymmetric information applies only in the case of SMEs. And even if one accepts these arguments, consideration of how one would design and implement a tax incentive in practice to correct market failure is fraught with many unsolvable questions. It is not clear, for example, how to measure the degree of market failure and thus assess the level of under-investment relative to some socially optimal level. Also required is some estimate of the sensitivity of the relevant activity (e.g. investment) to a relevant tax indicator (e.g. the effective tax rate on profits from investment), where plausible elasticity estimates may cover a wide range, and where the identification of the relevant tax indicator is not certain. What is clear is that some precision is required, as "getting it wrong" in terms of the rate of tax relief provided or the targeting of relief may result in a misallocation of resources (implying efficiency losses), with too much capital being directed to targeted investment, and/or capital being unwittingly encouraged towards (or away from) non-targeted investment.

Given the difficulties in identifying and targeting instances of market failure, and limiting tax incentive relief to just offset under-investment resulting from market failure, it must be accepted that tax incentive regimes will cause misallocations of capital in certain areas and corresponding efficiency losses. While the objective may be to ensure an overall (net) efficiency gain by countering market failure, it is difficult to be confident ex ante that such an outcome will in fact occur.

Where certain factors including possibly government policy (e.g. financial markets policy) act to impede SMEs, it makes sense to consider first whether the relevant factors or policies can be adjusted, and at what cost. That is, well before considering a targeted "tax fix",

generally the first-best approach is to consider whether and how the contributing factors can be addressed directly, and avoid reliance on the tax system to somehow correct for impediments arising elsewhere. For example, if on account of asymmetric information, capital markets are denying financing to SMEs in cases where funds would be provided under symmetric information, it may be that government can play an effective role in facilitating transparency including the dissemination of information.

In addition to market failure arguments for and against tax incentives for SME investment, the paper presents arguments that address the possibility that uniform application to firms of all sizes of certain basic tax provisions – that is, non-targeted, generally applicable tax policies and tax administration rules and procedures – may result in a relatively high tax burden on SMEs, and thereby discourage SME creation and growth, at least in certain cases. In this context the following provisions are considered: the double taxation of corporate profits and implied cost of capital effects for SMEs; the inability to deduct interest expense (for business start-ups unable to access debt financing); limited loss offset provisions that may discourage risk-taking; cross-border tax planning opportunities limited to multinational firms; a relatively high compliance burden on SMEs; and taxation on sale or inheritance of an SME.

Depending on country circumstances, adjustments to such basic tax policy and/or administration provisions may be justified on the basis of cost-benefit assessments of likely effects, including efficiency and revenue losses. For example, scope may exist to reduce double taxation, by moving further towards integration of corporate and personal taxation, or to expand accessibility to one or more flow-through vehicles. At the same time, however, possible adjustments may be very limited, depending on the particular country and tax system in question. Moreover, it may be that while certain basic provisions may be particularly impeding to certain SMEs, they may not be to others, whilst being impeding to certain large firms (e.g. those without international transactions enabling aggressive tax planning). Targeting firms that are particularly constrained by a uniform set of tax rules should be expected to be imprecise (inexact), to a degree dependent on the targeting criteria (with highly specific criteria raising some difficulties).

Where adjustments to basic provisions are not warranted, attention may turn to the possibility of tax relief targeted at SMEs to counter a relatively high tax burden. However, the considerable measurement and targeting uncertainties and difficulties discussed above would again arise.

SME tax compliance cost and simplification provisions

Chapter 5 of the paper addresses the second main component of the overall tax burden on SMEs, in addition to tax liability (payments to government) – namely costs associated with compliance requirements. Compliance cost considerations may factor importantly into a number of decisions, for example, whether to become self-employed, and whether or not to operate in the formal economy. Compliance costs typically have a significant fixed cost component, and so tend to impose a relatively higher burden on SMEs than larger businesses. Compliance costs also tend to increase with the number of taxes that an entrepreneur is subject to, the complexity of the tax rules, the frequency of submitting tax returns, and the number of levels of government involved in levying and collecting tax.

While compliance costs are difficult to measure, a number of comprehensive studies may be found. As a broad finding, such studies systematically conclude that while total business tax compliance costs tend to be higher for large companies, as a percentage of sales they are significantly higher for SMEs. By reducing tax compliance costs and thereby lowering the overall tax burden on small businesses, simplification provisions help achieve more neutral tax treatment of firms of varying sizes, implying efficiency gains, and encourage compliance with (adherence to) the tax laws of a country.

The paper discusses provisions of VAT and income tax systems targeted at small businesses to simplify their compliance requirements and thereby lower their tax compliance costs – that is, lower the amount of time and resources required by firms to comply with the tax system (aside from their tax liability). Depending on design features, simplification measures may not only lower tax compliance costs; certain measures may also provide small businesses with the additional cost savings of reduced tax payments to government. With or without this additional cost savings, reduced tax compliance costs encourage increased SME creation and compliance with a tax system.

A number of approaches may be taken to reduce VAT compliance costs, with the SME tax questionnaire responses identifying approaches adopted by the OECD countries surveyed in this report. The main options include: introducing a VAT collection threshold; using a single VAT rate; allowing a simplified VAT remittance calculation ("presumptive approach") for small firms; allowing cash accounting for small firms; and allowing less frequent filing of VAT returns for small firms.

Various measures are also observed in countries to reduce the compliance requirements on small businesses of (self-assessed) regular income tax, in support of the creation and tax compliance of small businesses, including: exempting firms with turnover under a small business threshold from regular income tax, replaced by some form of "presumptive" tax; allowing small firms to adopt cash accounting and other simplified accounting procedures; and less frequent filing requirements for small firms.

Simplification provisions of various types can be expected to impact small businesses differently, given the heterogeneity of the small business population. In particular, certain measures may directly encourage business creation and tax compliance for some small businesses, but not others, suggesting the need to analyse a range of measures. For example, allowing simplified accounting or less frequent filing of tax returns may be of little practical consequence to small businesses with very low turnover (e.g. street vendors) that may regard the tax compliance burden of a relatively simple regular tax system as excessive and discouraging to participation in the formal economy. But the same measures may operate to encourage other larger-scale small businesses to establish, and to comply with tax rules.

For very low turnover businesses for the most part unaffected by simplified accounting and filing measures, tax compliance may call for the introduction of a simple replacement tax, for example a turnover-based presumptive tax, to replace regular income tax and/or VAT for firms with turnover below some (micro) business threshold. In such cases, a key design consideration is the setting of the tax burden under a presumptive (replacement) tax, and in particular the avoidance if possible of large upward adjustments in tax burden when a business size threshold is passed and the taxpayer is required to migrate from a replacement regime to the regular regime.

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Introduction

This report considers findings of a study on the taxation of small and medium-size enterprises (SMEs) carried out jointly by the Working Party on Tax Policy Analysis and Tax Statistics of the OECD Committee on Fiscal Affairs, and the Working Party on SMEs and Entrepreneurship of the Committee on Industry, Innovation and Entrepreneurship. Aside from interest in revisiting an important policy topic, a main purpose in preparing this report is to present and discuss information gathered from a questionnaire issued to OECD countries in 2006 on current policy and administrative aspects of taxing SMEs (the "SME tax questionnaire"), used as background material to discussions at the 17-19 October 2007 International Tax Dialogue (ITD) conference on Taxation of Small and Medium Enterprises.

Responses to the SME tax questionnaire, forming the basis of this report, cover the following 20 OECD countries: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Germany, Greece, Ireland, Italy, Japan, Mexico, New Zealand, Norway, Poland, the Slovak Republic, Spain, Sweden, the UK and the US.⁴ In addition to reporting detailed information for these 20 countries, the paper presents further information on the tax treatment and characteristics of SMEs in all OECD countries, gathered by the OECD Centre for Tax Policy and Administration,⁵ and the OECD Centre for Entrepreneurship, SMEs and Local Development.⁶

Chapter 1 of the paper begins by discussing characteristics of SMEs in OECD countries, including the percentage of firms that are SMEs, by sector (manufacturing, industrial, service sectors), with a percentage breakdown distinguishing micro, small and medium-size firms; the contribution of SMEs to employment, by sector; the percentage of unincorporated *versus* incorporated firms, measured for firms of varying sizes based on employment; and the distribution of the number of firms by taxable profits and business form. Data are presented on in-house technological and non-technological innovation by SMEs, the prevalence of firms in a tax-loss position, and on the relationship between incorporation and firm size. The data serve to highlight the importance and diversity of the SME population, and to raise a number of considerations relevant to SME creation and growth.

Chapter 2 of the paper reviews income taxation of SMEs in OECD countries, where taxable income thresholds, tax rates, and levels of taxation depend on business structure. Average income tax rates are compared for unincorporated business income, and for incorporated business profit, for "mature firms" that distribute their earnings, and for "growth-firms" that retain them. The reported rates are average statutory rates (as opposed to average effective tax rates) so that while within-country comparisons are possible, the comparisons do not in any case provide a basis for assessing differences in effective tax rates between or across countries. The tax rate comparisons are used to analyse income tax considerations that influence the tax burden on firms depending on their legal form, and thereby possibly influence the choice of legal form. Investment versus distribution

policies are shown to be a key factor, but less so in countries with integrated corporate and personal tax systems.

Chapter 3 examines possible tax distortions created by personal and corporate income tax systems, together with social security contributions, in influencing the choice of an individual taxpayer of whether to stay in dependent employment, or create one's own business; and whether to structure a business in unincorporated or incorporated business form. The analysis adds to Chapter 2 by introducing social security contributions, and broadening the analysis beyond that of a high-income (top personal tax rate) investor. The presentation of results is limited to four OECD countries: New Zealand, Norway, Sweden and the UK. While the illustrative results are country specific, they demonstrate the potential for tax to influence both decisions over whether to create an SME, and how to structure one, and also how these decisions depend on capital versus labour intensity.

Chapter 4 of the paper considers the use of tax incentives to encourage investment in SMEs, reviewing arguments for and against their use; main types of income tax incentives; and examples of corporate and shareholder-level tax incentives to encourage SME investment based on the SME tax questionnaire responses. The discussion goes beyond standard "market failure" based arguments, to address possibilities that uniform application to firms of all sizes of certain basic tax provisions - that is, non-targeted, generally applicable tax policies and tax administration rules and procedures - may result in a relatively high tax burden on SMEs, and thereby discourage SME creation and growth, at least in certain cases. The list of basic income tax provisions considered includes: the double taxation of corporate profits and implied cost of capital effects for SMEs; the inability to deduct interest expense (for business start-ups unable to access debt financing); limited loss offset provisions that may discourage risk-taking; cross-border tax planning opportunities limited to multinational firms; a relatively high compliance burden on SMEs; and taxation on sale or inheritance of an SME. The coverage in the last section considering tax incentives in place for SMEs is largely restricted to a description of the basic types and targeting of SME tax incentives, as reported by OECD countries that participated in the SME tax questionnaire exercise.

Lastly, Chapter 5 of the paper addresses the second main component of the overall tax burden on SMEs, in addition to tax liability (payments to government) – namely costs associated with compliance requirements (e.g. permitting simplified accounts, simplified tax calculations, less frequent filing). Compliance costs, which typically have a significant fixed cost component and therefore tend to impose a relatively high burden on SMEs, may factor importantly into a number of decisions, for example, whether to become self-employed, and whether to operate in the formal economy. A range of tax policy and tax administration approaches are examined to reduce compliance costs (in relation to VAT, income tax, social security contributions and payroll taxes). Possible approaches include the replacement of regular tax systems with simpler "presumptive taxes" for small businesses falling below a turnover threshold, where key concerns include avoiding disincentives for firms to transition into regular tax systems, and avoiding certain other distortions (including reduced competitiveness) that may be created under a simpler set of rules.

Notes

1. Findings of a previous review by the OECD of issues in the taxation of SMEs, carried out over 1992-94, were reported in the publication *Taxation of Small Businesses*, 1994, OECD.

- 2. A summary of questionnaire responses was prepared by Professor Alfons Weichenrieder, with financial support from the OECD Centre for Entrepreneurship, SMEs and Local Development, made possible by a grant generously provided by the Japanese Ministry for Economy, Trade and Industry.
- 3. Chapter 5 of this report, addressing tax compliance cost issues, benefits from a background paper prepared for the ITD conference, Taxation of Small and Medium Enterprises, prepared by the IMF with input from the OECD, World Bank and other ITD partners, including the Inter-American Development Bank.
- 4. Without doubt, the significant resource requirements involved in providing responses to the detailed questionnaire go some way in explaining why not all countries were able to respond. The Secretariat of the OECD wishes to underline its appreciation for the impressive amount of work undertaken by participating countries.
- 5. The relevant sources include: the OECD Tax Database, and data gathered for the 2007 edition of the annual publication Taxing Wages, OECD.
- 6. The relevant sources include: the Structural and Demographic Business Statistics (SBDS) database, as well as information gathered as part of the Entrepreneurship Indicators Programme (EIP).

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Chapter 1

Characteristics of SMEs

This chapter considers various characteristics of SMEs, with reference to data on the number of SMEs and employment they create, based on OECD data,¹ as well as data on taxable income and business form (incorporated and unincorporated) reported by the 20 OECD countries that responded to the SME tax questionnaire (the "survey countries").² This information is intended to serve as background material for the discussion of tax policy and administration issues in the remainder of the paper.

1.1. The weight of SMEs in business population, employment and innovation

SMEs are recognised as a key source of dynamism, innovation and flexibility in advanced and in emerging and developing economies.³ They are responsible for most net job creation in OECD countries and make important contributions to innovation, productivity and economic growth (OECD, 2005).

SMEs account for a large percentage of companies in all countries, in the range of 95 to 99 per cent of the business population worldwide (OECD, 2005). On average, in OECD countries for which data is available, SMEs accounted for 98.7 per cent of the business population in the manufacturing sector in 2005 (see OECD average in Figure 1.1). In industrial sectors of the economy, SMEs constituted almost the totality of the firm population in Italy, Australia, Portugal and Spain (over 99.8 per cent of all firms), while at the other end of the range, a still very high 96 to 97 per cent of the firm population in Ireland, the Slovak Republic and Luxembourg (see Figure 1.2). Furthermore, amongst SMEs, the smaller firms dominate in number. Considering again the manufacturing sector, where as noted above SMEs accounted for 98.7 per cent of the business population on average in the OECD in 2005, microfirms accounted for 75.4 per cent, small firms accounted for 18.6 per cent, while medium sized firms accounted for 4.7 per cent. In Australia, the Czech Republic, Poland, Sweden and Hungary, microfirms constituted over 90 per cent of all industrial SMEs, while in Ireland they represented only 34 per cent, and in Japan and Korea slightly above 50 per cent (see Figure B.1 in Annex B).

In service industries,⁵ SMEs represented an even higher share of the total firm population in 2005. In 22 of the 23 OECD countries for which data on service activities is available, SMEs represented over 99 per cent of firm population with the 98.7 per cent figure for New Zealand being at the low-end (see Figure 1.2). Similarly, in terms of firm distribution by size amongst SMEs in service activities, microfirms account for over 95 per cent of service SMEs in 8 of the 23 countries, with Poland, Italy and Portugal showing the highest percentages, and with the US (at 79 per cent), and the Slovak Republic and New Zealand (both at 80 per cent) at the lower end of the distribution (see Figure B.2 in Annex B).

SMEs are important not only in terms of number of firms, but also in terms of their contribution to employment. Indeed, they are recognised as an important source of job creation and account for a large and growing share of employment in OECD countries (OECD, 2005). As indicated in Figure 1.1, on average across OECD countries, 57.5 per cent of employees in the manufacturing sector were employed by SMEs in 2005. Considering

Box 1.1. **Defining SMEs**

There is no single agreed definition of a SME. A variety of definitions are applied among OECD countries, and employee numbers are not the sole defining criterion. SMEs are generally considered to be non-subsidiary, independent firms which employ less than a given number of employees. This number varies across counties. The most frequent upper limit designating a SME is 250 employees, as recommended by the European Commission (Recommendation 2003/361/EC of 6 May 2003). However, some member countries set the limit at 200, while the United States considers SMEs to include firms with fewer than 500 employees. Small firms are mostly considered to be firms with fewer than 50 employees while microenterprises have at most 10, or in some cases, five employees.

The definition of SME and the size thresholds used by the OECD are those recommended by the European Commission. The Commission defines a medium-sized enterprise as a firm having less than 250 employees, a turnover inferior to EUR 50 million and a balance sheet below EUR 43 million; a small enterprise as having less than 50 employees and turnover and balance sheet of less than EUR 10 million; and microenterprise as a firm with less than 10 employees and a balance sheet and turnover below EUR 2 million).

For tax purposes, the definitions used to target concessions at SMEs are also based on a variety of factors. For example, eligibility for the reduced SME tax rate in Luxembourg is based on the level of taxable income, whereas in Japan it is based on the business's capital. France and Spain instead use a gross turnover test to determine eligibility for their concessionary SME rates. Small businesses in Belgium, on the other hand, are only eligible for the reduced SME rate if they meet requirements relating not just to taxable income, but also to the activities of the company, the shareholding, the dividend yield, and the remuneration of the business's managers.

industrial sectors (see Figure B.3 in Annex B), for 8 of the 24 OECD countries for which data are available, SMEs account for over two-thirds of total employment. Amongst this group, SMEs in Italy, Portugal and Spain account for more than 80 per cent of total employment. The SME contribution to total industrial employment is shown to be below 50 per cent only in Luxembourg, the Slovak Republic and Finland.

Similarly, with regard to service sectors, SMEs account for over two-thirds of total employment in service-related activities in 14 of the 22 countries for which data are available (see again Figure B.3), with Portuguese and Italian SMEs accounting for over 80 per cent of employment in the service sector. Indeed, for each country, SMEs account for over 50 per cent of total employment, with the US and the UK at the lower end of the range, with figures of 50 per cent and 52 per cent.

A further observation to be drawn from the data in Figures 1.1 and 1.2, showing the large percentage of firms that are SMEs, is that only a small fraction of SMEs grow to be large. That few firms grow to be large reflects, at least in part, limited growth potential for certain SMEs. Examples would include SMEs providing certain professional services (doctors, dentists), "hobby farms", and various other businesses limited to serving local markets, exhibiting decreasing returns to scale, with possibly limited competition and limited incentive to innovate.

With regard to innovative activities, according to the OECD Science, Technology and Industry Scoreboard 2007, in almost half of the countries for which data was collected, 40% or

SMEs Employees in SMEs % 100 80 60 40 20 n We the Hard's The Men Legland Slongk Behinic Ning Kindon Inited States Clecil Redibilic LIXENDOURS OECI AMERICA Denmark Finland France Germany Citegge Celand Ireland MEXICO NOTWAY Poland Spain Hungary Hall 13031

Figure 1.1. SMEs and employment in SMEs in manufacturing activities As a percentage of total firms and total employment in the manufacturing sector

Notes: For EU countries, Iceland and Norway, the thresholds are those recommended by the EC (Recommendation 2003/361/EC of 6 May 2003). For Australia, microenterprise 1-9 employees; small enterprise 10-49 employees; and medium enterprise 50-199 employees. For Canada, microenterprise 1-9 employees; small enterprise 10-99 employees; and medium enterprise 100-499 employees. For Japan, microenterprise 4-9 employees; small enterprise 10-49 employees; and medium enterprise 50-199. For Korea, microenterprise 5-9 employees; small enterprise 10-49 employees; and medium enterprise 50-199. For Mexico, microfirm 0-10 employees; small firm 11-50 employees; and medium enterprise 51-250. For New Zealand, microenterprise 1-9 employees; small enterprise 10-49 employees; and medium enterprise 50-99. For the US, microenterprise 1-9 employees; small enterprise 10-99 employees; and medium enterprise 100-499. Finally, the OECD average excludes Switzerland and Turkey. Sources: For all countries except Canada, Greece and Mexico, OECD Structural and Demographic Business Statistics Database, 2005 or most recent available year. For Canada (all sectors of economic activity), Industry Canada (2008). For

Figure 1.2. **SMEs in industrial and service activities**

Greece, eurostat 2005. For Mexico, INEGI, in OECD (2007), SMEs in Mexico, Policies and Issues.

Industrial sectors Services sectors % 100 99 98 97 96 95 Czeci Republic Slovak Republic 94 Wetherlands United Kingdom United States LITERIDOURG Wentegland Poland France Germany Hungary celand reland Mornay Portugal Spain Dennark Finland

As a percentage of all firms in each sector of activity

Source: OECD Structural and Demographic Business Statistics Database, 2005 or most recent available year.

more of all large firms had developed an in-house product innovation while among SMEs that share exceeded 20 per cent in only around one-third of the countries (see Figure B.4 in Annex B). The pattern is similar for in-house process innovators (see Figure B.5) and non-technological innovators (see Figure B.6). However, while SMEs generally lag behind large firms in terms of innovative activities, a small subset of entrepreneurial SMEs play an important role in introducing and commercialising "radical" innovations, which are essential for economic and employment growth, while large, well established firms remain necessary to refine and mass-produce radical innovations (OECD, 2008).

Innovation is widely recognised as increasingly important to growth in many if not most markets. A central observation for tax policy purposes is that not all firms are innovative or growth-oriented, because they need not be to serve particular markets, or interests of certain worker/owners of a business. Limited need for innovation implies limited "spillover" benefits tied to innovation, with such benefits (positive externality) sometimes used to argue in favour of targeted tax incentives for SME investment.⁸

In contrast, SMEs subject to price and product competition (including competition from firms based and taxed elsewhere) may need to be innovative in order to compete and generate normal or above rates of return. Indeed, a possibly high percentage of SMEs may need to upgrade technologies, or grow to obtain economies of scale and efficiencies. For policy makers interested in targeting tax relief to support innovation (e.g. through R&D tax credits), a key challenge is limiting relief to such firms, given that targeting through the tax system is inevitably imprecise to some (possibly significant) degree.

At the same time, data on numbers of SMEs and the employment they provide in OECD countries serve to remind policy makers of the broad population of both workers and businesses that are affected by government policy on SMEs, including tax. The figures heighten interest in ensuring that tax rules do not place them at a competitive

Box 1.2. **Defining innovation**

The OECD-eurostat Oslo Manual (2005) defines innovation as the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations. This implicitly identifies the following four types:

Product innovation: the introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses. This includes significant improvements in technical specifications, components and materials, incorporated software, user friendliness or other functional characteristics.

Process innovation: the implementation of a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software.

Marketing innovation: the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing.

Organisational innovation: the implementation of a new organisational method in the firm's business practices, workplace organisation or external relations.

The first two types are traditionally more closely related to technological innovation. Firms are considered innovative if they have implemented an innovation during the period under review.

disadvantage with regard to the tax burden on other firms, taking into account not only taxes paid to government, but also resources involved with the "compliance burden" of preparing, documenting and filing tax returns.⁹

It is also important to emphasize that the very large numbers of small companies pose challenges for tax administration. First the sheer volume of taxpayers implies significant tax administration costs. In addition, to the extent that it is easier for small companies than large to operate in the informal market in order to evade tax (e.g. with small scale transactions limited to the domestic as opposed to export market), significant resources may be consumed in trying to ensure tax compliance. These considerations create incentives for government to search for ways to curb tax evasion and avoidance, including through reducing tax compliance costs.

1.2. Incorporation is increasingly common with increased business size

The survey data presented in Annex B show that incorporated business status is an increasingly common business form with increased business size, as measured by employment. As discussed in Chapter 2, incorporation may offer a number of advantages to business, including limited liability of business owners (shareholders), improved access to international capital markets, and business continuity. However, the formation of an incorporated business is generally more costly in terms of legal fees in establishing and registering articles of incorporation, compared with setting up an unincorporated business. Incorporation also involves corporate-level and shareholder-level taxation of business profits. For small firms, these costs may be discouraging to incorporation. At the same time, certain forms of unincorporated business (e.g. limited partnership) may provide not only tax advantages – in particular, flow-through taxation to business owners, avoiding taxation of profit at the business level – but also limited liability to investors not involved in management decisions.

In the case of New Zealand, for very small firms with no more than 1 employee (which together account for roughly 7 per cent of total employment), only 31 per cent of employment is with incorporated firms (see Annex B). For firms with 2-9 employees (accounting for 33 per cent of the total workforce), 64 per cent of employment is with incorporated firms, implying that incorporation is more common beginning with this employment band. For firms with 10-19 employees, 88 per cent of employment is with incorporated firms. And the prominence of the incorporated sector continues to grow uninterrupted with firm size, measured by employment.

Other country examples in Annex B include Norway and the UK, where the bulk of employment in very small firms, with no more than 1 employee, is with unincorporated firms (85 and 90 per cent, respectively). For firms with a workforce of 2-9 employees, the results are reversed with incorporated firms accounting for more employment (71 and 56 per cent). For larger firms with 10-19 employees, incorporated firms account for 94 per cent and 78 per cent of employment respectively. These figures, like those for New Zealand, also indicate a tendency for larger firms to be incorporated.

In the case of Japan, employment with an incorporated business is more common amongst firms with fewer than 10 employees, which together account for 28 per cent of the total workforce. In particular, about 54 per cent of employment in this group is with a corporation. The percentage of employees working for a corporation, rather than an

unincorporated firm, increases to 89 per cent for firms with 10-19 employees, and to 96 per cent for firms in the 20-49 employee range.

In Mexican firms with no more than 1 employee, accounting for 0.7 per cent of employment, only 21 per cent of workers are employed with incorporated businesses. For firms with a workforce of 2-9 employees, this figure rises to 41 per cent; and to 66 per cent for firms with 10-19 employees. Over four-fifths of employment amongst firms with 20-49 workers is with an incorporated business.

The employment data for Sweden, while also pointing to incorporation as being increasingly common the larger the firm size, show that incorporation accounts for more employment at all firm sizes, including firms with no more that 1 employee (in the other country examples, unincorporated firms accounted for more employment). In other words, in Sweden, incorporation is a more common business form regardless of firm size, and tends to be more common as firm size increases. ¹⁴

Figure 1.3 considers employment data for firms with 100 or more employees and shows that for each of the survey countries, incorporated firms account for all or nearly all of the employment in that group, again to highlight the correlation between firm size and incorporated business status.

When looking instead at taxable profits (a weaker proxy for size than total employment), similar patterns emerge. Taking New Zealand again as an example, unincorporated firms make up the majority of firms with taxable profits under USD 50 000. Past that mark, incorporated firms are increasingly common. For firms with taxable profits between USD 500 000 and USD 1 million, 84 per cent are incorporated. For firms earning taxable profits in excess of USD 5 million, 100 per cent are incorporated. Figure 1.4 shows the percentage of large firms that are incorporated, under these two "large" taxable profit categories for New Zealand as well as other countries. Annex B provides country detail on the distribution of number of firms by taxable profits and business structure.

The data suggest that for small firms that begin as unincorporated businesses, growth to a significant size (e.g. 10-50 employees, and up) is likely to involve incorporation. One possible reason is that SMEs may need to issue public shares to raise sufficient equity

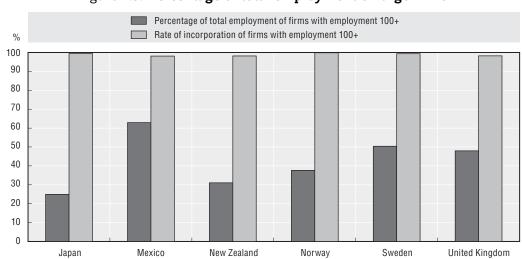


Figure 1.3. Percentage of total employment of large firms

Source: Country responses to the SME tax questionnaire.

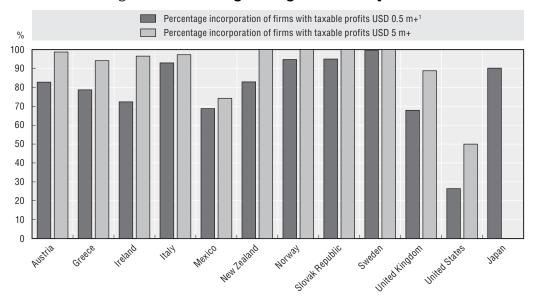


Figure 1.4. Percentage of large firms incorporated

1. For Italy: USD 1m+.

Source: Country responses to the SME tax questionnaire.

capital to grow. Where governments aim to avoid policy-related impediments to growth, it follows that tax rules should aim to not discourage business incorporation. Similarly, for both growth-oriented and small stable SMEs, there may be non-tax advantages offered by incorporation (e.g. limited liability for business owners), and efficiency losses where the tax system discourages incorporation – for example, by taxing profits of incorporated businesses more heavily than unincorporated business profit.

1.3. The percentage of small enterprises in a tax loss-position may be significant

While not all of the responding countries report data detailing the prevalence of tax losses, for those that do, the data show large numbers of businesses in a tax-loss situation (dependent in part on underlying business losses). As illustrated in the figures in Annex B showing the distribution of number of firms by taxable profits and business structure, in Greece, Ireland, Italy, New Zealand, Norway and Slovak Republic, roughly 20 per cent of firms are in a tax-loss position, ¹⁵ with the figure climbing to 24 per cent in Austria, and 40 per cent in the US. Roughly 50-60 per cent of these firms are unincorporated in these country examples. ¹⁶

Business losses (and taxable losses) are incurred by firms of all sizes. For small businesses with large start-up costs, and limited revenues when first entering a market, losses may be likely during initial years of the business. To the extent that most businesses start up small, the tax treatment of losses is particularly important to small companies, recognising the more limited ability of new firms, compared to large established (mature) firms with diversified revenues, to claim tax losses. Therefore it is interesting to consider how generous the tax treatment of losses is in different systems – that is, the degree to which business losses can be deducted against other income, or are ring-fenced – and whether more generous treatment is targeted at small businesses in some countries.

1.4. Fixed costs are particularly burdensome for small enterprises having low turnover

Small firms (measured by turnover, assets, total employment) with generally lower profits than large firms, tend to be disproportionately impacted by fixed costs. ¹⁷ A commonly cited example concerns tax compliance costs – that is, costs involved with recording transactions, maintaining financial and tax accounts, calculating tax liabilities, making tax payments to government, and undertaking other compliance requirements under a self-assessment system. Since compliance costs have a fixed (common) component for all taxpayers, they impose a relatively higher burden on SMEs than larger firms measured as a percentage of turnover or profit. Given this, it is not surprising that many OECD countries including the survey countries have introduced a variety of provisions to simplify compliance under VAT and income tax.

Notes

- 1. OECD work in the development of statistics and indicators on SMEs and entrepreneurship is reflected in data and information provided in the Structural and Demographic Business Statistics (SDBS), and in the Entrepreneurship Indicators Programme (EIP). The SDBS provides a wealth of information compiled at a detailed sectoral and firm size level, including number of firms, employment, value-added, production, while also including data on business demography statistics. The EIP, launched in September 2006, is aimed at building internationally comparable statistics on entrepreneurship and its determinants, involving the development of standard definitions and concepts and engaging countries and international Agencies in the collection of data.
- 2. The country-specific information on taxable income and business form reported in this paper is taken from the summary of country responses to the "taxation of SMEs" questionnaire, prepared for the OECD by Professor Alfons Weichenrieder, in his report Survey on the Taxation of Small and Medium-Size Enterprises Draft Report on Responses to the Questionnaire (September 2007). The summary report was funded by the OECD Centre for Entrepreneurship, SMEs and Local Development (CFE), in particular through a grant generously provided by the Japanese Ministry for Economy, Trade and Industry. In replying to the questionnaire, countries were asked to describe the situation as of January 2007.
- 3. This recognition is highlighted by activities of the OECD Working Party on SMEs and Entrepreneurship (WPSMEE), which is the official OECD body in charge of SME and entrepreneurship issues and policies. Its main objectives are to assist member countries in the design and implementation of policies that enhance the performance of small businesses and foster entrepreneurship.
- 4. Industrial economic activities are those classified under items C (Mining and quarrying), D (Manufacturing), E (Electricity, gas and water supply) and F (Construction) in the UN International Standard Industrial Classification (ISIC) Rev. 3.
- 5. Service economic activities are those classified under items G (Wholesale and retail trade, repair of motor vehicles and motorcycles and personal and household goods), H (Hotels and restaurants), I (Transport, storage and communications) and K (Real estate, renting and business activities) (excluding J, Financial intermediation) in the UN International Standard Industrial Classification (ISIC) Rev. 3.
- 6. The fact that some small firms fail implies smaller fractions (than those represented in the data) of small firms that grow to be large. The deduction that only a small percentage of small firms grow to be large assumes that large companies remain large (i.e. do not contract at some stage, or fragment into smaller units). (To the extent that large firms are created large, the percentage of small firms that grow to be large would be lower.)
- 7. In the view of Joseph Schumpeter, who greatly influenced theories of innovation, "radical" innovations create major disruptive changes, whereas "incremental" innovations continuously advance the process of change (OECD/eurostat, 2005).
- 8. See Chapter 4 for a discussion of market failure arguments for tax incentives for SMEs. Where targeting through the tax system is too blunt an instrument, more direct targeting mechanisms outside the tax system (e.g. direct cash grants, the sponsoring of partnership arrangements with universities) may be considered.

- 9. While limited contraction of business activity might be expected from the taxation of location-specific profits on immobile factors of production generated by certain SMEs, it is generally difficult to measure the size and source of immobile profits (just as it is difficult to identify firms subject to growth constraints). Thus policy makers generally aim to ensure that the tax burden is not onerous and discouraging to business activity overall.
- 10. Even for those operating in the formal economy, it may be easier for small companies to underreport taxable profits and remain undetected, compared with medium-size businesses subject to audited accounts. At the same time, considerable scope may exist for large multinationals (MNEs) engaging in cross-border transactions and investments to underreport taxable profits by relying on non-arm's length transfer prices, tax haven finance affiliates, and other cross-border tax-planning strategies.
- 11. In some developing countries, scope for income tax fraud is reduced by requiring that large (typically public) companies and border customs agents (import control) withhold tax on purchases by small firms as a prepayment of income tax that small firms required to pay, but may not. The amounts withheld are final if income tax is not paid, but creditable against income tax if paid.
- 12. Tax compliance costs may be reduced directly by certain simplification procedures and approaches (see the discussion in Chapter 5). Compliance costs may also be reduced by increased tax administration costs geared towards taxpayer education services, the provision of electronic (IT) means to complete and file tax returns, and other measures.
- 13. The Japanese employment data do not separately report employment by firms with 0-1 employees and 2-9 employees (instead, 0-9 employees).
- 14. An interesting question to examine is whether an owner-worker is able to achieve a lower tax burden on business income by incorporating his/her business. Whether this is possible depends on the outcome of rules that split unincorporated business income into (notional) capital and labour components, and the determination of wage income of an owner-worker of a closely-held corporation.
- 15. The exact figures for these countries range from 19 per cent to 22 per cent.
- 16. In Austria, the figure is slightly higher at 66 per cent, while for the Slovak Republic, New Zealand and Norway the figures are 46 per cent, 48 per cent and 49 per cent respectively.
- 17. Where firm size is measured by turnover, small firms by definition have lower turnover (gross revenues) than large firms; small firms also have lower profits than large firms, when considering small and large firms with the same rate of profitability (profit per unit of turnover).

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Chapter 2

Income Taxation of SMEs

This chapter reviews income taxation of SMEs in OECD countries, with attention restricted to personal income tax and corporate income tax considerations, where taxable income thresholds and applicable tax rates depend on how a business is legally structured – in particular, in unincorporated versus incorporated business form. The following chapter broadens the analysis to factor in social security contribution systems, with rates and contribution thresholds for the self-employed often differing from those for employers and employees of incorporated businesses. In particular, the information presented below is applied in Chapter 3 to examine possible tax distortions relevant to SME creation and growth.

The review begins with the taxation of unincorporated businesses. In the case of a sole proprietorship – that is, an unincorporated business (with or without employees) owned by one individual – business income is normally subject to personal income tax and self-employed social security contributions (in countries with social security taxes). Where two or more individuals invest in a business through an unincorporated partnership, generally the same taxes apply, with business profits (and losses) allocated to the business partners to be subject to tax at the individual level (personal income tax and social security contributions) without business-level taxation. Such "flow-through" entities avoiding business-level taxation may include general partnerships, limited partnerships, and possibly other partnership structures.² In some countries, certain incorporated businesses may qualify for flow-through treatment.³ Given the similar tax treatment of sole proprietorships and partnerships, the discussion in the paper around personal taxation of unincorporated business income concentrates on the sole proprietorship case.

Section 2.1 reports for each OECD country the top statutory personal income tax rate on unincorporated business income, and the taxable income threshold at which the top rate applies. In non-dual income tax systems, the top rate applies to the full amount of personal business income where the taxpayer earns taxable income from other sources above the top rate threshold. Average tax rates are also reported for various business income levels, factoring in graduated marginal rates and taxable income thresholds. In particular, average personal statutory income tax rates are reported for each OECD country at different multiples of average earnings, with multiples of average wage earnings in each country used as a basis for comparison. While not a perfect basis for assessing how average statutory tax rates vary with firm size, the paper argues that the approach is preferable to one of relying on some arbitrary amount of business income held fixed across all countries, given differences in income per capita across OECD countries.

Section 2.2 turns to the incorporated business case. Where a business is incorporated, profits/losses are normally subject to corporate income tax, with distributions of after-tax profits subject to shareholder-level dividend taxation. Capital gains realized on retained after-tax profits may be subject to shareholder-level taxation at the time of the disposition of shares. The review in Section 2.2 of corporate income taxation of incorporated SMEs profits finds that 11 or roughly one-third of OECD countries apply a graduated corporate income tax rate structure that taxes corporate profits of SMEs at one or more reduced

(below basic) rates. In countries with a single corporate tax rate, the reported basic rate is both the marginal and average statutory tax rate on corporate profit, regardless of the size or income a firm. Basic corporate rates in some countries are shown to be lower than preferential small business tax rates operating in certain others. For countries with a graduated rate structure, different approaches are identified in the targeting of corporate tax rate relief to SMEs, and average corporate statutory tax rates are compared at various multiples of average earnings.

Section 2.2 then factors in shareholder-level taxation of distributed corporate profit, where different systems and degrees of integration of corporate and personal taxation are observed across OECD countries, with integration serving to reduce double taxation.⁴ In some cases, classical tax treatment applies, while in other "full imputation" cases double taxation is avoided with corporate profits being effectively taxed at personal shareholder rates. Cases of fixed or variable partial integration are also observed. With dividends taxed in most countries at the shareholder-level at graduated rates, average combined corporate and personal tax rates on distributed profit depend in general on the amount of business income and thus firm size, even in countries with flat corporate tax rate schedules. Combined rates also depend on the amount of taxable income of the taxpayer from other sources assigned to the same taxable income basket as dividend income. The analysis presented in the paper of combined corporate and personal taxation of distributions is limited to consider the case of a top personal tax rate investor, where combined tax rates on distributions are shown in some country cases to be above, and in other cases below, personal tax rates on unincorporated business income.

Section 2.3 compares top personal tax rates on personal (unincorporated) business income, and combined average corporate and top personal tax rates on wage and capital income derived from a business in incorporated form, and considers what inferences can be drawn as regards the possible influence of income tax systems in shaping the tax burden on SMEs. The analysis considers corporate tax systems with flat corporate tax rates, versus systems with preferential small business tax rates, and distinguishes mature firms and growth-oriented firms where shareholder taxation of after-corporate tax profits can be deferred. Exactly how income tax rates compare between an unincorporated company and an incorporated company is case specific, depending on the level of income generated by a business, as well as the amounts of taxable income of the investor from other sources. As in Section 2.2, the analysis is restricted to the case of top personal income tax rate investors, while considering businesses of different sizes. At an illustrative SME earnings level considered in Section 2.3, combined average tax rates on corporate profits are shown in some cases to be above top personal tax rates on personal business income, with results dependent in some country cases, but not others, on the mature versus growth-oriented firm characterisation.

The average personal, corporate and dividend tax rates reported in the paper are statutory rates as opposed to average effective tax rates, as they do not factor in tax base considerations that determine the extent to which taxable business income differs from true (economic) income, nor do they factor in non-standard tax credits. However, within-country differences between statutory personal tax rates on unincorporated business income, and average corporate and personal statutory tax rates on distributed incorporated business income, where assessed at similar business income levels (as in Chapter 3) are suggestive of differences between average effective tax rates on unincorporated versus incorporated business income to the extent that tax base and credit

provisions are the same for each business form. On this point, most OECD survey countries report few (if any) differences in rules determining taxable business profit. The statutory tax rates however do not in any case provide a basis for assessing differences in effective tax rates between or across countries.

Certain other limitations must be emphasized in comparing the average tax rate results. In particular, the analysis in this chapter does not factor in social security contributions (included in the average tax rate analysis in Chapter 3 covering only four countries). Furthermore, significant differences may exist in opportunities for owners of unincorporated businesses, compared with owners of incorporated businesses, to characterise as business expenses certain expenses having a personal consumption component. Such differences may have a significant impact on effective tax rates. The omission of this consideration is part of a broader omission in ignoring tax base and tax credit provisions that together with statutory tax rates shape effective tax rates.

2.1. Taxation of unincorporated SMEs

As noted in the preceding introduction, a main feature of the taxation of income of a business structured in unincorporated form is the taxation of personal business income on a current basis according to personal income tax (PIT) rules. This contrast with the current taxation of profits of an incorporated business according to corporate income tax (CIT) rules, with typically additional personal (shareholder) taxation on a current or deferred basis, depending on the distribution policy of the firm.

In most OECD countries, net unincorporated business income is taxed together with other personal taxable income including employment income according to a graduated (tiered) personal income tax rate schedule, possibly with a personal basic allowance, tax credit, or zero-rate taxable income band. (Certain country exceptions to this are noted below.) Figure 2.1 shows for each OECD country the top marginal personal income tax (PIT) rate in 2007, and the taxable income threshold level at which the top marginal PIT rate first applies, with thresholds shown in US dollars to enable comparisons. ⁵ The countries are ranked from highest-to-lowest top PIT rate.

For individuals with taxable income from other sources in excess of the top PIT rate threshold, the average personal statutory tax rate (APSTR) on unincorporated business income is given by the top PIT rate.⁶ For individuals without other sources of taxable income, implying taxation of business income at more than one marginal PIT rate under a graduated PIT rate schedule, the APSTR depends on the level of business income.

With detailed personal-level micro-data for each country, average taxable personal business income of a sample of taxpayers (e.g. sole proprietors) with an unincorporated business of a given size (measured by number of employees, capital, or turnover) could be assessed for each country. This would permit the measurement of APSTRs on unincorporated business income, by company size and by country. In the absence of such data, other less precise approaches may be considered for illustrative purposes, where one candidate approach would be to calculate and compare APSTRs at some fixed level of taxable personal business income held constant across all countries.

However, while a given level of taxable business income (e.g. USD 200 000) may be representative of a sole proprietorship of a given size in certain countries, it may not be in others. In particular, average personal business income may be higher (lower) in countries with higher (lower) average earnings in the economy, measured by GDP per capita, or

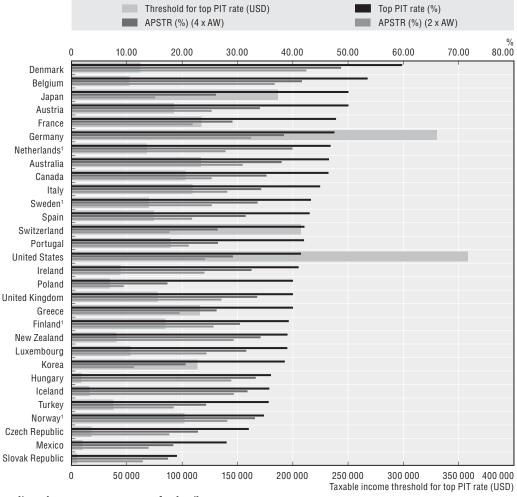


Figure 2.1. **Top PIT rate and threshold, APSTRs at multiples of average wage earnings, 2007**

1. Adjusted top PIT rates – see text for detail.

possibly average wage income per capita. (Establishing whether or not this relationship holds would generally require micro-data analysis.)⁸ While comparisons of APSTRs based on business income levels taken to equal to one or more multiples of average wage earnings that vary by country may be more representative and informative than comparisons based on a fixed level of income, the comparisons would nonetheless be illustrative rather than fact-based on actual micro-data. In particular, APSTRs would not be linked directly to firm size.

In the absence of micro-data, the APSTRs reported in Figure 2.1 consider the case of a sole proprietor, and assume that personal business income of a business of a given size varies by country, as average wage earnings vary by country. As personal business income generally includes both a wage component as well as a return on capital, APSTRs are measured at business income levels equal to two-times, and four-times, average wage earnings (AW) in each country, as reported in OECD Taxing Wages. The calculations assume that personal (unincorporated) business income is taxed at progressive personal tax rates applied in the country to the general income basket.

As noted, countries are ranked from highest-to-lowest top PIT rates, with values shown to range from 19 per cent in the Slovak Republic to 59.7 per cent in Denmark. Adjusted top PIT rates are shown for four countries (the Netherlands, Norway, Finland and Sweden). In the Netherlands, operating a scheduler tax system, net business income is taxed (with other income including wage income) as "Box 1" income, at progressive PIT rates with a top rate of 52 per cent. As from 1 January 2007, 10 per cent of business income exceeding a special business allowance is exempt from tax. The 90 per cent inclusion rate is taken into account in calculating an effective top PIT rate of 46.8 per cent.

In Finland, with a top PIT rate on earned income of 50.5 per cent, part of net business income is treated as income from capital taxed at 28 per cent, with the remainder taxed as earned income at progressive personal tax rates (see Box 2.1). In Sweden, where the top PIT rate is 56.5 per cent, earnings that are withdrawn from a company are taxed in part as capital income at 30 per cent, and in part as earned income at progressive personal tax rates (with retained (reserve) income taxed at 28 per cent). The top PIT and average personal tax rates for Finland and Sweden assume for illustrative purposes that 50 per cent of unincorporated business income is labour income, and 50 per cent is notional capital income.¹⁴

In Norway, where the top PIT rate is 40 per cent, an allowance is provided for a prescribed (notional) "normal" rate of return on capital invested in an unincorporated business, with the allowance deducted from the national income tax base on gross income. ¹⁵ As in the case of Finland and Sweden, an adjusted top PIT rate and average personal tax rates for Norway assumes that 50 per cent of unincorporated business income is labour income, and 50 per cent is notional capital income. Additionally, the APSTR estimates assume a 10 per cent pre-tax rate of return on capital.

The APSTRs calculated at two- and four-times average earnings show considerable variation, with values reflecting the net effect of PIT rate schedules and thresholds, personal allowances (or credits), and average earnings levels which in some cases differ markedly from one country to the next. An interesting comparison is between Ireland and the US, where average earnings are roughly equal at just over USD 40 000, and top PIT rates are also similar at 41 and 41.4 per cent, respectively. Despite the fact that the taxable income threshold at which the top PIT first applies is over 8 times higher in the US, the personal ASTRs are similar at both average wage earnings multiples (e.g. 24.0 per cent in Ireland, versus 24.1 per cent in the US). This result reflects the large number of PIT rate brackets in the US case (eight compared to two in Ireland), with mid-bracket marginal PIT rates in the US notching upward to the top PIT rate more quickly than the top PIT threshold might suggest.

Another interesting comparison is between Greece, Norway, Poland and the UK, where the top PIT rate is 40 per cent in each case (as noted above, a prescribed normal rate of return allowance in Norway lowers its effective top PIT rate). While the APSTR in the UK calculated at four-times average earnings exceeds that in Norway by only 0.4 percentage points (33.5 *versus* 33.1 per cent), the UK rate exceeds that in Greece by 7.3 percentage points, and is almost double that for Poland (16.2 percentage points higher). These differences reflect not only different marginal PIT rates and thresholds applying below the top PIT rate, but also significant differences in average earnings in these countries. ¹⁶

Figure 2.1 ignores social security contributions which factor into an overall assessment of the tax burden on unincorporated business income (in countries operating social security contribution systems). Annex C provides a detailed summary of provisions applied to determine social security contributions levied on the self-employed, compared

Box 2.1. Taxation of business income under dual income tax systems

Under the dual income tax system operating in Finland, income from capital and earned income are treated separately. In particular, income from capital is subject to national income tax rate at a flat rate of 28 per cent, while earned income is subject to national income tax at progressive rates and to municipal income tax and church tax at flat rates (depending on the municipality) and to social security contributions. Net business income is divided into an income from capital component, and an earned income component. In particular, the income from capital component is calculated, at the choice of the taxpayer, as either a) 20 per cent of the net capital used in a business (at the end of the previous tax year), or b) 10 per cent of net business income, with earned income determined as the residual amount of net business income.

Under the dual income tax system operating in Denmark, capital income, personal income (including employment income and business income), income from shares² and controlled foreign company income are treated separately. Taxable income, consisting of the aggregate of personal income and capital income less general deductions, is subject to national income tax at progressive rates and to municipal income tax and church tax at a flat rate (depending on the municipality), with employment income subject to social security contributions. Income from shares up to USD 7 726 (DKK 44 300) is subject to national income tax at a flat rate of 28 per cent, with a 43 per cent rate applying above this limit. A special regime for business income of individuals allows income retained in a reserve to be taxed at a 28 per cent rate (corresponding to the rate of corporate income tax). When income is withdrawn from the reserve, it is taxed as personal income at progressive rates with a credit for the 28 per cent (reserve) tax.

Under the dual income tax system operating in Sweden, capital income, business income and employment income are calculated separately, with net business income and net employment income aggregated to determine earned income.³ Capital income is subject to national income tax at a flat rate of 30 per cent (20 per cent for dividend income from a closely held company), while employment income is subject to national income tax at progressive rates, to municipal income tax at a flat rate (depending on the municipality) and to social security contributions. A special regime for business income of individuals allows income retained in an "expansion fund" to be subject to tax at a 28 per cent rate (equal to the corporate income tax rate). When income is withdrawn from the expansion fund it is either taxed as employment income, or, if optional "positive interest allocation" rules are utilised, is split into a capital income component and an employment income component⁴ [with a credit for the 28 per cent (reserve) tax].

- 1. Determining income from capital as 10 per cent of net business income may provide a lower tax burden for low-income taxpayers given the tiered rate structure of national income tax.
- Income from shares includes dividends and capital gains on shares (other than dividends on qualifying investment companies). Capital income includes net interest, gains/losses on bonds and immovable property.
- 3. Separate calculation of net business income and net employment income enables restrictions on losses in one basket of income offsetting income in another.
- 4. The capital income component is calculated by applying an imputed rate of return (8.54 per cent in 2007) to business assets, less business debts, less the accumulated after-tax allocations to the expansion fund, with net business assets and reserves measured at the end of the previous year.

alongside provisions for employers and employees applicable in the incorporated business case. Average tax rates reported in Chapter 3 factor in social security contributions together with personal income tax into average tax rate calculations on unincorporated business income (for a select number of countries, to be compared with average tax rates in the incorporated business case).

A first observation from Annex C is that two countries, Australia and New Zealand, do not impose social security contributions.¹⁷ In the remaining 28 countries that do, a flat or tiered contribution rate schedule is applied to taxable business income (as opposed to gross labour earnings, in the incorporated company case) up to some upper threshold amount that serves to cap contribution amounts. As considered in Chapter 3, the contribution amounts may contribute importantly to the overall tax burden on a company. In other words, focussing on personal income taxation alone may be highly misleading. A further observation is that in most countries the self-employed social security contribution base is taxable business income, consisting of a blend of returns on labour and capital. Unlike the incorporated business case (examined below), this generally implies an inability to alter the social security charge by adjusting (or misreporting) the amount of labour *versus* capital income earned from a business.

Finally, it should be underlined that a comparison of statutory PIT rates ignores tax base provisions and tax-planning opportunities influencing average effective tax rates on business profit. For example, the effective tax rate on a given amount of business income may be considerably lower in one country compared with another with the same/similar PIT rate structure, if depreciation provisions and/or other key tax base provisions in one are more generous than in another. The current study does not include an account of country-specific rules determining taxable business profits, with attention restricted instead to differences in rules determining taxable profits of unincorporated *versus* incorporated firms, with only a limited number of survey countries reporting any major differences.

As regards tax planning, personal expenses may be improperly treated in some cases as business expenses, given difficulties faced by policy makers in drafting tax laws and regulations clarifying what can be considered eligible deductible business expenses, and the inevitable "grey areas" in interpretation that arise. Where personal expenses are deducted (and effectively subsidised through the tax system), the effective tax rate on business income is artificially reduced. The current study does not address this issue other than to note the implication of a degree of tax relief not possible with dependent employment.

2.2. Taxation of incorporated SMEs

As reviewed above, personal business income, comprised of a combination of income from labour and capital invested by a sole proprietor (worker/owner) of an unincorporated SME, is subject to current personal income taxation in OECD countries. Where a business is incorporated, corporate profits/losses – that is, returns on capital (business income net of wages) – are subject to corporate income tax (CIT), with after-corporate tax profit subject to current or deferred personal (shareholder-level) income tax (PIT) depending on the timing of a firm's distributions. Wage income (returns to a worker/owner on labour (hours worked) in the business), deductible for corporate income tax purposes, is subject to personal income tax (with implications examined in Section 2.3). This section first considers the application of corporate income tax with a focus on small business profits, and then addresses shareholder-level taxation of distributed profits.

Corporate-level income taxation

Most OECD countries apply a single (flat) basic statutory corporate income tax rate to the full amount of taxable profits of incorporated businesses, regardless of the size of the company. However, as considered in Figure 2.2, the following 11 out of 30 OECD countries tax corporate profits using a graduated (tiered) corporate tax rate schedule involving two or

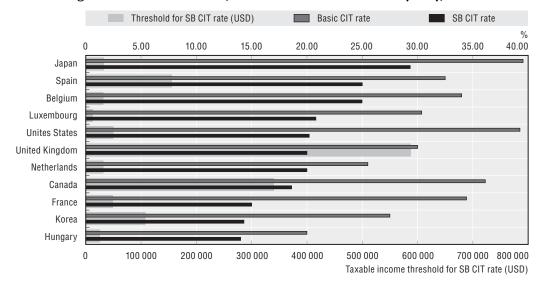


Figure 2.2. Basic CIT rate, SB CIT rate and threshold (USD), 2007

more statutory rates:¹⁹ Belgium, Canada, France, Hungary, Japan, Korea, Luxembourg, the Netherlands, Spain, the UK and US. These countries are ranked in Figure 2.2, highest to lowest, according to their small business tax rate (SB CIT), shown in the bottom bar for each country. (Basic CIT rates in these countries, and in the other OECD countries where the basic rate is the only rate, are discussed in sub-section c, with rates presented in Figure 2.3.)

a) Preferential small business corporate tax rates

For countries with a tiered schedule involving only two CIT rates, a small business corporate income tax (SB CIT) rate applies to taxable profits up to some small business taxable profit threshold, with profits in excess of this amount taxed at the basic (top) CIT rate. These amounts are reported in Figure 2.2 as SB CIT rate, threshold for SB CIT rate, and basic CIT rate. For countries with a tiered schedule involving three or more CIT rates, Figure 2.2 shows the basic (top) CIT rate and the first (bottom) rate applicable to the first bracket of taxable corporate profit, reported here as SB CIT rate. Considerable variation is observed across countries in the threshold level of taxable profit subject to the first tier CIT rate. (Figure 2.3 presented in the following sub-section takes account of varying thresholds and multiple rates by comparing average CIT rates at alternative profit levels).

Amongst the 11 countries, a number of approaches are observed in providing CIT rate relief to small businesses. One approach, followed by Korea and the Netherlands, is to tax corporate profits up to a small business profit threshold at a preferential rate below the basic rate regardless of the size of the company. For example, Korea taxes the first USD 108 000 (KRW 100 million) of corporate profit at 14.3 per cent, while taxing profit in excess of this threshold at the basic CIT rate of 27.5 per cent. ²⁰ In the Netherlands, a tiered CIT rate structure with three bands applies: a 20 per cent rate applies to the first USD 32 498 (EUR 25 000) of taxable profit, a 23.5 per cent rate applies to profit in excess of this first threshold up to USD 77 994 (EUR 60 000), while the top (basic) rate of 25.5 per cent applies to profit in excess of this amount.

The UK and US also apply a tiered CIT rate structure that taxes small business profits at lower rates, but withdraw this tax relief when taxing firms with significant profits. For example, the UK taxes the first USD 587 760 (GBP 300 000) of corporate profit at the UK's

small business tax rate of 20 per cent. Taxable profits in excess of USD 2 938 800 (GBP 1 500 000) are taxed at the basic CIT rate of 30 per cent. Taxable profits in the mid-range, between USD 587 760 and USD 2 938 800, are taxed at a higher marginal rate of 32.5 per cent. This approach increases the average (statutory) CIT rate on total profits, such that the average rate converges to the basic rate (30 per cent) when the basic rate threshold is met, at USD 2 938 800.

The US operates a tiered rate system with a greater number of profit bands, different thresholds and CIT rates. In particular, the US taxes the first USD 50 000 of corporate profit at a small business tax rate of 20.2 per cent. The marginal CIT rate increases over four successive profit bands, reaching the basic CIT rate of 39.26 per cent at a taxable profit threshold of USD 10 million. For firms with taxable profits exceeding USD 15 million, a higher marginal CIT rate applies to profits up to USD 18 300 000, with the application of this higher rate operating to withdraw tax relief provided by the application of lower CIT rates to lower profit bands. A similar "claw-back" applies to profits over the range USD 100 000 to 335 000.²¹

Other countries including Belgium and Luxembourg apply reduced CIT rates only to corporations with taxable profits less than a small business profit threshold. For example, Belgium applies its three-tier progressive rate structure only to companies with taxable profits no greater than USD 419 218 (EUR 322 500). For firms meeting this condition, the first USD 32 498 (EUR 25 000) of profit is taxed at 24.98 per cent; profits over this first threshold, up to USD 116 991 (EUR 90 000), are taxed at 31.93 per cent, while profits in excess of USD 419 218 are taxed at the basic rate of 33.99 per cent.²²

Rather than limit the application of a reduced CIT rate to corporations with profits under a small business profit threshold, Japan uses a capital (instead of profit) test, while France and Spain rely on a gross turnover test. In the case of Japan, a first tier CIT rate of 29.34 per cent applies to the first USD 33 200 (JPY 4 million) of taxable profits of corporations with capital of USD 830 000 (JPY 100 million) or less. For firms satisfying the small business capital test with profits over the range USD 33 200 to USD 66 400 (JPY 8 million), a second tier CIT rate of 30.85 per cent applies. For profits above USD 66 400, the top rate of 39.54 per cent is applied. The same (basic) CIT rate is applied to the full amount of taxable profits of firms not satisfying the small business capital test.

France relies on a turnover test (rather than a capital or profit test) to determine corporations eligible to benefit from application of a small business tax rate. In particular, for corporations with annual turnover no greater than USD 9 918 237 (EUR 7 630 000), the first USD 49 552 (EUR 38 120) of taxable profit is taxed at a preferential small business tax rate of 15 per cent. For profits above USD 49 552, the basic tax rate of 34.43 per cent applies (also applied to the full amount of taxable profits of corporations with turnover exceeding the small business test). Similarly, in the case of Spain, the first USD 156 251 (EUR 120 202) of taxable profit of qualifying small corporations – those with turnover under USD 10 399 200 (EUR 8 million) – is taxed at a small business tax rate of 25 per cent. The basic rate of 32.5 per cent applies to profits above USD 156 251 (also applied to the full amount of taxable profits of corporations not qualifying as small businesses).

Canada limits application of its small business tax rate to qualifying active business income of Canadian-controlled private corporations (CCPCs), while using a capital test to withdraw small business tax rate relief from CCPCs with "taxable capital" in excess of USD 8 518 000 (CAD 10 million). Under the Canadian system, a small business tax rate of

18.62 per cent applies to the first USD 340 720 (CAD 400 000) of active business income of CCPCs. Profits in excess of this threshold are taxed at the basic CIT rate of 36.12 per cent.²⁴ The (annual) limit for income taxed at the small business rate is reduced for corporations (more specifically, corporate groups) having taxable capital in excess of USD 8 518 000, such that no income is eligible for the small business rate where taxable capital exceeds USD 12 777 000 (CAD 15 million).²⁵

Last to consider is Hungary which operates a two-tier CIT rate structure for companies satisfying a number of conditions not directly related to size. In particular, where a company employs at least one person, complies with its social security contribution obligations, and does not make use of any special tax incentives, the first USD 25 650 (HUF 5 million) of taxable profit is taxed at reduced rate of 14 per cent. Taxable profit in excess of this amount, and the full amount of taxable profit of companies not qualifying for the two-tier CIT rate structure, is taxed at the basic CIT rate of 20 per cent.

b) Cross-country comparisons of preferential small business tax rates

Comparisons of average corporate statutory tax rates (ACSTRs) on SME profits are complex across countries with graduated CIT rate structures, taking into account preferential small business tax rate relief, given differences in threshold levels of taxable profit at which corporate tax rates are adjusted, the use of multiple rates and thresholds, ²⁶ and in some countries conditional application of small business tax rates depending on turnover or capital.

With detailed corporate-level micro-data for each country, average taxable profits of a sample of taxable incorporated SMEs of a particular size (measured by number of employees, capital or turnover) could be measured for each country. This would permit calculations of ACSTRs on incorporated SMEs by firm size and by country. The analysis could be repeated for firms of varying size and profit levels, to illustrate the influence of tax rates and thresholds on ACSTRs by firm size. In the absence of such data, other approaches may be considered.

As when assessing average personal statutory tax rates on unincorporated business income, one possible approach would be to calculate ACSTRs assessed at some fixed level of corporate profit, held constant across countries.²⁷ However, a fixed level of corporate profit, while possibly representative of small companies of a given size in some countries, may not be in others. In particular, total income generated by an incorporated SME of a given size, including returns on labour (wages) and capital (profit) of a worker/owner, may be higher (lower) on average in countries with a higher (lower) average earnings in the economy, as measured possibly by GDP per capita, or wage earnings per capita.

The following analysis for the 11 countries with a tiered CIT rate structure assumes that corporate earnings of an incorporated company (e.g. single owner/worker company) of a given size, measured by capital or number of employees, are proportional to average wage earnings in the country.²⁸ In particular, Figure 2.3 reports ACSTRs at various multiples of average wage earnings in each country (as reported in OECD Taxing Wages), factoring in the preferential rates and taxable income thresholds for each of the eleven countries concerned, reviewed in the previous sub-section.

The bottom bar for each country shows the lowest statutory CIT rate applicable to the first bracket of taxable corporate profit (identified as SB CIT rate), matching the values

reported in Figure 2.2. The other bars show ACSTRs calculated at taxable profit equal to 2, 3, 4 and 5 times average earnings (AW) in the country. The results serve mainly to illustrate the influence of CIT rate thresholds (shown in Figure 2.2) in influencing ACSTRs at different earnings levels.

Figure 2.3 illustrates the important influence of marginal CIT rate thresholds in establishing ACSTRs at different earnings levels. For example, in the case of the UK, Canada and Spain, where the threshold profit level for application of the preferential small business tax rate is relatively high (USD 587 760, USD 340 720 and USD 156 251), the low (first-tier) SB CIT rate applies to the full amount of profits at each of the earnings multiples (the average statutory CIT rate in each case equals SB CIT). In contrast, the ACSTR in Belgium and the Netherlands increases with each increment, to reach within 1 percentage point of the top rate at 5-times average earnings. The SB CIT applies up to two (three) times average earnings in the case of Hungary (Korea). In contrast, for Luxembourg, where the small business CIT rate of 20.8 per cent applies only to firms with taxable profits of USD 12 999 or less, the basic (top) CIT rate (30.4 per cent) applies at all of the earnings multiples considered in the Figure 2.3.

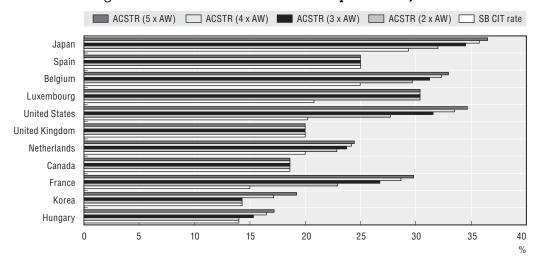


Figure 2.3. ACSTRs at various taxable profit level, 2007

c) Basic and preferential small business corporate tax rates

The preceding review concerns the 11 OECD countries with a tiered CIT rate structure. In the remaining 19 OECD countries (Australia, Austria, Czech Republic, Denmark, Finland, Germany, Greece, Iceland, Ireland, Italy, Mexico, New Zealand, Norway, Poland, Portugal, Slovak Republic, Sweden, Switzerland and Turkey), a single (flat) basic corporate tax rate applies to the full amount of corporate taxable income, regardless of the size of a business. Figure 2.4 reports basic CIT rates for all OECD countries, ranked highest to lowest.

It is interesting to compare these basic CIT rates with the small business rates shown in Figure 2.3. The comparison reveals that basic CIT rates in a number of countries are lower than (first-tier) SB CIT rates in certain other countries with a tiered CIT structure. For example, the basic CIT rates in Ireland, Iceland, Poland and the Slovak Republic, ranging from 12.5 to 19 per cent, are lower than the 20 per cent small business tax rate in the

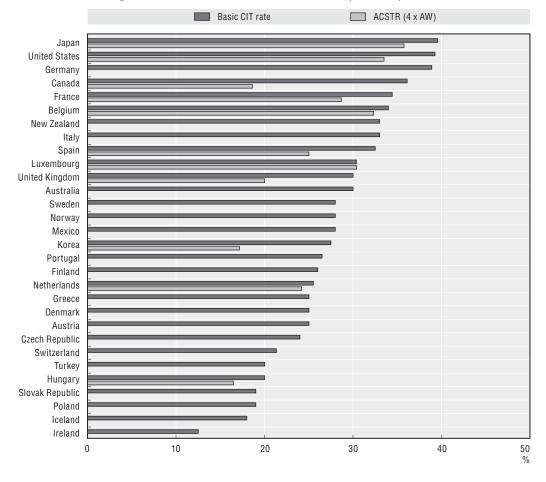


Figure 2.4. Basic CIT rate and ACSTR (4 x AW), 2007

Netherlands and the UK. Indeed, Ireland's very low basic CIT rate of 12.5 per cent falls below the relatively low 15 per cent SBCIT rate in France. Similarly, the 20 per cent basic CIT rate in Hungary and Turkey, and the basic CIT rates in Switzerland and the Czech Republic, are lower than the 25 per cent preferential SB CIT rate in Belgium and Spain. Basic CIT rates in Austria, Denmark and Greece are also relatively low at the 25 per cent mark.

Figure 2.4 also shows ACSTRs calculated at taxable profits equal to 4 times average earnings (AW) for the 11 countries with graduated CIT rates. Their inclusion serves to signal average statutory corporate tax rates below basic CIT rates for these countries, with ACSTRs depending on business income levels and marginal rate thresholds (with ACSTRs calculated at other profit levels reported in Figure 2.3). For countries with a flat CIT rate structure, the basic CIT rate is the marginal corporate statutory tax rate and average rate (ACSTR) regardless of the level of taxable corporate profit.

Shareholder-level taxation of dividends

Profits of an incorporated business, net of corporate-level tax, may be subject to further taxation at the individual shareholder level. In particular, distributed after-tax profits are normally subject to shareholder-level dividend taxation, while capital gains on shares resulting from the retention of after-tax profits may be subject to capital gains taxation upon the disposition of shares. An assessment of the combined ("all-in") average

statutory tax rate on profits of incorporated firms factors in both company-level (corporate) and shareholder-level taxation. While a comprehensive assessment would consider corporate plus shareholder-level taxation of distributed earnings, and separately corporate plus shareholder-level taxation of retained earnings, the analysis below restricts itself to examine combined corporate and shareholder income tax rates on distributed profits (in part, given that the capital gains tax rate and thus the "all-in" tax rate on retained earnings is variable, dependent on the holding period of shares).

In taxing distributed profits of incorporated firms, a number of approaches are observed in OECD countries. Some countries (e.g. Austria) apply a flat withholding tax rate to distributed profit, at the company level, without further shareholder taxation.²⁹ Others tax individual shareholders on the full amount of dividend income received at personal tax rates without special relief for tax imposed at the corporate level (classical tax systems). In contrast, given the possible negative effects of double taxation on the cost of capital and investment (see Chapters 3 and 4) and/or to encourage savings, many countries "integrate" corporate and personal taxation in order to avoid or limit double taxation.

Possible integration approaches include a dividend paid deduction at the corporate level, providing an offset to corporate income tax at the time of dividend distribution. However, integration relief when available is typically provided at the shareholder level, which helps maintain the role of corporate tax as a withholding device. Common integration provisions at the personal shareholder level include partial inclusion of dividend income as taxable income; imputation tax credit systems that tax pre-corporate tax distributions at personal tax rates while giving partial (or full) relief at the shareholder level for corporate tax paid on distributed income; and fixed dividend credit systems providing tax relief as some percentage of dividend income received, determined independently of the actual amount of corporate-level tax paid.

The operation of integration provisions in some countries is complex, and is not described here in any detail.³¹ Instead, summary measures of combined corporate and shareholder-level tax rates on distributed profits are presented for OECD countries, in Figure 2.5. Except for the few countries that apply final withholding tax on dividends at the company level, the calculations accounting for taxation of dividend income consider the top PIT rate investor case, where (gross) dividend income is taxed at top personal income tax rates.³²

As discussed above in sub-section c, profits of incorporated firms (including incorporated SMEs) are taxed in 19 OECD countries at basic CIT rates, regardless of firm size. For these countries, Figure 2.5 shows the basic CIT rate and corresponding combined (statutory) tax rate on dividend income. For these countries, the dividend tax rate labelled DIVTR (basic CIT) applies to taxable SME profits distributed to a top PIT rate investor, regardless of firm size.

For the 11 countries taxing corporate profits under a tiered CIT rate schedule, the figure reports, for top PIT rate investors, combined tax rates on dividends of incorporated firms with taxable profits equal to 4 times average earnings (AW), shown as DIVTR (4 x AW), with this earnings multiple (4 x AW) chosen for illustrative purposes. The average corporate statutory tax rate at this earnings level is also shown in the figures, labelled ACSTR (4 x AW). Figures 2.4 and 2.5 also show for these countries dividend tax rates, again for top PIT rate investors, in cases where corporate profits are taxed at the basic CIT rate, labelled DIVTR (basic CIT). 33

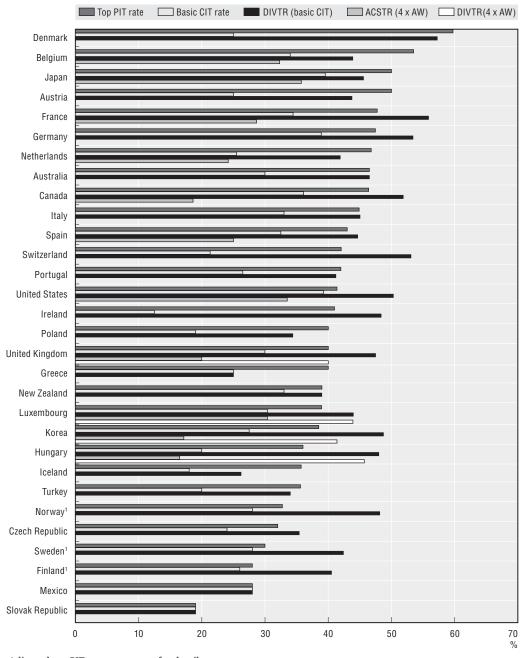


Figure 2.5. Top PIT rate (unincorporated business profits) ACSTR and DIV tax rates (incorporated business profits), top PIT rate investor, 2007

1. Adjusted top PIT rates – see text for detail.

A key observation is that in countries with preferential small business tax rates, the combined average statutory tax rate on dividend income generally depends on firm size, with corporate-level tax levied on dividend income varying by firm size, as considered in Figure 2.4. Unless higher corporate-level taxes are fully offset by lower effective personal income tax rates – which may occur in countries with imputation systems where imputation credits increase with the amount of corporate tax paid (up to certain limits), increased firm size may result in an increased average tax rate on distributed profits of incorporated SMEs.

2.3. Comparisons of ASTRs of unincorporated versus incorporated SMEs

The information presented in the previous sections may be used to consider how statutory income tax rates on unincorporated business income compare with corresponding tax rates on incorporated business income, taking into account the treatment of returns to both labour and capital invested by a worker/owner of an SME. Such comparisons are useful where policy makers wish to address cases where the tax system has the potential to impede or distort the choice of business form, recognising that structuring a business in an unincorporated form (e.g. sole proprietorship, general or limited partnership) may provide certain non-tax advantages relative to incorporation, or possibly the reverse, depending on a taxpayer's situation.

Establishing an unincorporated business may be relatively less costly if significant legal fees and other resources are involved in drafting and registering articles of incorporation, and may give business owners (sole proprietors, general partners) greater control over business decisions. On the other hand, incorporation may be relatively attractive in enabling improved access to finance, continuity of life, and greater protection of personal assets. In general, efficiency losses may arise where the choice of a particular business form offering a taxpayer greater non-tax advantages on balance relative to another, is discouraged by the tax system. While avoiding certain distortions imposed by a tax system may not be administratively feasible or otherwise possible – for example, avoiding differences in tax burden linked to current taxation of personal business income, versus deferred personal taxation of corporate profits resulting in effective tax rates dependent on the distribution policies of firms – policy makers are generally interested in establishing where distortions exist, to help establish policy approaches to take.

Before proceeding, it is useful to contrast dual and non-dual income tax systems. Most OECD countries operate a non-dual system. While recognising that unincorporated business income of a worker/owner of an SME represents a return on labour and capital invested in a company, these returns are not treated separately for income tax purposes. Instead, total business income, net of allowable deductions, is taxed at personal income tax rates. Thus the statutory tax rate (STR) on the underlying wage income component and the STR on the underlying capital income component are one and the same, and depend on the category of taxable income to which personal business income is assigned. Where assigned to the general income basket, ³⁴ the average STR depends on the progressive PIT rate structure applied to the general income basket, the amount of taxable income of the taxpayer from other sources also assigned to that basket, and the amount of business income. For a top PIT rate taxpayer, the STR on personal business income (capital and labour components) is the top PIT rate, regardless of the level of the business income, as the top rate would apply to the full amount of business income in this case.

In the incorporated business case, wage income is normally assigned to the general income basket and subject to progressive PIT rates. This means that, for a top PIT rate taxpayer comparing the income tax burden on business income under the unincorporated versus incorporated business options, labour and capital components of unincorporated business income would be taxed at the same top PIT rate that would apply to wage income where the business is incorporated. Thus differences between the overall income tax rate on unincorporated versus incorporated business income arise in general only where the tax rate on capital income differs between the two business forms – that is, where the top PIT rate applied to the general income basket differs from the relevant statutory tax rate on corporate profits (with corporate and shareholder-level taxation).³⁵

Finland and Sweden operate dual income tax systems which separate unincorporated business income into labour and capital components (based on prescribed notional rates of return on capital). The imputed labour income component is subject to progressive PIT rates, as is wage income in the incorporated business case. Thus for a top PIT rate taxpayer, imputed labour income is taxed at the same top PIT rate that would apply to wage income if the business is instead incorporated. The capital income component is taxed at a reduced flat rate (28 per cent in Finland, 30 per cent in Sweden). This implies that, as with non-dual income tax systems, differences between the overall income tax rate on unincorporated versus incorporated business income arise where the tax rate on capital income differs between the two cases. In other words, for dual income tax systems, the comparison to make is between the flat rate applied to prescribed capital income of an unincorporated business and the relevant statutory tax rate on corporate profits (with corporate and shareholder-level taxation).

Such a comparison assumes that the underlying split between capital and labour income is the same irrespective of business form. This, however, is not necessarily the case – the splitting rules may result in the imputed levels of labour and capital income in the unincorporated case differing from wage income and corporate profits, respectively, in the incorporated case (as the unincorporated business split is based on a notional, rather than actual, return on capital). This means that comparing just capital tax rates will not give an exact measure of differences in overall tax rates. That said, in most cases the split between capital and labour income is approximately the same, and so differences in tax rates on capital income can still be used to infer differences in the overall income tax rates for dual income tax countries. ³⁸

Therefore the comparisons below for all countries (dual/non-dual income tax) focus on possible differences between the PIT rate on the capital component of unincorporated business income and the CIT/PIT rate on corporate profit – where the former is a flat rate in dual income tax system countries, and is the top PIT rate on the general income basket in non-dual income tax system countries. Where such differences exist, they tend to matter more (less) in influencing differences in the overall tax burden between the two business types where capital income accounts for a higher (lower) percentage of total business earnings.

In focussing on the treatment of capital income, the top PIT rate shown in Figure 2.5 for Finland and Sweden is the flat PIT rate applied to the capital component of unincorporated business income. For Norway, the top PIT rate again takes account of the allowance for a "normal" return on invested capital. These rates differ from the top PIT rates for these countries shown in Figure 2.1 which consider the taxation of unincorporated business income including both labour and capital components.³⁹

It must be emphasized that the within-country tax rate comparisons reviewed below reflect only the influence of statutory income tax rates. To the extent that business income tax base provisions are the same for unincorporated and incorporated business, differences in statutory tax rates (STRs) may reflect differences in effective tax rates. However, even where tax base rules applied to establish taxable business income are the same, different tax credit provisions may result in very different effective tax rates. It is also important to emphasize that differences in STRs across countries cannot be used in any case to infer differences in effective tax rates across countries, given differences across countries in both tax base and tax credit rules.

It should also be emphasized that the illustrative within-country tax rate comparisons presented below ignore social security contributions (accounted for in Chapter 3) and consider only the case of top PIT rate investors. In assessing possible differences in the tax treatment of unincorporated *versus* incorporated business income, the analysis presented should be

repeated for taxpayers at different taxable income levels, including the common case where business income derived by a small business owner/worker is the only significant source of taxable income of the taxpayer. Also, as noted above, differences in the overall STR on incorporated versus unincorporated business form depend on capital versus labour contributions to total business income.

In comparing STRs on corporate profit with top PIT rates on personal (unincorporated) business income, one can consider dividend tax rates (DIVTR) which factor in both CIT and PIT (shareholder-level) taxation, referred to below as the "mature firm" case involving immediate distribution of earnings). It is informative to also compare CIT rates, excluding shareholder-level taxation, referred to below as the "high-growth" case involving indefinite profit retention and deferral of shareholder taxation of dividends. STR comparisons under retention and eventual distribution of corporate profits can be addressed as falling between these polar cases, as considered below. It is useful to consider first countries with a flat CIT rate schedule, and secondly, countries with a tiered CIT rate schedule.

Results for single (basic) CIT rate countries

Considering the mature firm case, the combined corporate and shareholder-level tax rates on distributed profits for top PIT rate taxpayers are shown in Figure 2.5 as DIVTR(basic CIT) for the 19 countries that tax corporate profits at a single flat (basic) CIT rate. Within-country comparisons find that the DIVTR(basic CIT) is higher than the top PIT rate on personal business income in seven of these countries, including the Czech Republic (+3.4 percentage points), Germany (+5.9 points), Ireland (+7.4), Switzerland (+11), Sweden (+12.4), Finland (+12.5), and Norway (+15.4). These STR differences imply a tax rate distortion favouring unincorporated business form linked to varying degrees of double taxation of distributed corporate profit.

In contrast, DIVTR(basic CIT) is shown in the figures to be lower than the top PIT rate in Turkey (–1.6 percentage points), Poland (–5.6 points), Austria (–6.2) and Iceland (–9.5). The results for Greece show the largest difference in rates (–15 percentage points). DIVTR(basic CIT) is also shown to be lower in Denmark (–2.5 percentage points), under the assumption that business income is withdrawn from a company (the reinvestment case is considered below). These STR differences imply a tax rate distortion favouring incorporated business form linked to relatively low CIT rates and limited PIT rates on dividends.

In Italy and Portugal, the difference between DIVTR(basic CIT) and the top PIT rate is less than 1 percentage point (+0.1 and -0.8). In the case of Australia, Mexico, New Zealand and the Slovak Republic, the rates are identical, with tax rate neutrality in Australia, Mexico and New Zealand resulting from dividend tax systems that provide full imputation credits to shareholders. Tax rate neutrality in the Slovak Republic results from the waiving of shareholder level tax on personal dividend income and identical top PIT and corporate tax rates.

The preceding results assume immediate distribution of corporate profits (mature firm case). Consider now the case where after-tax profits (business earnings net of wage income) are reinvested. Where after-corporate tax profit is retained indefinitely (high-growth case), the applicable tax rate on corporate profits is the statutory CIT rate which in many cases is considerably lower than the top PIT rate on unincorporated business income taxed on a current basis. ⁴⁰ Indeed, with the exception of Mexico and the Slovak Republic, the basic CIT rate on corporate profits is shown in Figure 2.5 to be below and in some cases well below the top PIT rate on personal business income.

As noted above, DIVTR(basic CIT) rates exceed the top PIT rate on personal business income in seven countries with a flat CIT rate structure, implying an income tax distortion

against incorporation in the "mature firm" case. When shareholder taxation of corporate profit does not factor in, the basic CIT rate on retained profit is well below the top PIT rate on personal business income – implying a tax rate distortion favouring incorporation – in the Czech Republic (–8 percentage points), Germany (–8.6 points), and Norway (–4.7) and Finland (–2). In Switzerland the difference exceeds 20 percentage points (–20.7) while in Ireland the difference approaches 30 percentage points (–28.5). In Sweden there is no difference, given that retained (reserve) income of an unincorporated business is taxed at a preferential rate of 28 per cent, which matches the basic corporate income tax rate.

In the other flat CIT rate countries where DIVTR(basic CIT) is less than the top PIT rate on personal business income, the income tax rate advantage provided by incorporation increases further when profits are retained rather than distributed. In particular the gap in relevant tax rates between the incorporated and unincorporated business cases increases as follows: Turkey (-1.6 to -15.6 percentage points), Poland (-5.6 to -21), Austria (-6.2 to -25), Iceland (-9.5 to -17.7) and Portugal (-0.8 to -15.5). In Denmark, the gap increases marginally (-2.5 to -5), with taxation of retained (reserve) unincorporated business income at 30 per cent.

In Australia and New Zealand, where the DIVTR(basic CIT) and top PIT rate are the same when profits are immediately distributed, incorporation creates a gap (provides a lower tax rate) where profits are instead retained. In particular, with retention, the gap created between the incorporated and unincorporated business cases is (–16.5) for Australia and (–6) for New Zealand.

In the Slovak Republic and Mexico, tax rate neutrality continues to hold when profits are retained. In the Slovak Republic, this result applies because shareholder tax does not apply to distributions. In the case of Mexico, tax rate neutrality is explained by the fact that the CIT rate (28 per cent) matches the combined tax rate on distributions, with a top PIT rate of 28 per cent and full imputation credits.

Results for tiered CIT rate countries

When analysing the 11 OECD countries that apply a tiered CIT rate structure, Figure 2.5 assumes for illustrative purposes business profits at four-times average wage earnings (see the discussion of the 4 x AW earnings case examined in Figure 2.4).

Consider first the immediate distribution/mature firm case. In eight of the 11 countries, the combined (corporate and shareholder-level) tax rate on dividends taxed at the basic CIT rate (representing for these countries the *large firm* case⁴¹), shown in the figures as DIVTR(basic CIT), exceeds the top PIT rate on personal (unincorporated) business income, in some cases by a considerable margin: Hungary (+12.0 percentage points); Korea (+10.2); US (+8.9), France (+8.1), UK (+7.5), Canada (+5.4), Luxembourg (+5.0) and Spain (+1.7). These tax rate differences imply a tax rate distortion against incorporation in the mature large firm case that assumes immediate distribution of profits.

Now consider SME results for these countries where, with one exception, preferential small business tax rates applied to SME earnings (profits equal to four-times average earnings) are found to reduce the tax rate discrepancy between incorporated and unincorporated business form, and in two cases reverse it. For each country with a tiered CIT rate structure, the combined tax rate on dividends is shown in the figures as DIVTR (4 x AW).

In Hungary, the difference between the combined tax rate on dividends paid out by SMEs and the top PIT rate on unincorporated business income is (+9.7) percentage points, compared with (+12) in the large firm case. Similarly, smaller differences are found in Korea

(+2.9 versus +10.2), the US (+2.4 versus +8.9), and France (+4.2 versus +8.1). In the UK, the difference between incorporated and unincorporated rates is eliminated for SMEs (0 versus +7.5 for the large firm case), with imputation credits providing a full offset to corporate-level tax. In Canada and Spain, shareholder dividend tax credits in the SME case reverse the difference. While the combined tax on dividends paid out by large firms exceeds the top PIT rate on personal business income in Canada by (+5.4) percentage points, the combined tax on SME distributions differs from (is less than) the top PIT rate by (-2.3) percentage points. Similarly in Spain the difference is reversed (+1.7 to -4.8). In the case of Luxembourg, there is no change (the difference remains at +5.0), as access to small business tax rate relief is conditional on taxable profits not exceeding USD 12 999 (not satisfied at four-times AW).

In the other countries with a tiered CIT rate structure, where the combined tax rate on dividends is less than the top PIT rate on personal business income even in the large firm case with profits taxed at the basic CIT rate, the tax rate gap favouring incorporation is slightly increased in the SME case. In the Netherlands the gap enlarges from (-4.9 to -5.9) percentage points, while in Belgium (-9.6 to -11), and in Japan (-4.4 to -7.8).

The preceding results for systems with tiered CIT rates consider the "mature firm" case (immediate distribution of corporate profits). In the high-growth case, where after-tax profits are retained indefinitely and shareholder tax (PIT) does not factor in, the average corporate statutory tax rate (ACSTR) is typically lower, in some cases significantly, than the top PIT rate on personal business income. In other words, retention in some cases significantly increases the gap for high-growth SMEs between income tax on corporate profits and personal tax on unincorporated business income.

Indeed, significant differences are shown in Figure 2.5 between the ACSTR on retained SME profit and the top PIT rate, for the following countries with a tiered CIT rate structure: Canada (–27.8 percentage points), Netherlands (–22.6), Korea (–21.4), Belgium (–21.2), UK (–20), Hungary (–19.5), France (–19.1), Spain (–18), Japan (–14.3), Luxembourg (–8.6), and the US (–7.9). These differences imply significantly lower income tax rates for high-growth SMEs that are incorporated, compared to unincorporated, on account of preferential small business tax rates, combined with indefinite deferral of shareholder level tax on corporate profits (with unincorporated business income taxed on a current basis, implying no deferral).

A related observation is that the basic CIT rate exceeds the ACSTR (4 x AW) by 17.5 percentage points in Canada, with similar results shown for Korea (+10.4), the UK (+10), Spain (+7.5), France (+5,8), the US (+5.8), Japan (+3.8), Hungary (+3.5), Belgium (+1.7), and the Netherlands (+1.3). These differences are the same amounts by which the gap between the small business CIT rate (SME case) and the top PIT rate differs from the gap between the basic CIT (large firm case) and top PIT rate. In other words, taking Canada as an example, for a high-growth firm with indefinite retention of earnings, the gap between the CIT rate on corporate profits and the top PIT rate on unincorporated business profits is 17.5 percentage points larger for an SME than for a large firm (at the assumed profit level). 42

The preceding results for polar cases (immediate distribution vs. indefinite retention) may be generalised. In particular, where earnings are initially retained but later distributed, implying that shareholder taxation is deferred but not indefinitely, the present value of future dividend taxes factors into STRs for the incorporated business case, with values falling between the polar cases, tending to the retention/tax deferral case the longer the growth (reinvestment) period.

As a general result, incorporation may involve a higher income tax burden on a top PIT rate investor, owing to some degree of double taxation of profit (with this difference pronounced in certain countries, and not in others with imputation/integration systems). For firms reinvesting their earnings (generally a cheaper source of finance than new equity), the taxation of corporate profits at a low rate, compared with a top PIT rate on personal business income, combined with the ability to defer shareholder taxation of profits, tends to increase the relative attractiveness to profitable SMEs of incorporation as a choice of business form, at least for a top personal tax rate investor, and in particular where small business tax rates apply.

For SME owner/workers without other sources of income, the APSTRs on unincorporated business income will be less than the top PIT rate (the applicable rate for a top personal tax rate investor, considered in the results discussed above), and determined by the level of business income and the structure of the tiered personal tax rate schedule [i.e. marginal PIT rates, levels and thresholds, basic personal allowance (if any)]. For relatively low levels of business income, the APSTR on unincorporated business income may be below the basic corporate tax rate (and possibly zero). Thus for relatively small firms, incorporation may involve a higher tax rate being applied to business profits even for growth-oriented firms reinvesting their earnings.

It is important to again be reminded that the preceding comparisons, while useful in considering how statutory tax rates may factor in to potentially distort decisions over the choice of business form, the comparisons may or may not reflect differences in effective income tax rates upon which decisions are presumably based. To the extent that tax base and tax credit differences arise, the statutory tax rates may be misleading indicators. Also, as noted at the outset, the differences in STRs across countries cannot be used in any case to infer differences in effective tax rates across countries, given differences across countries in both tax base and tax credit rules. Last to recall is that the results ignore social security contributions and consider only the case of top PIT rate investors. These two assumptions are relaxed in Chapter 3 of the paper.

Notes

- 1. This chapter and the next focus on income tax rates and thresholds, and combined income and social security contribution rates and thresholds, respectively. Certain income tax base provisions and other taxes are discussed in other chapters. Loss offset rules for business losses and capital losses on SME shares, relevant to risk-taking, are addressed in Chapter 4. Targeted tax incentives to encourage SME investment are also addressed in Chapter 4. Various policy and administrative approaches designed to limit VAT compliance costs are addressed in Chapter 5. Capital gains taxation, property and excise taxes (not covered in responses to the SME tax questionnaire) are not addressed. The personal, corporate and dividend tax rates reported in this chapter capture statutory income tax considerations, including: the existence in some countries of graduated rather than flat corporate income tax rate structures; thresholds for preferential small business tax rates; varying degrees of integration of corporate and personal income taxation of dividends; and the influence of a firms growth path (profit retention versus distribution) on the overall income tax levied on a business, when structured in incorporated form.
- 2. A sole proprietor (single owner of a business) may be held personally liable for business-related obligations, including debt-obligations to creditors, and business tax liabilities. This means that personal assets (e.g. investor's personal residence) may be seized to meet these liabilities. With a general partnership, each individual partner may be personally liable for business liabilities. With a limited partnership, personal assets of investors providing capital but not management advice ("limited partners") may not be regarded as business assets (not at risk), so that the maximum capital that a limited partner may lose is the amount of capital he/she has invested in the business.

- 3. Unlike a regular (Subchapter C) corporation in the US, a company that qualifies as a "Subchapter S-corporation" is not subject to US federal corporate income tax (or state-level corporate income tax, in most states). All profits flow through to shareholders who report the income on personal income tax returns [as with sole proprietorships, general and limited partnerships, and limited liability companies (LLC)]. For a corporation to qualify as an "S-corp", it must be a domestic corporation with only one class of stock, there must be no more than 100 shareholders, all of whom must be US citizens or residents, and cannot include corporations. All shareholders of an S-corp have limited personal liability for business liabilities (in contrast general partners of a general or limited partnership are personally liable for business debts). While S-corp status has been used in the US for some time, a more recent designation is the Limited Liability Company (LLC) designation. Like an S-corp, owners of LLCs have limited personal liability for business debts (even if they participate in the management), and profits of LLCs flow-through to owners. Additional flexibility under LLC status allows profits/losses to be allocated differently than ownership interest.
- 4. Relief from double taxation of retained after-corporate tax profit (with retentions giving rise to taxable capital gains), is provided in part by taxing capital gains on a realisation basis. Relief from double current taxation of capital gains (accompanying the immediate sale of shares that have increased in value as a result of current period after-tax retentions) may be provided through partial inclusion of capital gains (possibly with a one-year holding period requirement), or by allowing shareholders to "step-up" (increase) the basis of their shares by their pro rata share of tax-paid distributed profit. The analysis in this paper of combined corporate and personal taxation of profits is limited to the case of distributions.
- 5. For all OECD countries other than Finland, Sweden, Norway and the Netherlands, Figure 2.1 shows top marginal PIT rates on wage income, as reported in the OECD Tax Database (see Table I.4 in the database found at www.oecd.org/ctp/taxdatabase). All rates are combined central and sub-central rates, inclusive of surtaxes.
- 6. With few exceptions across OECD countries, (net) personal business income is assigned for tax purposes to the general income basket, meaning the taxable income category to which wage income from dependent employment income (and possibly other income) is assigned for tax purposes. Where a taxpayer earns other taxable income, assigned to the same pool as personal business income, such that the full amount of personal business income is taxed at the top PIT rate, the latter is both a marginal rate and an average rate. It is a marginal rate, in that each unit of business income is taxed at the margin at the top PIT rate. It is also an average rate in that the total amount of business income is taxed at the top PIT rate.
- This assumes a micro-dataset with balance sheet or income statement variables relevant to firm size (capital, turnover/sales, or payroll).
- 8. With a constant returns-to-scale (CRS) production function, total output (and income) per worker increases at a decreasing rate with a firm's capital/labour ratio (k = K/L). If all firms have the same CRS production function, then firm A and firm B of an identical size ($K_A = K_B$) would be predicted to generate the same amount of total income if employing the same amount of labour input ($L_A = L_B$), with the same capital/labour ratio ($k_A = k_B$). When considering sole proprietorships of equal size ($K_A = K_B$) it would seem reasonable to assume the same labour input. However a prediction of equal output/income of firms A and B assumes identical technologies. If technology employed in country A is superior (more efficient) to that employed in B, then total income generated by firm A would be expected to be higher, with returns to capital and labour also commensurably higher. When assessing illustrative APSTRs of a firm of a particular (unspecified) size, the approach taken in the paper assumes that unincorporated business income (total income) is proportional to average wage earnings (return on labour).
- 9. With taxable personal business income measured net of wages paid to employees, the choice of multiples of average wage earnings may be made without consideration of the number of employees (ignoring deductible social security contributions made by a sole proprietor as an employer). The main consideration is that personal business income includes wage and capital returns to a sole proprietor (worker/owner).
- 10. The APSTRs shown in the figures are derived using the OECD Taxing Wages framework, considering the single individual (no children) case, with gross wage earnings equal to two times, and four times, the average wage.
- 11. In Denmark, Finland, and Sweden, PIT rates on unincorporated business income depend on whether earnings are retained in a company or withdrawn. Figure 2.1 consider the case where earnings are withdrawn. In the case of Denmark, the top PIT rate on business income that is withdrawn is 59.7 per cent, while the rate on retained income is 25 per cent.

- 12. A special deduction of USD 5 692 (EUR 4 379) is provided if business profits exceed USD 74 003 (EUR 56 930). The special deduction for business income is available provided that the taxpayer works in excess of 1 225 hours in their business. For businesses with profits less than USD 17 367 (EUR 13 360), the deduction is higher at USD 11 735 (EUR 9 028). Furthermore, for start-up firms, the deduction is increased by USD 2 624 (EUR 2 019) for the first three years of business. The top PIT rate reported in Figure 2.1 does not factor the business.
- 13. The top PIT rate investor case considers a taxpayer earning other taxable income that is, income other than business income (e.g. interest or wage income from dependent employment) that is pooled and taxed together with business income such that other taxable income (net of a basic personal allowance, if any) is sufficiently large so that the full amount of taxable business income (a marginal addition to taxable income) is taxed at the top PIT rate. Under this assumption, a basic personal allowance, if any, that offset other taxable income does not factor in. The special business allowance (ring-fenced to offset business income) is not taken into account, as it substitutes for itemised deductions, not taken into account for any country nor for corporate tax calculations.
- 14. The adjusted top PIT rate on business income is calculated as: (0.50) * (50.46) + (0.50) * (28.0) = 39.2 in the case of Finland, and (0.50) * (56.50) + (0.50) * (30.0) = 43.3 in the case of Sweden. Note that this 50/50 split between capital and labour income is arbitrary and solely for illustrative purposes. In particular, the actual contribution of capital towards total business income may, in many cases, be far less than 50 per cent. It should also be emphasised that these calculated top PIT rates for Finland and Sweden are not comparable with each other given that different rules operate in each country to determine the appropriate split of income between capital and labour for taxation purposes.
- 15. Under the Norwegian system, a flat 28 per cent rate (combined national and municipal income tax) applies to net taxable income of individuals including (net) personal business income. An additional national tax applies at graduated rates (up to 12 per cent) on gross income including personal business income and employment income (but not invested income) measured net of a personal business allowance for a "normal" return on invested capital, calculated (in 2007) as 3.3 per cent of invested capital. The average tax rate calculations estimated on total business income (Y) set at 2-times and separately 4-times average wage earnings, assume that labour income (wL) and capital (rK) contribute 50 per cent each to total business income. Under the assumption used for illustrative purposes that the pre-tax rate of return to capital is 10 per cent, invested capital is estimated as K = (0.50)Y/(0.10). Taxable personal business income, for the purpose of the national tax, is measured as Y - BA with the business allowance calculated as: BA = (0.033) K. When calculating the top PIT rate, an invested capital figure is also necessary to calculate the personal business allowance. For this calculation, income is assumed to equal 4-times average wage earnings (again 50 per cent capital, 50 per cent labour income). For consistency with top PIT rate taxpayers in other countries, the individual's other source of income is assumed to be investment income (interest, dividends), and does not include employment income. Therefore the graduated national tax rate schedule is still applied, rather than just the top rate of 12 per cent, in calculating all rates.
- 16. In 2007, average wage earnings in these four countries were: USD 31 692 (Greece), USD 66 105 (Norway), USD 10 407 (Poland), and USD 64 977 (UK). Also the Norwegian ATR estimates are based on several assumptions noted above.
- 17. This study follows the OECD definition of a tax (mandatory unrequited payment to general government), and therefore does not include in tax burden assessment mandatory social security payments to a private sector entity managing funds for retirement.
- 18. Personal tax relief from deductible business expenses depends on the scope of business loss offset rules, including business loss carry-forward (and possibly carry-back) provisions, and rules governing the type of income that business losses can be deducted against.
- 19. As with the presentation of personal income tax rates, the corporate income tax rates reported in this report are 2007 combined central and sub-central rates, inclusive of surtaxes.
- 20. The tax rates and thresholds reported here are 2007 values, as reported in the OECD Tax Database. The exchange rates used to convert thresholds, in national currencies, into US dollars are obtained from the same source (www.oanda.com/convert/fxhistory, monthly average exchange rates for January 2007) as the exchange rates used to compile responses to the SME tax questionnaire.
- 21. The central government tiered rate structure [taxable profit band: marginal CIT rate] is as follows: [0-50 000: 15%], [50 001-75 000: 25%], [75 001-100 000: 34%], [100 001-335 000: 39%], [335 001-10 000 000: 34%], [10 000 001-15 000 000: 35%], [15 000 001-18 333 333: 38%], [over 18 333 333: 35%]. The 39% CIT rate over the fourth profit band, and the 38% rate over the seventh profit band claw-back tax relief from lower-tier rates. [The CIT rates presented in the main text are combined (central and sub-central) rates, which vary by state. The combined rates reported here (and in the OECD Tax Database) are based on a weighted-average of state rates.]

- 22. The effective CIT rate in Belgium can be substantially less than statutory rates suggest, with tax relief under the allowance for corporate equity (ACE) provision. In the case of Luxembourg, a first tier CIT rate of 20.8% applies to the first USD 12 999 (EUR 10 000) of profit of corporations with taxable income no greater than the small business profit threshold of USD 19 499 (EUR 15 000). The basic rate (30.38%) applies to profit over USD 12 999. For companies with taxable income exceeding USD 19 499 range, the basic CIT rate applies to the full amount of taxable profit.
- 23. These CIT rates (small, basic) exclude local business tax and the turnover-based solidarity tax.
- 24. The reduced CIT rate varies by province (the 18.62 per cent rate in the main text applies in the province Ontario). While the federal component of this rate applies to the first USD 340 720 (CAD 400 000) of active business income of CCPCs, the threshold in some provinces is higher. The active business income amount (limit) must be shared among associated corporations [and is annual, not cumulative (no carry-over)]. In 2009, the threshold will be raised to USD 425 900 (CAD 500 000), and by 2012 the combined federal and provincial (Ontario) CIT rate on the active business income of CCPCs will be 15.5 per cent and the basic CIT rate will be 26 per cent.
- 25. "Taxable capital" is a Canadian tax concept developed in the context of establishing tax liability under the federal Large Corporations Tax. (The tax (effectively a minimum tax), was eliminated at the federal level in 2006.) In general, taxable capital equals share capital, retained earnings, corporate surplus and corporate liabilities, adjusted to reflect that part of capital considered to be employed in Canada.
- 26. Another consideration is that taxable profit is not a good proxy of firm size, as very large companies (measured by assets or number of employees) may have low (or negative) profits. However, while an average statutory tax rate on a low level of taxable profit may apply to large companies with low profit rates, such a measure would tend to be more representative of a small business than one calculated at a high level of taxable profit (given that large profits normally are derived by firms with a large size).
- 27. In such comparisons, one may assume that the turnover restrictions in France and Spain and capital restriction in Japan are not binding. Where they are, the basic (top) rate applies. In the case of Canada, the average corporate tax rate calculation is complicated by the gradual (rather than discrete) adjustment in the rate as taxable capital varies between CAD 10 and 15 million. Where taxable capital exceeds CAD 15 million, the basic (top) rate applies.
- 28. As footnoted in Section a), when considering firms of equal size, and with the same capital/labour ratio, more productive technologies in a given country may explain higher wage earnings in that country (in general, a higher average wage may result from a higher capital/labour ratio and/or more productive technology). We assume here, for illustrative purposes, that firms of a given size generate higher returns on both labour and capital in countries with higher average wage earnings (linked to more productive technologies).
- 29. Taxpayers are provided with the option for taxation of dividend income at PIT rates (with a credit for tax withheld at the company level) which may provide a lower tax rate for lower income taxpayers.
- 30. Taxing corporate profits under a tiered rate structure, as 11 OECD countries do, provides some relief from double taxation, compared with a classical tax system based on a flat corporate tax rate. However, the relief applies only to lower-brackets of taxable profit, and in some countries is withdrawn for profit, turnover or capital levels exceeding certain thresholds. Furthermore, basic CIT rates in certain countries are lower than preferential SB CIT rates in others.
- 31. For information on dividend tax systems applied in OECD countries, see Table II.4 of the OECD Tax Database (see www.oecd.org/ctp/taxdatabase).
- 32. As noted previously, certain countries tax distributed profits using final withholding tax rates. Where top PIT bracket individuals are taxed according to final withholding taxes or under other preferential rates, the available relief is factored into the DIV rate calculations (as per Table II.4 of the OECD Tax Database).
- 33. For the 11 countries that tax CIT profits on a graduated basis (tiered CIT rate structure), the dividend tax rate calculations DIVTR(4 x AW) consider the case of an incorporated SME with taxable profits equal to four times average wage earnings. In contrast, the calculations shown as DIVTR (basic CIT) assume that the full amount of taxable profit is taxed at the basic CIT rate (i.e. lower bracket CIT rates do not factor in). The rates are representative in the case of distributions by large companies in countries that restrict small business tax rates to apply only to firms below a size threshold (e.g. using a turnover or capital test), or withdraw (claw-back) lower-bracket tax relief. For countries that do not restrict or withdraw tax rate relief, the rates are representative for distributions by firms with profits that are sufficiently large such that application of lower bracket CIT rates has a negligible effect on the average corporate tax rate (where the profit level at which ACSTRs converge to the basic CIT rate varies across countries, as taxable income thresholds for lower bracket CIT rates vary across countries).

- 34. In this paper, the term "general income basket" refers to the taxable income basket (category) to which dependent employment income is assigned and taxed at progressive PIT rates.
- 35. Where a single flat (basic) CIT rate applies to corporate profit, the combined corporate and shareholder tax rate for a top PIT rate taxpayer is independent of the level of business income. Where instead a graduated CIT rate structure applies, the combined corporate and shareholder tax rate for a top PIT rate taxpayer depends on the level of business income. In particular, in classical tax systems, the combined rate generally increases with business income under a tiered CIT rate structure. Where PIT and CIT systems are integrated, the combined rate may or may not increase with business income, depending on the degree of integration.
- 36. As noted in Section 2.1, the 30 per cent rate in Finland applies to personal business income retained in or withdrawn from a company. In Sweden, a 28 per cent rate applies to retained earnings; the 30 per cent rate applies to withdrawn capital income (with a credit for tax already imposed on retentions). Denmark applies a flat capital rate (30 per cent) to retained earnings, but not earnings that are withdrawn. The tax rate comparisons in Figure 2.5 consider the case of earnings that are withdrawn. However, in assessing possible differences between basic CIT rates (on corporate retentions) and the top PIT rate on retained unincorporated business earnings, the 30 per cent rate on retained unincorporated business income is taken into account.
- 37. Furthermore, in some cases splitting rules may also alter the capital/labour income split in the incorporated case. For example, in Sweden, dividends distributed in excess of a "normal" return on capital are taxed as labour income rather than capital income. The normal return is calculated based on a higher notional return to capital (12.54 per cent, in 2007) than in the unincorporated case (8.54 per cent).
- 38. It would be possible, however, for capital income tax rates to imply incorrectly the direction of a tax distortion if a substantial difference was present in the capital/labour income splits between the incorporated and unincorporated form. The business's actual return to capital would have to be substantially different to the notional return for this to occur.
- 39. As noted in Section 2.1, the top PIT rates shown in Figure 2.1 for Finland, Sweden and Norway assume a 50/50 split of personal business income into labour and capital income components. Top PIT rates in Figure 2.5 consider the limiting case where business income is entirely capital income. This assumption enables comparisons with corporate rates and dividend tax rates (as well as top PIT rates for other countries which apply regardless of the capital/labour contribution). For Norway, this means that the calculation of the personal business allowance assumes capital income equal to 4-times average wage earnings (see note 15). Note that for Norway, unlike Finland and Sweden, the capital/labour income split does impact on the top PIT rate calculation because the personal business allowance depends on invested capital (and so indirectly on capital income, assuming a fixed 10 per cent pre-tax return to capital).
- 40. Indefinite retention of corporate profits implies negligible shareholder tax on dividends on a present value basis.
- 41. Figure 2.5 also shows for the 11 countries with a tiered CIT rate schedule the basic CIT rate and corresponding combined corporate and personal tax rate on dividends [Basic CIT rate, DIV rate (basic CIT)]. These rates apply in the case of sufficiently large corporate profits such that the basic CIT rate approximates the average (statutory) CIT rate. Given differences across the 11 countries in CIT rate structures and thresholds, the level of business profit at which the average corporate tax rate converges to the basic CIT rate differs across countries.
- 42. This is the case in Canada for active business income only. Canada's preferential small business tax rate only applies to active business income. Additionally, passive investment income from a small business is taxed at a rate equivalent to the top PIT rate, so there is no tax deferral advantage for passive portfolio investment through a small incorporated business. Note that legislated CIT rate reductions will reduce the gap in Canada to 10.5 percentage points in 2012.
- 43. Where business income is less than the basic personal allowance (if any), the tax rate on personal business income is zero. Similarly, in countries that apply a zero marginal personal tax rate to a first "zero-band" range of taxable income, where business income is less than the upper threshold of the zero band, the tax rate on personal business income is zero.

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Chapter 3

Tax Distortions to SME Creation, Business Structure and Growth

The previous chapter focussed on personal and corporate income tax considerations in reviewing the taxation of SMEs in OECD countries. However, employee, employer, and self-employed social security contributions can also make up a substantial component of the tax burden faced by SMEs. Social security contributions (SSC) across all businesses are an important source of tax revenue in most OECD countries, contributing to over 30 per cent of total tax revenue in 13 OECD countries in 2006, with employment figures (see Chapter 2) implying a significant portion of this amount linked to SMEs.¹

When considering social security contributions and their impact on SMEs, it is important to note that contribution rates and the overall SSC burden on the self-employed may differ considerably from the combined rates and burden of employee and employer social security contributions faced by an owner/worker of an incorporated business. As a result, social security contributions may favour one type of business structure over another.

This chapter examines possible tax distortions relevant to SME creation, business structure and growth, focusing on the tax position of a single owner/worker of an SME. Average statutory tax rates for different types of business structure are calculated for selected countries, taking account of personal and corporate income taxation, and social security contributions, to analyse two decision margins: 1) the decision to move from dependent employment to establishing a business (whether incorporated or unincorporated); and 2) the decision to structure an SME in incorporated or unincorporated form. The first is relevant for SME creation, while the second is particularly relevant for SME growth if it is accepted that in many if not most cases the incorporated form is the preferable legal form for a business to gain sufficient outside capital to develop and grow.

Section 3.1 takes a more detailed look at social security contributions in OECD countries. Section 3.2 uses the information discussed in Section 3.1, and in Chapter 2 of this report, to calculate average statutory tax rates for selected countries.

3.1. Social security contributions

Social security contributions (SSC) are levied in 28 OECD countries. Australia and New Zealand are the only two OECD countries that do not impose SSC. Contributions are imposed on both employees and employers, and separately on the self-employed. Germany, Japan and Poland, while having employee and employer SSC, have no self-employed SSC.

The design of SSC systems varies significantly amongst OECD countries. Additionally, there is also variation within countries in the design of, in particular, self-employed as opposed to employee and employer SSC, but also in many cases between employee and employer SSC. Annex C summarises SSC systems in OECD countries taking account of the following key design features: the base on which contributions are levied; the contribution rate; minimum and maximum income thresholds; and the deductibility of contributions. Where a lump sum payment is applicable, this is specified (in bold) in place of a contribution rate, with thresholds and deductibility referring to the lump-sum payment.

Of these design factors, the greatest consistency amongst OECD countries is with deductibility, with employee, employer and self-employed SSC being fully deductible against income in most countries. Some consistency is also found in the applicable base. Both employee and employer SSC are generally levied on labour income (gross wage earnings),² while self-employed SSC are generally levied on total labour and capital income (taxable business income).³ Considering the impact of SSC on SME business structure decisions, this implies an ability in the incorporated business case to alter the SSC burden by adjusting (or misreporting) the amount of labour *versus* capital income earned from a business. For example, an owner/worker may pay him/herself a less-than-market wage in order to manipulate the amount of reported labour income from the business. This ability to reduce SSC is not generally present in the self-employed case. This issue is discussed further in Section 3.2.

Regarding the contribution rate, countries take various approaches. The simplest approach is to adopt a single flat rate. 11 OECD countries use a flat rate for at least one type of SSC. The most common approach is to use a tiered schedule. However, tiered rate structures themselves vary markedly – of 14 countries with tiered rate structures for at least one form of SSC, seven have decreasing rates (as income increases), four have increasing rates, and three have rates that first increase before falling. Additionally, a lump-sum payment is used in six countries instead of, or in combination with, a tiered or flat contribution rate. For example, Denmark combines a lump-sum payment with a flat rate for employee SSC. A tiered schedule combined with a lump-sum payment is used in France, Mexico and the Netherlands for at least one type of SSC.

Thresholds also vary considerably for flat contribution rates and lump-sum payments. Possibilities here include: a minimum threshold, where contributions are only due on income above this amount; a minimum threshold for contributions to be due, but where contributions are assessed on total income; a maximum threshold, with contributions only due on income up to but not exceeding the amount; and some combination of the above. For example, Austria has an (identical) upper threshold for all three types of SSC, the Czech Republic only has an upper threshold for self-employed SSC, while Finland has no upper thresholds at all.

At the same time, some common features are observed in relation to rate structures, and thresholds. Within countries, employee and employer SSC will generally have consistency in terms of structure. That is, if there is an increasing tiered rate schedule for employee SSC, then the same approach is likely to be taken for employer SSC. ^{4, 5} Thresholds are also likely to be similar. Austria, Canada, France, Germany, Switzerland, Greece, Japan, Poland, the Slovak Republic, Spain, and the US all have identical or very similar rate structures and thresholds for employer and employee SSC. Some, such as Austria, France and the US also have similar rate structures and thresholds for self-employed SSC as well, but these are exceptional cases. Another common feature is for the contribution rate (or schedule of rates) to generally be higher for employer SSC than employee SSC.

In the context of investigating the potential impact of SSC on SME creation and business structure decisions of a single owner/worker, it is necessary to compare the self-employed SSC burden with the combined employee and employer SSC burden. However, this is difficult to do given the differing bases, rate structures, thresholds and deductibility. To allow comparison, the burdens generally need to be calculated for a fixed

amount of income. This is done as part of Section 3.2 where average tax rates, including both income tax and SSC, are calculated for selected countries at fixed income levels.

3.2. Average tax rate calculations

This section comprises four country case studies that look at how tax may influence decisions over SME creation, business structure and growth, under a set of particular assumptions. The countries considered are New Zealand, the United Kingdom, Sweden and Norway. We focus on two margins that may be influenced by SME taxation: 1) the decision to move from dependent employment to establishing a business (whether incorporated or unincorporated); and 2) the decision to structure an SME in incorporated or unincorporated form. The first is relevant for SME creation, while the second is particularly relevant for SME growth if, as discussed in Chapter 2 of this report, it is accepted that in many if not most cases the incorporated form is the preferable legal form for a business to gain sufficient outside capital to develop and grow.⁶

The purpose of the case studies is not to provide definitive conclusions on tax distortions present in the countries considered, or to evaluate the countries against one another. Such broad conclusions are difficult to make given the necessarily fact-specific nature of the analysis. Rather, the purpose of these case studies is to illustrate how different statutory tax rates, in combination with different distribution/retention policies, income levels, and capital intensities, may influence SME creation and business structure decisions, and so emphasise for policy makers the factors that should be considered when developing and/or reforming tax policies for SMEs where neutrality is a guiding tax consideration.

It should be kept in mind, when considering the case studies, that tax is not the sole factor in determining the choice of business form, or in the decision to create an SME. As emphasised in Chapter 2, many factors, such as the administrative costs associated with starting a business or changing business form, access to finance, continuity of life, and protection of personal assets, may play significant roles in these decisions. However, efficiency losses may arise where the choice of a particular business form offering a taxpayer greater non-tax advantages on balance relative to another, is distorted by the tax system.

Methodology

The analysis in the case studies is based on calculating and comparing "all-in" average statutory tax rates – "ASTRs", which include corporate income tax (CIT), personal income tax (PIT), and social security contributions (SSC).^{8,9} The ASTR calculations are made for 2007. We consider a hypothetical individual taxpayer who provides both labour and capital inputs to derive income in one of three ways: as a dependent employee; as a single owner/worker of an unincorporated business; and as a single owner/worker of an incorporated business. To investigate possible tax distortions to the SME creation decision, the ASTR for a dependent employee is compared with both ASTRs for incorporated and unincorporated SMEs, while the incorporated and unincorporated ASTRs are compared against each other to examine the business structure decision.¹⁰

The PIT, CIT and SSC burden of the hypothetical taxpayer will vary depending on three key factors that need to be controlled for: the amount of income earned; the relative contributions of labour and capital inputs in deriving the income, and dividend distribution policy (for an incorporated SME).¹¹

The amount of income earned will affect the ASTR as a result of progressive PIT (and in some cases SSC) schedules, and tiered CIT schedules. To ensure comparability, we assume that the taxpayer earns a fixed amount of pre-tax income on labour and capital, and set this equal to two-times average wage earnings in the respective country. ASTRs for income equal to four- and ten-times average wage earnings are also reported (in Annex D). To simplify the analysis the calculations assume that the individual is single with no dependents, and has no other sources of taxable income (so the entire PIT and SSC schedules apply in determining ASTRs). This differs from the analysis in Chapter 2 which considers a top PIT rate investor.

The relative contributions of labour and capital inputs to income earned are important in determining the overall ASTR. As discussed in Chapter 2, capital and labour income tend to be taxed differently, so firms with different levels of capital intensity in their production process may face different tax burdens. Furthermore, capital intensity can vary significantly depending on the industry and type of business activity being undertaken. Some commercial activities will require, for example, significant investment in plant and equipment relative to labour; others may be highly dependent on skilled labour. This variability makes it important to account for differing levels of capital intensity.

A related consideration is the ability of taxpayers to manipulate the reported amounts of capital and labour income derived from an SME to minimise tax liability. For example, this could be achieved by the owner/worker paying him/herself a less/greater than market-wage for his/her labour input. Manipulation is even possible where the labour and capital components are pooled together as personal business income for PIT purposes, if SSC are levied on a different basis (for example, on labour income only as is typically the case).

To take account of both capital intensity and tax-planning considerations, ASTRs are calculated for levels of capital income as a proportion of total business income ranging from zero to 100 per cent. To enable comparison between a dependent employee and an SME, we assume that the equivalent capital income of the dependent employee is derived from corporate bonds. For simplicity, we assume that the capital invested by our hypothetical taxpayer comes from personal savings – that is, no external financing is used.

Dividend distribution policy can also have a significant impact on the ASTR, particularly as retention of corporate profits can result in PIT liability being deferred until distribution, and in some cases avoided entirely. While tax considerations may influence payout decisions, different firms will have different distribution policies irrespective of tax considerations. For example, a growth-oriented firm may retain all of its corporate profits to reinvest in the business, which may be optimal especially in cases where debt financing is difficult to obtain due to information asymmetries (see Chapter 4). In contrast, an established firm may have a policy of full distribution. Given this, it is instructive to consider ASTRs for more than one distribution policy.

The illustrative cases used in Chapter 2 are adopted here also, with ASTRs calculated for the "mature firm" case – involving immediate distribution of corporate profits; and the "high-growth" case – involving indefinite retention of corporate profits. In addition to these polar cases, an "intermediate" case is also included. This third case assumes immediate distribution of one-half of corporate profits. In the latter two cases, undistributed corporate income is assumed to be retained in the company indefinitely and so subject to approximately zero additional tax in NPV terms. This allows a static analysis of the business structure decision. ¹³ Essentially, the optimal decision in the period considered

becomes the optimal decision in all future periods. While this illustrative assumption is restrictive, it avoids the complexity of ASTR calculations that arise in a multi-period model. Given that the aim of these case studies is to illustrate the influence of tax considerations in combination with other factors on SME creation and business structure decisions, the complexity of a dynamic analysis is avoided in favour of elaborating fully the relevant tax considerations in a relatively simple framework.

A further issue is the incidence of employer SSC. This is not an issue for the incorporated and unincorporated business cases as the employee and employer are one in the same. However, for the dependent employee case, the employer and employee are different. We include employer SSC in calculating the ASTR for a dependent employee and, in doing so, effectively assume that the entire employer SSC burden is shifted on to the dependent employee in the form of lower wages. Furthermore, we assume that the dependent employee derives no benefit from the deductibility of employer SSC to the employer.

In total, five ASTRs are analysed for each country calculated at total income equal to two-times average wage earnings for the following cases: dependent employee; unincorporated business; incorporated business with a policy of immediate distribution of the full amount of after-corporate tax profits; incorporated business with a policy of immediate distribution of half of after-corporate tax profits and indefinite retention of the remaining half; and an incorporated business with a policy of indefinite retention of the full amount of after-corporate tax profits. These rates are presented below in Figures 3.1 to 3.4. Capital income (as a percentage of total income) is shown on the horizontal axis, and ASTRs on the vertical axis. The analysis in the case studies is supplemented by Annex E, which provides an algebraic decomposition and analysis of the ASTR in the incorporated business case.

Case study one: New Zealand

Figure 3.1 presents ASTRs for the case of New Zealand which levies income tax but not SSC. Labour income and personal business income are taxed at progressive PIT rates. The top statutory PIT rate is 39 per cent on income over NZD 60 000 (in 2007). The CIT rate is

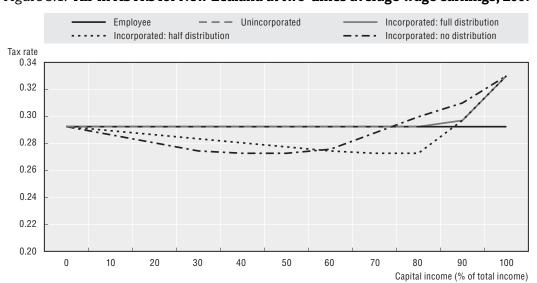


Figure 3.1. All-in ASTRs for New Zealand at two-times average wage earnings, 2007

33 per cent. A full imputation system operates so that distributed corporate profits are taxed at progressive personal rates, with full relief given for CIT already paid.

Average wage earnings in New Zealand in 2007 were NZD 44,749. At two-times this amount, total (net) business income is NZD 89 498.

a) Employee case

Figure 3.1 shows that the ASTR is constant at roughly 29.3 per cent for a dependent employee earning labour and interest income totalling two-times the average wage, regardless of the percentage of total income that is capital (interest) income. ¹⁴ That is, the ASTR is unaltered by a changing mix of capital and labour income. This is because capital (interest) and labour income are pooled for tax purposes and taxed together at progressive PIT rates. The absence of employee or employer SSC in New Zealand is also an important factor. (As discussed in Section 3.1, SSC in many countries are determined as a percentage of labour income and therefore could alter the ASTR at varying capital income proportions).

b) Unincorporated case

For an unincorporated business, the ASTR on personal business income is also constant at 29.3 per cent, equal to the ASTR on the same amount of income received as wage and interest income in the dependent employee case. This is for the same reason as the dependent employee case – capital and labour income are effectively pooled for tax purposes (earned as business income, being a blend of returns on labour and capital) and taxed at progressive PIT rates, and there are no SSC.

c) Incorporated case

Consider now the incorporated business case. In the no distribution case, capital income and labour income are taxed at different rates. Capital income is taxed at the flat statutory CIT rate of 33 per cent, irrespective of the amount of capital income. Labour income is subject to progressive PIT rates, so the tax burden on labour differs depending on the amount of labour income. The difference in the taxation of labour and capital income is clearly shown by focusing on the polar cases. When the capital income proportion equals zero, there is only labour income and so all income is taxed at progressive PIT rates. Thus, the ASTR at 29.3 per cent is equivalent to that for an employee and an unincorporated business. At the other extreme, where all income is from capital, the ASTR is equal to the statutory CIT rate (33 per cent).

As the capital income proportion increases from zero to 100 per cent, the overall ASTR initially falls before increasing towards the corporate tax rate (see Box 3.1). At low capital income proportions, the marginal PIT rate on labour income of 39 per cent exceeds the flat CIT rate of 33 per cent on (retained) capital income. When increasing at the margin the amount of capital income, this effectively means increasing the amount of income taxed at the relatively low CIT rate (33 per cent) while reducing the amount of labour income taxed at a relatively high PIT rate (39 per cent), so that the overall ASTR declines.

When the capital income proportion reaches 33 per cent, increasing capital income further at the margin yields no change in the ASTR, as the marginal rate on labour income falls to 33 per cent – the same as the CIT rate. The overall ASTR curve in the "incorporated: no distribution" case is then flat until the capital income proportion reaches 58 per cent. Above this point, replacing labour income with capital income causes the overall ASTR to

Box 3.1. Average tax rates on incorporated business income

A Simplified illustration of the New Zealand full retention case

Consider an incorporated business (single owner/worker) with a fixed amount of earnings Y consisting of a labour income component (wL) and profit component (Y-wL) retained indefinitely in the company. Labour income is taxed under a progressive PIT rate schedule that taxes the first wL_1 units of labour income at a marginal rate t_1 , and labour income income in excess of wL_1 at t_2 . There is no standard allowance. Corporate income is taxed at a flat CIT rate u, where $t_1 < u < t_2$. The total tax burden can be expressed as follows:

$$T = t_1(wL_1) + t_2(wL - wL_1) + u(Y - wL)$$
[1]

The average tax rate is measured by:

$$\tau = \frac{t_1(wL_1) + t_2(wL - wL_1) + u(Y - wL)}{Y}$$
 [2]

This formula shows that where $wL > wL_1$, reducing labour income (wL) at the margin causes the ASTR to decrease at rate t_2 (operating through PIT) and to increase at rate u (operating through CIT). With $t_2 > u$, the ASTR decreases overall. Where $wL < wL_1$, reducing labour income at the margin causes the ASTR to decrease at rate t_1 and to increase at rate u. With $t_1 < u$, the ASTR increases overall.

The ASTR formula given by [2] can be written alternatively as:

$$\tau = \frac{t_1(wL_1) + t_2(wL - wL_1)}{wL} \frac{wL}{Y} + \frac{u(Y - wL)}{(Y - wL)} \frac{Y - wL}{Y}$$
[3a]

or equivalently as:

$$\tau = ASTR_L \frac{wL}{V} + ASTR_K \frac{Y - wL}{V}$$
 [3b]

where the average tax rate on labour income $ASTR_L$ is given by the first right-hand side term in [3a], while the average tax rate on corporate profit is $ASTR_K = u$ (the average and marginal CIT rate are the same). This formulation expresses the overall ASTR (τ) as an average of average tax rates on labour and capital income, with the $ASTR_K$ being fixed at rate u. As labour income decreases, the second term increases, while the first decreases, both on account of a decrease in the weight (wL/Y) and a decrease in $ASTR_L$ for the reason noted above (less income taxed at the marginal rate t_2). At low labour income proportions (wL/Y), the second effect dominates so that τ decreases, while at a higher labour income proportion, the first effect dominates and τ increases. As explained in the main text, with four marginal PIT rates operating in New Zealand, with the third tier PIT rate equal to the CIT rate, adjustments to the labour income proportion leave τ constant over a range of values.

* The New Zealand PIT rate structure has four marginal tax rates (four tiers). For simplicity of illustration, we assume only two marginal rates (two tiers).

rise, with capital income taxed at the margin at the CIT rate, while labour income is now taxed at the margin at the lower marginal PIT rate of 21 per cent. With further increases in capital income, the overall ASTR rises towards the CIT rate.

With full distribution, the ASTR is constant, and equal to the ASTR for the dependent employee and unincorporated business cases, for capital income proportions up to 88 per cent. This is because imputation credits provide full relief for CIT paid so that pooled capital and labour income is only taxed effectively at progressive PIT rates. ¹⁷ However, at

capital income proportions above 88 per cent, the ASTR increases towards the CIT rate. This is because the amount of imputation credits starts to exceed the total PIT due on pooled labour and capital income. Excess credits cannot be cashed-out, so CIT can no longer be fully off-set. 18

When corporate profits are partially distributed, the retained portion is taxed at the basic CIT rate, while the distributed portion is pooled with labour income and taxed at progressive PIT rates (with imputation credits off-setting CIT). As in the no distribution case, half distribution also initially produces a falling ASTR which then flattens out between capital income proportions of 66 and 82 per cent, when capital and labour income are both taxed at a marginal rate of 33 per cent. Across this range the ASTR equals 27.3 per cent – the same as the "no distribution" ASTR between 33 and 58 per cent capital income. In fact, with lower distribution policies, this minimum ASTR can also result between 58 and 66 per cent capital income (and so across the entire range from 33 to 82 per cent capital income).¹⁹

Above a capital income proportion of 82 per cent, the ASTR rises towards the CIT rate for the same reason as in the full distribution case - imputation credits start to exceed the total PIT due on pooled labour and capital income so that CIT can no longer be fully off-set.

d) Behavioural effects

As discussed above, calculated ASTRs (identical for the dependent employee and unincorporated business case) depend on distribution policy and capital intensity. In the "high-growth" case, where business (investment) earnings are retained indefinitely, the results find no distortion between dependent employment with capital invested in bonds, and the creation of a company in unincorporated form. However, a tax bias is found favouring business incorporation where the capital income proportion is less than 74 per cent, as along this range the "incorporated: no distribution" ASTR is lower than that for a dependent employee and an unincorporated business. Similarly, incorporation is tax-favoured for an already established high-growth firm along this range. In contrast, for growth-oriented businesses with a higher capital intensity (capital income proportion exceeding 74 per cent), while the ASTR remains the same for dependent employment and an unincorporated business, the ASTR for an incorporated business is higher and rising and therefore discouraging to the creation of, as well as the conversion to, an incorporated business.

In the "mature firm" case, with full distribution of earnings, there is no tax distortion to the SME creation decision or to the decision over business form for capital income proportions up to 88 per cent (as the ASTRs for the dependent employee, unincorporated business and incorporated business cases are the same). At very high capital income proportions (above 88 per cent), the rising incorporated business ASTR suggests the tax system will be discouraging to the creation of, or conversion to, an incorporated business.

For intermediate cases where the taxpayer distributes some business income, a tax bias exists towards establishing and structuring an SME in incorporated form, with this bias in effect up to a higher capital income proportion than in the "high-growth" case. The half-distribution ASTR illustrates this, where a distortion towards the incorporated business form is found for capital income proportions up to 88 per cent. Beyond this point, the incorporated form is tax-discouraged, with tax neutrality remaining between the dependent employment and unincorporated business cases.

The ASTR is minimised (at 27.3 per cent) in the incorporated business case, with full profit retention, and a capital income proportion between 33 and 58 per cent. The same

minimum ASTR can also be achieved with some limited distribution of corporate profits, for capital income proportions between 33 and 82 per cent. ²⁰ For businesses needing to predominantly retain corporate profits, this signals a tax-minimising incentive to manipulate, where possible, the capital income proportion to ensure it is within this 33 to 82 per cent range. In other words, at low capital income proportions, an incentive is found to report for tax purposes labour and capital income amounts that correspond to a capital income proportion of at least 33 per cent, in order to minimise the ASTR. At very high capital income proportions, an incentive is found to lower the capital income proportion to at most 82 per cent. Within the 33 to 82 per cent range, a business need not recharacterise income in order to minimise tax liability as this can be achieved by "nominally" altering distribution policy. For example, even for a growth oriented single owner/worker business needing to reinvest all corporate income back in the business, tax could still be minimised by distributing the necessary corporate income (to receive the tax benefit) and then immediately reinvesting the funds in the business.

For a business requiring substantial distribution of corporate profits, there will generally be an incentive to recharacterise labour income as capital income because the ASTR will decline as the capital income proportion increases (as illustrated by the "incorporated: half distribution" ASTR; with the incentive to recharacterise present at higher capital income proportions for larger distribution policies, albeit with lower tax gains from recharacterisation). A firm requiring full distribution will generally have no incentive to recharacterise, as illustrated by the constant "incorporated: full distribution" ASTR.²¹

e) Sensitivity analysis: altering the level of income

The ASTRs discussed above are, at least in part, dependant on the total income earned by the taxpayer in the business, as at least part of the income will be taxed at progressive personal tax rates. Figures D.1 and D.2 in Annex D show the same results as figure one but for a taxpayer earning four-times and ten-times average wage earnings.

The main change is that, at both four- and ten-times average earnings, the incorporated business form is tax preferred in the "high-growth" and half distribution cases at all capital income proportions. Also, the capital income proportion where the tax burden is minimised is higher (as the marginal tax rate on labour income equals the corporate tax rate at a lower capital income proportion).

Case study two: United Kingdom

Figure 3.2 presents the ASTRs for the United Kingdom where "personal income", subject to progressive PIT rates, is split into three income types under a "slicing" system: "earnings" (consisting of labour income and personal business income); interest income; and dividend income. The slicing system combines the three personal income types in a specific order (earnings, then interest, then dividends) and applies a single set of tax rate thresholds, but with different statutory tax rate schedules for each of the three types of income.²² (An illustration of the slicing system is provided in Box 3.2.)

Employee and employer social security contributions are levied on labour income, while self-employed social security contributions are levied on total personal business income. A tiered corporate tax schedule applies to corporate profits, with a basic CIT rate of 30 per cent and a small business rate of 20 per cent. The small business tax rate is clawed back on income between GBP 300 000 and GBP 1 500 000.

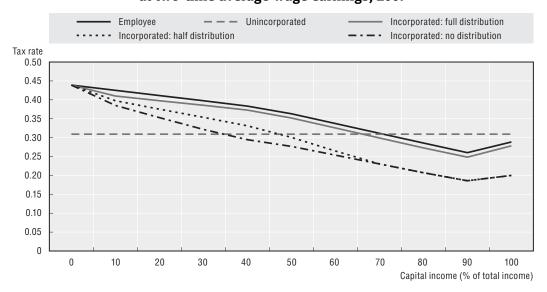


Figure 3.2. All-in ASTRs for the United Kingdom at two-time average wage earnings, 2007

Average wage earnings in the United Kingdom in 2007 were GBP 33 165. At two-times this amount, total (net) income on labour and capital is GBP 66 330, in excess of the top statutory PIT rate threshold of GBP 34 600.

a) Employee case

Figure 3.2 shows that for a dependent employee earning two-times the average wage, the ASTR falls as the capital income proportion increases. The main driver of this is SSC. Where capital income is zero, taxable income consists entirely of labour income taxed at progressive PIT rates plus employee and employer SSC. As the capital income proportion increases, labour income, taxed at the top statutory PIT rate on earned income of 40 per cent, is replaced by interest income taxed at the top statutory PIT rate on interest of 40 per cent. However, labour income is also subject to employee and employer SSC (at a marginal rate of 13.8 per cent) while capital income is not, so the overall ASTR falls as the interest income increases. When the capital income proportion reaches 40 per cent and taxable earned income falls below the top (higher) bracket threshold, the statutory tax rate on labour income falls to 22 per cent. At the same time, while interest income is taxed at the margin at the top statutory PIT rate on interest of 40 per cent, infra-marginal units of interest income are taxed at the lower interest income rate of 20 per cent (under the "slicing" system). This means that as the capital income proportion increases, earned income taxed at 22 per cent is substituted for interest income effectively taxed at 20 per cent, implying a PIT reduction overall. As a result, the ASTR begins falling at a slightly greater rate. Once the capital income proportion reaches 47 per cent, the marginal SSC rate increases to 23.8 per cent, increasing the rate of decline of the ASTR for capital income proportions beyond that level.²³

b) Unincorporated case

For an unincorporated business the ASTR is constant. This is because capital and labour income are effectively pooled for PIT, and also self-employed SSC purposes (PIT, SSC and the ASTR are determined by the (fixed) level of income and not its composition). When

Box 3.2. Illustration of the UK slicing system for the taxation of earnings, interest and dividends

Consider a taxpayer earning GBP 40 000, of which GBP 20 000 is earned income (e.g. wages); GBP 2 000 is interest; and GBP 18 000 is dividends. Applying the tax-free personal allowance of GBP 5 225 against earnings results in taxable income of GBP 34 775, of which GBP 14 775 is earnings, GBP 2 000 is interest, and GBP 18 000 is dividends. The applicable tax bands and rates for earnings, interest and dividends are as follows:

Table 3.1. Bands of taxable income and statutory personal income tax rates, 2007

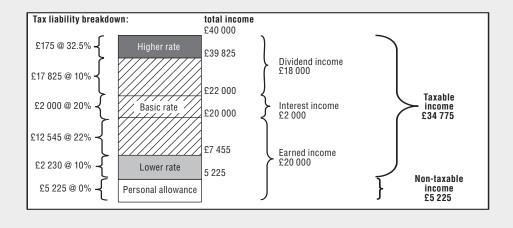
Bands of taxable income (GBP)		Personal income tax rates (%)		
		Earnings	Interest	Dividends
0- 2 230	Lower rate	10.0	10.0	10.0
2 231-34 600	Basic rate	22.0	20.0	10.0
Over 34 600	Higher rate	40.0	40.0	32.5

Earned income ("earnings") of GBP 20 000 are considered the first "slice" of income. The first GBP 5 225 of earnings is tax-free after application of the personal allowance. The remaining earned income constitutes taxable income from GBP 0 to GBP 14 775, and is taxed as follows: the first GBP 2 230 of earnings is taxed at 10 per cent, and the remaining GBP 12 545 is taxed at 22 per cent.

Interest is the second "slice" of income. Interest income of GBP 2 000 constitutes taxable income from GBP 14 775 to GBP 16 775, which is all taxed at 20 per cent.

Dividends are the final "slice" of income. Dividend income of GBP 18 000 constitutes taxable income from GBP 16 775 to GBP 34 775 (total income of GBP 34 775 + GBP 5 225 = GBP 40 000), and is taxed as follows: the first GBP 17 825 is taxed at 10 per cent (taking taxable income to GBP 34 600); and the remaining GBP 175 is taxed at 32.5 per cent.

This calculation results in income tax due of GBP 5 222.28. However, a 10 per cent dividend tax credit applies (GBP 18 000 * 0.10 = GBP 1 800), which reduces tax payable to GBP 3 422.28. [Note that dividend income is taxed at 10 per cent if total taxable income (including dividends) does not exceed the higher rate threshold, so the 10 per cent tax credit ensures that double taxation of corporate profits does not occur if total income is less than GBP 34 600.]



the capital income proportion is zero, the ASTR is substantially lower for an unincorporated business than for a dependent employee. This is because the self-employed SSC rate is significantly lower than the combined employer and employee SSC rates. However, as labour income falls, the employee rate falls eventually below the constant unincorporated rate.

c) Incorporated case

First consider the full distribution case. The ASTR is equal to the dependent employee ASTR when the capital income proportion is zero, as labour income is taxed equivalently in either case (same PIT, employee and employer SSC amounts). As in the dependent employment case, the ASTR falls as the capital income proportion increases. In particular, as the capital income proportion increases from zero, labour income (taxed at a marginal PIT rate of 40 per cent, plus employee and employer SSC at 13.8 per cent) is replaced by distributed capital income free of CIT, while subject to PIT at 25 per cent. ²⁴ The absence of a CIT burden is explained by the deductibility of employer SSC against corporate income, and its impact is illustrated by the substantial drop in the ASTR when moving from zero to 10 per cent capital income. At 11 per cent capital income, though, corporate income becomes positive and the marginal rate on capital income increases to 40 per cent. ²⁵ Again though, as the capital income is not subject to SSC, the overall ASTR still falls (though not as quickly as before). ²⁶

The fall in the ASTR then quickens again once the capital income proportion exceeds 40 per cent. As in the dependent employee case, this is where the marginal rate on labour income falls to 22 per cent. While the marginal unit of capital income is taxed at 40 per cent, this allows an infra-marginal unit of capital income to be taxed at the lower rate of 20 per cent. Again, once the capital income proportion reaches 47 per cent, the marginal SSC rate increases to 23.8 per cent, increasing the decline in the ASTR. ²⁷

The no distribution case is very similar to the full distribution case. The ASTR starts at the same level and has a large decrease as capital income is introduced due to the deductibility of employer SSC off-setting CIT. However, the lack of any dividend taxation pushes the ASTR far lower than the full distribution case. At a capital income proportion of 11 per cent, the marginal income tax rate on capital income increases to 20 per cent. ²⁸ Interestingly, once the capital income proportion exceeds 40 per cent, the ASTR falls at a slower rate, whereas it fell at a quicker rate in the full distribution case. This is because the marginal income tax rate on labour income falls to 22 per cent (plus SSC at 13.8 per cent, and then at 23.8 per cent once the capital income proportion is greater than 47 per cent), whereas the marginal rate on capital income remains unchanged at 20 per cent.

The half distribution case falls between the full and no distribution cases. After the capital income proportion exceeds 11 per cent, the marginal rate on capital income equals 30 per cent [the average of the full distribution rate (40 per cent) and the no distribution rate (20 per cent)]. As with the full distribution case, the rate falls more quickly after the capital income proportion exceeds 40 per cent. Once again, there is an infra-marginal benefit to be gained in the taxation of capital income. The half and full distribution ASTRs are equivalent once the capital income proportion reaches 70 per cent. This is because there is no longer any dividend taxation as labour income has fallen sufficiently to let all distributed income fall beneath the personal income higher rate threshold.

d) Behavioural effects

Considering first the decision of whether to be in dependent employment or create one's own business, Figure 3.2 shows a tax distortion favouring establishing an unincorporated business, particularly one that is labour intensive, with this bias in effect for capital income proportions less than 71 per cent; beyond this point, the tax distortion favours dependent employment owing to relatively low SSC on limited labour income. The creation of an incorporated business is tax favoured, compared to dependent employment, in all cases, with the ASTR for a dependent employee calculated to be always higher than for an incorporated business (irrespective of distribution policy).

Now consider the business structure decision. When the capital income proportion is less than 35 per cent, the unincorporated form is tax favoured (as the unincorporated ASTR is below all incorporated business ASTRs). Conversely, when the capital income proportion is above 66 per cent the incorporated form is tax favoured (as all unincorporated business ASTRs have then fallen below the unincorporated ASTR). In between these two points, the tax bias depends on distribution policy. In the "mature firm" case (where all profits are distributed), the unincorporated form is tax preferred from zero to 66 per cent capital income. In the "high-growth" case (where all profits are retained), the incorporated form is tax favoured from 35 to 100 per cent capital income. The half distribution case, where incorporation is tax preferred above 47 per cent capital income, illustrates that intermediate cases (where some income is distributed) produce results within this 35 to 66 range.

Furthermore, because the ASTR continually falls (irrespective of business structure and distribution policy) as the capital income proportion increases,²⁹ the results reveal an incentive on the part of the taxpayer to re-characterise labour income as capital income. A tax minimising strategy would therefore be to incorporate, retain all profits and maximise the reported level of capital income.^{30, 31}

e) Sensitivity analysis: altering the level of income

ASTRs reported in Figures D.3 and D.4 in Annex D, calculated for a taxpayer earning four-times and ten-times the average wage find tax differences across cases that are broadly unchanged from the preceding results. One observation is that tax distortions favouring unincorporated business creation over dependent employment are found to apply up to higher capital income proportions.

Case study three: Sweden

Figure 3.3 presents ASTRs for Sweden. As previously outlined in Box 2.1, the dual income tax system in Sweden separates an individual taxpayer's income into capital income, employment income, and business income. Capital income is subject to national income tax at a flat rate of 30 per cent (20 per cent for dividend income from a closely-held company). Employment income is subject to national income tax at progressive rates and municipal income tax at a flat rate (producing a top combined rate of 56.6 per cent on income over SEK 476 700), and to employee and employer SSC.

Unlike the countries considered in the other cases studies, in Sweden the tax treatment of personal business income depends on whether income is distributed or retained within a business. If personal business income is distributed, it is taxed as either employment income, or if optional "positive interest allocation" rules are utilised, can be split into a "normal return" on capital component and an employment income

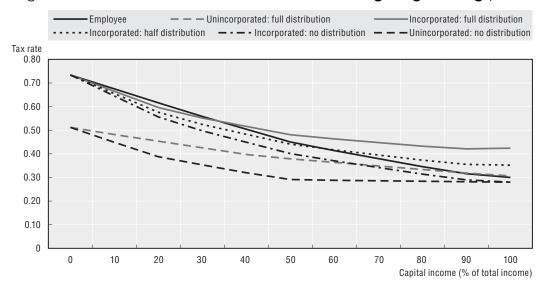


Figure 3.3. All-in ASTRs for Sweden at two-times average wage earnings, 2007

component.³² In the latter case, the "normal return" on capital component is calculated by applying a deemed (imputed) normal rate of return (8.54 per cent in 2007) on capital.³³

If business income is retained, it can be placed in an "expansion fund" and taxed at 28 per cent, matching the corporate income tax rate (Sweden operates a classical system of dividend taxation, with a 28 per cent statutory CIT rate). When income is withdrawn from the expansion fund, it is taxed as either employment income, or as partly capital income (normal return on capital component) and partly employment income under the "positive interest allocation" rules (with a credit for the 28 per cent tax already paid). Retained income not placed in the expansion fund will be treated as distributed income for tax purposes.

The ability to retain and allocate business income to an expansion fund taxed at the CIT rate means that the distribution policy of an unincorporated business affects the unincorporated ASTR. To take account of this, two distribution policies – no distribution and full distribution – are considered in the unincorporated business case, to be compared with the "incorporated: no distribution" and "incorporated: full distribution" polar cases. It is important to recall that in the incorporated business case, distribution policy relates purely to the capital income component. Therefore, the comparable "unincorporated: no distribution" case is not where all income is retained, but rather where the fraction of business income retained and placed in the expansion fund is equivalent to the amount of capital income retained in the incorporated business case (e.g. the full amount of capital income in the no distribution case). The remaining income is then taxed as business income under the "positive interest allocation" rules. For the "unincorporated: full distribution" ASTR, labour and capital income are pooled together and taxed as personal business income under the "positive interest allocation" rules.

The "positive interest allocation" splitting rules require an additional assumption to be made that was not necessary in the previous case studies. This is because the rules require the underlying capital invested in the business to be determined. As the amount of income from capital is already fixed in our scenario, we simply assume a pre-tax return on capital of 10 per cent, which infers the amount of capital invested.³⁵ The results of this case

study must to be considered in the restrictive light of both the base assumptions outlined earlier as well as this additional assumption.

As noted above, employee and employer SSC are levied on employment income. Self-employed SSC is levied on distributed personal business income, or on the employment income component of distributed personal business income where the taxpayer elects to use the "positive interest allocation" rules.

Average wage earnings in Sweden in 2007 were SEK 337 415. At two-times this amount, total (net) business income is SEK 674 830.

a) Employee case

Figure 3.3 shows that the ASTR falls continuously for a dependent employee earning two-times the average wage, as the capital income proportion increases. At the polar case of zero capital income, labour income is subject (as employment income) to progressive personal rates and employer and employee SSC producing an ASTR of approximately 73 per cent. As the capital (interest) income proportion increases, labour income taxed at a marginal income tax rate of 56.6 per cent plus SSC at 36.82 per cent, ³⁶ is replaced by capital income taxed at the constant marginal capital rate of 30 per cent, and not subject to SSC. As the capital income proportion continues to increase the marginal rate on labour income falls (to a minimum of 31.6 per cent, plus SSC now at 43.82 per cent, once the capital income proportion reaches 52 per cent), and this acts to slow the decline in the ASTR. ³⁷ At 100 per cent capital income the ASTR equals the capital rate of 30 per cent.

b) Unincorporated case

First consider the full distribution case. The ASTR is substantially lower than that for a dependent employee when the capital income proportion is zero. This is because self-employed SSC on the fixed amount of business income (two-times the average wage) is less than the combined employer and employee SSC on the same amount of employment income. As the capital income proportion increases, involving increased capital invested in the company, the imputed amount of capital income (the "normal" return on invested capital) increases under the "positive interest allocation" rules. As the imputed capital income is taxed at a constant marginal capital rate of 30 per cent, while labour income is initially taxed at a marginal income tax rate of 56.5 per cent plus SSC at 23.5 per cent, 38 the ASTR falls as the capital income proportion increases. As in the dependant employee case, due to the progressive taxation of employment income, the marginal combined personal income tax and SSC rate on labour income falls (as labour income falls with an increasing capital income proportion), which slows the decline in the ASTR. At 100 per cent capital income, the ASTR is slightly higher than the capital income tax rate of 30 per cent because the "positive interest allocation" rules impute a small amount of labour income (as the rules assume a slightly lower return to capital than the return assumed in this case study) which is taxed at a higher rate.

Now consider the no distribution scenario. At the polar case of no invested capital and thus no capital income, the ASTR calculated on employment income alone is identical to the ASTR in the full distribution case. However, as the capital income proportion increases, the ASTR declines at a faster rate because retained earnings assigned to the expansion fund are taxed at only 28 per cent – lower than either imputed capital income or labour income in the full distribution case. As the capital income proportion increases, a larger share of income is retained in the expansion fund, and so less is distributed and taxed

under the "positive interest allocation" rules. The ASTRs rate of decline slows as the capital income proportion increases because, under the "positive interest allocation" rules, an increasing proportion of distributed income is treated as capital income rather than employment income. Once the capital income proportion reaches 56 per cent, the "positive interest allocation" rules treat all remaining distributed income as capital income and subject to tax at 30 per cent. As illustrated by the almost flat ASTR curve, this results in a very slow decline as marginal units of previously distributed income (taxed at 30 per cent) are instead retained in the expansion fund and taxed at 28 per cent. At 100 per cent capital income, all income is retained in the expansion fund so the ASTR equals 28 per cent.

c) Incorporated case

When the capital income proportion is zero, the incorporated ASTR is equal to the dependent employee ASTR as labour income is taxed equivalently in either case. With increasing capital income, the full distribution ASTR falls, but at a decreasing rate. In particular, while the ASTR initially falls more quickly than the dependent employee case, the rate is higher than the employee ASTR at higher capital income proportions. As the capital income proportion increases from zero, labour income (taxed at 56.6 per cent plus SSC at 36.82 per cent) is replaced by distributed capital income free of CIT, though still subject to dividend taxation at 20 per cent. As was the case in the UK, the absence of a CIT burden is explained by the deductibility of employer SSC against corporate income. When the capital income proportion reaches 21 per cent, though, corporate income becomes positive and the marginal rate on capital income increases to a constant 42.4 per cent. ³⁹ This slows the decline in the ASTR, ⁴⁰ as does the subsequent fall in the marginal tax rate on labour income. At 100 per cent capital income the ASTR equals the capital income rate of 42.5 per cent. ⁴¹

With no distribution, the ASTR falls below the dependent employee rate. This is because there is no dividend taxation. Once capital income becomes positive, it is only taxed at the corporate level at a flat 28 per cent. (This rate is evident by looking at the polar case of 100 per cent capital income). Meanwhile, the half distribution result bisects the two polar cases.

d) Behavioural effects

Consider first the business creation decision, where the ASTR results, in general, show tax distortions favouring business formation, particularly for growth-oriented firms. For "high-growth" firms that retain all of their profits, a notable tax distortion is revealed favouring business formation over dependent employment, a result holding for all capital income proportions, with both incorporated and unincorporated ASTRs found to be lower than the dependent employee rate. The ASTR is particularly low in the unincorporated business case, as self-employed SSC are well below combined employer and employee SSC in the case of incorporation. In the "mature firm" case where business profits are distributed in full, the tax system is shown to favour creation of an unincorporated business where the capital income proportion is less than 88 per cent; for very high capital income proportions, the tax distortion is reversed in favour of dependent employment. Creation of an incorporated business is tax favoured where the capital income proportion is less than 34 per cent, with a distortion working in the opposite direction for more capital intensive businesses.

Regarding the business structure decision, in both the "high-growth" and "mature firm" cases there is a clear tax bias towards the unincorporated form, as the "unincorporated: no distribution", and "unincorporated: full distribution" ASTRs are found to be less than the

"incorporated: no distribution" and "incorporated: full distribution" ASTRs, respectively, at all capital income proportions.

Figure 3.3 also shows that the ASTR falls (irrespective of business structure and distribution policy) as capital income increases relative to labour income. In the unincorporated business case, the ASTR with no distribution of capital income (i.e. with capital income assignment to the expansion fund) is less than the ASTR with full (or half) distribution, implying a tax incentive to retain capital income. For a given distribution policy, while the ASTR would be reduced if additional units of employment income could be characterised as capital income, this is restricted by the positive interest allocation rules which stipulate an imputed return on capital with reference to a deemed normal rate of return. For an incorporated business, the ASTR with no distribution of capital income is less than the ASTR with full (or half) distribution, implying a tax incentive to retain capital income, as in the unincorporated business case. As regards earnings that are withdrawn from the company, a tax incentive exists to recharacterise returns on labour (employment income) as capital income taxed at a flat 30 per cent rate. While some manipulation may occur around the margins in these cases, the "3:12" rules discussed earlier would operate to prevent excessive recharacterisation of labour income as capital income.

e) Sensitivity analysis: altering the level of income

Figures D.5 and D.6 in Annex D show the same results as Figure 3.3 but for a taxpayer earning four-times and ten-times the average wage. The conclusions are unchanged.

Case study four: Norway

Figure 3.4 presents ASTRs for Norway, where labour income, and personal business income are each taxed as ordinary income at a flat 28 per cent, and together as personal income at progressive rates. Before personal business income is subject to tax as personal income, a deemed normal return on invested capital is deducted. In 2007, a top (combined) marginal PIT rate of 40 per cent applies to labour income and taxable personal business income over NOK 650 000. Interest income is taxed as ordinary income only, at 28 per cent. Similarly, the statutory CIT rate is a flat 28 per cent, while distributed dividend income in excess of a normal return on invested capital (exempt from dividend taxation) is also taxed at 28 per cent. Employee, employer and self-employed SSC are levied on personal income'.

The deemed "normal" return used to calculate taxable personal business income and tax-free returns on shares of an incorporated business is set at 3.3 per cent (in 2007). The calculation of the deemed "normal" return requires the underlying capital invested to be known. As in the Swedish case study, we make the assumption of a pre-tax return on capital of 10 per cent, which infers the amount of capital invested (given the fixed level of capital income). 43

Average wage earnings in Norway in 2007 were NOK 420 780. At two-times this amount, total (net) business income is NOK 841 560.

a) Employee case

Figure 3.4 shows that the ASTR continually falls for a dependent employee earning two-times the average wage, as the capital income proportion increases. At the polar case of zero capital income, labour income is subject to both ordinary and personal income tax, as well as employer and employee SSC, producing an ASTR of approximately 51 per cent. With capital investment, labour income, taxed at a marginal ordinary and personal income

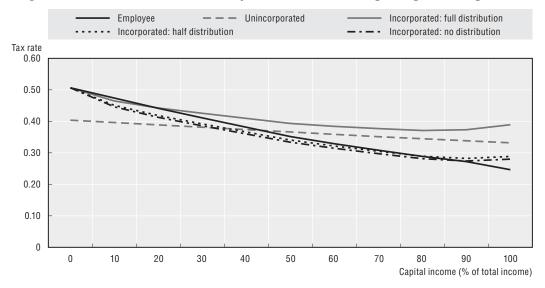


Figure 3.4. All-in ASTRs for Norway at two-times average wage earnings, 2007

tax rate of 40 per cent plus SSC at 20.6 per cent, is replaced by capital income taxed at a flat marginal rate of 28 per cent and not subject to SSC. When the capital income proportion reaches 60 per cent, labour income falls below the tax-free threshold for "personal income", and so both capital and labour income are taxed at the same 28 per cent marginal rate. However, as capital income is not subject to SSC, the overall ASTR continues to be reduced at higher capital income proportions. At the polar case of 100 per cent capital (interest) income, the ASTR is lower than the 28 per cent statutory tax rate applied to interest (part of "ordinary income") due to the application of personal allowances.

b) Unincorporated case

Considering an unincorporated business, in the polar case where the capital income proportion is zero, the ASTR is significantly lower than the ASTR for a dependent employee. This is because while labour and personal business income are both subject to combined ordinary and personal income tax and SSC, the self-employed SSC rate is significantly lower than the combined employer and employee SSC rate.⁴⁴ As the capital income proportion increases, reflecting a higher amount of capital (as opposed to labour hours) invested, the unincorporated business ASTR decreases gradually (and linearly) on account of an increasing deduction for the "normal" return on capital invested which reduces both "personal income" tax and self-employed SSC.

The decrease in the unincorporated business ASTR is more gradual than in the dependent employment case because business income (comprising returns on labour and capital) is subject to SSC (self-employed) in the unincorporated business case, while only the labour income component of total income is subject to SSC (employee plus employer) in the dependent employment case. This consideration more than offsets the effect on relative ASTR values of the relatively low self-employed SSC rate once the capital income proportion reaches 43 per cent – at which point the unincorporated ASTR exceeds the ASTR for dependent employment, with the difference becoming more pronounced as the capital proportion tends to 100 per cent.

c) Incorporated case

With full distribution, the ASTR is equal to the dependent employee ASTR when the capital income proportion is zero, as labour income is taxed equivalently in either case. As the capital income proportion increases, the full distribution ASTR initially falls before increasing at high levels of capital income. The initial fall is largely due to the deductibility of employer SSC against corporate income, as was the case in the UK and Sweden. Consequently, as the capital income proportion increases from zero, labour income, taxed at a marginal rate of 60.6 per cent (40 per cent PIT, plus 20.6 per cent employer and employee SSC), is initially replaced by distributed capital income free of CIT, and only subject to dividend taxation at 28 per cent. When the capital income proportion reaches 12 per cent capital income, though, corporate income becomes positive and the marginal tax rate on capital income increases to 48.2 per cent. 45 Meanwhile the marginal tax rate on labour income falls as the capital income proportion continues to increase, falling to 48.6 per cent at 60 per cent capital income (as labour income falls below the tax free threshold for "personal income"). These changes all slow the decline in the ASTR, but as the marginal rate on labour income is still higher than on capital income it still falls. This changes at 80 per cent capital income, when the marginal tax rate on labour income falls further to 17.92 per cent, 46 resulting in an all-in marginal rate on labour of 38.52 per cent, and the ASTR begins to rise.⁴⁷ Box 3.3 illustrates the effect of changing marginal rates on the ASTR.

With no distribution, the ASTR will fall by more than in the full distribution case due to the elimination of any shareholder level taxation of capital income. Like the full distribution case, the no distribution ASTR does begin to increase again, but only once the capital income proportion is above 91 per cent, at which point the combined standard and basic allowances reduce the marginal tax rate on labour income to zero. At 100 per cent capital income the ASTR equals the corporate tax rate of 28 per cent.

The half distribution case is very similar to the no distribution case. In fact, the additional benefit from moving from half to no distribution is at first glance surprisingly small. However, this is due to the deduction for a "normal" return, which eliminates a large component of taxation of capital income that would otherwise have occurred at the shareholder level.

Box 3.3. Average tax rates on incorporated business income (another illustration)

Illustrating effects of partial distribution and a rate of return allowance (as in the Norwegian case)

The following extends the analysis in Box 3.1 to consider partial (as opposed to full) distribution of corporate profits, and the provision of an allowance for a notional ("normal") rate of return on shareholder capital (as in the case of Norway's tax system). As in Box 3.1, consider a single owner/worker of an equity financed incorporated business earning a fixed pre-tax amount of earnings net of depreciation Y consisting of a labour income component (wL) and profit component (Y - wL). Assume that tax depreciation matches true economic depreciation, and no social security contributions. Corporate profits are taxed at a flat rate u. A fraction θ of after-tax profits is distributed, with the other fraction ($1 - \theta$) retained indefinitely in the company. Labour and dividend income are pooled and taxed under a progressive PIT rate schedule that taxes the first X_1 units of income at a marginal rate t_1 with the excess taxed at rate t_2 , where $t_1 < u < t_2$. There is no standard personal deduction. However, the shareholder (owner/worker) is provided with an allowance at a prescribed rate r^* for capital invested in his/her company.

Box 3.3. Average tax rates on incorporated business income (another illustration) (cont.)

Taxable dividends are measured as follows:

$$\theta[(Y - wL)(1 - u) - r^*K] \tag{1}$$

where K measures capital invested in the company. Under the assumption that the company generates an after-corporate tax rate of return of r^c , the underlying equity capital invested in the business may be determined as follows:

$$K = \frac{(Y - wL)(1 - u)}{r^c} \tag{2}$$

Using [2], taxable dividends [1] can be expressed as follows:

$$\theta[(Y - wL)(1 - u) - \frac{r^*}{r^c}(Y - wL)(1 - u)] = \theta(Y - wL)(1 - u)(1 - \frac{r^*}{r^c})$$
[3]

Lastly, consider the following measure of combined corporate and shareholder tax on labour income and profit:

$$T = u(Y - wL) + t_1(X_1) + t_2[wL + \theta(Y - wL)(1 - u)(1 - \frac{r^*}{r^c}) - X_1]$$
 [4]

The ASTR is measured by:

$$\tau^{inc} = \frac{u(Y - wL) + t_1(X_1) + t_2[wL + \theta(Y - wL)(1 - u)(1 - \frac{r^*}{r^c}) - X_1]}{Y}$$
 [5a]

Using k = (Y - wL)/Y = 1 - (wL/Y), the formula in [5a] can be expressed as follows:

$$\tau^{inc} = k \cdot \left[u + t_2 (1 - u)\theta (1 - \frac{r^*}{r}) \right] + (1 - k) \cdot t_2 + (t_1 - t_2) \frac{X_1}{Y}$$
 [5b]

Consider the impact on the ASTR of increasing labour income over the range where taxable income exceeds X_1 , holding Y fixed:

$$\frac{\Delta \tau^{inc}}{\Delta (wL)} | \overline{Y} = \frac{(t_2 - u) - t_2 \theta (1 - u)(1 - \frac{r^*}{r^c})}{Y}$$
 [6a]

It follows immediately that the impact on ASTR of increasing the capital income

proportion of income is:
$$\frac{\Delta \tau^{inc}}{\Delta (Y - wL)} \Big| \overline{Y} = \frac{u - t_2 \left[1 - \theta (1 - u)(1 - \frac{r^*}{r^c})\right]}{Y}$$
 [6b]

where u < t2, the overall ASTR is shown to unambiguously decrease in the case of full retention (θ = 0). Where profits are distributed θ > 0, the overall ASTR decreases but by less, in the "normal" case where $(r^* < r^C)$, given the additional shareholder taxation of dividends. The allowance for a normal rate of return on equity is shown to dampen the offsetting effect by reducing the effective tax rate on distributions. It can also be shown that where taxable income is less X_1 so that the marginal statutory PIT rate is $t_1 < u$, the ASTR increases with capital income in the full retention case. With distributions, the ASTR increases faster, given shareholder level taxation, with the normal rate of return allowance tending to dampen this reinforcing effect.

^{*} The corresponding pre-corporate tax rate of return r^g is given by $r^g = r^c/(1-u) = (Y-wL)/K$. These rates of return are measured net of depreciation. The analysis of CIT assumes that tax depreciation matches actual depreciation.

d) Behavioural effects

First consider the business creation decision. In the "high-growth" case, where profits are retained, there is a tax distortion towards incorporated business formation over dependent employment at capital income proportions up to 88 per cent, with a bias found against incorporated business creation at higher capital income proportions. In the "mature firm" case though, where all profits are distributed the incorporated form is tax preferred only at capital income proportions below 20 per cent, with a bias against incorporated business formation at all higher capital income proportions. The creation of an unincorporated business is tax favoured over dependent employment at capital income proportions less than 44 per cent, with dependent employment tax preferred at higher capital income proportions. (as the "incorporated: full distribution" ASTR is below the dependent employee rate).

Now consider the business structure decision. When the capital income proportion is less than 34 per cent there is a clear distortion towards the unincorporated form, as the unincorporated ASTR is below all incorporated ASTRs. At higher capital income proportions distribution policy needs to be considered once again. In the "mature firm" case there continues to be a distortion towards the unincorporated form (as the unincorporated ASTR is always below the "incorporated: full distribution" ASTR). However, in the "high-growth" case there is a distortion towards incorporation at capital income proportions of 34 per cent or greater. In the half distribution case, incorporation is tax preferred at capital income proportions of 36 per cent or greater.

Figure 3.4 also shows that the ASTR generally falls (irrespective of business structure and distribution policy) as capital income increases relative to labour income. Consequently, there appears to be a clear incentive to re-characterise labour income as capital income.

e) Sensitivity analysis: altering the level of income

The broad conclusions remain unchanged when considering a taxpayer earning four-times and ten-times the average wage. These rates are shown in Figures D.7 and D.8 in Annex D. Notably, where some profits are retained, incorporation will now be preferred over the unincorporated form at slightly lower capital income proportions than when income equals two-times the average wage. Furthermore, in the "mature firm" case the incorporated form will now be tax preferred at some higher capital income proportions.

Summary

While the case studies are both country specific and based on a number of assumptions, the illustrative results demonstrate the potential for tax to influence both decisions over whether to create an SME, and how to structure one, and also how these decisions depend on capital versus labour intensity. In two of the four case studies (Sweden and the UK), a tax distortion is found towards formation of an SME (incorporated and unincorporated SMEs being tax favoured relative to dependent employment) at most capital income proportions, irrespective of dividend distribution policy. For the other two (New Zealand and Norway), the potential distortion varies with both distribution policy and capital intensity. However, a tax incentive to form an incorporated SME is found in both countries where a significant fraction of corporate profits is retained, and where the business is not highly capital intensive.

As regards the SME business structure decision, the case studies show a general bias towards incorporation with full retention of profits (as with the general trend in the income tax analysis in Chapter 2). This is largely because incorporation tends to reduce SSC, and avoids possible additional taxation of capital income on distribution. Even with some distribution of profits, the incorporated form is still generally favoured in the UK, New Zealand and Norway. Sweden is the clear exception, where the ability to both retain unincorporated business income within the business, as well as have distributed income split into both capital and labour components, make the unincorporated form attractive from a tax perspective.

More broadly, the case studies emphasise that the capital income proportion can substantially influence the ASTR faced by an SME. In general, for the UK, Sweden and Norway, ASTRs fall as the capital income proportion increases, while in New Zealand there is a range of capital income proportions over which the ASTR is minimised. This raises two policy considerations for tax policy makers to be aware of, in addition to the possible distortions to business creation and structure decisions. First, taxpayers may have an incentive to shift production structures (e.g. capital/labour mix) towards factor combinations that are tax favoured but possibly not production efficient.

Second, taxpayers may have an incentive to artificially recharacterise (generally to increase) their true capital income proportions to minimise tax liability. While the nature of a business will determine broadly the capital/labour income ratio, there is likely to be a margin around the "true" capital/labour income ratio that can be exploited. As noted earlier, this could be achieved by the owner/worker paying him/herself a below/above-market wage for their labour input. Audit activity would be expected to prevent gross recharacterisation away from true ratios, but may not detect small alterations. Such incentives could even distort business structure decisions. For example, in the UK a business with around 30 per cent capital income (so the unincorporated form is tax favoured) may be able to recharacterise enough labour income as capital income to push the "reported" capital income proportion up above 35 per cent. Incorporation would then become tax favoured, lowering the ASTR faced by the business.

Notes

- 1. Austria, Belgium, the Czech Republic, France, Germany, Greece, Hungary, Japan, Netherlands, Poland, Portugal, the Slovak Republic and Spain. Source: OECD Revenue Statistics (2008).
- 2. One exception is Finland where the base for the health insurance component of employee SSC is taxable income for municipal income tax purposes.
- 3. Nor is this always the case. For example, in Sweden, if the self-employed so elects, they can have their personal business income split into a capital and a labour component, in which case self-employed SSC only apply to the labour income component.
- 4. There are exceptions though. For example, Denmark has a combination of lump-sum and a flat rate for employee SSC, but simply a lump-sum for employer SSC (and the same lump sum for self-employed). Poland has an increasing rate structure for employer SSC, but a decreasing rate structure for employee SSC (and no self-employed SSC).
- 5. There is not necessarily consistency with self-employed SSC though. For example, Canada has a tiered structure for employee and employer SSC, but a flat rate for self-employed SSC. Belgium has flat rates for employee and employer SSC, but an increasing rate structure for self-employed SSC.
- 6. Even where growth does not involve incorporation, policy concern generally arises where the tax system treats differently and thereby distorts choice over business form, given possible non-tax advantages that one form may present over another to a given taxpayer.

- 7. Furthermore, the tendency for tax laws to change would also render any such conclusions dependent on the particular year and set of tax laws that then applied.
- 8. Average tax rates are arguably better than marginal rates, as indicators of the tax burden relevant to setting up an SME, and/or structuring it in different legal forms, because they factor in the tax burden on total income, rather than simply on additional income. Furthermore, an average tax rate enables tiered CIT, PIT, and SSC structures to be taken account of, whereas a marginal rate does not. As in chapter three, these are average statutory tax rates rather than average effective tax rates. Income tax base provisions are not addressed, under the assumption that main base provisions (e.g. depreciation) are the same for incorporated and unincorporated businesses. As noted in Chapter 3 (refer discussion at p. 23), this is the case in most OECD countries. The calculations are for 2007 and are based on the OECD Taxing Wages framework and information from the OECD Tax Database.
- 9. Social security contributions can be considered equivalent to a tax, and so have the same distortive impact on taxpayer behaviour as a tax, where there is no actuarial link between contributions made and future expected benefits. Where there is some degree of actuarial link (as, for example, with pension contributions in a number of countries), then the behavioural response induced by contributions may possibly differ to some extent from those induced by a tax. For simplicity, this chapter treats contributions as having no actuarial link to benefits, and therefore as equivalent to PIT and CIT.
- 10. A number of empirical studies have investigated the impact of tax and non-tax factors on organisational form by looking at actual firm behaviour, particularly in the US, with a focus on the double taxation of corporate profits. See, for example, Goolsbee (1998); MacKie-Mason and Gordon (1997); and Gordan and MacKie-Mason (1993). While these studies do not distinguish businesses by size, they find that tax does influence organisational form, with consequent efficiency costs, but conclude that non-tax factors play the predominant role.
- 11. In Denmark (not examined in this Chapter) and Sweden, the treatment of unincorporated business income also depends on the amount of earnings that are retained rather than withdrawn.
- 12. For example, PIT on retained corporate profit may be avoided through the sale of shares in a country without a capital gains tax.
- 13. Implicitly, the assumption of indefinite continuity of ownership of the business is made along with indefinite retention. Otherwise, the analysis would have to consider any future capital gains tax liability.
- 14. The ASTR values for the "employee" case and 'unincorporated business' case are the same (the ASTR schedules are coincident).
- 15. Personal marginal income tax rates in 2007 are as follows: 15 per cent for income under NZD 9 500; 21 per cent for income between NZD 9 500 and NZD 38 000; 33 per cent for income between NZD 38 000 and NZD 60 000; and 39 per cent on any additional income.
- 16. This is not shown clearly on Figure 3.1 because of its discrete nature.
- 17. Capital income is taxed at the CIT rate, grossed up, pooled with labour income and taxed at progressive PIT rates, with imputation credits providing full off-set for the CIT paid.
- 18. Excess credits can be carried forward indefinitely and used against future tax liabilities. If the taxpayer had additional income from other sources then the imputation credits could be used against this tax liability and the ASTR would remain constant. The increase in the ASTR therefore results directly from the assumptions on which the case study is based.
- 19. The minimum ASTR results when between NZD 38 000 and NZD 60 000 is taxed, as labour income and/or distributed capital income, at progressive PIT rates. This is because the full tax benefit is then obtained from lower marginal PIT rates, and no income is taxed at the top PIT rate.
- 20. Refer note 19.
- 21. An incentive may actually exist at very high capital income proportions (above 88 per cent), to recharacterise capital income as labour income. Given that an equivalent (or greater) tax benefit could be obtained by structuring in unincorporated form, this would require the non-tax benefits of incorporation to outweigh the non-tax benefits of the unincorporated business form.
- 22. This means that lower marginal tax rates will only apply to interest income if earned income has not already exhausted the lower thresholds. Similarly, lower marginal rates will only apply to dividend income where earned income and interest income has not exhausted the lower thresholds.
- 23. The increase in the ASTR at 100 per cent capital income is due to the existence of a tax free allowance on personal income, meaning that the first GBP 5 225 of labour income is untaxed. So, at the margin, untaxed labour income is being replaced by capital income taxed at 40 per cent. The

- reduction is SSC cannot outweigh this difference, and at 100 per cent capital income there are no SSC due anyway.
- 24. 32.5 per cent dividend tax on grossed up dividend, less 10 per cent tax credit [1/(1-0.1)*(0.325-0.1)=0.25].
- 25. 20 per cent corporate tax, plus 32.5 per cent dividend tax on grossed up dividend, less 10 per cent tax credit [0.2 + (1 0.2)/(1 0.1) * (0.325 0.1) = 0.4].
- 26. There is also a small infra-marginal effect that increases the tax burden on capital income. When changing the marginal unit of income from labour to capital, the available deduction for employer SSC will fall (as labour income falls). So some infra-marginal capital income will now be taxed at 40 per cent rather than 25 per cent. This is a small effect, though, as a one currency unit decrease in labour income will increase taxable capital income by only 0.128 of a currency unit (as the employer SSC rate is 12.8 per cent).
- 27. As in the dependent employee case, the ASTR does increase when moving from 90 to 100 per cent capital income. Again this is due to the existence of a tax free allowance on personal income.
- 28. Note that this is also the ASTR at the polar case of 100 per cent capital income.
- 29. Except for between 90 and 100 per cent capital income as noted previously.
- 30. This incentive will still exist if some distribution of profits is required.
- 31. The United Kingdom does have "IR35" rules that are aimed at preventing tax driven incorporation when the taxpayer, in reality, remains an employee.
- 32. Employment income is the residual amount of personal business income after subtracting the imputed normal return on capital. Where the actual return on capital exceeds a normal return, the excess (above-normal) return is taxed as employment income.
- 33. Calculated as business assets, less business debts, less the accumulated after-tax allocations to the expansion fund. Net business assets and allocations to the expansion fund are measured at the end of the previous year.
- 34. To prevent Figure 3.3 from becoming too congested, ASTRs for the "half distribution" case are not presented. As with the "incorporated: half distribution" ASTR presented in Figure 3.3, an "unincorporated: half distribution" ASTR would fall between the two polar cases presented.
- 35. This assumption also impacts on additional rules to prevent recharacterisation of labour income as capital income the so-called "3:12" rules for closely-held incorporated businesses. Under these rules, any dividends distributed in excess of a "normal" return on capital are treated as employment income. The normal return is calculated as the sum of an imputed return of 12.54 per cent on the underlying capital in the business, plus a wage-base allowance equal to 25 per cent of the company's total wage bill plus 25 per cent of the wage bill over SEK 2 670 000 (in 2007). By assuming a 10 per cent pre-tax return, the "3:12" rules will not apply in this scenario.
- 36. This includes the Swedish payroll tax of 4.4 per cent. Note that employee SSC is deductible for national and municipal income tax purposes.
- 37. Additionally, the basic allowance begins to increase from SEK 11 900 (to a maximum of SEK 31 100) with increases in the capital income proportion beyond 53 per cent. Also, once the capital income proportion reaches 98 per cent, the SSC rate falls back to 36.82 per cent.
- 38. The statutory self-employed SSC rate is 30.71 per cent. This rate is payable on an "exclusive" base (income after the deduction of self-employed SSC). For better comparability, the equivalent rate due on an "inclusive" base (a gross income base) is reported in the main text. Also note that self-employed SSC is deductible for national and municipal income tax purposes.
- 39. 28 per cent corporate rate, plus 20 per cent capital income tax rate on distribution. [0.28 + (1 0.28) * 0.20 = 0.424]. It is this higher marginal rate on capital income that results in the "incorporated: full distribution" rate being higher than the "dependent employee" rate at higher capital income proportions.
- 40. As with the UK, there is also a small infra-marginal effect that increases the tax burden on capital income. When changing the marginal unit of income from labour to capital, the available deduction for employer SSC will fall (as labour income falls). So some infra-marginal capital income will now be taxed at 42.4 per cent rather than 20 per cent. This has a small effect (though a larger effect than in the UK as the employer SSC rate is higher). A one currency unit decrease in labour income will increase taxable capital income by 0.3242 of a currency unit (as the employer SSC rate is 32.42 per cent).

- 41. Note that, at 90 per cent capital income, the impact of the basic allowance combined with the earned-income tax credit reduce the ASTR slightly below 42.5 per cent.
- 42. This suggests that tax planning would concentrate on increasing the measure of invested capital used to established the deemed return on capital.
- 43. A "normal" return on invested capital is calculated each year (separately for each share) at the shareholder level, and assigned to a pool, with a carry-forward for unused amounts.
- 44. A minimum threshold acts to further reduce the self-employed social security contribution burden.
- 45. 28 per cent corporate rate, plus 28 per cent capital income tax rate on distribution. [0.28 + (1-0.28) * 0.28 = 0.482].
- 46. This is due to the basic allowance provided against ordinary income. The allowance equals 36 per cent of taxable income, subject to a minimum of NOK 4 000 and a maximum of NOK 63 800. When income falls below NOK 177 222, the deduction is no longer constrained by the upper limit. An additional unit of income will then also provide an additional deduction of 0.36 units. This infra-marginal effect implicitly reduces the marginal rate from 28 per cent to 17.92 per cent. [0.28*(1-0.36)=0.1792]. The marginal rate on labour falls further when labour income falls below the combined standard (NOK 37 000) plus basic allowance. At this point labour income only faces SSC.
- 47. Note there are two additional infra-marginal effects operating. First, as in the UK and Sweden, the available corporate deduction for employer SSC falls as labour income falls. So when changing the marginal unit of income from labour to capital, some infra-marginal capital income will now be taxed at 48.2 per cent rather than 28 per cent. This is a small effect, though, as a one currency unit decrease in labour income will increase taxable capital income by only 0.128 of a currency unit (as the employer SSC rate is 12.8 per cent). This infra-marginal effect implicitly increases the marginal rate on capital income by 6 per cent [0.128 * 0.482 = 0.062]. Additionally, there is an infra-marginal effect working in the opposite direction. As the capital income proportion increases so does the capital stock leading to a larger deduction for the "normal" return on capital. This means that some infra-marginal units of capital income that were previously taxed at 48.2 per cent become taxed at just 28 per cent. This effect is also small, though, as a one currency unit increase in capital income will increase the normal deduction by only 0.33 of a currency unit [(1/0.1) * 0.033 = 0.33]. This infra-marginal effect implicitly decreases the marginal rate on capital income by 9 per cent [0.33 * 0.28 = 0.09]. Combined these two factors decrease the marginal rate on capital by 3 per cent.

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Chapter 4

Tax Incentives for SMEs

As reviewed in Chapter 1, SMEs typically account for a significant percentage of total employment (as in the surveyed OECD countries). Governments are therefore understandably keen to ensure that their tax (and non-tax) policies do not place SMEs at a significant competitive disadvantage relative to other firms, including large domestic and foreign-owned firms, operating in the same market. Also recognising that many if not most large companies are created as small or medium-sized companies (with only some fraction of SMEs growing to be large), governments are encouraged to ensure that policies are encouraging to the growth of SMEs. With innovation seen as centrally important to the growth of individual firms and whole economies, governments may actively support SMEs that are R&D intensive.

Given the important role of SMEs and concerns in some cases that SMEs may be at a competitive disadvantage with SME creation and growth impeded by one or more factors (possibly including taxation), arguments are often made that special tax incentives targeted at SMEs should be introduced, maintained or enriched. At the same time, discouraging experience with the use of tax incentives may caution against their use, with revenue loss and efficiency concerns being more pronounced in some cases than in others.

This chapter reviews arguments for and against the use of special tax incentives for SMEs, various categories of income tax incentives, and examples of such incentives based on the SME tax questionnaire findings, considering first business-level incentives and then shareholder-level incentives.

4.1. Arguments for SME tax incentives

The first two sub-sections begin with a brief review of "market failure" arguments for tax incentives for SMEs, centred on assumptions of positive spill-over benefits of investment, and asymmetric information leading to various forms of capital market imperfection.² This is followed by a review in the remaining six sub-sections of arguments for tax incentives for SMEs involving possible impediments to SME creation and growth linked to certain "basic" income tax provisions. In these cases, and depending on country circumstances, policy adjustments may or may not be justified on the basis of a cost-benefit assessment of likely effects including efficiency and revenue losses.

The list of "basic" income tax provisions uniformly applied to firms of all sizes, which may negatively impact SMEs (and in particular, risky start-up firms) compared to large firms, includes:

- double taxation of corporate profits and cost of capital effects;
- the inability to deduct interest expense (business start-ups);
- limited loss offset (discouraging to risk-taking);
- cross-border tax planning opportunities (available to multinational enterprises);
- a relatively high compliance burden on SMEs, resulting from uniform application of basic tax rules to firms of all sizes; and
- taxation on sale or inheritance of an SME.

Positive externalities ("spill-over" benefits)

A main argument for SME investment incentives is that SMEs generate benefits over and above those accruing privately to investors. The benefits may include innovation (e.g. process innovation) that can be applied elsewhere and positively affect economic growth in the economy. Other potential benefits include labour training and the upgrading of skills that can be applied subsequently, in other businesses. In deciding the amount of investment to undertake, SME investors can be expected to consider only private benefits and costs of investment. By ignoring social benefits that spill-over into the economy at large, the expected outcome would be under-investment in SMEs, relative to a socially optimally level based on social benefits and costs. Tax incentives targeted at SMEs, at the company and/or shareholder-level, may encourage investment closer to a social optimum.

Capital market imperfections

Another main line of argument for tax incentives for SMEs considers capital market imperfections resulting from information asymmetries. Perhaps the most commonly cited example is where the profitability of a business, in particular an early-stage business with highly uncertain (risky) returns, is better understood by managers of firms than by outside creditors. Asymmetric information may result in the extension of credit to firms with "quality" investments³ but at excessive interest rates (in excess of what would be charged with symmetric information), or no funding (at market rates), or costly signalling, implying in each case under-investment. Another example of information asymmetry arises where outside equity investors are unable to monitor activities of managers who may engage in consumption activities inconsistent with the maximisation of firm value. In such cases, asymmetric information, leading to significant monitoring costs or demands for increased rates of return by outside investors, may lead to under-investment relative to an efficient outcome based on symmetric information. Arguments for tax incentives to correct for capital market imperfections of this type may refer to results from "adverse selection" and/or "moral hazard" models (see Box 4.1).

Proponents of targeted tax relief for SMEs may point to (non-appropriated) spill-over benefits and capital market imperfections that are particularly pronounced for SMEs. It may be argued that large companies are able to contain spillovers at a lower cost – for example, by offering more employment opportunities to encourage highly trained staff to stay with a company; or by having in-house lawyers that can undertake patent applications to secure property rights on new products and processes (at a lower cost than external legal service). Information asymmetries may also be particularly problematic for small firms. For example, due to their size, medium- to large-scale firms may have fewer difficulties in encouraging potential equity providers to study business plans where returns are highly uncertain. Venture capitalists, for example, may be disinterested in considering small equity deals given lower average "due diligence" costs (possibly due to a significant fixed cost component) in reviewing larger business deals. Furthermore, large firms generally have larger hard asset pools offering more collateral to support loans, and greater access to international capital markets.

The following sub-sections consider possible impediments to SME creation, growth and tax compliance under uniform application of basic tax provisions of main taxes – that is, under provisions (statutory and administration) of main taxes that are generally applicable to all firms, regardless of size⁴ – that typically may be more impeding to certain SMEs than to other firms, or may favour other companies (e.g. multinational firms) relative

Box 4.1. Capital market imperfections resulting from asymmetric information

Adverse selection arises where information needed to assess potential profit on investment (the probability distribution of net returns) is known by the manager/owner of a firm but not by outside creditors. One possible outcome is that creditors cannot distinguish amongst firms, and require that all firms pay the same rate of return. In such models, quality firms with projects earning above-average expected rates of return pay an interest rate premium relative to rates they would be required to pay if lenders had symmetric information known to the firm (with the premium effectively subsidising firms with projects earning below-average expected rates of return). Alternatively, quality firms willing to pay a market rate of interest may be denied financing. In both cases, less investment would be predicted than with symmetric information (see for example de Meza and Webb, 1987). So-called "signalling models" would predict that high-quality firms would engage at considerable expense in activities to signal to potential investors the quality of their prospective returns, where that activity cannot be copied by (is too expensive for) lower-quality firms. For example, a strong cash-flow from existing investments may be signalled by a high dividend payout ratio (see Miller and Rock, 1985), or a high debt-equity ratio (see Ross, 1977).

Moral hazard models consider information asymmetries and conflicting objectives of different claimants on returns to investment. One branch compares the interests of equity owners of a firm, and external debt providers (see Myers, 1977), and predicts under-investment where equity owners act to maximise the value of existing shares rather than the value of the firm. If creditors must be reimbursed before shareholders, firm managers – acting in the interest of equity owners and having more complete information than creditors on the profitability of investment projects – raise and invest new capital only up to the point where returns are sufficient to cover the investment outlay and repay debt (i.e. only if new capital is expected to provide positive net present value to existing equity shareholders). In contrast, debt holders would wish that investment decisions were instead based on maximising the value of the firm (consistent with an efficient allocation of capital in the economy), which would involve undertaking investment with returns sufficient to cover the investment outlay alone.

Another branch of the moral hazard literature (see Jensen and Meckling, 1976) compares the interests of an owner/manager of a firm, and "outside" (portfolio equity) investors, and also predicts under-investment. Outside equity investors recognize incentives of an owner/manager to engage in self-rewarding behaviour, rather than exclusively behaviour that maximises the value of the firm (e.g., with an owner/manager able to benefit exclusively from perquisites from a business, while sharing the cost with other equity investors). With incomplete information on this behaviour, outside investors may demand that behaviour be curtailed through covenants (restrictions), entailing costs that result in under-investment relative to levels that would be observed with symmetric information. Or outside investors may take management behaviour into account when determining the price they are willing to pay for the firm's equity, implying that part of the costs are borne by management (requiring a higher pre-tax rate of return). Differences in pre-tax rates of return resulting from asymmetric information imply an inefficient allocation of capital.

to small companies with only domestic operations, due to particular characteristics of SMEs. The topics reviewed in this section, with survey country examples, include: the double taxation of corporate profits; interest deductibility; limited loss-offset; a relatively

low effective tax rates on cross-border investment; a relatively high tax compliance burden; and taxation on sale or inheritance of an SME.⁵

Double taxation of corporate profits and cost of capital effects

A central tax consideration for profitable incorporated SMEs is the possibility of double taxation of business profit. As reviewed in Chapter 2, when after-tax profit is distributed, it is typically taxed again at the shareholder level, subject to personal income tax or final withholding tax on dividend income, implying double taxation (in the absence of full integration relief). Similarly, the retention of after-tax profit, giving rise to capital gains on shares, may be subject to capital gains taxation on a realisation basis, implying some degree of double taxation (in the absence of integration relief). Consistent with so-called "tax-capitalisation models" where shareholder taxes are capitalised into share prices, and dependent on the tax treatment of the marginal shareholder, double taxation may increase the cost of equity capital. More specifically, dividend taxation may increase the hurdle (pre-tax) rate of return on investment financed at the margin by new equity capital, while capital gains taxation may increase the hurdle rate of return on investment financed at the margin by retained earnings.

Increased hurdle rates of return on investment linked to double taxation may be an issue primarily for SMEs with limited access to international capital markets. Under tax capitalisation models of dividend taxation, predicted increases in the cost of equity capital assume financing by domestic (local) investors. The same result is not predicted for firms, typically large firms, obtaining finance from international capital markets where domestic shareholder tax rates do not factor into the cost of capital. Thus when considering small businesses that do not have access to international capital markets and must rely on local financing, domestic shareholder taxes would be expected to increase hurdle rates of return on funds particularly for this group.

Where the predictions of the tax capitalisation model hold true, double taxation of corporate profits may discourage business creation. While in some cases an entrepreneur may be prepared (and prefer) to establish a business in unincorporated form, this may not always be the case. For example, an entrepreneur may wish to access the advantages (e.g. limited liability) that incorporation provides, before deciding to leave dependent employment and raise capital to create an SME. However, establishing an incorporated business may not be attractive where double taxation means that forecasted rates of return on a project are not sufficiently high to cover hurdle rates of return.

Double taxation of corporate profits may also discourage business growth by discouraging business incorporation, and by providing a competitive cost of funds advantage to large firms. Consider first a business incorporation argument. As reviewed in Chapter 1, in a number of OECD countries the very smallest of businesses, those with less than two employees, are typically unincorporated. For small firms with less than ten employees, unincorporated business form is common, but the majority are incorporated in each of the survey countries providing employment data (with the exception of Mexico and the UK), in some more than others. As firm size increases, incorporated business form becomes increasingly dominant in each country example. Thus to the extent that, at some firm level, continued growth requires a switch to incorporation to more efficiently reach capital markets, double taxation may pose possible impediments. Furthermore, to the extent that required rates of return on shares of large firms are not grossed up to cover personal tax on investment returns (e.g. where marginal providers of capital in

international capital markets are tax-exempt investors), large companies may enjoy a cost of capital advantage relative to SMEs relying on local investors.

Double taxation of dividends, by raising the cost of new equity capital, may tend to limit investment of small, growth-oriented firms, relative to investment of large companies, even where the latter have restricted access to international capital markets. This could occur where large "mature" firms are able to finance their investment using retained earnings, while small growing firms (with financing requirements that exceeds their after-tax profits) finance investment at the margin by issuing new equity shares. The prediction of reduced investment for small firms results where new equity capital has a higher hurdle rate of return than retained earnings. This latter effect is predicted by tax-capitalisation models where returns on new equity must cover the burden of dividend taxes, while returns on retained earnings must cover the lower burden of capital gains taxes on retentions.

Furthermore, double taxation of dividends may impede SME financing where it encourages mature (established) companies to retain rather than distribute profits in order to avoid dividend taxation (so-called "corporate lock-in" effect), and where individual shareholders (e.g. local investors) are more inclined to invest in SME shares than mature companies. While certain theories including the "new view" of dividend taxation suggest that dividend taxation (where held fixed at a given rate) should not affect the timing of dividend payments, it may be that in practice shareholders of mature companies are more likely to agree to dividend retention in order to defer dividend taxation. Where this is the case, the pool of financial capital available to SMEs may be reduced.

Double taxation of retained (as opposed to distributed) corporate profit may also pose more of a constraint to the financing of SMEs compared with large companies, particularly in the case of small growth-oriented businesses that reinvest their corporate profits, giving rise to capital gains. As noted previously, when after-corporate tax profits are retained, the market value of equity shares increases by the amount of the retention. Thus taxation of capital gains on shares represents double taxation of corporate profits (just as shareholder level taxation of distributed profits represents double taxation). While some relief from double taxation is available through the taxation of capital gains on a realisation (rather than accrual) basis, the taxation of capital gains under a classical tax system may operate to increase the cost of (required rate of return on) retained earnings as a source of funds. As in the case of dividend taxation, the impeding effect of capital gains taxation is more likely where domestic shareholders are the marginal providers of finance, which may be the typical case for SMEs.

Also to note is that the taxation of capital gains of individuals (including gains on shares in mature companies) on a realisation basis creates "capital gains lock-in" incentives – that is, incentives to hold onto assets producing capital gains. In addition to impeding an efficient allocation of savings, lock-in incentives may impede efficient allocation of capital to certain start-up businesses requiring external equity capital. Under a realisation-based capital gains tax system, taxation of capital gains is deferred until the year in which the asset producing capital gains is disposed of. Deferring capital gains taxation tends to lower the effective tax rate on capital gains. Deferred taxation thus creates "lock-in" effects distorting decisions over asset sales – that is, tax driven incentives to hold onto assets with accumulated unrealised (untaxed) gains to benefit from tax deferral, rather than sell and unlock capital for investments – including investments in promising SMEs – that would be

selected absent tax considerations. Lock-in effects tied to deferred taxation of capital gains may thus lead to sub-optimally diversified portfolios, and misallocated productive capital (implying reduced national income), at least in certain cases.

Lastly, it may be noted that while capitalised SMEs may benefit from "patient capital" encouraged by realisation-based taxation of capital gains lock-in effects, this benefit does not apply to new SME business start-ups, which have yet to raise external equity financing. To the extent that individuals are encouraged to hold onto shares of mature firms or other assets generating capital gains, on account of lock-in incentives, SME financing may be frustrated. This outcome would tend to be inefficient if a new business idea could lead to a profitable business enterprise, but does not go forward due to this tax distortion.

The inability to deduct interest expense (business start-ups)

A basic provision of an income tax is an interest deduction for the cost of debt finance (but not the cost of equity). This feature tends to be most beneficial to firms that are able to secure loans, and secondly, able to claim a current interest deduction. To the extent that large firms are better positioned to secure loans by presenting a lower-risk to creditors, and to the extent that small start-up firms tend to be in a loss position during initial years when up-front costs are high relative to revenues (with profits of both small and large firms affected by business cycles), it follows that tax relief from interest deductibility tends to favour primarily large profitable firms.

In trying to secure a bank loan to finance a given business venture of a given risk, generally small firms would face more difficulty than large firms, to the extent that business assets that small firms can offer as collateral are of lower aggregate value due to smaller firm size, are less tangible (e.g. with the bulk of capital invested early on in product development, leaving limited funds to invest in hard assets such as land, buildings, machinery and equipment), and are less diversified (i.e. with the bulk of capital invested in one initial product). When unable to borrow, benefits of tax deductibility cannot be realised (either through a current tax deduction, or from a business loss carry-forward).

Even where able to secure a loan, small firms may generally benefit less to the extent that they are more likely to be loss-making, as they typically are during a start-up phase before revenues are generated. While most tax systems allow a carry-forward of business losses (factoring in interest expense), loss offset provisions are normally limited. In particular, unincorporated business losses may not be deducted against employment income, for example, or other income. Moreover, business losses cannot be carried forward with interest to compensate for the time value of money (that is, to compensate for a deferred rather than current tax deduction). Limited benefits from interest deductibility may be most pronounced for new innovative firms whose main assets are intangibles (posing the greatest difficulty to value as collateral), and production gestation periods are relatively long (implying a lack of taxable profits for many year to absorb claims for interest deductions).

Country examples. The allowance for corporate equity (ACE) system in Belgium is unique amongst OECD countries in providing a deduction for a notional return on equity. This system is intended to reduce the distortion between debt and equity financing. However, it may also be seen as a way to minimise the disadvantage to SMEs unable to access debt financing, as they will still gain tax relief based on their equity financing. As with a debt interest deduction, and although qualifying for loss carry-forward provisions, the allowance for corporate equity will not be of immediate benefit to firms in a loss position.

Limited loss offset (discouraging to risk-taking)

In comparing across countries the treatment of unincorporated business losses, systems can be distinguished according to the degree to which they "ring-fence" losses. Strict ring-fencing would deny a deduction of unincorporated business losses against other taxable income of the taxpayer in the same year (e.g. investment income, rental income, wage income, pension income), by only allowing business losses to be deductible against future business profits realised in subsequent tax years under business loss carry-forward provisions. More flexible ring-fencing provisions would allow business losses to be deductible against other types of taxable income, in addition to providing loss carry-forward and possibly also loss carry-back provisions, thereby providing greater scope for deductions for business losses (and thus greater symmetry in the treatment of business profits and business losses). Loss-offset provisions may differ considerably across countries in terms of the types of non-business income that business losses can be deducted against, and the allowed number of carry-forward (and carry-back) years. 12

Systems providing greater scope for business loss offsets, at the cost of foregone tax on other income, ¹³ may (or may not) be designed to target the relief to genuine business losses (as opposed to losses on consumption activities), to active business owners as opposed to passive investors, and possibly to newly-established firms to address possible tax impediments to business start-ups. Systems may be differentiated according to whether ring-fencing rules apply equally to firms regardless of their size, or whether more flexible rules apply to losses of smaller firms, targeted under some measure of size, possibly with additional restrictions to steer relief where intended.

Country examples. The SME tax questionnaire asks countries to indicate whether unincorporated business losses can be deducted against non-business (e.g. wage) income, and to describe relevant carry-forward and carry-back provisions. The Czech Republic, Italy, Mexico and Poland all indicate ring-fencing rules that deny the deduction of unincorporated business losses against non-business income (the rules applied in Italy came into effect only recently, in 2006). The Czech Republic and Poland both limit business loss carry-forward to five years, while in Mexico a 10 year carry-forward applies. In each of these country examples, the rules do not differ according to firm size.

Business losses realised by individuals in the Slovak Republic may be deducted against other types of taxable income, with the exception of employment income, with unused losses carried forward for up to 5 years. Similarly for Norway, business losses may be set off against capital income, but not employment income, in this case owing to the separate taxation of wage income in the Norwegian tax system. Norway has recently moved to an indefinite loss carry-forward period (previously 10 years).

In the other (14) countries, unincorporated business losses may be deducted against non-business income, including employment income, with different approaches taken to target the loss offset relief to legitimate business activities where restrictive loss treatment could inhibit SME creation and growth. For example, business losses in Denmark may be deducted from personal income which includes employment income. Any excess of business losses over personal income can be carried forward indefinitely (whilst losses incurred before 2002 are limited to a five-year carry forward). Special rules apply to limit business loss deductions to deductions in respect of earning "legitimate" or "real" business income.

In Australia, business losses may be deducted against other taxable income in the year, provided that five criteria are each satisfied. The criteria require that the assessable income and total assets of the business activity exceed certain thresholds; the activity is a primary production or professional arts business that results in taxable income in 3 out of the previous 5 years; the taxpayer's taxable income from other sources is below a given threshold; and the loss arises in circumstances outside the taxpayer's control, or from an activity with a significant commercial purpose (e.g. a start-up expenditure) and the Commissioner of Taxation's discretion is exercised. Unused business losses may be carried forward indefinitely (no carry-back).

Similarly, in Germany, business losses may be deducted against other taxable income in the year, subject to a number of special restrictions, including limits on the deductibility of losses incurred from animal husbandry. Strict ring-fencing rules also apply to losses from forward transactions of non-financial institutions, losses from certain "dormant" partnerships, losses in certain cases of limited liability, and to losses from certain tax deferral schemes. A capped amount of business losses may be carried back one year, with an indefinite loss carry-forward also provided, subject to capping rules.

Under passive activity loss rules in the US, a business owner that is a "passive" investor, not involved in a regular, continuous and substantial way in the operation of the business activity, is only allowed to deduct business losses against other "passive" income. ¹⁵ If instead an individual "materially participates" in the activities of a business, losses may generally be deducted against non-business income. Net operating (business) losses may be carried-back two years and then forward for up to 20 years.

Cross-border tax-planning opportunities (available to multinational enterprises)

Various tax-planning strategies may be used by multinational enterprises (MNEs) – that is firms engaged in cross-border investment (typically large corporations) – to lower the effective tax rate on profits from a given business activity below the rate paid by other firms, including small firms, competing in the same market with only domestic transactions and investment.

For example, tax systems in many countries provide MNEs with significant tax relief by allowing a tax deduction for interest on funds borrowed to finance outbound investment whose income faces little or no domestic tax – a tax break not available to SMEs with solely domestic investments. Some countries attempt to limit these interest deductions using tracing rules, given that foreign profits earned on outbound investment are generally free of home country tax [in countries with territorial (dividend exemption) international tax systems, but also in countries operating worldwide (dividend credit) systems where firms keep profits offshore]. Without limits such as those provided by tracing rules, interest expense can be deducted against domestic source income – implying effectively a tax subsidy, with a mis-match between taxable profits and allowable tax deductions. However, in general, tracing rules are difficult to enforce and may have only a limited effect. The implication is significant tax relief for MNEs, tending to place at a competitive disadvantage SMEs and other domestic firms without cross-border investment (even assuming an ability to borrow and claim an interest deduction on domestic operations). ¹⁶

Even where basic income tax rules applied to small businesses and MNEs are the same, the effective tax rate on host country profits may be very different for MNEs that are able to take advantage of the operation of international tax systems, including inconsistent treatment by host and home countries of cross-border returns. Box 4.2 and Table 4.1 consider one example of this (the use of so-called cross-border hybrid securities, in place of conventional debt).

Box 4.2. Example of cross-border tax planning by MNEs

Table 4.1 illustrates the competitive advantage provided by tax savings from cross-border hybrid financing. Case 1 considers, as a base case, an operating company (OpCo) in country X with USD 100 of operating capital, financed 20 per cent by equity and 80 per cent by third-party debt. Pre-tax profits are USD 6. With a 40 per cent CIT rate, after-tax profits are USD 3.60, implying a net rate of return on investment of 18 per cent.

Table 4.1. Illustration of tax-planning advantages to MNE (hybrid financing example)

Debt/asset ratio: 80%; pre-tax gross rate of return: 20%; interest rate: 5%; corporate tax rate: 40%

	Case 1	Case 1 Conven		Case 3 Hybrid security	
	ОрСо	ОрСо	Foreign parent	ОрСо	Foreign parent
Assets					
Operating capital	100	100	0	100	0
Financial capital:					
Bonds	0	0	80	0	80
Shares	0	0	20	0	20
Liabilities + Equity					
Debt (third party)	80	0	80	0	80
Debt (related party)	0	80	0	80	0
Equity	20	20	20	20	20
Investment returns					
Gross revenue (sales)	20	20	0	20	0
Interest income	0	0	4	0	4
Dividend income	0	0	3.6	0	3.6
Interest expense	4	4	4	4	4
Other expenses	10	10	0	10	0
Pre-tax profit	6	6	3.6	6	3.6
Taxable profit	6	6	0	6	-4
Corporate income tax	2.4	2.4	0	2.4	-1.6
After-tax profit	3.6	3.6	3.6	3.6	5.2
Net rate of return	18%		18%		26%

Notes: Pre-tax rate of return and gross revenue are measured gross of depreciation. Operating capital: refers to non-financial assets (plant, property and equipment).

Other expenses: includes wage expenses, other current expenses, depreciation expense.

Assumptions:

Tax depreciation is assumed to match book depreciation.

Foreign parent is subject to exemption system (foreign dividend income is exempt).

Corporate income tax rate of 40% applies in host country (OpCo) and home country of foreign parent. Non-resident withholding tax is ignored.

In Case 2, the operating company (OpCo) in country X is owned by a foreign parent company in country Y, with identical CIT rates in X and Y. As in Case 1, USD 100 of capital is raised (in this case by the parent), financed 20 per cent by equity and 80 per cent by third-party debt. The parent injects the 100 USD in the operating subsidiary, with OpCo issuing (and the parent purchasing) USD 20 of equity shares and USD 80 of conventional bonds. As in Case 1, pre-tax profits of OpCo are USD 6. After-tax profits of USD 3.60 are distributed to the parent as a dividend on the equity shares, while USD 4 is paid as interest on the conventional bond. The parent is not taxed on dividend income where country Y operates a dividend exemption system to avoid double taxation. The parent is taxed on its

Box 4.2. Example of cross-border tax planning by MNEs (cont.)

interest income. However, in the calculation of the parent's taxable income, the interest income inclusion of USD 4 is offset by a USD 4 deduction for interest on its third-party debt, implying no additional CIT paid by the parent. Thus overall after-tax profit is USD 3.60, implying net rate of return on investment of 18 per cent, as in Case 1. The same result would be observed if the parent and operating company were resident in country X.

Case 3 is identical to Case 2, except the injection of USD 100 in *OpCo* is structured with *OpCo* issuing USD 20 of equity shares and USD 80 of hybrid securities (in place of conventional bonds). The distinctive feature of a cross-border hybrid security is that payments on the security are treated by the host country X as deductible interest, while receipts on the security are treated by the home country Y as exempt dividend income. In this case, the parent is taxed neither on the dividend income nor on the returns on the hybrid security. At the same time, the parent claims a USD 4 deduction for interest expense on its third-party debt (e.g. deducted against other taxable income). Overall, the after-tax profit is USD 5.20, implying a net rate of return on investment of 26 per cent, well in excess of that in Cases 1 and 2, and arising from the miss-match in the characterisation of the return on the hybrid security by different (host and home) countries.

In addition to hybrid securities, the effective tax rate on foreign profits and domestic profits of MNEs may be considerably lower than the effective tax rate on domestic profits of SMEs through the use by MNEs of hybrid structures, tax haven finance affiliates, and possibly other tax planning mechanisms. While a review of these and other similar arrangements is beyond the scope of the current study, the example in Box 4.2 serves to illustrate the fact that tax provisions that on the surface do not appear to treat firms differently can have the effect of providing tax relief to a limited set of firms (i.e. with cross-border holdings), ¹⁷ to the exclusion of SMEs and other domestic firms that do not fall into this category. To the extent that MNEs are increasingly able to access tax relief on cross-border investment – because of increased cross-border activity, or a relaxation of foreign tax credit, anti-deferral, and thin capitalisation rules that would counter tax-planning, or some combination of these factors – possible non-neutralities and distortions to the allocation of capital (and corresponding efficiency losses) tied to developments in this area may increase over time.

A possible counter argument would be that highly mobile foreign investment warrants a lower tax rate on efficiency grounds. That is, because highly mobile factors are likely to be far more responsive to the net-of-tax return than immobile factors, an equivalent tax will be more distortionary on them. As such, a lower effective tax rate on MNEs than on domestic businesses (including most SMEs) may be seen as efficiency enhancing.

Relatively high tax compliance burden on SMEs

The costs of complying with an income tax system, VAT, and other taxes may involve a significant fixed cost component, invariant or largely invariant to firm size, as measured by turnover or assets. This means a relatively high tax compliance burden measured as a percentage of turnover or profit for SMEs compared with large firms. The smaller the firm measured using turnover, total assets or employment, the higher the compliance burden of a given compliance cost. In certain cases, high compliance costs may discourage SME creation and growth, depending on compliance costs encountered at different firm sizes, which in turn depends on the various taxes and corresponding thresholds in place.

One could argue that a relatively high compliance cost on SMEs results in a misallocation of resources, with under-investment in SMEs relative to a case where compliance costs varied proportionately with firm size (recognising that absence of compliance costs is not possible, given the need for taxes and the advantages of having SMEs pay them), and that this miss-allocation could be possibly addressed by retaining existing tax incentives for SMEs if consideration is being given to removing those incentives, or possibly introducing a new tax incentive to compensate for relatively high SME tax compliance costs.

Taxation on sale or inheritance of an SME

For many owners of SMEs the value of their business constitutes a major part of their assets. Funding retirement therefore often implies selling a closely held business. This may result in substantial tax consequences. For example, capital gains accrued over many years but taxed only on realisation will incur a greater tax liability where taxed at progressive rates, than if they had been taxed as they accrued. Similar concerns may arise on the death of an SME owner, with resultant capital gains tax as well as inheritance tax consequences.

Country examples. A number of countries have responded to this concern by introducing measures to lessen the capital gains tax burden on retirement and on inheritance of an SME. For example, Australia, Belgium, Germany and Ireland report lower rates or exemptions for capital gains on retirement, while Sweden and Norway allow income to be spread out over a number of years. Concessionary treatment of capital gains is also provided in Canada and Denmark if the gains are placed into specified retirement savings schemes. On the death of an SME owner, Australia, Germany and the UK provide rollover relief from capital gains tax, while Spain exempts gains entirely.

Regarding inheritance tax, Ireland provides a 90 per cent reduction for SME business assets, while Spain reduces inheritance tax by 95 per cent. A smaller reduction (10 per cent) applies in Japan.

4.2. Arguments against SME tax incentives

Difficulties with "market failure" arguments

Market failure arguments for tax incentives for SMEs raise questions and an assortment of practical difficulties. One question is whether positive spill-over benefits are limited to SMEs. For example, it is not clear (in the absence of evidence) that SMEs are more likely than large companies to confer knowledge to workers, or to be innovative. In other words, positive externality arguments may apply to investment generally, without a connection to size. ¹⁸ It is also noteworthy that certain theoretical models examining capital market failure find that asymmetric information may in some cases result in overinvestment, rather than underinvestment. ¹⁹

Moving beyond theoretical arguments, consideration of how one would design and implement a tax incentive in practice to correct for market failure is fraught with many questions not answered (let alone posed) in the supporting literature. What is apparent is that precision should be required, given that "getting it wrong" in terms of the rates of tax relief provided and/or the targeting of the relief, could potentially result in a misallocation of resources (implying efficiency losses), with too much capital being directed to targeted investment, for example, and/or investment encouraged towards (or away from) non-targeted investment.²⁰ In this likely scenario, it is not clear to what extent the

efficiency losses caused by imprecision would counter and possibly more than offset intended efficiency gains from addressing market failure.

In principle, ex ante efficient intervention requires that the degree of market failure be measured – for example, the amount of under-investment (pre-reform), assessed relative to some socially optimal level. The problem here is that it is not possible to establish on any solid ground what the optimum level is. Also required is some estimate of the sensitivity of the relevant activity (e.g. investment) to a relevant tax indicator (e.g. the effective tax rate on profits from investment), where plausible elasticity estimates may cover a wide range, and where the identification of the relevant tax indicator is not certain. Another central variable is a measure of the sensitivity of the relevant tax indicator to the specific tax incentive instruments being considered (e.g. rates of depreciation allowance), which may be difficult to assess. Beyond these requirements, efficient targeting would require reasonably accurate estimates of the amount of tax revenue foregone, and indications of the combination of adjustments to other taxes and expenditures that would be appropriate, taking into account efficiency (and equity) implications of these changes. Addressing each of these issues is complex, leaving little hope that policy guidance stemming from such an exercise could be regarded as robust.

Where certain factors including possibly government policy (e.g. financial markets policy) are constraining the financing of "quality" SMEs, it makes sense to consider first whether the relevant factors or policies can be adjusted, and at what cost. That is, well before considering a targeted "tax fix", generally the first-best approach is to consider whether and how the contributing factors can be addressed directly, and avoid reliance on the tax system to somehow correct for impediments arising elsewhere. For example, if on account of asymmetric information, capital markets are denying financing to SMEs in cases where funds would be provided under symmetric information, it may be that government can play an effective role in facilitating transparency. This could, for example, be achieved by increasing financial reporting requirements on SMEs (with quality, as well as quantity, of information being important to potential investors), although this would require a trade-off to be made between the increased compliance costs imposed on SMEs, and the potential reduction in financial market imperfections. Rather than requiring more information from SMEs, an alternative would be to provide more information to SMEs to encourage better business management and assist in making them more attractive to lenders.²¹

Scope may also exist for strengthening laws affecting a firm's ability to protect property rights, and thereby contain certain types of "spill-over" benefits so that firm's more fully reap the rewards of their investments, leading to greater private investment in the absence of special tax incentives.

Similarly where basic provisions of the tax system are posing an impediment to SME creation or growth, the costs and benefits of adjusting the relevant provisions should be addressed. For example, where business costs of maintaining tax accounts, filing returns and otherwise complying with the tax system are found to be excessive and particularly burdensome for small businesses, consideration should be given to the costs and benefits of introducing targeted simplification measures.

Possible opportunities and constraints in adjusting basic tax provisions

Uniform application to firms of all sizes of certain basic (generally applicable) statutory and administrative provisions of income and consumption taxes may discourage

the creation and growth of SMEs in certain cases. Moreover, uniform application of basic provisions may discourage tax compliance for some individuals.²² In an effort to support SME creation and growth, foster SME tax compliance, and possibly meet other objectives, policy makers may find means to adjust basic provisions affecting all firms, regardless of their size, where feasible and appropriate, to address these goals.

For example, policy makers may move towards integration of corporate and personal taxation of dividend income and capital gains, with possible approaches including imputation credits giving partial (or full) relief for corporate tax paid on distributed income, fixed dividend credits determined independently of corporate level tax paid, and partial inclusion of dividend income in the personal tax base.²³

Alternatively or in addition to special measures to integrate corporate and personal taxation of dividends paid out by corporations, some countries may provide firms (in some cases, regardless of their size) the possibility to chose an alternative business form – for example, a limited partnership, trust or special corporate entity – that provides flow-through taxation (so that corporate level tax and thus double taxation is avoided), while possibly providing other advantages that corporate status would otherwise provide (e.g. limited liability to shareholders).

Country examples. Half of the survey countries, including Australia, the Czech Republic, Denmark, Germany, Ireland, New Zealand, Norway, the Slovak Republic, Sweden and the US, report having limited partnership and/or partnership regimes, providing flow-through treatment at the entity level, implying taxation of income at the personal shareholder (rather than entity/enterprise) level, and in some cases limited liability for limited partners.²⁴ Under most limited partnership regimes, limited partners are not allowed to represent or take part in the management of the enterprise. None of the countries indicate a size-limitation in relation to obtaining partnership status (although other qualifying criteria may apply).

In Australia, partners in certain limited partnerships operating for the purpose of investing in venture capital activities, and treated as flow-through vehicles for tax purposes, are entitled to tax concessions on the profits and gains from the eligible venture capital investments.²⁵ Small businesses may also operate as trusts in Australia, whereby the trustee owns the property of trust estate (e.g. land, buildings, other assets) while net trust income is paid to the beneficiaries and subject to personal tax at their marginal tax rate.

In the US, flow-through treatment is available to so-called Sub-chapter S corporations, earning income subject only to shareholder tax rates. Conditions for eligibility for Sub-chapter S corporation status include: no more than 100 shareholders;²⁶ the corporation must be a domestic corporation; and only one class of stock. Also in the US, limited liability companies (LLCs) flow-through taxation of income and limited liability for the members.²⁷ Furthermore, in the US, an unincorporated business may elect to be treated as a corporation for Federal income tax purposes.

The preceding provisions all address double taxation of corporate profits, which may be particularly impeding for SMEs. Similarly, scope may also exist for liberalising general loss offset provisions, tightening interest deductibility rules, increasing effective tax rates on MNEs, and providing increased simplicity in complying with administrative aspects of the tax system.

At the same time, however, possible adjustments to generally applicable tax provisions (e.g. to reduce double taxation) may be very limited, depending on the particular country and tax system in question, taking into account (estimated) revenue losses and concerns and uncertainty over efficiency and equity effects. Moreover, it may be that while certain basic provisions may be particularly impeding to certain SMEs, they may not be to others, whilst being impeding to certain large firms (e.g. those without international transactions enabling aggressive tax planning). Targeting firms that are particularly constrained by a uniform set of tax rules should be expected to be imprecise (inexact), to a degree dependent on the targeting criteria (with highly specific criteria raising some difficulties).

Tax planning opportunities for SMEs

Multinational enterprises are not the only business entities with opportunities taken to tax-plan (within or outside the tax law). Establishing a business, rather than seeking or remaining in dependent employment, may be attractive to a taxpayer for a number of reasons, including the possibility to influence ones' tax liabilities.²⁸ In particular, certain personal expenses may be characterised as business expenses – given difficulties faced by policy makers in drafting tax laws and regulations clarifying what can be considered eligible deductible business expenses, and the inevitable "grey areas" in interpretation that arise – implying a degree of tax relief not possible with dependent employment.²⁹

Aside from grey areas, perfectly legal opportunities may be taken by SMEs to minimise their tax bill. For example, as considered above, in some countries firms may opt structure themselves as a limited partnership, trust or special corporate entity providing flow-through taxation so that corporate-level tax and thus double taxation is avoided, while possibly providing other advantages that corporate status would otherwise provide (e.g. limited liability to shareholders).

As another example, where the statutory corporate income tax rate is low relative to the personal tax rate on unincorporated business income/loss,³⁰ the tax system may encourage incorporation of profitable firms, particularly firms planning to reinvest earnings over a number of years. However, the same tax rate structure may discourage businesses (e.g. early-stage businesses) in a loss position from incorporating during the loss-making years. This result may be observed where losses can be written off at a higher (personal) tax rate, and depend on the flexibility of business loss offset rules under the personal income tax (and under corporate income tax), and in particular whether business unincorporated business losses can be set off against other personal taxable income.

Efficiency and revenue considerations with the use of tax incentives

Given difficulties in identifying and targeting instances of market failure, and limiting tax incentive relief to just offset under-investment resulting from market failure (see above), it must be accepted that tax incentive regimes will cause misallocations of capital in certain areas and corresponding efficiency losses. While the objective may be to ensure an overall (net) efficiency gain by countering market failure, it is difficult to be confident ex ante that such an outcome will in fact occur.³¹

Indeed, a central challenge in targeting tax incentives – for example, to small businesses engaged in a particular activity (e.g. R&D) – is containing relief to targeted firms/activities, recognising that targeting criteria will be carefully analysed by all taxpayers, with attempts made to access tax relief to minimise tax paid and increase

after-tax profit. For example, a non-qualifying (medium or large) firm may reorganise itself into two or more new business entities to access tax relief conditional on firm size, determined on the basis of turnover, profit and/or capital (depending on the amount of tax relief possible, relative to cost of business reorganisation, and the existence or not of anti-fragmentation rules). Boundaries of qualifying business activities will be tested with companies attempting to characterise or re-characterise certain activities so that they fall within the letter of the law or administrative rule. For example, establishing what expenditures qualify to receive R&D tax incentives is not straight-forward, as reflected in the significant tax administration expenses incurred in many countries to manage the delivery of these incentives.

Inevitably, governments come under pressure to extend tax incentive relief to taxpayers/activities not initially targeted (e.g. on the basis that competitive positions have been disadvantaged). Governments also come under pressure to ensure that all parties in a targeted group receive equal treatment. A key issue here concerns the fact that not all firms are profitable in a given year, and, due to their tax status (profitable versus loss-making) have a varying ability to claim or benefit from tax incentive relief. This can pit taxpayers against government, with the latter charged with ensuring that tax revenue losses and efficiency losses are contained by limiting tax-planning opportunities and the pools of human resources directed in the economy towards developing various market schemes aimed at transferring tax incentives from taxpayers that cannot currently claim them to those that can.

Furthermore, accelerated depreciation, and to a greater extent enhanced allowances and investment tax credits, combined with flexible business loss carryover and tax credit carryover rules, can lead to a significant build-up of unutilised tax deductions and credit – that is, earned but unused tax offsets that can be carried forward by the taxpayer to offset tax in future years. This build up in unused tax offsets is typically matched by increased pressure on government to allow firms in a loss position (e.g., start-up firms) to somehow access the tax relief, with minimum expectations being the ability to carry forward balances of business losses and unused investment tax credits to be claimed in future years, with business preferring the ability to carry-forward these amounts with interest.

To deny this to firms that are profitable over the longer term but currently loss-making introduces a non-neutrality that tends to place them at a competitive disadvantage relative to currently profitable firms able to take advantage of the tax incentives. The existence of large balances of unused business losses and tax credits creates incentives for firms in a loss position to "sell" these amounts to firms outside the target tax incentive group that are profitable and able to use them to reduce their tax liability. This in turn puts pressure on host governments to ensure that rules and administrative practices are in place to limit unwanted loss and credit trading, typically with new tax loopholes created as old ones get shut down. The revenue costs resulting from loss transfers can be huge and dwarf foregone revenues from the targeted investment activities.

Alongside these considerations, it is useful to recall from investor surveys that where tax policy is identified as a major issue in investment decisions, transparency of the tax law and administrative certainty are often ranked ahead of special tax relief by investors. Uncertainty over tax consequences of special tax incentives increases the perception of risk and may discourage investment. As a guiding principle, the law and supporting regulations should strive to provide clear guidance over the treatment of basic

transactions. The administration of the law should be as consistent and non-arbitrary as possible and interpretations and advance rulings should be readily available.

Furthermore, frequent major changes to tax laws and regulations should be minimised. This is salient where unforeseen results from tax incentives, once in place, require a quick adjustment. Frequent changes to the tax laws can contribute more than the provisions themselves to a perception that the tax system is complex and difficult to comply with. Frequent changes can make tax administration more difficult and may have other undesirable, unintended effects. At the same time, tax incentives, even those introduced on a temporary basis may be difficult to purge from the system, with pressures for the provisions to be extended, or made permanent features of the tax system.

It should also be recalled that administrative discretion is an important issue. On the one hand, the granting of incentives by discretion (with pre-approval of authorities) may be attractive, in that it may improve targeting to desired activities, reduce the scope for tax avoidance, limit up-take and more generally limit the revenue cost. However, the approval process may be time-consuming and cumbersome. Administration discretion can also undermine transparency of the tax system, leading to a sense of unfairness, and tend to increase uncertainty with negative investment incentive effects.

4.3. Main income tax incentives for SMEs

Where the relative merits of tax concessions to SMEs are seen to outweigh their costs, income tax relief may be provided to SMEs in a number of ways (see Box 4.3). Alternative income tax incentive measures include: 32 reductions in the statutory corporate income tax rate; accelerated depreciation allowances for capital expenditures; enhanced depreciation allowances for capital expenditures; general or targeted investment tax credits; and financing incentives. 33

Statutory corporate tax rate reduction

A common form of tax relief to encourage SME investment is a reduced (statutory) corporate income tax rate on qualifying income, as reviewed in some detail in Chapter 2. The rate reduction may be targeted at small business income in a number of ways (in some systems only to firms satisfying a small business test, in other systems available to SMEs and large firms but only up to some taxable profit limit), together possibly with other targeting criteria (e.g. profits from targeted business activities).

In general, difficult definitional, administrative and compliance issues arise where a reduced rate is targeted at income from a subset of activities or investors. Where a reduced rate schedule applies only to profits from a targeted activity, careful legislative drafting, regulations and administration are generally required to clarify eligibility and limit tax avoidance and revenue leakage.

Accelerated depreciation allowances

Another channel through which investment incentives may be altered is via special tax provisions that lower the effective price of acquiring capital. Two main sorts of incentives can be distinguished in this category: i) investment allowances (accelerated and enhanced depreciation allowances), which are deductions against taxable income; and ii) investment tax credits, which are special offsets against income tax otherwise payable. Both investment allowances and investment tax credits are earned as a fixed percentage of

Box 4.3. Simple framework for addressing intended effect of tax incentives for SME investment

Main tax incentives for SME investment can be usefully categorised according to the mechanism or channel through which they influence the benefits and costs of additional investment at the margin:

- incentives that reduce the statutory (or nominal or "headline") corporate income tax rate on profits derived from investment;
- incentives that reduce the after-tax cost to business of purchasing new capital (through accelerated or enhanced tax deductions, and tax credits); and
- incentives that reduce the after-tax cost of raising funds to finance the purchase of new capital.

The following summarises a useful paradigm, with roots traced to the seminal work by Jorgenson (1963) on the user cost of capital concept, for considering the influence of tax incentives on marginal investment decisions over the level or rate of investment for a given project site. In theory, under certain stylised assumptions, market-value maximising managers of firms in competitive markets would be expected to undertake investment in capital just up to the point where the marginal benefit from the last unit of capital installed just equals its marginal cost. This equilibrium condition can be expressed as follows:

$$(\Delta Y/\Delta K)(1-u) = (r+d)(1-A)$$
 [1a]

or equivalently,

$$Fk = (r+d)(1-A)/(1-u)$$
 [1b]

In expression [1b], the term $Fk = (\Delta Y/\Delta K)$ represents the increase in gross revenues (Y) accompanying a (one currency) unit increase in the representative firm's capital stock (K). With diminishing returns to installed capital at the margin, Fk falls as the capital stock increases. Revenues from investment at the margin are subject to the statutory or "headline" corporate income tax rate, denoted by (u). The left-hand-side of [1a] measures the after-tax marginal benefit from an additional unit of investment.

The after-tax marginal cost of investment is measured on the right-hand-side of [1a]. This cost is the product of two terms. Term (1 - A) gives the after-tax purchase price of one additional unit of capital where A measures the present value of tax incentives tied to the purchase of a unit of capital (e.g. investment tax credits and tax depreciation allowances). The higher is the investment tax credit rate, or the rate of tax depreciation allowance, the larger is (A). The term (r + d) is the sum of the real rate of return required by investors on their capital investment (r), and the rate of economic depreciation of the capital due to wear-and-term and technological obsolescence (d). On the last currency unit of capital installed, acquired at an after-tax price of (1 - A), the firm has financing charges of r(1 - A), and in each period must replace worn-out capital at an after-tax cost measured by d(1 - A).

This framework is useful for considering the channels through which various tax incentives may operate to encourage investment behaviour. First, reducing the statutory corporate income tax rate (or eliminating taxation, as under a tax holiday) will increase the after-tax revenues from investment at the margin, which tends to lead to a higher equilibrium capital stock. A reduction in the corporate tax rate, however, also lowers the present value of deductible depreciation allowances, which lowers A. A reduction in the corporate tax rate also increases the after-tax cost of debt finance by reducing the value of interest deductions, which also acts to lower A. Therefore, *a priori*, the impact on investment incentives of a reduction in the corporate income tax rate is ambiguous. However, the first-noted effect will generally dominate under typical parameter settings, implying that investment incentives will be increased by a reduction in the corporate tax rate.

Box 4.3. Simple framework for addressing intended effect of tax incentives for SME investment (cont.)

Second, introducing or enriching a system of investment tax credits increases the value of A, which tends to encourage investment at the margin. Similarly, increasing the rate at which capital can be depreciated for tax purposes (e.g., accelerated depreciation, or immediate and full expensing of capital costs) increases A and thereby investment incentives. Depending on the rate and design of the investment tax credit and capital cost allowance (i.e., tax depreciation) regime, the term (1 - A) may be negative and the tax system may on balance act to encourage rather than discourage investment relative to the no-tax case. Such situations lead to an increased benefit when costs are increased and so are particularly susceptible to tax avoidance activity and inefficient investment patterns.

Thirdly, government policy can potentially influence the firm's pre-corporate tax cost of finance (r). As already noted, the cost of finance, which generally is some weighted average of equity and debt finance, will tend to increase if the statutory corporate income tax rate is reduced. In some cases, the cost of equity finance may be a function of personal tax parameters including the degree of double taxation (corporate and personal tax integration) relief. In particular, reductions in shareholder-level dividend tax rates and capital gains tax rates may lower the cost of funds for SMEs that obtain financing from domestic capital markets (as opposed to international capital markets).*

* The marginal investment condition given by [1b], relevant to the optimal size of a business (investment project), does not address the taxation of infra-marginal economic profit (returns in excess of required or normal rates of return) on infra-marginal units. The more significant are these "rents", the more important is the corporate income tax rate (taxing rents) to a decision of whether to establish a business (e.g. versus invest in other assets).

qualifying investment expenditures. However, because the first is deducted against the tax base, its value to the investing firm depends, among other things, on the value of the corporate income tax rate applicable to the tax base – the higher (lower) is the tax rate, the higher (lower) is the amount of tax relief on a given amount of investment allowance claimed. In contrast, variations in the corporate tax rate do not affect the value of investment tax credits.³⁴

Accelerated depreciation allowances allow firms to depreciate (write-off) capital costs over a shorter time period relative to the estimated useful economic life of the asset (which may roughly correspond to that at which capital costs are depreciated for book (financial reporting) purposes). While accelerated depreciation does not change the total amount of capital cost to be depreciated, it increases the present value of the claims by shifting them forward, closer to the time of the investment. The present value of depreciation allowances is the greatest where the full cost of the capital asset can be deducted in the year the expenditure is made (immediate expensing).

Where a firm is in a "tax loss" position (has negative taxable income) in the year depreciable capital costs are incurred – which is particularly likely during early years of an investment project, especially for capital intensive projects – depreciation allowances only provide value to the investor if the additional tax loss (the increment to negative taxable income) generated by the tax deduction can be carried forward (or, under some systems, carried back) or otherwise transferred to offset future (or previous) tax liabilities. Fully symmetric treatment with profitable firms may be achieved if depreciation allowances can be carried forward with interest, given the time value of money.

In addition, and related to the question of appropriate carry-over provisions, is the question of whether to make depreciation claims mandatory (allowed only in the year in which the investment is made and the claim first becomes available), or instead discretionary (giving a taxpayer the choice to carry depreciation claims forward).³⁵ In general, providing discretionary accelerated depreciation significantly improves the investor's situation. Providing discretionary accelerated depreciation plus loss carry-forward provisions, thereby allowing both tax losses and business losses to be carried forward, improves the situation further.

Enhanced depreciation allowances

With an enhanced depreciation allowance, firms are allowed to claim total deductions for the cost of qualifying capital that exceed the (market) price at which it is acquired. An enhanced depreciation allowance may be combined with an accelerated depreciation system, to provide accelerated deductions on an enhanced (inflated) cost base. Depending on the rate at which the enhanced costs can be depreciated, such a system may generate a stream of tax deductions that exceed, in present value, acquisition costs.

In theory, tax incentives based on investment expenditures, such as accelerated depreciation, immediate expensing of some proportion of capital costs, enhanced depreciation allowances, and investment tax credits (see below), should provide a larger investment response for each dollar of tax revenue foregone, compared to a corporate tax rate reduction. Unlike a corporate tax rate reduction, tax incentives (and other subsidies) tied to the cost of purchasing capital benefit only new investment, and therefore may provide a larger reduction in the effective tax rate on investment (which takes into account the impact of taxation on both marginal revenues and costs) at a lower revenue cost. A reduction in the statutory corporate tax rate, in contrast, benefits "new" as well as "old" (previously installed) capital, providing existing investors with a windfall gain by increasing the present value of the future stream of after-tax earnings from existing capital. Accelerated and/or enhanced depreciation (and investment tax credits) may avoid providing relief to existing capital, ³⁶ and may help address possible liquidity constraints by shifting relief up-front, provided that the firm is taxable and able to sue.

While tax incentives tied to the level of investment may be attractive in that they reward only new capital purchases, it is important to recognise that targeting relief to newly acquired capital does not ensure that windfall gains to investors are avoided. This is because some (unknown and possibly significant) fraction of new investment that qualifies under a given tax incentive program would have occurred in any event (in the absence of special tax incentive relief).

Investment tax credits

Another main tax incentive instrument is an investment tax credit, earned as a percentage of qualifying expenditures. Tax credits provide an offset against taxes otherwise payable, rather than a deduction against the tax base (thereby removing the dependency of the value of the incentive on the income tax rate).

Investment tax credits may be flat or incremental. A flat investment tax credit is earned as a fixed percentage of investment expenditures incurred in a year on qualifying (targeted) capital. In contrast, an incremental investment tax credit is earned as a fixed percentage of qualifying investment expenditures in a year in excess of some moving-average base (e.g., the average investment expenditure by the taxpayer over the

previous three years). Typically a main intent behind an incremental tax credit is to improve the targeting of the relief to conditional investment expenditure – that is, to investment expenditure that is conditional on (would not have occurred in the absence of) the tax relief.³⁷ This targeting is not ensured, however, as investors may have planned to increase their investment expenditures beyond levels in prior years in any event, and it has a reduced or no beneficial effect for firms whose pre-incentive level of investment is falling (perhaps because they have just completed a major capital expansion, or are faced with a market in recession) which may be just the time that policy makers would want investment incentives to be triggered.

Like investment allowances, investment tax credits are generally of no immediate use to firms in a "tax loss" position. At a minimum, governments may be expected to allow firms in a temporary loss position (e.g., start-up firms) to carry forward balances of earned but unused investment tax credits. To deny this would place them at a competitive disadvantage relative to profitable firms able to take advantage of special tax expenditures (although, even with carryover provisions, a timing disadvantage would still persist). An alternative to tax credit carryover provisions is to allow for tax credit "refundability". Where a credit is refundable (non-wastable), taxpayers are provided with cash relief for that portion of the credit that cannot be used to offset income tax liability in the year the credit is earned. Refundability can boost cash-flow and address possible liquidity constraints inhibiting investment plans.

However, from the government's perspective, great care must be exercised when pressures amount for the introduction of refundable tax credit provisions. Refundability, by design, increases the cost of an investment tax credit program by shifting forward tax expenditures that would be delayed under tax credit carryover provisions. However, at the same time, refundability extends support to a subset of non-taxpaying firms (e.g., start-ups) that will eventually fail and never be profitable and taxable. Tax credit carryover provisions, in contrast, limit program costs by extending assistance only to profitable firms. By virtue of the fact that a firm must be profitable for it to be subject to income tax (and only then able to claim a tax credit), the carryover design feature has an inherent selection device. On the downside, where relief from excess credits is limited to a carryover, immediate financing relief may be denied in certain cases to firms that are currently in a loss position but potentially profitable.

While not perfect, the overall results with assistance limited to a carryover of tax relief may however be more efficient than those that might occur with a loosely targeted refundable tax credit. A key risk with the latter is that the prospect of generous refundable tax credits will encourage the creation of "sham" business activities set up primarily or solely for the purpose of receiving a refund cheque from the government. Refundability tends to increase the incentive to re-characterise non-targeted activities as qualifying ones, putting additional pressure on tax administration and testing further the limits of the qualification criteria. For example, tax-planners might explore "holes" in the tax legislation and regulations to determine whether capital assets could be purchased, with the pretence of undertaking a *bona fide* qualifying activity, and then resold to the capital supplier or to a third party, with a tax credit refund in hand then split amongst the interested parties. Given this, policy makers may wish to mitigate difficulties by applying a discount to the amount of credit refunded.

Financing incentives

A variety of financing incentives may also be used to encourage investment. In principle, financing incentives, which lower effective tax rates on returns to investors (shareholders, or bondholders), may operate to increase investment by lowering the after-corporate tax (hurdle) rate of return that a firm is required to earn, in order to pay investors their expected rate of return. In general, a requirement for financing incentives to operate efficiently is that investors lower their expected (pre-personal tax) rate of return by an amount reflecting in full the amount of tax relief that they are provided. A second requirement is that the financing incentive is directed at the marginal investor, meaning the investor that provides the marginal source of financing to an investment.

There are generally three broad classes of financing incentives delivered through the tax system, with each intended to lower a firm's cost of capital (i.e., discount rate): i) up-front personal tax incentives (tax deductions or credits) which provide shareholders with personal income tax relief on the cost of their equity investments in (or loans to) targeted activities; ii) down-stream personal tax incentives (tax deductions or credits including imputation credits and dividend tax credits) which provide shareholders with income tax relief in respect of the return (dividends or capital gains) from their investments in targeted activities; and iii) flow-through tax incentives which allow businesses to transfer unused tax deductions or tax credits earned on qualifying expenditures to investors, to be used to offset shareholder-level rather than business-level taxation. This latter form of incentive is generally applied to situations where businesses are expected to be non-taxable for a number of years and thus have no immediate use for tax preferences.

As in other areas where calls are made for special tax relief, possible outcomes of providing special tax incentives to SMEs, including possible benefits and costs need to be estimated and carefully weighed, recognising that a given targeted provision in one country may not be appropriate in another, given different country circumstances and policy frameworks. Serious and cautious analysis is required, given the need to balance competing policy considerations (revenue requirements, efficiency, equity, simplicity), with many complexities and uncertainties involved. Key challenges include determining how a particular policy adjustment providing tax relief will impact with other tax provisions, and how to limit tax relief to targeted activities. Another is anticipating unintended effects in the markets and by taxpayers. Arguments need to be critically analysed in the light of available data and evidence, supporting, questioning or refuting arguments for policy change. Where possible impediments to SME financing or investment are identified (and are not directly related to government policy), attempts to find a solution should begin with an examination of the source and the size of the impediment(s) and contributing factors, and a careful assessment of whether government intervention is in order.

4.4. Examples of tax incentives to encourage SMEs

This section of the paper considers special income tax incentives targeted to encourage SME investment, as reported by the countries surveyed in the SME tax questionnaire. The coverage is for the most part factual, although possible factors motivating the use of such provisions are in some cases addressed. In very broad terms, SME tax incentives include reduced tax rates on SME profits (considered in some detail in Chapter 2), accelerated depreciation and investment tax credits for investment by SMEs, as well as shareholder-level incentives. The latter group of incentives include up-front

income tax relief on the purchase of SME shares, and preferential treatment of capital gains/losses on SME shares.

As noted in Section 4.1, uniform application of certain basic provisions of income and consumption taxes may impede SME creation and growth, at least in certain cases, and may also discourage tax compliance for some individuals. In some cases, policy makers may find means to adjust basic provisions affecting all firms (e.g. more flexible general loss offset rules), where feasible and appropriate, to address these goals.

However, adjustments to generally applicable provisions may not be feasible or appropriate, and policy makers may wish to consider targeting special relief to SMEs.³⁹ Where this can be done, revenue losses from providing tax relief may be contained, and efficiency improved (if the market and/or tax systems are failing, the impediment being addressed is specific to SMEs, and SMEs can be effectively targeted). The questionnaire responses show that a number of OECD countries are prepared to target tax relief to SMEs, through policy and/or administrative adjustments to the income and/or consumption tax provisions. This section reviews a sampling of policy provisions in the survey countries that lower the amount of tax paid by SMEs or by SME investors.

Simplification provisions introduced primarily to simplify compliance procedures with VAT and/or income tax may operate to lower the total burden imposed by the tax system on SMEs. In this sense, simplification provisions are similar to targeted tax incentives for SMEs. However, the review in this section does not cover special VAT, income tax and social security simplification provisions for SMEs. These are addressed separately in Chapter 5 of the report.

A further and final point to make before turning to the review of targeted tax incentives for SMEs, is that the provision of special targeted income tax provisions to lower the tax liability of SMEs (the amount of tax paid to government), or lower the compliance costs for SMEs (or both), may be seen as supportive of *both* SME creation and growth, and SME tax compliance (adherence to tax rules), as in general decisions over SME creation and growth depend on the overall tax burden imposed.

Business-level tax incentives targeted at SMEs

At a general level, the various approaches used by governments to preferentially tax SMEs may be distinguished in one or more ways. One way is to distinguish policy adjustments at the business (incorporated and/or unincorporated) level, and adjustments at the personal (business owner or shareholder) level. Provisions reported by surveyed countries are reviewed below. The review does not include reduced statutory tax rates on small business profits, addressed already in Chapter 2 comparing effective tax rates on unincorporated business income versus incorporated business income (see Figure 2.4). Moreover, the SME tax questionnaire did not request information from countries on this type of incentive, already reported in Table II.2 of the OECD Tax Database.

The Czech Republic, Denmark, Ireland, New Zealand, Norway, the Slovak Republic and Sweden all report that there are no special allowances or tax credits related to investment or employment that are targeted at SMEs. While certain tax credits for SMEs exist in Italy, targeted at certain sectors, they have not been widely used by potential beneficiaries, and therefore are not reported by Italy for the purpose of the current publication.

a) Expensing, accelerated depreciation and tax credits for investment by SMEs

Where the cost of new equity finance is relatively high, the cost of funds for SMEs may be reduced by lowering the effective tax rate on business profits, as this tends to increase the amount of after-tax profits available for retention. While a small business tax rate is often singled out as achieving this, it also holds that tax relief tied to investment (e.g. through accelerated depreciation, or an investment tax credit) increases available after-tax profits, while at the same time making the tax relief conditional on undertaking investment expenditure.

In the US, businesses with less than USD 430 000 in qualifying investment may elect to expense up to USD 108 000 of the cost of qualifying property placed in service each year. The USD 108 000 amount is phased out dollar for dollar starting at USD 430 000 of qualifying investment. 40 Mexico allows expensing of investment in fixed assets for unincorporated businesses with taxable income below USD 365 350 (MXN 4 million). In Spain, SMEs are able to expense assets valuing less than USD 781 (EUR 601), up to an overall ceiling of USD 15 630 (EUR 12 024) in the tax period.

Spain also reports accelerated depreciation provisions for new assets purchased by SMEs, calculated as two-times the maximum linear coefficient provided in the official tables. Where an asset is sold and the proceeds are reinvested, the rate of acceleration is faster (three-times the maximum linear coefficient).

Special depreciation provisions also apply to SMEs in the UK, where for this purpose an SME is defined as a business satisfying at least two out of the following three tests: annual turnover no greater than USD 44 669 760 (GBP 22 800 000); assets (balance sheet total) no greater than USD 22 334 880 (GBP 11 400 000); and total employees no greater than 250.⁴¹ In the UK, where the main rate of capital allowances for general spending on plant and machinery is 25 per cent, on a declining-balance basis, SMEs are allowed to claim a 40 per cent first-year allowance on investments in most plant and machinery (with some exceptions including expenditures on long-life assets, cars and assets for leasing). The reported purpose of the accelerated depreciation provision is to support SME investment by providing a cash-flow benefit to SMEs for investment in plant and machinery. The first-year allowance rate for SMEs is temporarily increased for the tax year 2006/07 from 40 to 50 per cent.

SMEs in Germany with business assets under USD 265 853 (EUR 204 518), as well as establishments that determine taxable profits using the cash accounting method, are provided with special additional depreciation (in addition to regular depreciation allowances) of up to 20 per cent on the acquisition price and production costs of movable assets. ⁴² Eligibility for the special depreciation allowances, which are available for up to five years, depends on the prior formation of reserves for the acquisition of the asset.

SMEs in Japan acquiring certain depreciable machinery may elect to have special initial depreciation of 30 per cent of the acquisition costs, or a special seven per cent investment tax credit. In Poland, small taxpayers, defined (since 2007) as taxpayers with turnover in the prior year no greater than USD 1 039 920 (EUR 800 000) are entitled to more generous tax depreciation to encourage entrepreneurship. Belgium also reports that incorporated SMEs are subject to less restrictive tax depreciation rules.

Canada reports special provisions for small Canadian-controlled private corporations (CCPCs) under its Atlantic Investment Tax Credit (AITC) programme (the objective of this programme is to promote development in the Atlantic Provinces and Gaspé region of Canada and their associated offshore areas). In general, tax credits earned at 10 per cent on

qualifying expenditures are non-refundable (wastable). However, the AITC is refundable at a rate of 40 per cent for CCPCs that have taxable income below USD 340 720 (CAD 400 000) and taxable capital below USD 8 518 000 (CAD 10 million).

Greece also reports that it provides regional tax allowances for SMEs (the rate of allowance varies by region in the country). The tax allowances are subject to a cap that depends on the size of the business. In particular, the cap for very small enterprises is USD 129 990 (EUR 100 000), while the caps for small enterprises and medium enterprises are set at USD 194 985 (EUR 150 000) and USD 324 975 (EUR 250 000) respectively. The firm size characteristics for these three categories are determined according to EC regulation 70/2001.

Belgium reports that taxpayers are entitled to a tax credit if they have increased the value of their unincorporated business's assets. The tax credit is equal to 10 per cent of the difference between the fiscal value of business assets at the end of the year, and the highest value of the business assets in any of the previous three years. The tax credit is limited to USD 4 875 (EUR 3 750) per spouse. An investment allowance of 3.5 per cent of investments by natural persons is also allowed in Belgium. The investment can be in tangible or intangible fixed assets, but they must be assigned to Belgium for the exercise of a professional activity. Increased rates apply to investment in patents (13.5 per cent); ecologically-safe R&D (13.5 per cent); energy saving (13.5 per cent); and investment aimed at the securing of professional premises (20.5 per cent). Any allowance not able to be utilised in the current tax year may be carried forward to subsequent years.

Belgium also provides a 50 per cent exemption for corporate profits placed into an investment reserve. Within three years of setting up the reserve, the company must invest an amount equal to the reserve in eligible tangible or non-tangible fixed assets. Otherwise the full amount is treated as taxable corporate profits. The reserve cannot exceed USD 48 746 (EUR 37 500).

b) Special incentives for employment by SMEs

Where an SME in Spain invests in new depreciable capital, and in the same tax period increases the number of hired employees within the firm, then provided that the increased employment is maintained for at least two years, immediate expensing of new assets is allowed up to an amount equal to USD 155 988 (EUR 120 000) times the number of new hired employees.

In Belgium, SMEs receive an allowance of USD 6 292 (EUR 4 840) in each tax year for each additional staff member employed in Belgium. If, during the year following the claiming of an allowance, the workforce diminishes (in comparison with the year of allowance), an allowance amount of USD 6 292 must be included in taxable profits for each employee no longer on the payroll.⁴⁴

c) Enhanced R&D tax incentives for SMEs

Under the Scientific Research and Experimental Development (SR&ED) programme in Canada, firms are provided with an immediate deduction for all allowable expenditures, as well as an investment tax credit (ITC). The general ITC rate is 20 per cent. Small Canadian-controlled private corporations (CCPCs) are provided with an enhanced ITC rate of 35 per cent on their first USD 1 703 600 (CAD 2 million) of SR&ED expenditures.

Unused SR&ED ITCs earned in a year are refundable for small CCPCs that have prior-year taxable income less than USD 340 720 (CAD 400 000) and prior-year taxable capital less than

USD 8 518 000 (CAD 10 million). For these corporations, SR&ED ITCs on the first USD 1 703 600 of current expenditures are fully refundable. SR&ED ITCs on other current expenditures and all capital expenditures by small CCPCs are eligible for a 40 per cent refund. The USD 1 703 600 expenditure limit is phased out for prior-year taxable income between USD 340 720 and USD 511 080 (CAD 400 000 and CAD 600 000) and for prior-year taxable capital between USD 8 518 000 and USD 12 777 000 (CAD 10 million and CAD 15 million). SR&ED ITCs earned by unincorporated businesses are eligible for a 40 per cent refund.

Mexico provides a tax credit for R&D investment. The total tax expenditure of this incentive in 2007 was USD 410 850 000 (MXN 4.5 billion). Under the law, USD 91 300 000 (MXN 1 billion) of this amount should be distributed among SMEs and development of alternative sources of energy.

Special R&D tax credits are also provided in the UK to incorporated SMEs, in order to promote innovation and productivity. Companies must have qualifying R&D expenditure of over USD 19 592 (GBP 10 000) per annum to be eligible. The SME scheme allows companies to deduct an additional 50 per cent of qualifying R&D expenditure when calculating their taxable profits. Loss-making SMEs are allowed to surrender this deduction for a cash payment up to 24 per cent of their qualifying R&D expenditure.

d) Flow-through share provisions for SMEs

Canada reports that its flow-through share provisions, which allow a corporation to transfer unused tax deductions to its shareholders (and thereby sell its shares at some premium), although not directly targeted at SMEs, are used primarily by SMEs. In particular, flow-through shares are available to finance exploration and development expenses in the mining and oil and gas sectors and certain intangible start-up expenses of clean energy generation projects. Canada reports that flow-through shares are primarily used by smaller, start-up companies and "junior" exploration firms that do not have enough taxable income to be able to use available tax deductions themselves. In addition, "junior" oil and gas companies with less than USD 12 777 000 (CAD 15 million) in taxable capital are allowed to treat as exploration expenses – which are immediately deductible – the first USD 851 800 (CAD 1 million) per year of development expenses transferred to investors using flow-through shares (development expenses are written-off in general at 30 per cent).

Shareholder-level incentives to promote investment in SMEs

This section reviews special tax provisions encouraging investors (individual and corporate) to invest in SME shares. For the most part, these are special capital gains/loss provisions targeted at equity investment in SME shares. 46

Austria, the Czech Republic,⁴⁷ Denmark, Germany, Greece, Italy, New Zealand, Norway, Poland, the Slovak Republic and Sweden indicate no special rules for capital gains/losses on equity shares of SMEs or for venture capital based firms. In Belgium, there are currently no specific provisions with respect to venture capital at the federal level [while a special tax system (targeting "innovative companies") was established in Belgium at the beginning of the 1980s, authorities report that it was not successful and for this reason was phased out in the 1990s]. There are, however, some initiatives in Belgium at the regional level.

a) Preferential treatment of capital gains (including deferral)

The Canadian tax system, which applies a 50 per cent inclusion rate for capital gains on shares regardless of the size of the business, has a number of special capital gains tax provisions targeted at encouraging investment in small businesses. These provisions include a Lifetime Capital Gains Exemption (LCGE), which provides investors with a lifetime exemption of up to USD 425 900 (CAD 500 000) on capital gains on the sale of qualified small business shares.⁴⁸

In the US, individuals can exclude 50 per cent of capital gains from the sale of eligible small business stock held at least five years. After applying the exclusion, taxable gains are taxed at ordinary rates up to 28 per cent so that the maximum rate is 14 per cent. A portion of the excluded gains is taxed as preference income under the Alternative Minimum tax. To be eligible, stock must be purchased at the time of issue, and the total assets of the corporation, including the proceeds of the stock sale, may not exceed USD 50 million. A number of other restrictions on the type of business and its activities also apply. At the present time, there is almost no tax benefit from this provision, due to the temporary reduction of the long-term capital gains tax rate to 15 per cent. However, if the 15 per cent capital gains rate expires after 2010, the small business exclusion could provide a larger benefit as the top capital gains rate would increase to 20 per cent.

In Japan, where capital gains are realised by individuals on stock issued by qualifying SMEs, a special 50 per cent inclusion rate applies in determining the taxable amount of capital gains, provided that the shares have been held for at least three years, and also provided that, where a qualifying SME merges with another company or lists its shares on a stock exchange, the shares are sold within three years following the merger or listing.

Deferral provisions. Under Canada's small business capital gains rollover rules, a taxpayer is allowed to defer the taxation of capital gains realised on the disposition of common shares issued to the individual by an eligible small business corporation to the extent that the proceeds are reinvested in common shares of other eligible small business corporations. To qualify for deferral, the reinvestment must take place in the year of disposition or within 120 days after the end of the year of disposition. The total carrying value of the assets of the corporation and corporations related to it cannot exceed USD 42 590 000 (CAD 50 million) immediately before and after the share was issued.

A special provision enacted in the US in 1997 allows individuals to roll over capital gains from the sale of small business stock held more than six months, if the taxpayer reinvests the proceeds in other qualifying small business stock within 60 days of the sale of the original stock. The replacement stock must meet the active business requirements of the small business exclusion provision which excludes 50 per cent of capital gains from tax.⁴⁹

Under the UK's Enterprise Investment Scheme (EIS) targeted at direct (non-intermediated) investment by individuals in shares of SMEs meeting the EIS criteria⁵⁰ (with investments by individuals under the scheme limited to USD 783 680 (GBP 400 000) per year), preferential income tax treatment is provided to capital gains/losses on EIS shares.⁵¹ As regards gains, tax on capital gains on SME shares realised by individuals (connected or not connected with the company) may be deferred where the gains are reinvested in other EIS shares through a direct (non-intermediated) share purchase. When the shares are disposed of (or on the occurrence of another chargeable events requiring recognition of the gains), the deferred gains are taxed as ordinary income.

b) Preferential treatment of capital losses

In general, capital losses in Canada can only be applied against realised capital gains and cannot be used to offset other sources of income. However, under special allowable business investment loss (ABIL) rules, capital losses on small business investments can be used to offset other sourced income. In particular, the allowable portion (50 per cent) of a capital loss incurred from an arm's length disposition of a share or debt owed by a small business corporation may be deducted against any source of income for the year.⁵² If the allowable business investment loss exceeds net income for the year, any excess will be treated as a non-capital loss, which may be carried back three years and forward twenty years. If the non-capital loss cannot be fully utilised against income by the end of the twenty-year carry forward period, it reverts back to a capital loss, which can be carried forward indefinitely to be applied against future capital gains.

In general, a USD 3 000 annual limit applies to individuals in the US on the amount of capital losses that can be deducted against other income. However, a special provision allows up to USD 100 000 of capital losses from the sale of small business corporation stock to be treated as ordinary losses (and thus not subject to the normal USD 3 000 annual limit on the deduction of capital losses against other income). To qualify for this more flexible loss offset provision, the small business corporation must have paid in capital of USD 1 million or less at the time the stock was purchased.

Under UK capital loss offset rules, capital losses by individuals on shares in small and medium-size unquoted trading companies can be deducted against ordinary income. Similar relief is provided where the investment in a qualifying trading company is made by an investment company. Under the UK's Enterprise Investment Scheme (EIS) noted above, targeted at direct investment by individuals in shares of SMEs meeting EIS criteria, any loss made on the shares, less any IT relief claimed, can be claimed. This provision is limited to shareholders that are not connected in any way with the company.

Japan reports extending carry-forward provisions to three years for capital losses on the disposition of shares in qualified SMEs (provided the shares are unlisted at the time of sale). Japan also provides up-front relief to individuals investing in stock issued by SMEs. In particular, individuals are allowed to deduct amounts investments in qualifying SMEs against taxable capital gains in the same year. Other examples of up-front tax relief are provided by other survey countries under venture capital provisions, reviewed next.

c) Venture capital investments

In Australia, eligible venture capital investors are exempt from capital gains tax on gains made on eligible venture capital investments. Ireland reports that special tax treatment of investments in companies under its Business Expansion Scheme and/or the Seed Capital Scheme normally provides no taxable capital gain/loss on such investments (confirm). Mexico also reports special tax rules applicable in the case of venture capital investment trusts (FINCAS) and capital investment partnerships (SINCAS).

In Spain, a 99 per cent exclusion rate applies to capital gains/losses realised by venture capital-based firms on the disposition/transfer of shares. Venture capital based firms also receive a tax credit equal to the full amount (100 per cent) of tax otherwise payable on gross dividends (this measure effectively eliminates tax on dividends received by venture capital based firms).

Under Canada's Labour Sponsored Venture Capital Corporations program, individuals who make venture capital investments through labour-sponsored venture capital corporations (LSVCCs) are eligible to receive a 15 per cent non-refundable federal tax credit on investments up to USD 4 259 (CAD 5 000). Most Canadian provinces provide a matching credit. In addition, LSVCC investments are also eligible investments for registered retirement savings plans (RRSPs), which are tax-deferred retirement savings vehicles that allow individuals to deduct the value of these investments from the calculation of income for tax purposes. Factoring in federal and matching provincial tax credits (combined rate of 30 per cent), an investor with a marginal (combined federal and provincial) personal income tax rate of 45 per cent would obtain up-front tax relief at the rate of 75 per cent on qualifying investment.⁵³

Under the UK's Venture Capital Trusts (VCTs) scheme, a capital gains tax exemption is provided to individuals on gains realised on the disposal of shares of (intermediary) VCTs, which are fully listed companies that invest on shareholders' behalf in qualifying shares of SMEs.⁵⁴ The exemption is available on VCT share investments up to a value not exceeding USD 391 840 (GBP 200 000) per year. No relief is available on capital losses on VCT shares. The intermediaries (VCTs) are themselves exempt from tax on gains and losses on their investments in SME shares. The UK's Corporate Venture Scheme (CVS) provides certain preferential tax relief to companies that invest directly in subscribed shares of certain unquoted trading SMEs.⁵⁵ In particular, capital losses on SME shares can be set off against other company income. Tax on capital gains realised on SME shares can be deferred if the proceeds are reinvested in other shares that qualify for CVS treatment. Corporate investors under the scheme are not provided with an exemption on capital gains (although some sheltering of gains may be available under the UK's Substantial Shareholders Exemption (SSE).⁵⁶

In Belgium, a tax credit is provided to investors in shares of the ARKimedes Fund. This measure applies in the Flemish Region and is aimed at boosting risk-capital of start-up and early-stage companies. The ARKimedes Fund is a fund of funds acquiring holdings or granting loans to authorised investment companies who, in turn, invest in start-up and early-stage companies. Qualifying investors benefit for a period of four years from a tax credit of 8.75 per cent of their net investment. To be entitled to the credit the investor must be domiciled in the Flemish region and be able to prove they own the shares. The tax credit cannot exceed USD 1 137 (EUR 875) over the four year period.

Notes

- 1. Relevant markets may include domestic and foreign markets. One global trend is increasing participation by SMEs in foreign markets, particularly in service sectors.
- 2. Less sophisticated arguments than "market failure" would include those pointing out that in some cases SMEs are created by individuals that have few if any alternative income-earnings prospects, and that preferential taxation is a useful way to develop a more active labour market (a counter argument is that it is more efficient to consider how skills can be improved). Another is that special tax relief is required to address equity concerns and improve income distribution (a counter argument being that businesses are owned by individuals who may have relatively high (or low) incomes).
- A "quality" investment is an investment where the expected rate of return based on inside knowledge to the firm exceeds the market rate (safe rate plus risk premium).
- 4. Uniform application of basic (generally applicable) provisions can be interpreted to mean application, to firms of all sizes, of provisions applicable to large companies.
- 5. In considering the first, second, third, fifth and sixth listed topic, survey country provisions are reviewed. The questionnaire did not address the fourth item (low effective tax rates on large

- multinational firms resulting from aggressive tax planning around the burden of general tax provisions, examined in some detail in OECD (2007), Tax Effects on Foreign Direct Investment Recent Evidence and Policy Analysis, OECD Tax Policy Studies series No. 17).
- 6. In general, where firms aim to minimise the cost of capital, (more expensive) new equity capital would be raised only when retained earnings are exhausted. It follows that it is generally inefficient to distribute dividends while simultaneously issuing new equity (the cost of finance is reduced by increasing retentions.
- 7. In general, the burden of dividend taxes (i.e. the effective tax rate on dividends) is higher than that for capital gains taxes where taxpayers are able defer capital gains taxes by deferring share sales. With realisation-based taxation of capital gains enabling deferral of shareholder capital gains tax until the period in which shares are sold, the effective capital gains tax rate may be very low (due to the time value of money), implying a required rate of return on retained earnings that is lower than the required rate of return on new equity (assuming taxation of dividends at an effective rate (factoring in integration relief, if any) that exceeds the accrual-equivalent capital gains tax rate).
- 8. This point recognises that mature firms may invest retained earnings directly in SMEs (thereby limiting SME financing problems linked to corporate lock-in effects on mature firms). However, to the extent that individual investors provide a more broad-based equity pool (with large firms tending to invest in related SMEs), corporate lock-in may continue to pose financing constraints.
- 9. Taxing capital gains as they accrue (rather than when they are realised at the time of asset sale) is difficult on a number of counts. Valuation problems may be met in assessing current market values of assets giving rise to capital gains. Taxing accrued but unrealised capital gains may also introduce liquidity problems for taxpayers with insufficient cash-flow to cover the tax burden. Moreover, providing investors with the cash value of accrued losses in excess of accrued gains required for symmetric treatment of accrued gains/losses may be viewed as problematic.
- 10. The standard notional rate is adjusted annually and depends on the return on long-term government bonds. In 2007, the standard notional rate is 3.78 per cent of risk capital, but for SMEs this rate is increased by 0.5 percentage points.
- 11. Treatment that would deny a loss carry forward (or carry back) could be described as onerous and inappropriate, as it ignores the largely arbitrary choice of a fixed duration (12 month) tax year. In principle, ring-fencing rules could require that losses from one unincorporated business be deductible only against future taxable income derived from the same business. Greater flexibility is provided in practice where losses on one business may be set off against current year profits derived from another business (in effect, a pooling of business revenues and costs).
- 12. In general, flexibility under loss offset rules is more limited under dual income tax systems (than non-dual systems) that tax wage income separately from capital income including the (notional, prescribed) capital component of unincorporated business income.
- 13. Allowing greater flexibility under loss offset rules would mean giving up tax revenue on taxable income offset by increased loss offset claims (including non-targeted claims linked to consumption as opposed to business activities). But some additional (future) tax revenue may factor in where the greater flexibility has the intended effect of encouraging new business creation.
- 14. For example, in Ireland, unincorporated business losses may be deducted against non-business income including wage income, but only in the year of the loss.
- 15. A passive business owner may defer deducting business losses until the entire interest in the passive activity is sold. At that time any remaining carried-over passive losses may be deducted against other (non-passive) income.
- 16. Interest deductibility is a cornerstone of regular income tax. Short of eliminating this provision (e.g. by substituting a cash flow tax for an income tax), its distorting effects may be contained by limiting the scope for large MNEs to rely on this provision. As noted under item d), in most income tax systems, MNEs can claim against domestic taxable income interest expense on funds used to finance outbound FDI that may generate little or no domestic tax, even where the FDI is highly profitable. Some form of restriction on interest deductibility (e.g. allocation rules, outbound thin capitalisation rules) that could effectively limit this form of implicit subsidy for FDI may go a long way towards levelling the playing field between MNEs and SMEs with only domestic business activities.
- 17. Cross-border tax planning opportunities arise both in the context of outbound investment of resident-owned firms, and inbound investment (non-resident owned firms) including non-resident owned SMEs.

- 18. Another problem with the positive externality argument is that spillover benefits (e.g. diffusion of knowledge) may not be limited to domestic taxpayers but may spillover to others given the mobility of workers (e.g. scientists, engineers) and knowledge. Targeting tax incentives to domestically-owned firms may run counter to international agreements and relations, and moreover would not contain labour training spillovers (given foreign individuals working temporarily for domestically-owned firms) and difficulties in containing the dissemination of product and process information.
- 19. As discussed in de Meza and Webb (1987), and Stiglitz and Weiss (1981), models which assume uncertain returns when a project is successful generally predict under-investment, while models which assume an uncertain probability of success generally predict over-investment.
- 20. A result with capital flowing to non-targeted investment recognises the difficulties in ring-fencing a tax incentive to the intended target (e.g. SMEs), with possibly targeting criteria including firm size, business activity, capital type (plant, property, equipment), location, possibly ownership.
- 21. Examples might include public provision of training programs for young firms, providing guidance on how best to develop a business plan, with key verifiable information on determinants of revenues and cost, for consideration by potential suppliers of finance.
- 22. Depending on country circumstances and efforts by the tax administration to ease compliance, business entrepreneurs, confronted with what may be regarded as too high a tax burden on compliant firms taking into account amounts to be paid in tax, and compliance costs involved with self-assessment, including the maintenance of records and regular payments may choose to operate in the informal economy to avoid these costs (while confronting others). For example, when operating in the informal market, tax deductions for business losses are not available. However, business profits also are not taxed, implying symmetric treatment of business profits and losses. This symmetry, when viewed alongside asymmetric treatment of profits and losses under the regular income tax system, may discourage participation in the formal economy.
- 23. A reduced small business corporate tax rate may also be viewed as a measure designed to avoid double taxation under the basic tax regime that would tax corporate profits first at the basic corporate tax rate (with after-corporate tax profits then subject to marginal personal income tax rates on dividends or capital gains). A dividend paid deduction at the corporate level, providing an offset to basic corporate income tax at the time of dividend distribution, may not be desirable where a main purpose of corporate tax is to serve as a withholding device on profit distribution to non-resident shareholders.
- 24. In the Czech Republic, limited partnerships may partially distribute while general partnerships may totally distribute their tax base to their partners, subject to taxation at the level of partners.
- 25. The tax concessions are estimated to cost the revenue USD 19.6 million (AUD 25 million) over the period 2007-08 to 2010-11.
- 26. For the purpose of the primary eligibility conditions, a husband and wife count as 1 shareholder; families are allowed to elect to be treated as 1 shareholder; shareholders can only be individuals, estates, certain trusts, and certain exempt organisations; and shareholders can only be citizens or residents.
- 27. An LLC or limited partnership may delegate decision making and contracting authority to a single employee or partner.
- 28. In an effort to establish whether the competitive position of SMEs has weakened or improved relative to MNEs, on account of tax-planning, it would be necessary to assess (if possible) whether tax-planning opportunities for SMEs have expanded over time to the same degree as (the different set of) tax-planning opportunities for MNEs. To the extent that SME tax-planning opportunities have remained the same or been reduced with improved tax administration, while tax-planning opportunities for MNEs have increased (possibly as a deliberate policy choice, given concerns over increasing capital mobility of MNEs), one could argue that the competitive position of SMEs has weakened in recent years, in relation to tax-planning considerations.
- 29. Personal tax relief from deductible business expenses depends on the scope of business loss offset rules, including business loss carry-forward (and possibly carry-back) provisions, and rules governing the type of income that business losses can be deducted against.
- 30. In particular, the comparison is between the taxpayer's marginal corporate income tax rate (which may differ from the basic rate, in countries with a tiered corporate tax rate structure, depending on the level of corporate taxable income) and the taxpayer's marginal personal income tax rate on business income.

- 31. Ex post cost-benefit evaluations would appear to be the exception, rather than the rule, with few published assessments relative to the large number of country cases in which a variety of tax incentives have been tested. In the majority of cases where incentive regimes have been withdrawn, presumably in some of these evidence of a negative outcome (e.g. a larger than anticipated revenue loss) has been overwhelming.
- 32. A common form of incentive found outside OECD countries provides a full or partial exemption of corporate profits from corporate income tax, with a "tax holiday" providing a full exemption of profits for a finite (or in some cases an indefinite) number of years. This type of incentive arguably the most prone to unintended revenue loss, due to multiple possibilities created for profit shifting is not considered in this report.
- 33. Tax incentives may also be provided through other technical rules for calculating taxable income, such as allowing reserves to be taken against future costs; and providing tax deferrals for certain types of corporate transactions. While these rules can have a significant impact on the total tax burden of a firm, they are not usually seen as stand-alone incentives and so are not considered here.
- 34. The setting of the corporate income tax rate can indirectly influence the value of investment tax credits to the extent that the claiming of (so-called "wastable" or non-refundable) investment tax credits earned is constrained by the amount of corporate tax (which is itself a function of the corporate tax rate).
- 35. Certain counties allow unclaimed depreciation expenses to be carried forward indefinitely, which improves the ability of investors to manage tax claims and minimise their overall host country tax liability. Where taxpayers are given fewer degrees of freedom, the linkage with loss carry-over provisions becomes more important. For example, for early-stage small businesses typically in a loss position, it may be possible to extend depreciation claims beyond the prescribed carryover term by claiming the expense in the last year possible under the depreciation carryover rules, and then carrying the amount forward under loss carryover provisions.
- 36. Targeting a new accelerated depreciation allowance provision to new investment requires that only new capital purchases be written off at accelerated rates, while continuing to write-off undepreciated pre-reform capital stocks at pre-reform depreciation rates.
- 37. When an investment tax credit (or other tax incentive for investment) is introduced, and investment is observed to increase relative to the previous period (or to a trend), the additional amount of investment, measured against prior year (or trend) investment, cannot be taken to be conditional investment, as some percentage (perhaps all) of the additional investment would have occurred in the absence of the tax incentive. While additional investment is measureable, in general conditional investment is not. That is to say that, while the managers of an investing firm may be able to identify how much additional investment they undertook in a given year as a direct result of the availability of an investment incentive, to the outside observer conditional investment is unobservable.
- 38. For example, if shareholders can earn a 5 per cent pre-tax rate of return on bonds, subject to personal tax ate rate (m), then their required (expected) after-corporate tax rate of return on shares of equivalent risk would also be 5 per cent, assuming that the dividends are also taxed at an effective personal tax rate of m (classical tax treatment). If a 50 per cent partial dividend inclusion financing incentive is introduced, that includes only 50 per cent of dividend income as taxable income, so that the effective personal tax rate on dividends is reduced to (m/2), then shareholders could reduce their required (expected) after-corporate tax rate of return on shares to 2.5 per cent, and be no worse off. If shareholders reduce their required rate of return, but not by half (to somewhere between 2.5 and 5 per cent, say 4 per cent), then the transmission mechanism for providing the tax incentive relief is inefficient, part of the return (the difference between 4 and 2.5 per cent, or 1.5 per cent) represents a windfall gain to the investor. Where the hurdle rate of return is reduced from 5 to 4 per cent, then investment would not be expected to increase by as much as the case where the tax relief was fully passed along to the firm's hurdle (discount) rate.
- 39. For example, a low statutory corporate tax rate may be introduced to apply to small business profits, or a targeted investment tax credit may be introduced for qualifying small business investment, to address possible market failure. This targeting may be judged as appropriate and feasible. On the other hand, targeting increased integration of corporate and personal taxation of profits of SMEs may be desirable but not feasible within reasonable compliance and administrative cost (while increased integration for all shareholdings may provide windfall gains to shareholders of large companies with access to international capital markets, and be very expensive in terms of foregone revenues).

- 40. Qualifying investment is generally defined as depreciable tangible personal property purchased for use in a trade or business. The deduction is wastable (allowed only to the extent of business income). Any excess deduction amount can be carried over to future years.
- 41. This definition of SMEs is based on Section 247 of the Companies Act 1985, which is connected to Article 11 of the Fourth Council Directive 78/660/EEC, as amended.
- 42. Business assets are measured at the close of the financial year preceding the acquisition or production of the asset. In the case of agricultural and forestry businesses, the assessed value of business assets may not exceed USD 159 511 (EUR 122 710).
- 43. Greece also reports having introduced (under Law 3296/2004) incentives for the merger of SMEs, in order to establish partnerships or limited liability companies or "sociétés anonymes". Profits of the resultant company are taxed under at the statutory flat rate reduced by 10 per cent for the first year of operation, and five per cent for the second year of operation.
- 44. Austria provides a tax credit of USD 1 300 for every employed apprentice (available to both unincorporated and incorporated businesses). This incentive is not specifically targeted at SMEs, although Austria reports that, in practice, it benefits primarily small businesses. Strict reporting of tax provisions targeted at SMEs would not include the Austrian measure.
- 45. The R&D tax credit programme in the UK provides large companies with a 25 per cent enhanced deduction (wastable/non-refundable).
- 46. The flow-through share scheme in Canada may be regarded as a company-level provision, as it passes through to shareholders certain corporate-level tax reliefs, thereby increasing the value of those reliefs to the firms. Alternatively, the scheme may be regarded as a shareholder level provision, as the flow-through share deductions are taken by individual shareholders. Thus to some extent placing this scheme in the previous or current section is somewhat arbitrary.
- 47. The questionnaire response from Czech Republic points out that while there are no special tax rules for venture capital investments (i.e. investments in shares that are non-tradable in the stock-exchange), a reduced tax rate of 5 per cent applies to investment funds, unit trusts and pension funds.
- 48. The 2007 federal budget proposed to increase the LCGE limit to USD 638 850 (CAD 750 000), effective 19 March 2007.
- 49. In particular, the stock must be purchased at the time of issue; the total assets of the corporation including proceeds of the stock sale must be no greater than USD 50 million; and certain restrictions on the type of business and its activities must be met.
- 50. EIS tax relief requires that there is no connection between the investor and the company; the company is an unquoted trading company; and company size is below stipulated thresholds.
- 51. Gains on share investments in excess of the USD 783 680 cap are taxed as normal income.
- 52. In addition, the allowable portion (50 per cent) of a capital loss incurred as a result of small business corporation becoming insolvent or bankrupt, or because the debt is uncollectible, may be deducted against taxable income (no ring-fencing).
- 53. As RRSP withdrawals are taxable, part of the up-front tax relief is offset when contribution amounts are withdrawn (while the return on investment is tax-free). The province of Ontario is phasing out its LSVCC programme (providing matching credits) by 2011.
- 54. The criteria for qualifying SMEs under this scheme are similar to those for the EIS scheme. The scheme is limited to investments (by purchase or subscription) by individuals over the age of 18.
- 55. As with the venture capital trust scheme, the criteria for qualifying SMEs are similar to those for the EIS scheme.
- 56. Since 1 April 2002, a capital gains tax exemption has applied to companies on the sale of shares in other companies, provided that trading and other requirements are met, under the Substantial Shareholders Exemption (SEE). The SSE is not restricted to investments in small and medium-size companies.

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Chapter 5

SME Tax Compliance Cost and Simplification Provisions

This last chapter addresses the second main component of the overall tax burden on SME's, in addition to tax liability (payments to government) – namely, compliance costs, which typically have a significant fixed cost component, tending to impose a relatively higher burden on SMEs.¹ Compliance cost considerations may factor importantly into a number of decisions, for example, whether to become self-employed,² and whether to operate in the formal economy.

In particular, this chapter focuses on provisions of VAT and income tax systems targeted at small businesses to simplify their compliance requirements (e.g. permitting simplified accounts, simplified tax calculations, less frequent filing) and thereby lower their tax compliance costs – that is, lower the amount of time and resources required by firms to comply with the tax system (aside from their tax liability). Depending on design features, simplification measures may not only lower tax compliance costs; certain measures may also provide small businesses with the additional cost savings of reduced tax payments to government. With or without these additional cost savings, reduced tax compliance costs encourage increased SME creation and compliance with a tax system. As in the other parts of the report, the description concerns rules in effect as of January 2007.

After considering first in Section 5.1 the rationale for taxing small businesses under a simplified set of rules and procedures, various provisions to simplify compliance with a VAT are reviewed in Section 5.2, with a focus on measures reported by the survey countries. Section 5.3 discusses provisions to simplify compliance with income tax, while Section 5.4 examines reported simplification measures in relation to social security systems (contributions by small businesses as employers and by the self-employed) and in other areas where small businesses play a withholding function. The country examples do not address provisions that may be applied by tax authorities in certain cases to assess and impose tax liability where a taxpayer is unable or otherwise fails to comply with the regular tax system (including cases of apparent tax evasion and avoidance).

5.1. Rationale for simplification

Compliance costs tend to increase with the number of taxes that an entrepreneur is subject to, the complexity of the tax rules, the frequency of submitting tax returns, and the number of levels of government involved in levying and collecting tax. For example, in most countries, businesses must contend with a VAT system (unless the business falls under a VAT exemption threshold) not faced by an employee. Business income tax also introduces complexities not relevant to an employee that pays tax only on labour income and non-business investment income. Complexities may multiply where more than one level of government is involved in levying and/or administering a tax and rules and procedures are not well co-ordinated.

Compliance costs are difficult to measure (making difficult a comparison of the total tax burden), but certain comprehensive studies may be found. Recent studies of business compliance costs in the US include Blumenthal and Slemrod (1992), Hall (1995), Slemrod

(1996), and Slemrod and Venkatesh (2002). Studies by Ariff, Loh and Talib (1994), Ariff, Loh and Ismail (1997) and Chan, Cheung and Ariff (1999) consider business compliance costs in Hong Kong, Malaysia and Singapore. Pope (1995) and Sandford and Hasseldine (1992) study business compliance costs in Australia and New Zealand. As a broad finding, such studies systematically conclude that while total business tax compliance costs tend to be higher for large companies, as a percentage of sales they are significantly higher for SMEs. Another interesting finding is that tax-planning accounts for a larger proportion of total compliance costs for large firms.

By reducing tax compliance costs and thereby lowering the overall tax burden on small businesses, simplification provisions help achieve more neutral tax treatment of firms of varying sizes, implying efficiency gains, and encourage compliance with (adherence to) the tax laws of a country, including operating in the "formal" rather than informal (underground) economy. ^{5, 6} At the same time, careful design is necessary as simplification measures may expand opportunities for some taxpayers to avoid or evade tax, raising concerns in terms of the integrity of the tax system and horizontal equity. These potential concerns would need to be weighed against the net efficiency gains from greater neutrality and increased tax compliance amongst targeted groups.

A main efficiency concern associated with the fixed cost component of tax compliance costs is that absorbing this cost requires a higher pre-tax rate of return on capital, the smaller the size of the business (measured by capital). This effect, with small businesses placed at a competitive disadvantage relative to larger firms, implies an inefficient allocation of capital, with underinvestment in small businesses. A second efficiency consideration is that increased compliance, when resulting in increased tax revenues, may enable reduced effective tax rates on one or more possibly more elastic tax bases, with possible efficiency gains. In contrast, a third efficiency consideration is possibly reduced investment by some SMEs under a simplified regime (e.g. with presumptive taxation of gross revenues and no tax relief for investment costs), possibly resulting in some efficiency losses.

More broadly, increased compliance is desirable taking into account the benefits to society of having all persons participate in the financing of programs supporting economic and social development ("nation-building"). Indeed, addressing tax compliance costs facing small businesses, as a key strategy to encourage economic development, is highlighted in the OECD Istanbul Ministerial Declaration on Fostering the Growth of Innovative and Internationally Competitive SMEs, which states that SMEs require "enabling regulatory frameworks, which are developed taking into account the needs of SMEs and facilitating their integration into the formal sector [...] requiring tax systems that entail low compliance costs".

Simplification provisions of various types can be expected to impact small businesses differently, given the heterogeneity of the small business population. In particular, certain measures may directly encourage business creation and tax compliance for some small businesses, but not others, suggesting the need to analyse a range of measures. For example, allowing simplified accounting or less frequent filing of tax returns may be of little practical consequence to small businesses with very low turnover (e.g. street vendors) that may regard the tax compliance burden of a relatively simple regular tax system as excessive and discouraging to participation in the formal economy. But the same measures may operate to encourage other larger scale small businesses to establish, and to comply.

For very low turnover businesses for the most part unaffected by simplified accounting and filing measures, tax compliance may call for the introduction of a simple replacement tax, for example a turnover-based presumptive tax, to replace regular income tax and/or VAT for firms with turnover below some (micro) business threshold. In such cases, a key design consideration is the setting of the tax burden under a presumptive (replacement) tax, and in particular the avoidance if possible of large upward adjustments in tax burden when a business size threshold is passed and the taxpayer is required to migrate from a replacement regime to the regular regime.

5.2. VAT simplification provisions

A number of approaches may be taken to reduce VAT compliance costs, in order to encourage small business creation and participation in the formal sector, with the questionnaire responses identifying approaches adopted by the OECD countries surveyed in this report. A range of innovative techniques have also been implemented in developing countries, often with assistance from the IMF, the World Bank and others. The main options include: introducing a VAT collection threshold; using a single VAT rate; allowing a simplified VAT remittance calculation for small firms; allowing cash accounting; and allowing less frequent filing of VAT returns.

VAT collection threshold

A VAT collection threshold that waives VAT collection for firms with turnover below some small business threshold level may be an effective means of reducing tax compliance costs, while also containing the costs of tax administration. The case may be especially strong in the context of developing countries where small firms may collect very little VAT and tax administration is particularly challenging.

The IMF proposes that the output (turnover) threshold for VAT collection should be increased, at the margin, if the benefits to the taxpayer in terms of reduced tax payments and compliance costs, exceeds the net cost to government of the same increase in terms of reduced tax receipts less administration costs, weighted by the value of public funds. ¹¹

A number of other factors must also be considered when setting the optimal threshold level of turnover for VAT collection. First, with some firms being part of the VAT system (participating firms, above the threshold) and others not (non-participating firms, below the threshold), the VAT system can be expected to affect the relative competitiveness of firms. In particular, non-participating firms may be negatively impacted owing to their inability to claim input tax credits (i.e. credits in respect of VAT paid on inputs). Negative effects could be felt, for example, by non-participating firms that are intermediate producers, selling to participating firms unable to claim an input tax credit on purchases from non-participating suppliers. On the other hand, non-participating firms may enjoy a competitive advantage when selling to final consumers, if they are able to sell their output at the same price as participating firms. This is because the part of the VAT inclusive price charged to consumers linked to final stage value added is retained by the firm (not transferred to government as in the participating firm case), implying a competitive advantage linked to this amount.

The fact that firms below a VAT threshold may in some cases be negatively impacted by an inability to claim input tax credits encourages some countries to allow voluntary VAT registration and participation in the system by firms below the threshold. Providing this option increases tax administration costs, and introduces compliance costs on those that elect to be in the system to protect their competitive position. But the trade-off may be viewed as necessary.

Another consideration is that a relatively high VAT threshold, by excluding possibly large numbers of firms, may frustrate policy efforts to have all persons actively participate in the formal economy, recognising that once "outside" the system it may be less likely that individuals would decide at some point to fully participate. However, this concern may be at least partly addressed if firms below the VAT threshold (and not opting into the normal system) are required to pay another, simpler form of tax (e.g. a simple lump sum patent, with minimal compliance costs) – and thus be part of the "formal" economy.

Finally, a relatively low VAT threshold, while encouraging participation by a greater number of firms in the regular tax system, and avoiding distortions to competition, may broaden the scope for taxpayer fraud, committed for example by firms forging false invoices to claim fictitious input tax credits. Where the number of taxpayers in the system tends to grow exponentially with lower threshold values, tax administration challenges may grow exponentially as well. However, such challenges would also be expected in systems with higher threshold values that permit voluntary participation for those below the threshold (but possibly with a reduced rate of fraud if taxpayers opting into a system can be more carefully screened, with fewer firms in the regular system).

Country examples. With the exception of the United States, all of the countries that responded to the SME tax questionnaire ("survey countries") impose value-added tax. While Mexico, Spain and Sweden do not have a VAT threshold, the other sixteen countries do, normally based on turnover. Most responding survey countries provide an "opt-in" that allows firms below a VAT collection threshold to participate in the VAT system and thereby obtain a tax credit for VAT paid on business inputs.

Figure 5.1 reports turnover thresholds.¹³ As previously noted, all firms regardless of size are required to register and file VAT return in Mexico, Sweden and Spain (shown in Figure 5.1 with a threshold value of zero). At the other end of the figure, the UK stands out with a very high threshold relative to others, at USD 119 511 (GBP 61 000). Between these examples, a range of values is observed.

Certain countries have more than one threshold, depending on the type of business. In the previous UK example, the VAT collection threshold is increased to USD 137 144 (GBP 70 000) for distance sales. In the case of Greece, which distinguishes sales of goods *versus* services, the turnover threshold of USD 12 999 (EUR 10 000) applies to businesses selling goods, or goods and services provided that turnover from services does not exceed USD 6 500 (GBP 5 000). For business selling only services, the turnover threshold is USD 6 500. Threshold values in Ireland, which range between USD 45 497 (EUR 35 000) and USD 90 993 (EUR 70 000), also depend on the type of business (goods, services), and differ for mail-order inputs (as in the UK with its special threshold for distance sales).

Different threshold values are applied in some countries for non-profit organisations and charities. For example, the VAT threshold is increased for non-profit enterprises in Australia to USD 78 360 (AUD 100 000) and in Norway to USD 21 984 (NOK 140 000). This higher threshold in Norway also applies to charities. In Canada, a higher turnover threshold of USD 42 590 (CAD 50 000) applies to public service bodies, including charities. Additionally, charities are not required to collect VAT if their gross revenue from all sources

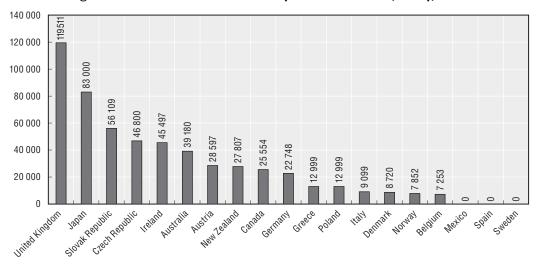


Figure 5.1. VAT threshold values (annual turnover, USD), 2006

(including donations) does not exceed USD 212 950 (CAD 250 000), even if they exceed the USD 42 590 turnover threshold.

Countries differ in terms of registration requirements. For example, in Belgium where firms with turnover of USD 7 253 (EUR 5 580) or less are not required to collect VAT, all firms are required to register. In Austria, firms with turnover less than USD 9 747 (EUR 7 500) need not register. Registration is necessary for turnover in excess of this amount, with the option for tax-free turnover if under the threshold of USD 38 997 (EUR 30 000).

For each of the countries presented in Figure 5.1 providing a VAT collection threshold, voluntary VAT registration is allowed, with the exception of Norway. Over one-third of VAT registrants in the UK, Australia and New Zealand are small firms that have opted-in (roughly 36 per cent, 39 per cent and 44 per cent of total registrants, respectively). Interestingly, in Japan where the collection threshold is relatively high at USD 83 000 (JPY 10 million), it is estimated that only two per cent of VAT registrants (roughly 80 000 firms) are voluntarily registered. The voluntary registration rate is estimated to be 10 per cent and 26 per cent in Belgium and the Slovak Republic.

Reliance on a simple (single) VAT rate structure

Studies suggest that a multiple rate VAT structure contributes considerably to VAT compliance costs. For example, a study of VAT compliance costs in Sweden estimates that compliance costs would be reduced on average by roughly 30 per cent if a single rate system replaced a multiple rate system. While a multiple rate system may satisfy public demands for lower rates on certain products, for a variety of reasons, adhering to a single or simple rate structure can both limit tax distortions to consumption, and production, and at the same time reduce compliance costs. However these advantages, including those tied to reduced informality, are difficult to measure and articulate to the public, implying considerable difficulty in imposing a simple VAT rate structure, and the need for policy makers to look for other means to bring down compliance costs.

Simplified VAT remittance calculation ("presumptive" taxation) for small firms

Given difficulties in introducing a single rate VAT system, and in adjusting away from a multiple rate VAT system, compliance costs may be lowered by allowing small firms with turnover above a collection threshold, but below some second tier "small firm" turnover level, to calculate VAT payments to government under a simplified "presumptive" approach. For example, certain small firms may be allowed to apply a single flat rate to turnover to determine the amount of VAT to remit to government (instead of requiring a detailed VAT calculation). In some country examples, flat rates may vary by sector. An alternative approach relies on simplified input tax credit calculations. VAT charged on sales would remain unchanged from the regular system, but the amount paid to government would be calculated differently.

Country examples. For example, a Flat Rate Scheme (FRS) in the UK allows eligible small businesses to calculate the amount of VAT to pay to government as a percentage of their VAT-inclusive turnover. The scheme is available to businesses with (expected) taxable turnover (taxable sales, excluding VAT) under USD 293 880 (GBP 150 000) and total business income (including VAT) under USD 367 350 (GBP 187 500). A flat rate VAT system in Poland allows businesses providing tax services to determine VAT payments as three per cent of turnover.

Different "flat" rates may apply depending on the particular sector that the firm operates in. For example, under the "Quick Method" system in Canada, businesses with turnover (taxable sales) less than USD 170 360 (CAD 200 000) may calculate their VAT liability by applying a reduced remittance rate to their taxable goods and services in the reporting period. Application of a reduced rate to taxable sales, with rates differing according to the general business activities (e.g. businesses mainly purchasing goods for resale, businesses mainly providing services), substitutes for detailed calculations that would factor in input tax credits.

VAT calculations are simplified in Japan for businesses with turnover under USD 415 000 (JPY 50 million), in that a deemed input tax credit is calculated as a percentage of VAT payable on taxable sales. ¹⁶ The percentage depends on the particular industry or trade of the business, and varies from 50 to 90 per cent. In Austria, input tax calculations are simplified for businesses with turnover under USD 285 978 (EUR 220 000) by allowing input tax on purchases other than goods to be calculated as 1.8 per cent of inputs. Lastly, flat rate enterprises in Belgium, consisting of businesses dealing mainly with private individuals, active in certain sectors (e.g. bakeries, butchers, hairdressers) with turnover no greater than USD 974 925 (EUR 750 000), have their annual taxable turnover set under special regulations, with the deduction for VAT on inputs determined according to normal rules.

Cash accounting for small firms

VAT systems are normally accrual based, requiring that VAT be remitted on taxable sales where the cash has not yet been received (accounts receivable). Under cash accounting, VAT is paid on sales only when the cash is received and similarly, input tax credits are claimed only when cash is paid on a purchase. Cash accounting systems targeted at SMEs, based on daily cash entries of payments and receipts, may significantly reduce compliance costs, to a degree depending on the additional supporting documentation that taxpayers are required to assemble and maintain (e.g. sales and purchase invoices, bank and possibly other financial statements).¹⁷

Country examples. Businesses in Australia with a turnover of USD 783 600 (AUD 1 million)¹⁸ or less may account for VAT on a cash basis, with other simplified accounting methods available for qualifying businesses with a turnover of USD 1 567 200 (AUD 2 million) or less. From 1 March 2007, businesses in Ireland with a turnover no greater than USD 1 299 900 (EUR 1 million) may account for VAT on a cash basis.

In Germany, the small invoice threshold, determining the obligation to keep small invoices, was recently raised from USD 130 (EUR 100) to USD 195 (EUR 150). It is anticipated that this adjustment will affect reporting requirements for 170 million invoices.

Less frequent filing requirements for small firms

One approach that reduces tax compliance costs, while at the same time provides firms with a cash-flow advantage (i.e. savings in present value terms, owing to the time value of money), is allowing small firms to file (declare) VAT returns on a less frequent basis, typically with a small business test based on taxable turnover in the prior year. Most countries with VAT systems require (large) firms to file VAT returns on a monthly basis. Where small firms are allowed to file and pay less frequently, for example quarterly, semi-annually or annually, compliance costs may be significantly reduced. Cash-flow savings realised by less frequent payments of tax may be viewed as a form of subsidy to help defray remaining compliance costs. In some cases less frequent filing requirements are combined with regular (advance) payments. While this will still provide some compliance cost reduction, any cash-flow benefit will generally be small.

Country examples. Under basic VAT provisions in most of the reporting countries, businesses are required to file (declare and pay) VAT returns on a monthly basis, with exceptions being Ireland and Norway where the standard filing requirement is every two months. In the Slovak Republic, Poland, Belgium, the Czech Republic and Spain, quarterly rather than monthly filing of VAT returns is allowed for businesses with turnover under USD 374 000, USD 1 039 920, USD 1 299 900, USD 1 872 000 and USD 7 799 400, respectively. 19 Canadian businesses with turnover under USD 5 110 800 (CAD 6 million) but above USD 425 900 (CAD 500 000) qualify for quarterly filing and payments; and those with turnover under USD 425 900 qualify for annual filing with quarterly instalment payments; while those with annual net tax payable under USD 1 278 (CAD 1 500) may make payments only once a year. In the case of Denmark, quarterly filing is allowed for businesses with turnover under USD 2 616 000 (DKK 15 million), while firms with turnover under USD 174 389 (DKK 1 million) are required to file declarations only twice a year. Similarly, businesses in New Zealand may submit a VAT return every six months if their turnover is less than USD 173 800 (NZD 250 000), or was higher than this amount (in the prior year) but is unlikely to exceed this threshold over the next 12 months. For turnover above this amount but below USD 16 684 800 (NZD 24 million), returns may be filed every two months rather than on a monthly basis.

Austria and Sweden allow annual rather than monthly filing for firms with turnover under USD 129 990 (EUR 100 000) and USD 143 200 (SEK 1 million) respectively. In Norway, a request for an annual declaration may be made for businesses with turnover under USD 157 030 (NOK 1 million), while in the UK an annual declaration is available for businesses with taxable turnover of up to USD 2 644 920 (GBP 1 350 000). Voluntary VAT registrants in Australia have the option of filing (reporting and paying) VAT on an annual basis.

In Ireland, thresholds for less frequent filing are now determined on the basis of estimated VAT liability. In particular, as from July 2007, businesses with an annual VAT liability of USD 3 900 (EUR 3 000) or less have the option of filing returns every six months (half-yearly basis). Returns may be filed every four months where VAT liability exceeds this threshold level, but falls below USD 18 719 (EUR 14 400). It is estimated that over 76 000 traders are eligible for these new arrangements.

5.3. Income tax simplification provisions

Various measures are also observed in countries to reduce the compliance requirements on small business of (self-assessed) regular income tax, in support of the creation and tax compliance of small businesses. This section of the paper reviews approaches identified by the surveyed OECD countries, including: exempting firms with turnover under a small business threshold from regular income tax, replaced by some form of "presumptive" tax; allowing cash accounting and other simplified accounting procedures; and less frequent interim filing requirements.

Replacement of regular income tax with a presumptive tax

As in the case of VAT, allowing firms with turnover below some threshold level to opt out of the regular income tax system may be an effective means to reduce tax compliance costs and costs of tax administration.²⁰ At the same time, strong arguments may apply to tax exempted firms with some simpler replacement tax, despite the (not insignificant) compliance and administration costs that such a system could entail. Aside from contributing to tax revenues and supporting good governance by aiming to have all firms, including the very small, participate in the tax system, imposing a replacement tax may ease the transition of firms into a country's regular income tax regime when a small business turnover threshold is crossed (and thereby encourage continued participation in the formal economy). Additionally, to the extent that the economic incidence of regular income tax falls on business owners, providing an income tax exemption for firms under a small business turnover threshold may place them at a competitive advantage relative to firms just over the same threshold.²¹ Non-neutral treatment implies welfare (efficiency) losses, and may encourage businesses subject to regular income tax to operate in the informal economy. Such considerations encourage policy makers to assess the pros and cons of levying some alternative replacement tax on firms exempt from regular income tax.

Replacement taxes for an income tax are generally referred to as "presumptive" taxes, as they rely on a base that in principle acts as a proxy for the base of the tax that they replace (in the current context, regular income tax). As reviewed below, presumptive tax bases and tax burdens may differ significantly from those under a regular income tax, to a greater or lesser extent depending on the type of presumptive tax and its design features (and the taxpayer's profit position).

The following types of presumptive taxes may be used to proxy a regular income tax: a patent, an indicator-based tax, a gross-basis turnover tax, and a net (adjusted) turnover tax. A number of variants may be observed for each of these categories of tax. The following reviews main design considerations, with some country examples.

a) Patent

The simplest presumptive tax is a patent, levying a uniform lump sum amount on firms below some size-threshold. In practice, a patent may indirectly target small

businesses when imposed on types of activities (e.g. hairdressers, mechanics) that typically involve relatively low levels of turnover. The main advantage of a patent is its simplicity, implying low tax compliance and administration costs.

However, being a lump sum fixed amount, a patent imposes a relatively higher tax burden on firms with relatively lower turnover, tending to distort competition amongst firms of different sizes subject to the patent. For the same reason, it imposes a relatively high tax rate on profits during downturns in business activity when profits are low or negative (tending to reinforce rather than counter business cycles), and may thus create cash-flow problems for firms.

Country examples. None of the OECD countries included in the survey reported taxation of small businesses under a simple patent system.

b) Indicator-based tax

Another relatively simple presumptive tax is one based on indicators of firm size, other than turnover or income. Examples of such indicators include total number of employees, floor space, inventory values, electricity consumption and other variables that may be correlated with income. The base of an indicator-based tax is generally less easy to misreport than turnover or income, and may offer significant savings in tax compliance and tax administration costs.

A particular feature of this type of tax is that it is effectively a tax on the indicators that form the base. An indicator-based tax that is increasing in the amount of floor space and/or total employment would tend to discourage investment in buildings and/or the hiring of additional workers by taxing these factor inputs. On the other hand, unlike an income tax, an indicator-based tax does not tax revenues and thereby discourage income growth accompanying increased work effort, or more generally, does not discourage increased utilisation of factors of production falling outside the tax base (i.e. the marginal tax rate on revenue is zero).²²

Certain other positive effects of indicator-based taxes may also be observed, depending on the components of the base. For example, where increasing in the amount of electricity consumption (a type of environmentally-related tax), an indicator-based tax would tend to encourage investment in technologies consuming less electricity per unit of output.

Country examples. An example of an indicators-based tax is provided by the "tax card" system in Poland, where the amount of tax liability specified by statute depends on the form and scope of activity performed, the number of employees, and the number of inhabitants of the place where the economic activity is performed. Another example is Spain where presumptive tax applied to unincorporated businesses engaged in one or more of nine business activities is based on a number of "modulos" [i.e. parameters including the number of employees, electric power consumption, number of tables (for restaurant services)].

c) Turnover tax

A common form of presumptive tax is a turnover tax, levied on gross revenues. Unlike a patent or indicator-based tax, a turnover tax varies directly with firm size measured by turnover, and thus goes some way towards avoiding the competitive distortions of profit-insensitive taxes. However, a fixed turnover tax rate imposes a relatively high

effective tax rate on businesses that are less profitable than others. For example, where two firms have turnover of 100, firm A realises a profit of 20, while firm B realises a profit of only 10, a 5 per cent turnover tax implies a 25 per cent tax rate on profits of firm A, compared to a 50 per cent tax rate on profits of firm B. Thus a turnover tax, in addition to imposing a higher tax burden on less efficient firms, would tend to discourage the allocation of capital to business activities where profit margins are relatively thin.

Turnover taxes may be applied to firms gross revenue below a small business threshold using a single flat rate or a tiered rate schedule, and may be uniformly applied or vary by type of business sector. While introducing some degree of complexity, one potential advantage of a tiered rate structure that applies a relatively low rate on low turnover, is encouraging tax compliance amongst young start-up firms. Low compliance costs under a turnover tax, together with a relatively low tax rate on low turnover in initial years, may provide an effective combination to encourage participation in the tax system. Once in the system, firms may decide to remain operating in the formal economy, a decision encouraged where the top tax rate of a tiered rate structure is set to avoid, on average, large upward adjustments in tax burden when the small business threshold is crossed.

Alternatively, reduced tax rates may be applied to turnover of businesses in sectors where profit rates on average are relatively low. With sector differentiation, complexity may be contained by applying a flat rate rather than tiered rate schedule, with the rate set lower (higher) in sectors where profit margins on average are lower (higher). Under a system with varying flat rates across sectors, a degree of graduation may be introduced to encourage tax compliance amongst start-ups by relying on standard deductions from the turnover base.

In addition to providing a better proxy to income than patent and indicator-based taxes, with a turnover tax base going some way towards avoiding competitive distortions of profit-insensitive taxes, turnover taxes also facilitate the adjustment of firms to a regular income tax system by requiring the maintenance of cash accounts measuring turnover. And, as with other presumptive taxes, by reducing tax compliance costs (and possibly reducing for some firms tax liability), small business creation and compliance with the tax system is encouraged.²³

Where a turnover tax is a replacement tax for VAT, however, it may be particularly vulnerable to evasion. This can easily occur by a business simply keeping a significant part of turnover out of registers and, without any additional tax compliance requirements, such evasion becomes very difficult to detect. In such a case the targeting of the replacement tax becomes very important. The threshold for the replacement turnover tax would ideally be set low enough to attract only businesses that find VAT obligations too onerous. As such, it would only attract businesses that would previously have been likely to evade tax any way, and so once again the simplicity of the turnover tax creates an incentive for tax compliance.

Country examples. In Mexico, small unincorporated businesses ("Repecos") with turnover under USD 182 600 (MXN 2 000 000) in the previous tax year are taxed at the rate of two per cent of gross revenues. For taxpayers deciding to opt instead for taxation under regular income tax, the decision is irreversible.

Unincorporated businesses in Poland have the option to be subject to regular income tax, or be taxed under a presumptive tax based on gross turnover (no deduction for costs) with turnover rates varying by type of business activity.²⁴ The rates are 20 per cent on revenue raised by liberal professions; 17 per cent on revenue raised from providing car

rental services, hotel services, or agency services involved in wholesale trade; 8.5 per cent on revenue raised from service activities including the sale of alcoholic drinks; 5.5 per cent on revenue raised from production and construction activities; and 3 per cent on revenue raised from service activities in the scope of trade and catering.

Unincorporated businesses in Spain performing agricultural activities may apply for taxation under a turnover-based system provided that turnover does not exceed USD 389 970 (EUR 300 000). As noted previously, Spain applies an indicators-based tax to other (non-agricultural) business activities under a small business threshold.

d) Net (adjusted) turnover tax

Closer in design and effect to a regular income tax are presumptive taxes that adjust turnover tax base (gross revenues) in respect of business costs. Given the goal of replacement taxes to contain tax compliance costs, the cost adjustments tended to be ones that can be readily measured. Rather than capitalise capital costs, for example, firms may be allowed to expense capital cost (i.e. full and immediate deduction).²⁵ Similarly, rather than require that firms track inventory costs, a simple "lump sum" deduction may be provided in respect of input costs, determined as a percentage of turnover.²⁶ Deductions in respect of wages, and possibly other costs and taxes may also be factored into the base definition, on the presumption that the relevant information is required for other purposes (e.g. calculation of employee social security contributions) and therefore available for presumptive tax purposes.

Country examples. Austria provides an example of this type of presumptive tax, applied to unincorporated businesses only, where the tax base is measured as turnover, minus wages, cost of goods (inputs) and related taxes (including VAT on inputs), less "deductible expenses" measured simply as 12 per cent of turnover [up to a maximum of USD 34 317 (EUR 26 400)]. The simplified regime applies to businesses under a turnover threshold that varies by business sector, with the general threshold being USD 285 978 (EUR 220 000). Where a business decides to opt out of the regime, the decision is binding for 5 years.

Simplified financial accounting for small firms

Income tax systems in most OECD countries are accrual based. Under cash accounting, income tax is paid on revenues only when cash is received, and input costs are claimed only when cash is paid out. Cash accounting systems targeted at SMEs, determining taxable profit based on entries of revenues actually received and costs actually incurred (including immediate expensing of capital purchases), may significantly reduce compliance costs, to a degree depending on the additional supporting documentation that taxpayers are required to assemble and maintain. Other simplification measures may include simplified book-keeping requirements.

Country examples. In Austria, unincorporated businesses with turnover under USD 519 960 (EUR 400 000) are not required to file full financial accounts (only revenues and expenses need to be reported). Small businesses in Belgium with turnover (excluding VAT) under USD 649 950 (EUR 500 000) benefit from simplified accounting rules that stipulate that all transactions must be fully registered in a treasury book, a purchase book and a selling book. Additionally, an inventory (list) should be made at least once a year indicating all credits, debts and resources used in the business.²⁹

In the Czech Republic, simplified "tax evidence" is allowed for taxpayers with turnover under USD 702 000 (CZK 15 million), to limit the amount of detail required in reporting income and expenses. As from 2006, SMEs in Denmark are exempted from supplying full tax accounts with their income tax return (with more detailed tax accounts possibly required under a tax audit).

For companies in Germany under certain turnover or profit thresholds, cash accounting may be used for tax purposes, in place of full financial reporting (profit and loss account, and balance sheet). The turnover threshold determining the obligation to keep accounts and records for tax purposes was recently raised (again), from USD 454 650 (EUR 350 000) to USD 649 950 (EUR 500 000). In Greece, simplified accounting rules and procedures apply to businesses with annual turnover thresholds under USD 389 970 (EUR 300 000) for trading companies and USD 194 985 (EUR 150 000) for services companies.

In Japan, small assets, defined as assets acquired at a cost of less than USD 2 490 (JPY 300 000), may be immediately expensed. A ceiling of USD 24 900 (JPY 3 million) applies to the total amount of immediately expensed small assets in a given year. Similarly, in Spain investments in "low value" assets, defined as assets with a value not exceeding USD 781 (EUR 601), may be expensed ("freely depreciated"), up to an overall ceiling in the tax period for such immediate expensing of USD 15 630 (EUR 12 024).

Small, sole proprietorships in Norway (with assets up to USD 3 140 600 (NOK 20 million) or not more than 20 employees) or general partnerships (with turnover no greater than USD 785 150 (NOK 5 million) and no more than 4 employees) are exempted from preparing annual accounts. However, businesses in this group must prepare an annual report for income tax purposes, to determine taxable income and assets for the year.

In Poland, unincorporated businesses with turnover under USD 1 039 920 (EUR 800 000) may keep a tax book of revenue and expenses (whereas all corporate taxpayers, and unincorporated taxpayers with turnover of USD 1 039 920 million or more must keep regular financial accounts).

Australia provides an example of simplified depreciation rules for SMEs. In particular, under the Simplified Tax System (STS) small businesses with turnover no greater than USD 1 567 200 (AUD 2 million) are allowed to pool depreciable assets for depreciation purposes, and to claim an immediate deduction for low-cost assets [assets whose costs are less than USD 784 (AUD 1 000)]. Assets with effective lives of less than 25 years are allocated to the general small business pool, depreciated at 30 per cent, while assets having effective lives of 25 years or more are allocated to the long life small business pool, depreciated at 5 per cent.

Simplified accounting procedures are provided in Spain for unincorporated and incorporated businesses with turnover under USD 2 599 800 (EUR 2 million), total assets not exceeding USD 1 299 900 (EUR 1 million), and no more than 10 employees (on average over the year).

In Sweden, which relies on a strong connection between the tax base and financial accounts, simplified accounting rules apply only to sole traders with a turnover under USD 429 600 (SEK 3 million).

In the UK, unincorporated businesses with profits under USD 29 389 (GBP 15 000) are allowed to use a simplified self-assessment return. Similarly, a simplified corporation tax return may be used by companies with simplified tax affairs.

In the US, the cash method of accounting (rather than accrual accounting) may be used by businesses with less than USD 1 million in average turnover (annual gross receipts) over the past 3 years, and by businesses with average turnover in excess of USD 1 million but less than USD 10 million that are not in trade, manufacturing, mining, or the information industries. Additionally, businesses with no more than USD 10 million in average turnover are exempt from regular capitalisation requirements to capitalise the direct costs and part of the indirect costs of production or resale activities.

Less frequent interim filing requirements for small firms

One approach that reduces tax compliance costs, while at the same time provides firms with a cash-flow advantage (i.e. savings in present value terms, owing to the time value of money), is allowing small firms to make advance instalments of income tax, and meet interim reporting requirements, on a less frequent basis. Many countries require (large) firms to make advance instalments of income tax, often on a quarterly (or even more frequent) basis. Where small firms are allowed to remit less frequently, for example, semi-annually or annually, compliance costs may be reduced. Cash-flow savings realised by less frequent payments of tax may be viewed as a form of subsidy to help defray remaining compliance costs.

Country examples. Under the PAYG instalments system in Australia, which collects progressively throughout the year a taxpayer's estimated tax liability (on income not subject to the withholding system), most taxpayers pay income tax instalments quarterly. Taxpayers whose previous year's notional tax amount was less than USD 6 269 (AUD 8 000) may make annual instalments (if certain other requirements are met). Canada reports that corporate tax instalments may be made less frequently for small businesses. In Poland, small taxpayers, defined (since 2007) as taxpayers with turnover in the prior year no greater than USD 1 039 920 (EUR 800 000) are entitled to quarterly based tax advanced payment.

5.4. Other simplification provisions

This section of the paper reports simplification provisions in relation to payroll deductions, where SMEs are required to withhold social security contributions and/or income tax on wages paid to employees.³¹ Other simplification measures of particular benefit to SMEs, including the wider use of information technologies to assist taxpayers in understanding and complying with the tax system, are also briefly discussed

Facilitating compliance with social security plans

The questionnaire asks countries to report whether special social security contribution provisions apply to SMEs to simplify tax compliance procedures or otherwise reduce taxpayer costs.

The country responses report a limited number of simplification measures in this area, presumably given the need to rely on SMEs to accurately withhold social security contributions (and personal income tax) on wages and other amounts paid to workers.³² Most of the measures reported by the surveyed countries (measures currently in place or planned) seek to facilitate information gathering and reporting, for example through internet access to forms and electronic filing of returns, rather than to reduce or otherwise simplify the information required for tax calculations, or simplify tax calculation themselves. Reduced contribution payments benefiting small businesses are however

reported, in one country example (Poland) for calculating social security contribution liabilities for new businesses, and in another (UK) for self-employed businesses with very low profits (with both measures only indirectly related to firm size).

Most surveyed countries report not having introduced special social security provisions targeted at the self-employed or incorporated small business employers.³³ Exceptions include Poland and the UK, which report provisions to ease compliance through reduced contribution amounts. In the case of Poland, the base of self-employed social security contributions is declared income from self-employment, which may be no less than 60 per cent of self-employment income in the previous quarter. Similarly, the base of social security contributions for employees and employers is declared income from employment, which may be no less than 60 per cent of employment income in the previous quarter. However, in the case of a person (self-employed individual, or employee) commencing economic activity, the base of social security contributions is reduced by half (50 per cent reduction) during the first two years of activity. The reduced contribution rates do not affect eligibility for social security benefits. In the UK, the self-employed may apply for an exception to pay if their business profits in the year are less than USD 8 748 (GBP 4 465).³⁴ These special provisions in Poland and the UK, while not reducing compliance costs, operate to lower the amount of contributions paid, and thus the overall tax burden on the small business employers and the self-employed, tending to encourage small business creation and compliance.

The US indicates no difference in employment tax liability rules for small employers. However, the frequency with which employment tax deposits are required to be made by employers in the US (payments of social security and Medicare taxes, unemployment insurance, and personal income tax) depends on the size of the firm's payroll. Thus small businesses in the US benefit from less frequent payment requirements.

The questionnaire asks countries to report whether self-employed individuals are allowed to opt-out of social security schemes. None of the OECD countries surveyed, with the exception of Mexico, indicate that full exclusion from the social security system is an option for the self-employed. In some country examples, participation by the self-employed in certain elements of the social security system is optional, while coverage under certain other plans is denied.³⁵

For example, in Canada, the self-employed are required to pay the employee and employer share of the Canada Pension Plan contributions (no opt out provision). However, the self-employed are not covered by the employment insurance (EI) system. In Germany, while in general the self-employed may choose to not participate in the social security system, participation in the public pension system is compulsory for some free-lance occupations.³⁶ In the Czech Republic, only sickness insurance is completely voluntary for the self-employed. In contrast, in Mexico, the self-employed can opt out of social security (i.e. can decide whether they want to participate in the social security system or not).

Simplification provisions for other payroll deductions

In general, SMEs are required to withhold and remit to government not only social security contributions, but also personal income tax on wages paid to employees. While simplification options in this area would appear to be limited, some relief is provided where the frequency of remittance payments is reduced. Under the Pay As You Go (PAYG) withholding system in Australia, "small withholders" [withholding USD 19 590 (AUD 25 000) or less per year] may make quarterly remittances of income tax withheld from wages of employees.³⁷

In Ireland, where a number of measures have been introduced in recent years to ease compliance with tax and duty systems, small business employers are subject to less frequent remittance requirements for withholding of income tax and social security contributions, as of 2006, under the PAYE (pay-as-you-earn) and PRSI (pay-related social security) systems. In particular, quarterly filing arrangements apply to employers whose annual PAYE/PRSI liability was USD 38 997 (EUR 30 000) or less in the prior year, reducing the administrative burden for roughly 76 000 SME employers.

Under recently introduced tax simplification initiatives targeted at SMEs in New Zealand, subsidies are provided to small employers to help defray the cost of using external payroll providers to comply with PAYE (pay-as-you-earn) tax obligations. In additional, the timing of payment requirements of provisional income tax has been aligned with payments of VAT (Goods and Services Tax) in order to reduce the number of tax payment dates. At the same time, small businesses are allowed to base their provisional income tax payments on VAT sales. In addition, a partial tax rebate is provided for early payment of provisional tax in the first year of a business.

Canada also reports that, depending on the size of payroll remittances, small businesses are permitted to remit payroll source deductions less frequently than large corporations. Similarly, in the US, as noted above, the frequency with which employers must make employment tax deposits (including payments of personal income tax) depends on the size of the firm's payroll, thus with the greatest relief provided to small businesses.

Further simplification measures

This final section reviews a number of other measures taken by the surveyed countries to reduce tax compliance costs. In particular, a number of countries report having implemented efficient electronic platforms to facilitate business access to information on how to comply with payroll, income tax and social security systems, and to ease the transfer by business to government of relevant information (forms) and contribution amounts. While in general such measures are not specifically targeted at small businesses, they are reported as being of particular benefit to smaller businesses (having relatively low turnover and limited profit to defray the cost of compliance requirements having a significant fixed cost component). A recent initiative reported below that is specific to small businesses is one reported by Australia, which has standardised its small business definition used to direct small business concessions.

In Germany, new software (ElsterLohn) is provided to employers to allow them to transfer data contained on a "certificate of wages tax deduction" electronically to the tax administration. This saves SMEs in Germany the need to process and dispatch some 30 million hard-copy certificates, significantly reducing tax compliance costs. In addition, the tax administration provides the software package ElsterFormular as a free service, which supports the filing of the income tax return, the VAT return, the trade tax return, the provisional VAT return, the wages tax return and the certificate of wages tax deduction.

In Canada, the creation of the "My Business Account" service allows businesses to access their business information online 7 days a week, 21 hours per day. Also provided are electronic services and forms for business making it easier to register a business, file tax and information returns (subject to eligibility), file tax remittances and to receive refunds and make payments. Similarly, in Belgium, the introduction of electronic tax returns for filing of VAT declarations, corporation tax, individual income tax, and withholding taxes on wages and salaries, can be expected to provide compliance savings of particular benefit to SMEs.

New business models and related IT systems have been introduced in Ireland to streamline the PAYE system and minimise the necessity for customer contacts with revenue authorities. Use of the Revenue On-line Service has promoted to the public, explaining the efficiencies and benefits in reduced time and effort for the completion of returns, on-line validation, immediate processing, quicker turnaround times where repayments are due, and on-line access to current year and historic returns and accounts. Moreover, systems are in place to identify disincentives to taxpayers dealing with Revenue electronically, so that these impediments may be addressed.

In Japan, the National Tax Agency (NTA) has taken a number of steps to reduce taxpayer compliance costs through tax education programmes and tax counselling, public relation activities to explain the importance complying with the tax system and to provide information on tax law and procedures, and through enhanced convenience for filing.

In Poland, efforts to reduce tax complication costs are focused primarily on providing better access to tax information, through the use of brochures and websites with information on taxes and compliance requirements. The US reports multiple efforts within the Internal Revenue Service to address costs incurred by taxpayers to meet their tax obligations. Offices with specific responsibilities in this area are the Office of Taxpayer Burden Reduction, Electronic Tax Administration, and the Taxpayer Advocate.

A final simplification initiative to highlight is that introduced by Australia. As of 1 July 2007, the turnover-based eligibility criteria in Australia were standardised for all small business tax concessions. Prior to this, separate eligibility tests applied for small business concessions – in particular, the definition of small business varied across different areas of the tax law. As a result of new legislation, one eligibility test applies to determine access to a range of small business concessions. It is estimated that a single definition of small business will result in reduced compliance costs for some two million Australian small businesses, or over 90 per cent of all Australian businesses.

Notes

- 1. The total resource cost to business of a given tax system may be considered as consisting of two parts: a) the amount of money that taxpayers are required to pay to government, to meet their tax liabilities (which may be loosely referred to as the "statutory tax burden"), and b) the amount of administrative resources not paid to government but required to determine, document and make tax payments so-called "tax compliance costs" (including recording transactions, maintaining accounts, computing and filing tax returns, etc.). Measures that reduce tax compliance costs (e.g. less frequent filing and payments of a given amount of tax liability) may involve reduced payments to government. Likewise, measures that adjust the statutory tax burden, or the way the tax burden is computed, may result in decreased (or increased) tax compliance costs. A further consideration is an analysis of the economic incidence of these costs that is, an examination of how the burden of this total resource cost is reflected in higher consumer prices, reduced total returns to labour and reduced total returns to capital.
- 2. This recognises that for many employees, personal income tax and social security contribution calculations are carried out by employers (with tax withheld at source), saving employees considerable time/cost associated with self-assessment, record keeping and tax payment. For other employees, where tax is not withheld and compliance costs are met individually, the time/cost in completing and submitting tax returns may be relatively low for an employee, compared to compliance costs facing a self-employed individual, or the owner/worker of an incorporated company, which may grow as the complexity of the business operation expands.
- 3. In principle, possible effects of simplification measures on the amount of tax paid to government should be assessed on a present value basis. This approach would take into account savings from less frequent filing requirements which do not affect the total amount of tax paid, but the present value of the payments, owing to the time value of money.

- 4. Compliance costs may also affect business growth where they vary with firm size, for example where they adjust sharply when turnover or some other size-related threshold is crossed that influences tax burden. A particular example arises when moving from a simple presumptive system to a regular income tax. Recognising this, policy makers generally aim for a relatively smooth transition in tax burden between regimes.
- 5. Difficulties are met in gauging the extent to which simplification translates into increased compliance with (adherence to) a tax system (e.g. increased participation in the formal economy, less underreporting of taxable income by those that file). While rough estimates can be made of the resource savings to taxpayers of a simplified set of procedures, measuring the impact of such savings on behaviour is exceedingly difficult, as the parameters impacting taxpayers' decisions (including reputation parameters) are generally unknown and likely to vary across taxpayers and countries. Also unknown is the size of the pre-reform informal economy (implying no stock figure against which to apply estimates of the percentage change of informal workers to formal workers, making estimates elusive). Perhaps the best that policy makers can do is look to the experience of other countries that have introduced far-reaching simplification measures and observe whether tax revenues were significantly affected (taking into account other reforms and events that could also affect total revenues raised).
- 6. While addressing underreporting of taxable sales and profits is a challenge in dealing with certain businesses of all sizes, the problem of informality that is, businesses operating outside the tax system is a particular challenge in dealing with small firms, where remaining below the "radar screen" of tax authorities is generally less difficult. Reducing tax compliance costs is likely to encourage more small businesses to operate within the formal economy, but may not necessarily reduce the level of underreporting of profits, or guarantee that businesses entering the formal economy will fully report all profits.
- 7. The OECD Istanbul Declaration was endorsed by OECD ministers and Government representatives in Istanbul, 3-5 June 2004.
- 8. For an excellent survey of approaches, see Designing a Tax System for Micro and Small Businesses: Guide for Practitioners, The World Bank Group (International Finance Corporation, in collaboration with DFID), December 2007.
- 9. A VAT collection threshold may be referred to alternatively as a VAT exclusion threshold. With a VAT exclusion, a firm is waived of the responsibility of collecting VAT (imposed on consumers).
- 10. In 2004, Tanzania increased its VAT exemption threshold from roughly USD 15 800 to USD 31 600. This resulted in deregistration for VAT purposes of about 7 000 firms, or almost half of the total of 15 320 VAT taxpayers. Interestingly, VAT revenues increased over the following two years by almost 50 per cent [see Ebril et al. (2001), The Modern VAT, IMF, Washington.]
- 11. This condition may be expressed as follows: $vz + C > \delta(vz A)$, implying an optimal turnover level of $z^* = (\delta A + C) / (\delta 1) v$, where A measures tax administration costs per unit of output, C measures tax compliance costs per unit of output (declining with the level of output), τ is the VAT rate and v measures value added per unit of output (so that tax paid at the turnover level z is vz), and δ measures the value of public funds. The optimal exclusion threshold is increasing with A and C, while decreasing with v and v see Ebril et al. (2001).
- 12. The VAT system in Australia and Canada is referred to as a Goods and Services Tax (GST).
- 13. Figure 5.1 shows standard annual threshold values for 2006, except for the case of Italy, where the threshold of USD 9 099 came into effect in 1 January 2007 (with the enabling legislation having been introduced in 2006). Austria reports that its turnover threshold increases to USD 38 997 as of 2007. Firms with turnover below the indicated VAT threshold are not required to collect VAT on sales. In some countries (e.g. Belgium), firms below the collection threshold are required to register for VAT purposes.
- 14. In general, voluntary registration is not possible in Norway. However, special rules apply regarding the leasing of agricultural land and the maintenance of roads for use in forestry business, in which case registration is allowed irrespective of turnover.
- 15. Swedish National Tax Board (2006); see also, for example, Agha and Haughton (1996).
- 16. The base (reference) year for the taxable sales (turnover) threshold is two years preceding the current year.
- 17. See Terkper, Seth (2003), "Managing Small- and Medium-Size Taxpayers in Development Countries", Tax Notes International, 29, 13 January, 211-234.
- 18. USD 1 567 200 (AUD 2 million) from 1 July 2007.

- 19. SKK 10 million, EUR 800 000, EUR 1 million, CZK 40 million and EUR 6 million, respectively. Figures refer to taxable turnover. In Belgium, the turnover for quarterly returns is reduced to USD 259 980 (EUR 200 000) for certain businesses, including suppliers of mineral oils, mobile telephone equipment, computers, computer peripherals, accessories and components, and motorised land vehicles. Similarly, Poland reduces the turnover for quarterly returns to USD 38 997 (EUR 30 000) for certain specific cases.
- 20. Small businesses may be exempted from regular income tax, and/or excluded from VAT (not required to collect VAT). The term "exemption" is used in the case of income tax, as income tax is levied on businesses. The term "exclusion" may be used in the context of VAT, as VAT is imposed on consumers. Under a VAT exclusion, small businesses are waived of the responsibility of collecting this tax.
- 21. As considered in the previous section, firms falling under a VAT collection threshold may be placed at competitive disadvantage due to loss of input tax credits, creating pressure for possibility of opting-in.
- 22. While the marginal tax rate on revenue is zero, the marginal tax rate on investment in buildings, inventories or machinery (more specifically, the METR on profit from these investments) is positive where the indicator base includes an amount that increases with investment in buildings, inventories or machinery.
- 23. Whether a turnover tax reduces the tax liability of a small business, relative to that under regular income tax, depends on the specific design features of both taxes, and the level of turnover and profit (or loss) of the business (including the flexibility of business loss provisions of the regular income tax).
- 24. As in other OECD countries, unincorporated business income of individuals is subject to personal income tax. In Poland, unincorporated (non-agricultural) businesses may elect for taxation of business income under a flat 19 per cent rate (equal to the corporate income tax applied to profits of incorporated businesses), or for turnover-based taxation ("lump-sum" tax rates applied to registered revenues). (The turnover tax rates are referred to as "lump-sum" tax rates as they are prescribed under the Lump-Sum Income Tax Act which governs both the turnover tax and the "tax card" system). The presumptive taxes substitute only for personal income tax on unincorporated business income (not for VAT or social security contributions).
- 25. Adjusted (net) turnover taxes may be viewed as similar in certain respects to cash-flow taxes (e.g. by providing immediate expensing of capital costs, denying deductions for interest expense, and excluding interest income from the base). At the same time, adjusted turnover taxes differ when allowing simplified calculations for certain business costs (e.g. as in the Austrian example which provides a standard deduction equal to 12 per cent of turnover).
- 26. The questionnaire responses reveal that some policy makers refer to a simplified deduction for input costs determined as a percentage of turnover as "lump sum" deduction, even though the deduction is not a fixed amount (instead variable with turnover).
- 27. Modified "lump sum" deductions apply to restaurants, hotels, food retailers and certain other business activities (e.g. for free professionals, deductible expenses are calculated as 6 per cent of turnover).
- 28. For restaurants and hotels, the turnover threshold below which the presumptive tax applies is USD 331 475 (EUR 255 000). For drug stores and food retailers, the turnover threshold is USD 519 960 (EUR 400 000) and USD 779 940 (EUR 600 000) respectively, assessed in the two preceding years.
- 29. Simplified accounting rules requiring double-entry accounting and an annual inventory also apply in Belgium to SMEs meeting the following tests: no more than 50 employees on average over the year; annual turnover (excluding VAT) no greater than USD 9 489 270 (EUR 7 300 000); and total assets no greater than USD 4 744 635 (EUR 3 650 000).
- 30. STS taxpayers also have access to simpler trading stock rules.
- 31. In countries with social security systems, individuals owning an unincorporated business are typically required to pay self-employed social security contributions on their own behalf levied on business income, and employee social security contributions on wages paid to workers. For an incorporated SME, employer and employee social security contributions are typically imposed on the wage income of all workers, including wages of a business owner/worker.

- 32. Australia reports that payroll taxes levied on wage/salary costs at the sub-central level (by State and Territory governments) generally have thresholds aimed at excluding small businesses from these taxes. Thresholds are usually based on annual turnover and/or the number of employees.
- 33. Australia and New Zealand do not have a separate social security (social insurance) scheme. Health and unemployment benefits are funded out of general government revenue.
- 34. The self-employed are required to pay "Class 2" contributions on profits above USD 8 748, and may make payments on business profits under this threshold to secure entitlement to benefit. Payment of Class 2 contributions count toward the basic state pension, maternity allowance and incapacity benefit. The self-employed also pay Class 4 contributions of 8 per cent on profits between USD 9 865 (GBP 5 035) and USD 65 712 (GBP 33 540), plus an additional 1 per cent on profits above USD 65 712.
- 35. The compliance implications of opt-out provisions are complex. Where the self-employed are able to opt out of a social security system, and choose to not participate, or where they are excluded from the system, the burden of social security contributions is eliminated (i.e. no compliance costs or contribution payments associated with this system, other than possibly notifying an opt-out decision). However, the burden of a public system may be replaced by the burden of complying with requirements under a private system, where an individual wishes insurance coverage (public or private), whether self-employed or employed. Overall compliance costs may be increased where self-employed are only partly excluded from the social security system (given the need to report and pay contributions to government for the public component, and to the private sector for private coverage).
- 36. Germany reports that the self-employed may opt in for public health insurance (sickness funds). As from 1 April 2007, cancellation of public health insurance requires proof of alternative coverage.
- 37. Under the Australian PAYG system, the frequency with which taxpayers must remit payments depends on the amount withheld in the previous year. Entities that withheld amounts exceeding USD 783 600 (AUD 1 million) are required to remit within six to nine days after the amount was withheld. Medium withholders (those who withheld between USD 19 590 and USD 783 600 per year) must remit monthly.

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ANNEX A

Exchange Rates

Table A.1. Exchange rates used in the country responses to the SME tax questionnaire

Country (currency) ¹	Exchange rate (currency/USD)	Exchange rate (USD/currency)
Australia (Australian dollar)	1.2762	0.7836
Austria (euro)	0.7693	1.2999
Belgium (euro)	0.7693	1.2999
Canada (Canadian dollar)	1.1740	0.8518
Czech Republic (Czech koruna)	21.4332	0.0468
Demnark (Danish krone)	5.7342	0.1744
Germany (euro)	0.7693	1.2999
Greece (euro)	0.7693	1.2999
Ireland (euro)	0.7693	1.2999
Italy (euro)	0.7693	1.2999
Japan (yen)	120.44	0.0083
Mexico (Mexican peso)	10.9483	0.0913
New Zealand (New Zealand dollar)	1.4385	0.6952
Norway (Norwegian krone)	6.3682	0.15703
Poland (euro)	0.7693	1.2999
Slovak Republic (Slovak koruna)	26.7336	0.0374
Spain (euro)	0.7693	1.2999
Sweden (Swedish krona)	6.9832	0.1432
United Kingdom (pound sterling)	0.5104	1.9592

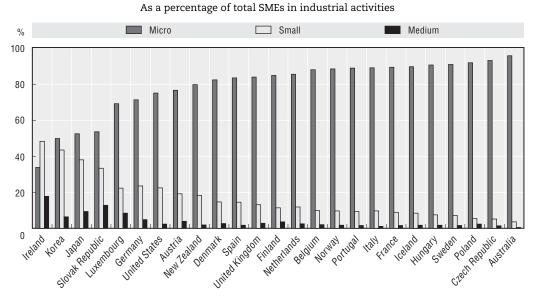
^{1.} Exchange rates reflect the monthly average in January 2007. Source: ECB database and www.oanda.com/convert/fxhistory.

ANNEX B

SME Characteristics

Distribution of SMEs by size

Figure B.1. **SMEs by size class in industrial activities**

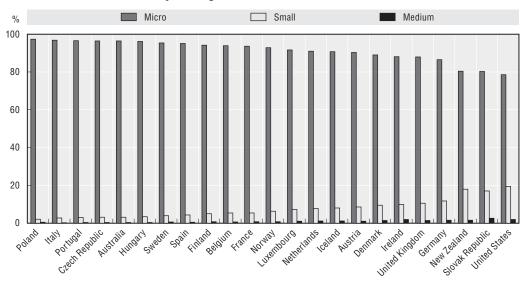


Note: These figures need to be considered with caution. Because of confidentiality reasons, data is missing for the following countries: Belgium, activities C and E; Finland F; Hungary C; Ireland C and E; Japan C, E and F; Korea E and F; Luxembourg F; Norway C and E.

Source: OECD Structural and Demographic Business Statistics Database, 2005 or most recent available year.

Figure B.2. **SMEs by size class in service activities**

As a percentage of total SMEs in service activities



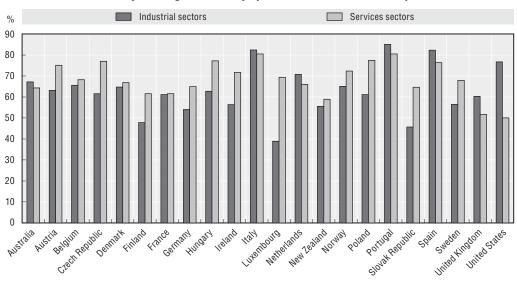
Note: Because of confidentiality reasons, data is missing for Luxembourg, activity I.

Source: OECD Structural and Demographic Business Statistics Database, 2005 or most recent available year.

Weight of SMEs in employment and innovation

Figure B.3. Employment in SMEs in industrial and service activities

As a percentage of total employment in each sector of activity

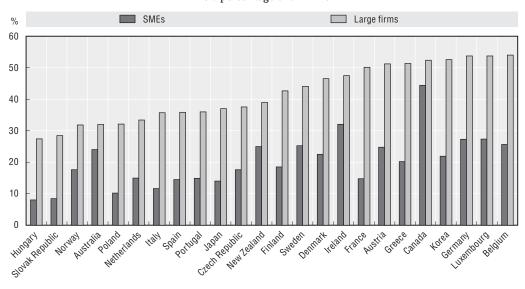


Note: These figures need to be considered with caution. Because of confidentiality reasons, data is missing for the following countries: In Industrial sectors, Austria C and E; Belgium C and E; Denmark C and E; Finland C and F; Ireland C and E; Japan C, E and F; Korea E and F; Luxembourg C, E and F; Norway E; Portugal C and E; and USA D. In the Service sectors, Luxembourg I, and the USA D.

Source: OECD Structural and Demographic Business Statistics Database, 2005 or most recent available year.

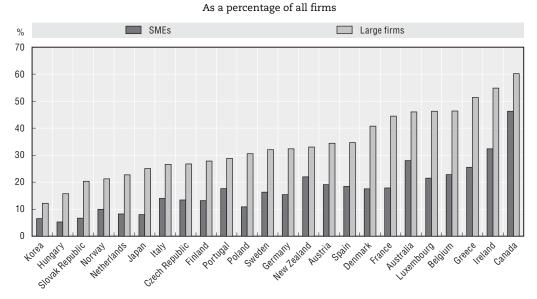
Figure B.4. In-house product innovators by size, 2002-04

As a percentage of all firms



Source: OECD Science, Technology and Industry: Scoreboard 2007.

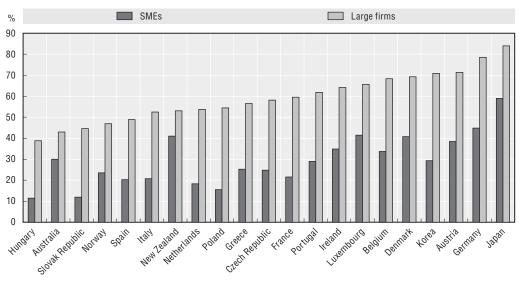
Figure B.5. In-house process innovators by size, 2002-04



Source: OECD Science, Technology and Industry: Scoreboard 2007.

Figure B.6. Non-technological innovators by size, 2002-04

As a percentage of all firms



Source: OECD Science, Technology and Industry: Scoreboard 2007.

SME characteristics by business structure

Figure B.7. Distribution of aggregate employment by number of employees and business structure

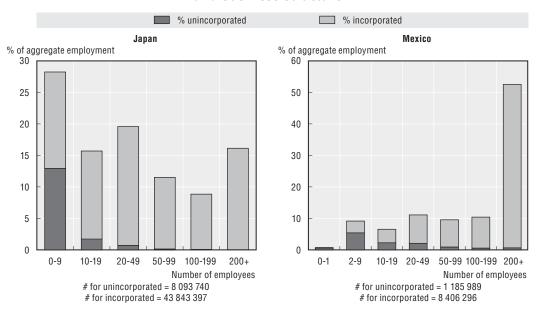
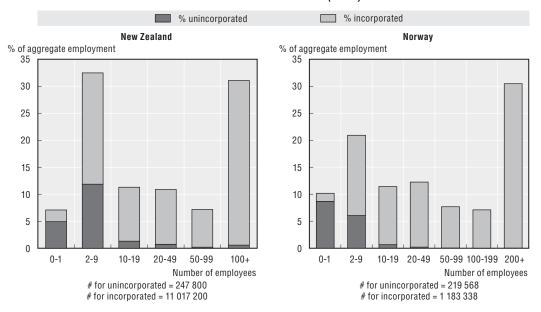
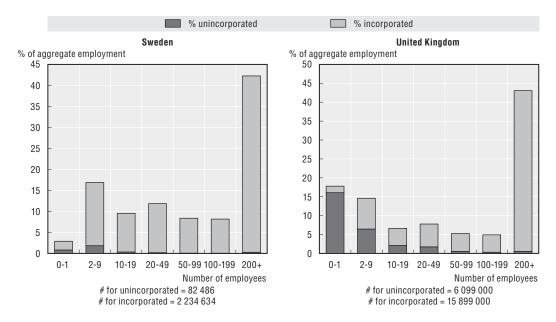


Figure B.7. Distribution of aggregate employment by number of employees and business structure (cont.)





Source: Country responses to SME Tax Questionnaire.

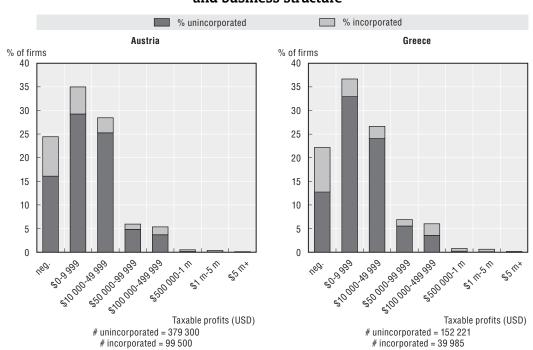


Figure B.8. Distribution of number of firms by taxable profits and business structure

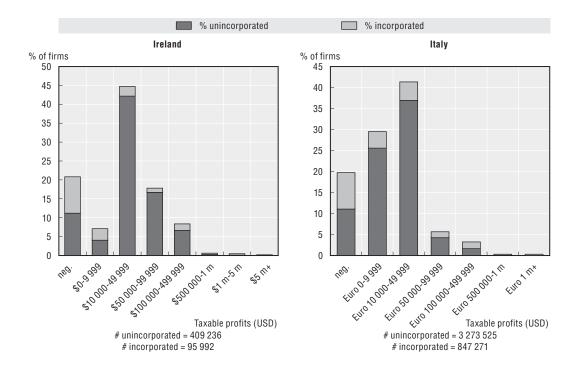
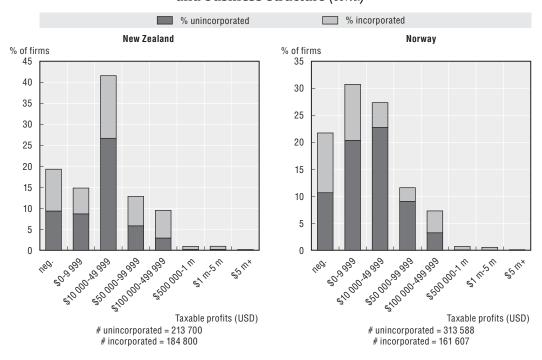
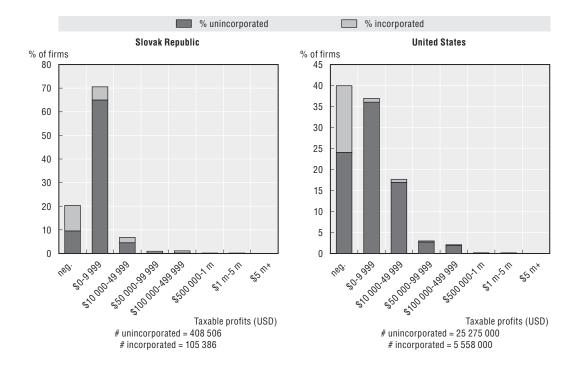


Figure B.8. **Distribution of number of firms by taxable profits** and business structure (cont.)





w unincorporated m % incorporated Mexico Sweden % of firms % of firms 90 90 80 80 70 70 60 60 50 50 40 40 30 30 20 20 10 10 \$1000 A9999 \$10000 98 98 98 0 \$1000 A3999 \$50000,98098 5-10 DOCARS OF S Sylvan Carlos and State 2019 99 9 50.0000 SIMSM SIMISM ^U€Q. ¹6∂. Taxable profits (USD) Taxable profits (USD) # unincorporated = 797 130 # incorporated = 307 688

Figure B.8. Distribution of number of firms by taxable profits and business structure (cont.)

Source: Country responses to SME Tax Questionnaire.

unincorporated = 1 875 752 # incorporated = 366 355 Excludes firms with tax losses

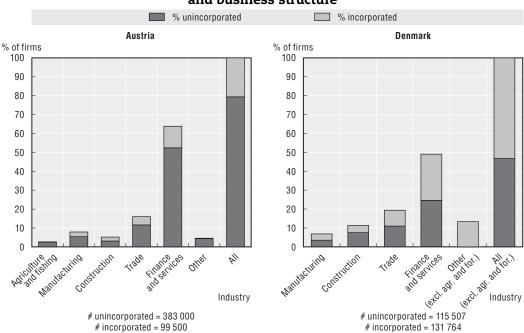
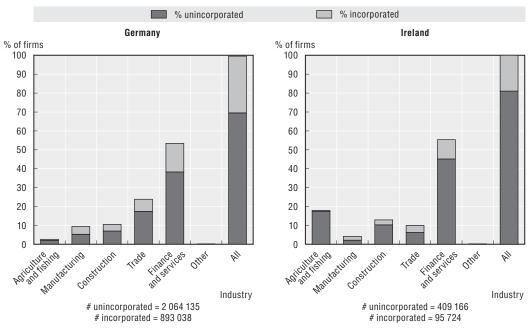
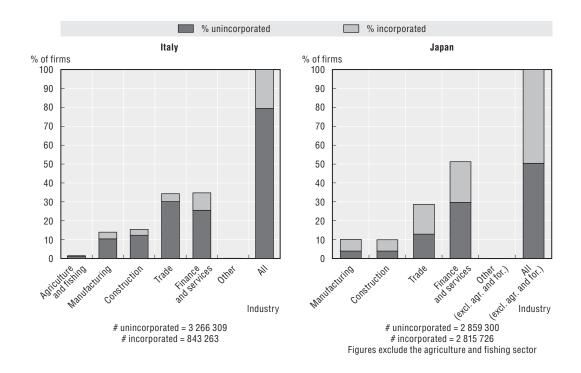


Figure B.9. Distribution of number of firms by business activity and business structure

Excludes firms with tax losses

Figure B.9. **Distribution of number of firms by business activity** and business structure (cont.)





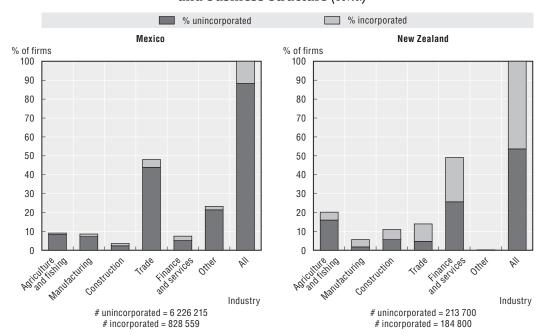


Figure B.9. **Distribution of number of firms by business activity** and business structure (cont.)

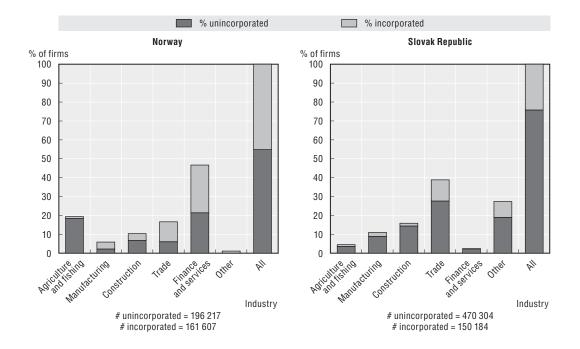
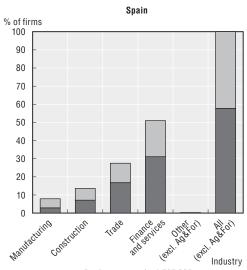
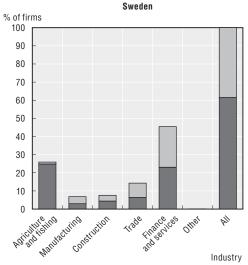


Figure B.9. **Distribution of number of firms by business activity** and business structure (cont.)

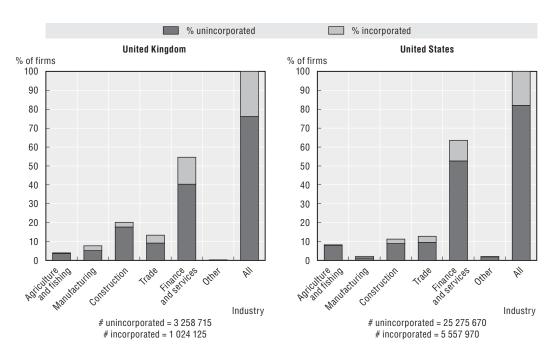


unincorporated = 1 767 265 # incorporated = 1 296 864 Figures exclude the agriculture and fishing sector.



unincorporated = 429 795 # incorporated = 268 917

Figures exclude 278 034 unincorporated businesses and 47 984 incorporated businesses that are not assigned to any industry (total unincorporated = 707 829, total unincorporated = 316 901).



Source: Country responses to SME Tax Questionnaire.

ANNEX C

Social Security Contributions

	Employer							Employee							Self-en	nployed							
	lax rate	Marg.	Base		Deductibility ⁵		Tax	Marg.	Base		Deductibility ⁵		Toy	Marg.	Base		Deduct	tibility ⁵					
		rate/lump sum ^{2, 3}	Lower threshold ⁴	Upper threshold ⁴	Base	%	base	rate/lump sum ^{2, 3}	Lower threshold ⁴	Upper threshold ⁴	Base	%	Tax base	rate/lump sum ^{2, 3}	Lower threshold ⁴	Upper threshold ⁴	Base	%					
Australia	-	-	_	-	-	_	-	_	_	_	_	-	_	-	-	_	-	-					
Austria ^a	14*MGE	21.63	[4 776]	53 760	TY	100	14*MGE	18.06	[4 776]	53 760	TY	100	AP	24.60	0	53 760	TY	100					
Belgium ^b	MGE	34.56	-	-	TY	100	MGE	13.07	-	-	TY	100	TY	19.65 14.16	9 793 47 830	47 830 70 492	-	-					
Canada	AGE	2.52 7.47 4.95	3 500 40 000	3 500 40 000 43 700	TY/TYs	100	AGE	1.80 6.75 4.95	3 500 40 000	3 500 40 000 43 700	_		AGE	9.90	3 500	43 700	TY/TYs	50					
Czech Republic	MGE	35.00	40 000	43 700	TY	100	MGE	12.50	40 000	43 700	TY	100	AGE	19.40	_	486 000	TY	100					
Denmark	IVIGE	1 951 (A)	_	_	TY	100	IVIGE	9 027	_	_	TY	100	AGL	1 951 (A)	_	400 000	TY	100					
Delillark		1 301 (A)	_	_	11	100	AGE	8.00	_	_	TY	100		1 931 (A)	-	_	11	100					
Finland ^c	AGE	24.00	-	-	TY	100	TYs AGE	1.28 5.63	-	-	– TY	- 100	AGE TY's	22.14 1.33	- 1	-	TY -	100					
Franced	AGE	41.7	0	32 184			AGE	21.56	0	32 184	11	86.9	AGE	40.63	0	32 184							
Trance	AGE	40.90	32 184	96 552			AGE	19.91	32 184	96 552		85.9	/\dL	14.38	32 184	128 736							
		27.60	96 552	128 736				11.01	96 552	128 736		74.5		14.38	128 736	160 920							
		23.68	128 736	.20.00	TY	100		8.61	128 736	.20.00	TY	67.4		7.98	160 920	-	_	_					
			120100											1 276	160 920	_							
														39.63	0	32 184							
														20.88	32 184	96 552							
														14.38	96 552	160 920	-	-					
														7.98	160 920	_							
														1 248	160 920	-							
Germany	AGE	19.70 12.20	0 42 750	42 750 63 000	TY	100	AGE	20.60 12.20	0 42 750	42 750 63 000	EMPR	100	-	-	-	-	-	-					
Greece ^e	MGE	28.06	_	5 279.6	TY	100	MGE	16.00	_	5 279.6	TY	100	-	-	-	-	TY	100					
Hungary	AGE + B	29.00	-	-	TY	100	AGE	8.50	0	6 748 847	-	-	TY	36.00	-	_	TY	100					
	AGE + B	3.00	-	-	TY	100	AGE	8.50	_	_	_	_	TY	8.50	0	6 748 850	_	_					
													TY	4.00	-	-	-	-					

Table C.1. Employer, employee and self-employed social security contributions¹ (cont.)

n.a.: data not provided; WGE: weekly gross earnings; MGE: monthly gross earnings; MGE: monthly conventional gross earnings; AGE: annual gross earnings; AGE: annual gross earnings plus benefits; AP: adjusted profits; TY: taxable income measured for central government tax purposes;

TYs: taxable income measured for sub-central government tax purposes

			Emplo	oyer			Employee								Self-en	nployed		
	Tax	Marg.	Bas	e	Deductibility ⁵		Tax	Marg.	Base		Deductibility ⁵		Tau	Marg.	Base		Deductibility ⁵	
	base	rate/lump sum ^{2, 3}	Lower threshold ⁴	Upper threshold ⁴	Base	%	base	rate/lump sum ^{2, 3}	Lower threshold ⁴	Upper threshold ⁴	Base	%	Tax base	rate/lump sum ^{2, 3}	Lower threshold ⁴	Upper threshold ⁴	Base	%
Iceland ^f	AGE	5.34	-	-	TY	100	TY AGE	6 314 8.00	1 080 067	1	– TY	- 100	AGE	5.34	-	-	-	100
Ireland	AGE	8.50 10.75	0 18 512	18 512 -	-	-	AGE	4.00 6.00 2.00 2.50	17 628 24 960 48 800 100 100	24 960 48 800 100 100 -	_	_	WGE	5.00	3 174	-	-	-
Italy	AGE	32.08	0	87 187	TY	100	AGE	9.49 10.49	0 40 083	40 083 87 187	TY	100	AGE	19.50 20.50 2 652	13 598 40 083 40 083	40 083 66 805 66 805	TY TY	100 100
Japan ^g	MGE MGE MGE	12.451 5.13 1.03	0 620 000 1 210 000	620 000 1 210 000 -	TY TY TY	100 100 100	MGE MGE MGE	12.021 4.70 0.60	0 620 000 1 210 000	620 000 1 210 000 -	TY TY TY	100 100 100	-	-	_	-	-	-
Korea	MGE MGE	9.54 5.04	0 1 944 000	1 944 000 –	TY TY	100 100	MGE MGE	4.50 2.84	0	1 944 000 -	TY -	100 –	n.a.	n.a.	-	-	-	-
Luxembourg ^h	AGE AGE	14.02 13.16	0 18 843.36	18 843.36 94 216.80	TY TY	100 100	AGE AGE	13.05 1.00	0 4 710.84	94 216.8	TY -	100 –	AP AP AP	21.60 23.00 1.40	0 4 711 94 217	4 711 94 217 –	TY TY TY	100 100 100
Mexico ⁱ	MGE MGE MGE MGE	304 6.62 8.21 3 361	0 0 4 615 38 454	38 454 4 615 38 454 -	TY TY TY TY	100 100 100 100	MGE MGE MGE	1.25 1.81 661	0 4 615 38 454	4 615 38 454 –	1 1 1	- - -	-	4 084 (A) 4 792 (A)	-	-	-	-
Netherlands	AGE AGE	7.65 12.05 6.50	0 15 660 0	15 660 45 017 30 623	TY TY	100 100	AGE AGE AGE TY	1 012 3.85 6.50 31.15	0 15 660 0	30 623 45 017 30 623 31 122	TY - -	100 _ _	TY TY	31.15 4.40	0	31 122 30 623	-	-
New Zealand Norway ^j	– AGE	- 12.80	-	-	– TY	- 100	– AGE	7.80	_	-	-	- -	– AGE	- 10.70	- 29 600	-	-	-

n.a.: data not provided; WGE: weekly gross earnings; MGE: monthly gross earnings; MGEc: monthly conventional gross earnings; AGE: annual gross earnings; AGE: annual gross earnings; AGE: annual gross earnings plus benefits; AP: adjusted profits; TY: taxable income measured for central government tax purposes;

TYs: taxable income measured for sub-central government tax purposes

			Emp	loyer			Employee								Self-en	nployed	Deductibility ⁵ Base % n.a. n.a. TY 100 TY 100 TY 100 TY 100 TY/TYs 100 TY/TYs 100 TY 100 TY 100					
	Tax base	Marg. rate/lump sum ^{2, 3}	Ва	ase	Deductibility ⁵		Tax	Marg.	Base		Deductibility ⁵		Tax	Marg.	Base		Deductibility ⁵					
			Lower threshold ⁴	Upper threshold ⁴	Base	%	base	rate/lump sum ^{2, 3}	Lower threshold ⁴	Upper threshold ⁴	Base	%	base	rate/lump sum ^{2, 3}	Lower threshold ⁴	Upper threshold ⁴	Base	%				
Poland	AGE	20.43 4.17	0 78 480	78 480 –	TY TY	100 100	AGE AGE	14.76 17.21 9	0 78 480	78 480 –	TY TY TY	100 100 100	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.				
Portugal	MGE	23.75	_	_	TY	100	MGE	11.00	_	_	TY	100	MGEc	25.40	[604.5]	4 836	TY	100				
Slovak Republic ^k	MGE	13.75	[7 600]	54 053	TY	100	MGE	8.00	[7 600]	54 053	TY	100	MGE	28.75	7 600	54 053	TY					
		1.65	[7 600]	27 026	TY	100	MGE	1.40	[7 600]	27 026	TY	100		4.40	7 600	27 026	TY	100				
		10.00 0.80	[7 600] [7 600]	51 822 -	TY TY	100 100	MGE	4.00	[7 600]	51 822	TY	100		14.00	7 600	51 822	TY	100				
Spain ^l	AGE	30.15	[7 988.4]	35 953.2	TY	100	AGE	6.35	[7 988.4]	35 953.2	TY	100	AGE	29.80	[9 615.6]	35 953	TY	100				
Sweden ^m	AGE + B	32.42	-	-	TY	100	AGE	7.00	[17 046.9]	371 200	TC	100	AGE + B	30.71	[17 047]	-	TY/TYs	100				
Switzerland	AGE	11.05 10.05	0 106 800	106 800 –	TY TY	100 100	AGE	11.05 10.05	0 106 800	106 800 -	TY TY	100 100	n.a.	n.a.	-	-	-	-				
Turkey	AGE	21.50		44 753.4	TY	100	AGE	15.00		44 753.4	TY	100	AGE	-	374.4 185.3	1 726.5 690.6	TY	100				
United Kingdom ⁿ	WGE	12.8	100	-	TY	100	WGE WGE	11.00 1.00	100 670	670 -	-	-	AGE AGE AGE	8.00 1.00 2.20 (W)	5 225 34 840 4 635	34 840 - -	n.a. – –	n.a. _ _				
United States	AGE	13.85 7.65 1.45	7 000 97 500	7 000 97 500 –	TY	100	AGE	7.65 1.45	97 500	97 500 -	-	-	AGE	15.30 2.90	97 500	97 500 -	TY	50				

Explanatory notes to Table:

- 1. This table reports employer, employee and self-employed social security contribution rates and related provisions (using the representative case for those countries where social security provisions vary by locality). Threshold and maximum contribution amounts are shown in national currencies. For the purpose of this table, a dash (–) means "not applicable".
- 2. Social security contribution marginal rates (flat or graduated) in many cases are aggregates over different rates for different social security contribution pools (e.g., for unemployment, health, etc.). Where a flat rate system applies, the marginal rate applies to the tax base identified in column 1 (e.g., monthly gross earnings see key to abbreviations) in excess of the lower threshold (base) amount, if any, up to the upper threshold (ceiling), if any. Similarly, where a graduated system applies, the marginal rates apply to the corresponding tax base band (lower threshold up to upper threshold) on the same line.
- 3. Lump sum charges are in bold. The lump-sum charge (if any) relates to the time-frame [annual (A), monthly (M) or weekly (W)] as indicated in parentheses after the lump-sum amount. Where a taxpayer is exempt from the lump-sum charge if his/her earnings or income fall below a certain level, this amount is indicated in the "lower threshold" column, with the relevant measure noted in parentheses.
- 4. The base parameters (lower threshold and upper threshold) relate to the SSC calculation and the same time-frame (week, month or year) as indicated in the first (tax base) column. Where a lower threshold is shown without brackets, contributions are calculated as a percentage of gross earnings in excess of this threshold. Where a lower threshold amount is shown in square brackets [], the threshold is not a contribution-free amount deducted from the base but an amount which is used to determine whether the contribution is payable on the total amount of earnings. When indicated in a country-specific footnote, the amount shown in this column is in a minimum tax base for contributions and not a lower threshold. Where an upper threshold value is shown on the same line as the top (or flat) marginal rate, the contributions are "capped" at this threshold (they are not imposed on the tax base in excess of this amount). The "lower" and "upper" thresholds (shown under "base") are relevant to the marginal rate, unless no marginal rate is shown, in which case the thresholds applies to the lump-sum charge.
- 5. The 5th and 6th columns, for each type of social security contribution, consider the extent to which contributions are deductible against personal taxable income. Where they are deductible against central government taxable income, the base is shown as TY and the deductible proportion of the contribution is given. If, in the representative case, sub-central government personal income tax is determined as a percentage of taxable income (TYs) which may differ from the definition used for central government purposes (TY), and if employee social security contributions are deductible from this base, then TYs and the deductible portion are shown. If contributions are deductible from both the central government tax base and (separately) the sub-central tax bases, then TY and Tys are shown on separate lines, along with the deductible portions. [Note that if sub-central income tax is determined as a percentage of central government tax or central government taxable income (with employee social security contributions indirectly deductible through this channel), this additional information would not be relevant.]

Country-specific footnotes:

- a) The lower thresholds for employer and employee social security contributions are equal to EUR 341.16 * 14. The self-employed social security contribution rate reported is for 2006. Data for 2007 is not yet available.
- b) For self-employed social security contributions, the rate schedule is applied to the inflation-adjusted taxable income (TY) of the previous three years.
- c) For self-employed social security contributions, the tax base is income as defined by the self-employed person for pension income insurance purposes.
- d) For self-employed social security contributions, the first set of rates apply for craftsmen, while the second set of rates apply for traders. Employer social security contributions for work accidents are not included. The reported rates apply for non-managers. The employee rates are for non-managers. They include the prélèvements sociaux levied on wages (CSG, CRDS). Social security contributions are fully deductible against personal taxable income, but CRDS and CSG (partly) are not.
- e) The threshold shown for employer and employee social security contributions applies for employees insured after 1 January 1993. A lower treshold of EUR 2 315 per month applies to employees insured before this date.
- f) Since January 2000, the compulsory employee payment to (privately-managed) pension funds, which amounts to 4 per cent of wages, is deductible from taxable gross earnings. In addition, optional pension savings of up to 4 per cent of wages may also be deducted. Although these contributions are not considered to be social security contributions (these payments are not made to a publicly-managed fund), they are included in the table in the case of Iceland.
- g) Work injury social security contributions are not included as the employer's contribution rate depends on each industry's accident rate over the last three years and other factors.
- h) For accident insurance, the employer's share is assumed to be 0.86% (similar assumption is made in Taxing Wages).
- i) Self-employed taxpayers face two options in order to obtain social security. Under the first option, the self-employed pays a fixed rate based on an annual minimum wage. Or, the self-employed pays a fixed annual fee that depends on the number and age of the family members. The amount reported here corresponds to a couple (ages 20 to 39) with two children (ages 0 to 19).
- j) The self-employed rate is 7.8% for primary industries.
- k) Minimum employer and employee social security contributions apply: if monthly income does not exceed the lower threshold value, then the SSC rate applies to this value. Employer SSC includes 0.8 per cent for accident insurance, which in reality varies between 0.3 and 2.1 per cent depending on category of risk associated with the employer's activities.
- l) Minimum employer, employee and self-employed social security contributions apply: if annual income does not exceed the lower threshold value, then the SSC rate applies to this value.

m)Employee social security contributions (including the maximum contribution) are rounded to the nearest SEK 100. n) All rates and thresholds shown are those in effect as of 5 April 2007.

Note on aggregation:

In some social security systems, both flat rate and progressive rate structures apply. Where these apply to the same base (e.g., gross earnings), the elements are aggregated for the purpose of reporting in this table. For example, assume a flat rate of 10.05% is applied to total gross earnings under one part of the social security contribution charge. Assume another element imposes a 1.5% rate on gross earnings between 0 and 97 200, and a 0.5% rate on gross earnings between 97 200 and 243 000. Given the same base (gross earnings), the various charges can be consolidated as follows: 11.55% rate applicable to earnings between 0 and 97 200; 10.55% rate applicable to earnings between 97 200 and 243 000; and 10.05% rate is applicable to earnings above 243 000.

ANNEX D

Average Statutory Tax Rates (ASTRs) at Four- and Ten-times Average Wage Earnings

Figure D.1. All-in ASTRs for New Zealand at four-times average wage earnings, 2007

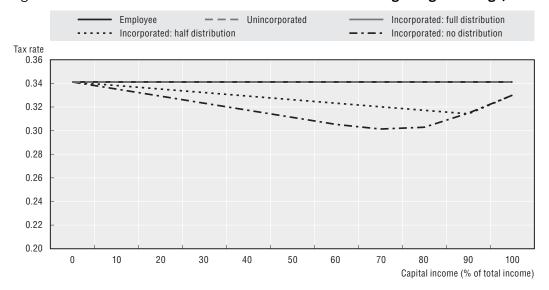


Figure D.2. All-in ASTRs for New Zealand at ten-times average wage earnings, 2007

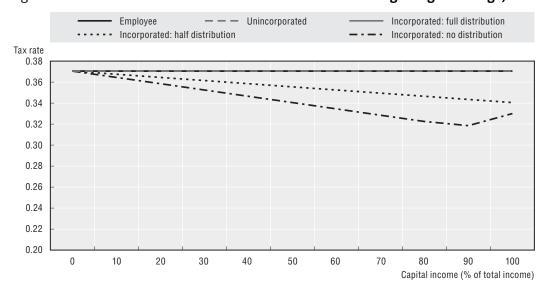


Figure D.3. All-in ASTRs for the United Kingdom at four-times average wage earnings, 2007

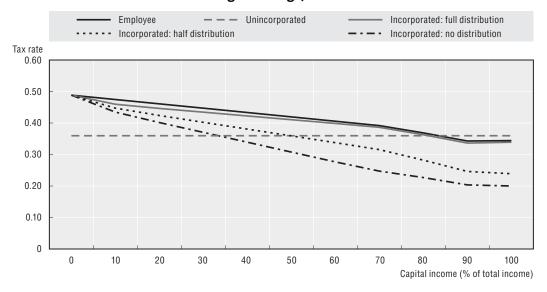
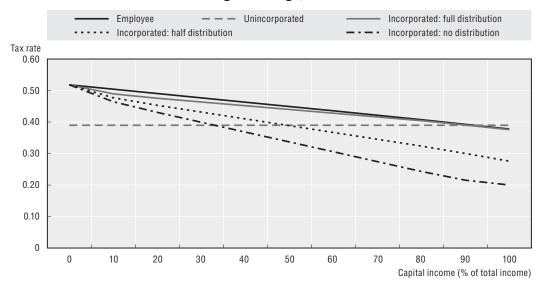


Figure D.4. All-in ASTRs for the United Kingdom at ten-times average wage earnings, 2007



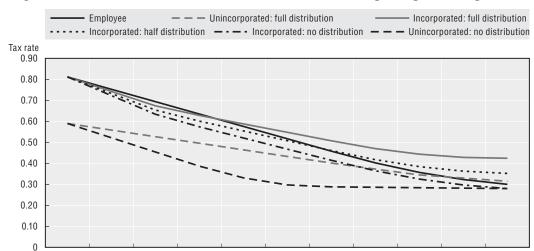


Figure D.5. All-in ASTRs for Sweden at four-times average wage earnings, 2007

Figure D.6. All-in ASTRs for Sweden at ten-times average wage earnings, 2007

Capital income (% of total income)

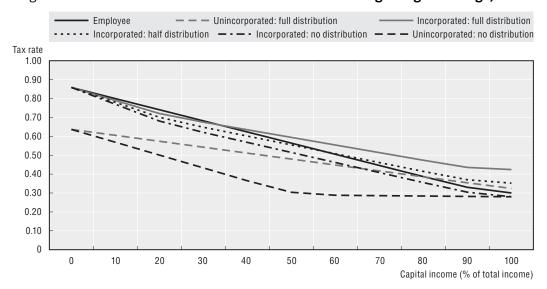


Figure D.7. All-in ASTRs for Norway at four-times average wage earnings, 2007

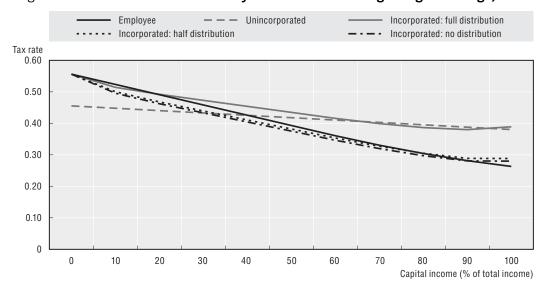
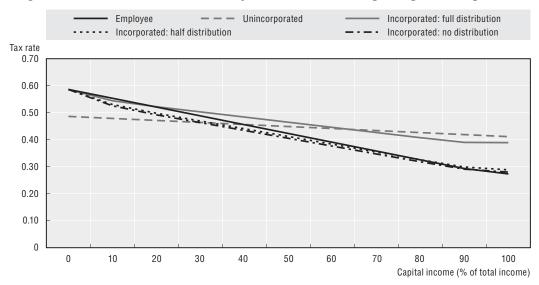


Figure D.8. All-in ASTRs for Norway at ten-times average wage earnings, 2007



ANNEX E

Assessing ASTRs on Incorporated Business Income

This annex provides an algebraic analysis of the average statutory tax rate (ASTR) on business income derived by a single owner/worker of an incorporated business. In particular, the analysis models income tax and social security contribution components of the ASTR, and indicates how such modelling may be used to analyse the sensitivity of (impact on) the ASTR to the level of business income and the mix of capital and labour income underlying total business income.

ASTR framework

Consider a single worker/owner of a business employing his labour and capital to generate income that is subject to personal and corporate income tax and social security contributions. With reference to Figure E.1, consider the following identity that separates total business income net of depreciation (Y) into the following components:

$$Y = wL + SSC^{er}\{wL\} + (Y - wL - SSC^{er}\{wL\})$$
 [1]

where the first term wL measures gross wage income, the second term SSC^{er} measures employer social security contributions assessed on gross wage income, and the third term captures the residual amount being the return on capital (with Y fixed). In the case of a single owner/worker, the burden of the SSC^{er} is fully on the owner/worker, with output prices taken as fixed.² Decomposing Y into these components is helpful in terms of identifying the various taxes imposed on business income.

In particular, personal income tax on labour income and employee social security contributions SSC^{ee} are amounts paid out of gross wage income (with reference to Figure E.1), with wage income less SSC^{ee} determining net wage income (see equation [4] below). As noted above, employer contributions SSC^{er} are also assessed on gross wage income. Corporate income tax (CIT) is levied on corporate taxable profit, with personal income tax levied on distributed after-tax profit. These amounts can be represented algebraically for analytical purposes as follows.

Personal tax and social security contributions on wage income

First, consider personal income tax on wage income, with an income tax deduction for SSC^{ee} and a basic personal allowance in the fixed amount of A.³ Let t<> denote the application of a progressive personal income tax rate structure to the PIT base shown in

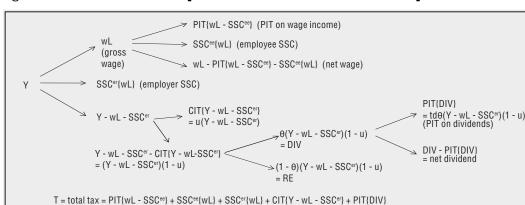


Figure E.1. Illustration of incorporated business income and its components and taxes

brackets < >. Assume that the PIT rate structure consists of two rates t_1 and t_2 , with $t_1 < t_2$, where t_1 applies to the first X units of personal taxable income:⁴

$$PIT\{wL - SSC^{ee}\} = t\langle wL - SSC^{ee}\{wL\} - A\rangle = t_1(X) + t_2(wL - SSC^{ee}\{wL\} - A - X)$$
 [2]

Box E.1. Modelling social security contributions

In many tax systems, employer social security contributions SSC^{er} are determined as a flat rate, say s^{er} , applied to gross wage income up to a maximum (threshold) wage income level denoted by W^T :

$$SSC^{er} = s^{er} \cdot min[wL, W^{T}] = s^{er*} \cdot wL$$
[B.1]

where the effective employer SSC rate s^{er*} is the fixed (statutory) SSC^{er} rate for wage income below the threshold wage level W^{Ter} , and a declining rate in wage income for wage income above the threshold:

if
$$(wL) \le W^{Ter}$$
 then $s^{er*} = s^{er}$ [B.2a]

if
$$(wL) > W^{Ter}$$
 then $s^{er*} = (s^{er}W^{Ter}) / wL$ [B.2b]

With similar treatment but at possibly a different statutory rate, employee social security contributions may be modelled as a flat rate (s^{ee}) on gross wage income up to a maximum (threshold) wage level W^{Tee} :

$$SSC^{ee} = s^{ee} \cdot min[wL, W^{Tee}] = s^{ee*} \cdot wL$$
 [B.3]

where, as in the employer SSC case, the effective employee SSC rate on wage income below the threshold W^{Tee} is the fixed statutory rate, whereas for wage income exceeding W^{Tee} , the effective employer SSC rate is declining in wage income:

if
$$(wL) \le W^{Tee}$$
 then $s^{ee*} = s^{ee}$ [B.4a]

if
$$(wL) > W^{Tee}$$
 then $s^{ee*} = (s^{ee}W^{Tee}) / wL$ [B.4b]

Employee and employer social security contributions may be expressed as follows:

$$SSC^{ee}\{wL\} = s^{ee^*} \cdot wL \tag{3a}$$

$$SSC^{er}\{wL\} = s^{er^*} \cdot wL \tag{3b}$$

where the applicable rates s^{ee^*} and s^{er^*} are the statutory employee and employer SSC rates for wage income under the SSC wage income threshold, while for wage income above this threshold, the applicable rates s^{ee^*} and s^{er^*} are declining in wage income (see Box E.1).

Net wage income is determined according to the following, with personal income tax on wage income and employee social security contributions (second and third terms) determined by [2] and [3a]:

$$NetWage = wL - PIT\{wL - SSC^{ee}\{wL\} - SSC^{ee}\{wL\}$$
 [4]

Corporate tax on corporate profits

Corporate income tax is assessed on business income net of depreciation (Y), with deductions for gross wage income and employer social security contributions:

$$CIT = CIT\{Y - wL - SSC^{er}\{wL\}\} = u(Y - wL - SSC^{er}\{wL\})$$
 [5]

where u denotes the statutory corporate income tax rate. Dividends (DIV) are some fraction θ ($0 \le \theta \le 1$) of the return to capital net of corporate tax, with retained earnings (RE) being the residual amount (after corporate-tax profit less dividends). Using [5], these amounts can be expressed as:

$$DIV = \theta(Y - wL - SSC^{er} - CIT) = \theta(1 - u)(Y - wL - SSC^{er}\{wL\})$$
 [6a]

$$RE = (1 - \theta)(Y - wL - SSC^{er} - CIT) = (1 - \theta)(1 - u)(Y - wL - SSC^{er}\{wL\})$$
 [6b]

Shareholder (personal) tax on distributed profits

Let the effective shareholder tax rate on dividend income be denoted by t^D . This rate may be a statutory final withholding tax rate on dividends, withheld at source; a statutory rate on capital income under a dual personal income tax that taxes capital income separately; or an effective tax rate where dividend income is pooled together with wage income possibly with integration relief. (Note that under a gross-up and credit system, the applicable tax rate may be determined as $t^D = (t_2 - \lambda u)/(1 - \lambda u)$, where λ measures the degree of integration relief (with $\lambda = 1$ under full imputation). Under a partial inclusion system, the relevant rate may be determined as $t^D = \alpha t_2$ where α is the inclusion rate). Shareholder tax on dividend income is therefore measured by the following (using [6a]):

$$PIT\{DIV\} = t^{D} \cdot DIV = t^{D}\theta(1-u)(Y - wL - SSC^{er}\{wL\})$$
 [7]

Total tax on incorporated business income

The total tax burden on incorporated business income is as follows (with reference to Figure E.1):

$$T = PIT\{wL - SSC^{ee}\} + SSC^{ee}\{wL\} + SSC^{er}\{wL\} + CIT\{Y - wL - SSC^{er}\} + PIT\{DIV\}$$
 [8]

Substituting the formulae given by [2], [3a], [3b], [5] and [7], we have the following measure of total personal and corporate income tax, plus social security contributions on business income Y:

$$T = t_1(X) + t_2[wL(1 - s^{ee^*}) - A - X] + s^{ee^*}wL + s^{er^*}wL + [u + t^D\theta(1 - u)][Y - wL(1 + s^{er^*})]$$
[9]

ASTR on incorporated business income

Using the result given by [9], the average statutory tax rate (ASTR = T/Y) may be expressed as follows:

$$ASTR = \frac{t_1(X) + t_2[wL(1 - s^{ee^*}) - A - X] + s^{ee^*}wL + s^{er^*}wL + [u + t^D\theta(1 - u)][Y - wL(1 + s^{er^*})]}{Y}$$
[10a]

or aternatively,

$$ASTR = \frac{wL}{Y} \left[\frac{t_1(X) + t_2[wL(1 - s^{ee^*}) - A - X]}{wL} + s^{ee^*} + s^{ee^*} \right] + \frac{(Y - wL)}{Y} \left[[u + t^D \theta (1 - u)] \frac{[Y - wL(1 + s^{ee^*})]}{(Y - wL)} \right]$$
[10b]

The preceding formula shows the ASTR as a weighted average of the tax rate on wage income (given by the first term in square brackets), and the tax rate on capital income $[u+t^D\theta(1-u)]$, with the weights determined by the labour *versus* capital mix in total business income, with that mix dependent on labour relative to capital as business inputs (and on possible mischaracterisation of income for tax-minimising purposes, addressed in Chapter 3 of the report).⁵

Comparative static analysis of ASTR

Using the preceding results, the ASTR on incorporated business income can be analysed in a number of dimensions. Such analysis can usefully supplement (help clarify) numerical analyses of determinants of the average statutory tax rate on business income, as reported in Chapter 3 of the report.

For example, the result [10a] may be used to analyse the impact on the ASTR resulting from changes in the income mix – that is, the contribution of wage income/capital income to total income – holding total business income fixed. Another application is analysing the impact on the ASTR resulting from changes in total business income.

Changes in wage income over the range ($wL < W^{T}$)

Consider the impact of an increase in gross wage income over the range where the social security contribution threshold limits are not binding ($wL < W^{Tee}$; $wL < W^{Tee}$).⁶ In particular, with reference to [10a], consider the change in ASTR with respect to gross wage income (wL) over this range, holding total business income (Y) fixed:

$$\frac{\Delta ASTR}{\Delta(wL)} \Big| \overline{Y} = \frac{1}{Y} \Big[t_2 (1 - s^{ee^*}) + s^{ee^*} + s^{er^*} - [u + t^D \theta (1 - u)] (1 + s^{er^*}) \Big]$$
 [11]

The result given by [11] shows that the ASTR impact resulting from an increase in gross wage income, holding total business income constant, is the net result of four terms. The first term captures increased personal income tax on additional gross wage income, taxed at the marginal rate t_2 , with the personal income tax base reduced by increased employee social security contributions. The second and third terms capture increased employee and employer social security contributions accompanying increased gross wage income, taxed at the statutory SSC rates. Lastly, the fourth term captures reduced corporate income tax and reduced personal tax on dividend income resulting from reduced capital income (with total income held fixed, residual (capital) income decreases as gross wage income

increases). The impact on the ASTR resulting from increased capital income is given by the negative of the result [11].

On balance, the result given by [11] reveals that the ASTR will increase with a shift in the income mix towards a larger wage income component where personal and corporate tax rates, employee and employer social security contribution rates, and distribution policy (captured by θ) are such that the following conditions holds:

$$[t_2(1-s^{ee^*})+s^{ee^*}+s^{er^*}] > [u+t^D\theta(1-u)](1+s^{er^*})$$
[12]

Looked at another way, the ASTR will decline with an increase in the capital income proportion where tax rates and distribution policy are such that condition [12] is satisfied. More specifically, where capital income makes up a larger percentage of total business income – for example, when considering a more capital intensive production structure – the ASTR would be lower where labour is taxed at a higher rate.

The result is not surprising, but helps clarify for the analyst the relevant determinants. For example, social security contributions are shown to factor in both directly, and by influencing the base of personal and corporate income tax. In particular, increased employee social security contributions accompanying increased wage income are shown to reduce the personal income tax base, while increased employer social security contributions are shown to reduce the corporate income tax base. The first consideration tends to offset increased PIT resulting from increased wage income, while the second tends to amplify reductions in corporate income tax and personal tax on dividend income accompanying reduced income from capital. The result [12] also highlights the sensitivity of movements in the ASTR to the distribution policy of the firm (captured by θ) and the degree of integration of corporate and personal taxation of dividends captured in t^d (as noted above).

Notes

- 1. Business income net of depreciation may be specified as $Y = pF(K, L) \delta qK$, where F(K, L) is a production function of labour L and capital K, p and q are price indexes for output and capital, and δ is the economic rate of depreciation. To simplify the presentation, it is assumed that the depreciation rate for tax purposes matches the economic deprecation rate. This assumption can be relaxed (with some additional complexity introduced into the average tax rate calculation). Other assumptions include: no employees; financing of the business by internal equity (no debt); partial distribution of after-corporate tax profits; indefinite retention of retained earnings (indefinite deferral/no personal taxation of retained income); no (accrual) taxation of capital gains. Each of these assumptions could be relaxed in the model.
- 2. The framework makes no assumption about the "incidence" of SSC^{er} that is, whether an increase in SSC^{er} causes wage income or capital income (or both) to fall that is, SSC^{er} may be reflected in a lower gross wage, or lower return to capital, or some combination. Making assumptions over the split is unnecessary in the measurement of an average tax rate on the total amount of income Y of the single worker/owner.
- 3. The model assumes for illustrative purposes that employee social security contributions (SSC^{ee}), determined as a function of gross wages (wL), are deductible from the personal income tax base. While this treatment is common, in certain countries employee social security contributions are not deductible (these cases may be readily modelled). Note that personal tax is also assessed on dividend income. The model considers separately the taxation of dividend income, subject to final withholding tax, separate personal taxation under a dual income tax system, or pooled taxation (with wage income) under a non-dual system (with or without imputation relief).
- 4. Equation [2] considers the case where taxable income in the second income bracket is positive. A more general specification for this term is: $max[0, wL SSC^{ee}\{wL\} A X]$. As modelled, marginal adjustments to gross wage income (and the tax allowance A) affect PIT at rate t_2 . The specification of PIT on wage income [2] considers the non-dual (pooled) tax system case where other taxable income is sufficiently large such that the full amount of wage income is taxed at t_2 . It also assumes

- that wage income is sufficiently large such that the full amount of the personal allowance A is set off against wage income. In other cases, the average PIT rate on wage income may be a function of both t_1 and t_2 .
- 5. The tax rate on capital income given by $[u + t^D\theta(1-u)]$ takes into account the assumption that only a fraction θ of after-corporate tax income is distributed. The term $[Y wL(1 + s^{er^*})]/(Y wL)$ in the second component of the ASTR formula [10b] adjusts the capital income weight (Y wL)/Y to account for the fact that returns on capital (and the corresponding tax base) are reduced by employer social security contributions.
- 6. The framework can be used to analyse cases where the SSC thresholds are binding, where $[\partial s^{ee^*}/\partial (\omega L)] = [\partial (s^{ee}W^{Tee})/\partial (\omega L)] = 0$, and similarly, $[\partial s^{er^*}/\partial (\omega L)] = [\partial (s^{er}W^{Ter})/\partial (\omega L)] = 0$, with $s^{ee}W^{Tee}$ and $s^{er}W^{Ter}$ both constant amounts (see Box E.1).

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