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## Discussion paper

# Taxing mobile capital and profits: The nordic welfare states

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## *Summary*

This paper discusses trends in capital taxation and the role of the corporate tax rate in a welfare state. It provides a summary of the tax competition literature with special application to capital taxation in small versus large countries. A main finding from this literature is that small countries set lower taxes on capital than large countries. In line with this prediction the paper shows that the Nordic countries undertook tax reforms in the 1990s, which lead to lower ratios of statutory corporate to wage taxes than in most OECD countries. The second part of the paper is devoted to tax base erosion by multinationals and how to combat it. Finally, the paper offers some concluding remarks on redistribution and the pressures of tax competition.

Keywords: Capital taxation, profit shifting, government policies

JEL Classification: H20, H73, F15, F23

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## 1. Introduction

The Nordic countries have traditionally been characterized by an extensive welfare state, a homogenous population and labour force, and redistributive taxation. This has changed in recent years. Increased immigration, an aging population, and competition for capital among countries have put pressures on public finances and the welfare state. These changes can be attributed to the globalization process whereby national economies become more integrated. Economic integration takes place in terms of increasing factor mobility, in particular mobility of capital, and rising volumes of trade in goods and services. Globalization has costs and benefits. On the one hand, globalization leads to a more efficient allocation of worldwide resources and thus to higher output and growth. On the other hand, globalization and free capital mobility disrupts employment patterns, makes incomes more volatile, and threatens the government's ability to redistribute income and to provide public services.

An argument frequently used by political lobby groups is that with free capital mobility corporations shouldn't be taxed at all and that taxing investment income is actually bad for workers. The argument is that if you cut taxes on investment income, more investment is encouraged. More investment means people have more equipment and technology to work with, which should increase the productivity of labour and thus wages and economic growth. Put differently, a tax on mobile capital would lead to an outflow of capital that would cause wages to fall; effectively shifting the full burden of the tax on capital onto workers. It is then better to tax workers directly and levy a zero tax on capital.

The argument above relies on strong assumptions, among them that labour is immobile and cannot evade taxation, that there are no country specific rents, and that domestic firms are not owned in part by foreigners. If domestic firms, say, are partly owned by foreigners, taxing capital would imply that some of the tax burden is shifted onto foreigners and that part of the welfare state is then financed by foreigners. This alone may warrant a positive tax on investment capital (see Huizinga and Nielsen 1997). Industrial agglomeration also modifies the zero-tax results. If industrial agglomeration is concentrated in one single country, a government may, through a positive source tax on capital, be able to exploit the locational rent created by agglomeration forces and thus increase welfare.<sup>1</sup> The zero tax on capital result is also difficult to confirm empirically. Yagan (2014), for example, studies the effects of the 2003 dividend tax cut in the US. He finds that it caused zero change in corporate investment in U.S. unlisted firms and that it had no impact on employee

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<sup>1</sup> See Kind et al. (2000) on industrial clusters, economic rents and tax policy.

compensation. It did, however, have an immediate impact on financial pay-outs to shareholders.<sup>2</sup> Alstadsæter et al. (2015) use Swedish panel data for unlisted firms and find that the Swedish 2006 dividend tax cut did not affect aggregate investment but that it affected the allocation of corporate investment. In particular, they find that relative to cash-rich firms, cash-constrained firms increased their investments after the dividend tax cut.<sup>3</sup>

In fact, there are good reasons to tax capital income at the corporate level. An important reason is that the corporate tax plays an essential withholding function, acting as a “backstop” to the personal income tax. If a country abolished the corporate tax rate, wealthy individuals in particular would be given an incentive to reclassify their labour earnings as corporate income, typically using offshore corporate structures and escape tax. The corporate tax might also be needed to avoid excessive income shifting between labour income and capital income. Finally, the corporate tax also acts as a withholding tax on equity income earned by non-resident shareholders, who might otherwise escape taxation in the source country.

Countries throughout the world have reduced their corporate taxes in an effort to attract or retain corporate investments. The Nordic countries have pioneered what is commonly known as the dual income tax (DIT). It combines a flat tax rate on capital income with progressive taxation of labour income. One of the arguments in favor of the DIT is that it allows policy makers to lower the corporate tax rate to reduce the risk of capital flight, whilst at the same time tax distributed dividends to personal shareholders.

In the continuation I discuss globalization and capital taxation. Tax competition is putting pressure on capital taxes and makes redistribution more difficult and may affect the size and structure of the welfare state and increase income inequality. If what the Nordic countries looked like in the past was the reason for their success, then the future may seem bleaker.

## **2. Globalization, tax competition and trends in capital taxation**

The term tax competition is used in the literature to describe how capital taxes are set by independent governments that do not cooperate, and the effect of tax setting on national tax bases. The early contributions consider a country with many identical regions each playing host to competitive firms producing a single output by means of a nationally fixed stock of mobile capital and an immobile factor fixed in supply. The latter could be interpreted as land or labour, and may give

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<sup>2</sup> See also Serrato and Zidar (2014) for similar findings on corporate tax cuts.

<sup>3</sup> Very little is known about the effect a dividend cut has on investments by listed firms. The new view of dividend taxation assumes that investments are funded by retained earnings rather than new equity and suggests that listed firms should not be affected by a dividend tax cut (see Auerbach and Hasset 2002).

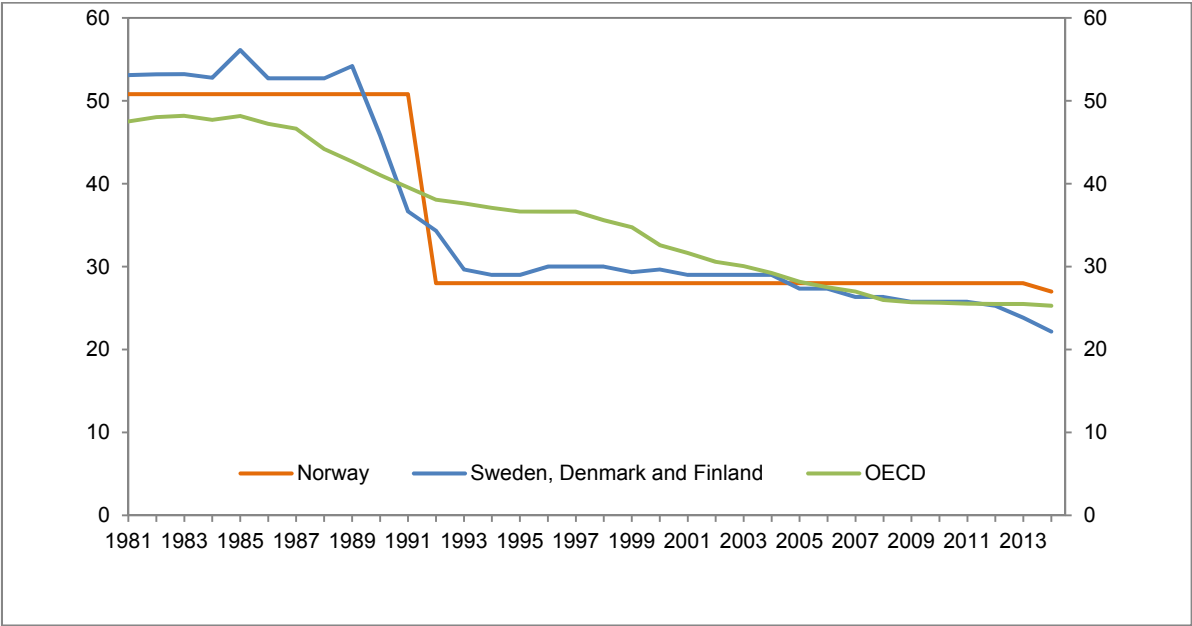
rise to pure profits. It is assumed that each region’s supply of a public good is financed entirely by a tax on capital employed within its borders (source tax). Tax policy affects the distribution of the country’s (world) capital stock.

A fundamental insight is that a rise in the capital tax rate of one region benefits other regions by increasing their capital supplies and, hence, their revenues. Put differently, a tax increase in one region causes a positive externality for other regions. However, the government in each region neglects these externalities since it is only concerned with the welfare of its own residents. The end result is that taxes are set too low resulting in underprovision of public goods. An increase in all tax rates at the same time by a small amount would increase public goods supplies and welfare in all regions.<sup>4</sup>

Later amendments to the early theories of tax competition have for example allowed countries to use expenditure levels of public input goods, and multiple tax instruments as strategic variables. These expansions still show that there is still a negative externality from competition over capital that puts pressure on tax rates and the financing of the welfare state.<sup>5</sup>

If the literature on tax competition was correct in its prediction one should observe falling tax rates on capital, since capital arguably is the most mobile tax base. Indeed, Figure 1 shows this to be the case for statutory corporate tax rates.

**Figure 1. Statutory corporate tax rates in selected countries 1981-2013 pct. (Source: NOU 2014:13)**



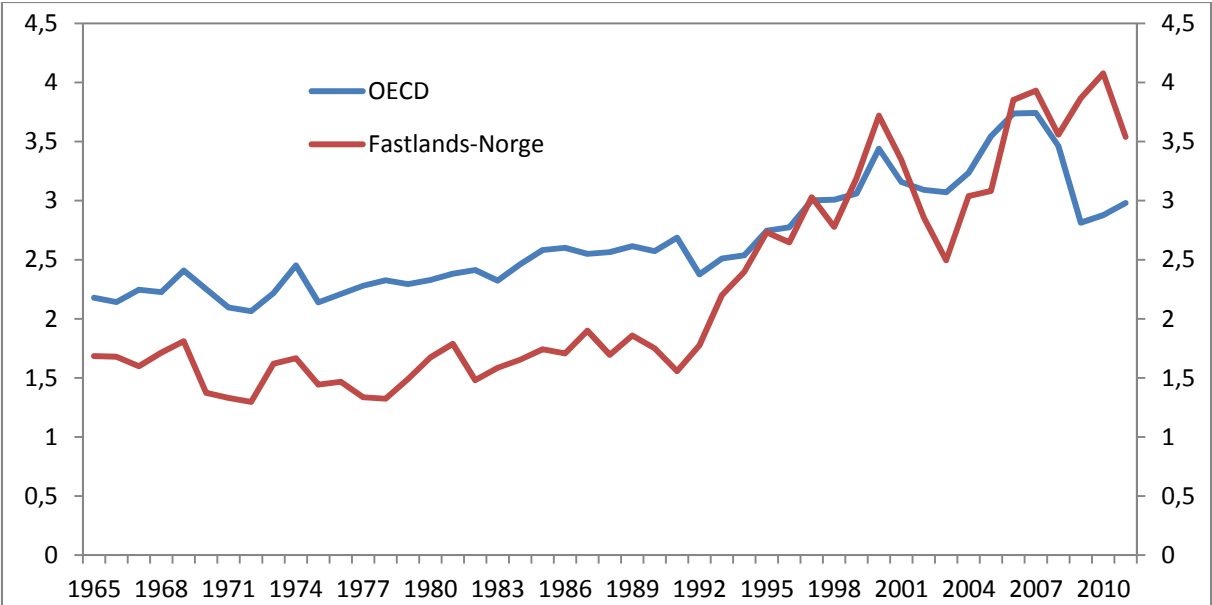
<sup>4</sup> See e.g. Zodrow and Mieszkowski (1986) and Wilson (1986).

<sup>5</sup> See e.g. Wildasin (1989), Bucovetsky and Wilson (1991) and Bjorvatn and Schjelderup (2002). For a survey see Wilson (1999) and Wildasin and Wilson (2004).

However, the development in statutory corporate tax rates alone is not a good indicator of whether tax competition reduces tax revenue from the corporate tax. A much better indicator is the development in corporate tax revenue. As seen from Figure 2, corporate tax revenue as a share of GDP is quite low, but it shows a rising trend over time. This is the opposite of what theories of tax competition predict. Figure 2 also shows that the corporate tax is a modest revenue raiser, which begs the question why one should worry about corporate tax competition. One reason as alluded to in the introduction is that the corporate tax is a backstop for the personal tax rate.

One reason for the rise in tax revenue is that corporate tax rate reductions have been accompanied by base broadening policies in most countries, for example, by limitations to interest tax deductibility through thin capitalization rules, reduced investment credits and less favourable depreciation allowances. Furthermore, a growing degree of incorporation may also explain part of the broadening of the corporate tax base. Finally, the reduction in corporate tax rates may have encouraged a shift of income from the personal towards the corporate tax base.<sup>6</sup>

**Figure 2. Corporate tax as share of GDP in the OECD and mainland Norway 1965-2011. (Source: NOU 2014: 13)**



<sup>6</sup> Alstadsæther and Thoresen (2009) study income shifting between personal and corporate tax bases in Norway for the period after the 1992 tax reform. They find significant evidence for income shifting.

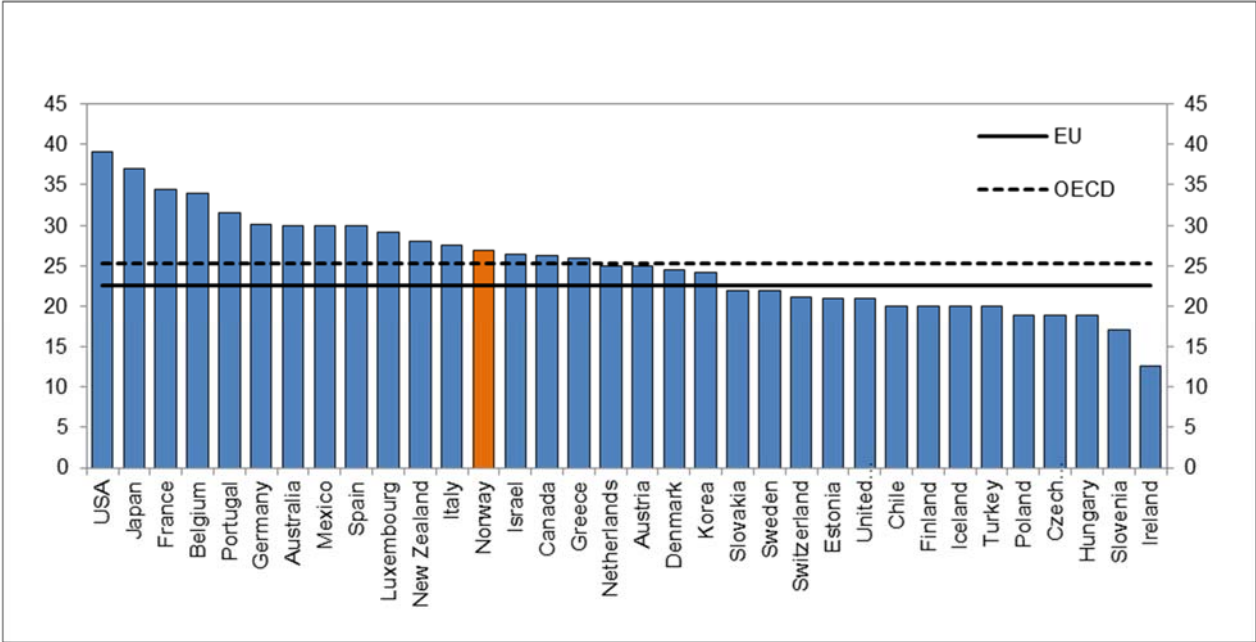
Some of the findings in the tax competition literature are particularly relevant for small open economies such as the Nordic countries. The literature models differences in size by assuming that each household owns a unit of capital, but that regions differ by population size (only). Per capita levels are therefore the same in each region, and imply that capital will not move between regions unless taxes differ. In this setting, the literature finds that the small region has an incentive to underbid the large country. Since the large region is a large demander in the international capital market, a reduction in its tax rate ( $t$ ) will increase the after-tax return to capital ( $r$ ) substantially. The movement of capital across regions depends on the cost of capital, that is,  $r+t$ , which means that a reduction in  $t$  has a modest effect on the cost of capital. As a result, the large country has weak incentives to bid for capital. In contrast, the small country cannot affect the after-tax return on capital and a reduction in its tax rate will therefore lower the cost of capital by a large amount.

An interesting result in the tax competition literature is that if the small country is sufficiently small, it sets a lower tax rate than the large country and attracts an over proportional share of the total capital stock. By doing so it 'wins' the competition for capital in that it can obtain higher per capita utility in equilibrium (Bucovetsky (1991) and Wilson (1991)). The result has interesting policy implications, as small countries may do relatively well in an integrating world. It should be noted, however, that the outcome is still inefficient in the sense that tax rates would be too low and the provision of public goods less than in the absence of competition.

There are other ways of analyzing country size than by population size. Haufler and Wooton (1999) model a multinational firm that wants to sell its goods in both a small and a large country. The large country has more consumers. The firm faces a locational choice: it can only locate and produce its good in one country. They show that firms prefer to locate in large countries (large market size) in order to save transport costs on exports (it is better to export small amounts of goods than large amounts when there are transport costs). As a consequence, the large country can utilize its market size and set a higher capital tax rate. As in the models by Bucovetsky (1991) and Wilson (1991), the outcome of tax competition is that the large country sets a higher tax rate.

In order to put these theories to the test one can group countries according to their population size. The difference in corporate tax rates among large and small countries are quite telling as is evident from Figure 3. Countries such as the US, France and Germany have substantially higher tax rates than the small northern European countries.

**Figure 3. Statutory tax rates in different countries in 2014 (pct.)** Source: KPMG Corporate Tax Rate Survey



If small countries set lower taxes on capital than large countries this means that the Scandinavian countries should be among those who have lowered their tax rates the most. The Nordic countries implemented major tax reforms in the early 1990s partly in response to the pressures of globalization. Klemm et al. (2009) study the relationship between wage taxes and corporate taxes. They document that on average, European Union (EU) member states have reduced their reliance on capital taxes and increased the share of labour taxes in total tax revenues during the past 30 years. They also find that the policy responses have been rather diverse. In 2004, the classical welfare states in Scandinavia and continental Europe had lower ratios of statutory corporate to wage taxes than the Anglo-Saxon countries (except Ireland). In 2004, the corporate tax rate was only 63% of the wage tax rate for an average worker in Sweden, but 171% of the wage tax rate in the United States. Such differences are in striking contrast to the common perception that social democratic governments (as in Scandinavia and continental Europe) share a higher preference for redistribution, as compared to more conservative and free market oriented types of governments.

**3. The political economy of tax competition**

In the studies mentioned above an underlying assumption is that politicians conduct policies that are to the best for society as a whole by maximizing the sum of individuals’ utilities (Benevolence). A different perspective on tax competition is taken by the public choice literature, which challenges the notion that competition to attract capital is harmful. The basic idea is that competition reduces the



rent-seeking activities of government officials and may force a more efficient use of public funds. The literature can be divided into two categories.

The first category does not take into account electoral systems or re-election concerns, but assumes that governments are partly benevolent and partly Leviathan. Hence, government officials are concerned in part with maximizing the public sector by diverting some tax revenue for own consumption. This strand of the literature finds that the outcome of tax competition on tax rates, public expenditures, and welfare depends on an assessment of the relative strength of Leviathan versus Benevolence.<sup>7</sup> In the context of the Nordic countries, the discussion of Leviathan versus Benevolence could be related to politicians' receiving campaign funding and retirement positions from wealthy individuals and special interest groups in return for favorable policy.

The second part of the literature models tax competition in the presence of voting and there are different approaches to how this is done. Persson and Tabellini (1992) study a two-country model where each government levies a source tax on mobile capital to finance government transfers. A fall in the cost of investing abroad (i.e. increasing competition) puts downward pressure on tax rates. At the same time, however, there is a second, political effect in place since policy is chosen by a policymaker who represents the preferences of the median voter. Tax competition is shown to make the median voter select a more leftist government, whose distributional preferences call for higher taxes on capital, and this partly mitigates the tendency of tax competition to lower taxes on capital.

Biglaser and Mezzetti (1997) study how regions compete to attract large firms. Their starting point is the observation that some US states seem to offer 'tax packages' to firms that often exceed the 'economic value' of the firm's instate investment project. They assume that when preparing a bid, legislators take into account both the public's interest and the bid's impact on their probability of re-election. The competition among regions follows the rules of an English auction. Since politicians value their re-election, their bid for investments is distorted away from the value of the project to voters and may result in an inefficient location of firms in the sense that legislators give away too much of the taxpayers' money in order to attract firms.

Janeba and Schjelderup (2009) compare the outcomes of increasing capital tax competition under presidential-congressional and parliamentary democracies, in a setting where politicians value rents and re-election to office. In their model, a presidential-congressional system features shifting majorities in the legislature that are issue dependent (here the revenue and expenditure sides of the government budget). The majority that passes tax policy may differ from the majority passing the expenditure allocation. Thus shifting majorities limit the possibility of rent-seeking and increases accountability of elected policy makers. By contrast, in a parliamentary democracy a cohesive

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<sup>7</sup> See, for example, Brennan and Buchanan (1980); Edwards and Keen (1996); Rauscher (1998).

majority passes the entire budget in one vote. In a closed economy, the cohesive majority in a parliamentary regime tends to deliver more public goods than under a presidential system because it appeals to voters from all supporting legislators' districts. Yet, the system has also a negative consequence because the majority coalition is powerful and therefore tends to extract more rents. They find that tax competition among presidential–congressional democracies is typically welfare improving, while harmful among parliamentary democracies if under the latter, public goods are sufficiently valued. The results hold when politicians seek re-election because of exogenous benefits of holding office. By contrast, when politicians hold office only to extract rents, tax competition is harmful if politicians are sufficiently patient.

#### **4. Profit shifting and multinationals**

One of the most pronounced characteristics the last 30 years is the growth in foreign direct investments (FDI) and thus the rising importance of multinationals. Growth rates have been between 10 and 20 per cent annually and an increasing share of trade worldwide is between affiliates of multinational firms. The rising importance of multinationals has gone hand in hand with industrialized countries reforming their corporate income tax policies in order to attract investment. Statutory rates in the OECD, for example, have fallen from an average of 50 % in the early 1980s to 25% in 2014. Despite falling tax rates, multinationals have come under fire for siphoning off profits into tax havens. Corporations have responded by saying that their objective is to reduce their worldwide taxes consistent with national laws in order to maximize post-tax global profit. This has prompted governments around the world to overhaul their tax systems and the OECD to launch its BEPS project (OECD, 2013).

The OECD (2013) report on *Base erosion and profit shifting* (BEPS) identifies transfer pricing and debt shifting (thin capitalization) as major reasons for the tax-revenue drain in high-tax countries. Both strategies are regulated by the OECD's arm's length standard, which states that transfer prices should reflect market prices chosen by unrelated parties engaged in similar trades under similar circumstances (Eden, 1998; OECD, 2010, art. 9). Such pricing, however, may be difficult to enforce because of the lack of market parallels, multinationals' use of tax havens, and lack of disclosure of either earnings worldwide or pricing methods.

Multinationals in effect report income by choosing prices on intra-firm trade. By selecting to overinvoice (underinvoice) sales to affiliates in high-tax (low-tax) countries, multinationals can shift profits to low-tax countries and thus save taxes. For instance, royalties for using a brand name or a patent do not have an obvious market parallel; hence, multinationals have considerable discretion in setting prices on such transactions. There is clearly a grey area between strictly legal tax planning

and illegal tax evasion. Multinationals may voluntarily or involuntarily cross this line. Furthermore, in some cases, the deviation from the true price of a good or service is so small that the tax authorities would not bother with it, but if the transaction volume is large, substantial amounts of profits can be shifted.

There is substantial evidence of profit shifting by multinational across countries. Pak and Zdanowicz (2001) find that the volume of profit shifting in U.S. multinationals was equal to 18% of total reported corporate profits in 2000. Bartelsman and Beetsma (2003) study OECD data and point out that 65% to 87% of the (potential) additional tax revenue, stemming from a unilateral tax increase, is lost due to profit shifting by transfer pricing. The literature on profit shifting by abusive transfer prices indicates that it is differences in statutory tax rates that provide profit shifting incentives.<sup>8</sup>

There are few empirical studies on Scandinavian data. Langli and Saudagaran (2004) compare the profitability of Norwegian-owned and foreign-owned companies in manufacturing and trade in the years 1993 to 1996. They find that foreign-owned enterprises have a profit margin 2.6 percentage points lower than Norwegian-owned enterprises. This is consistent with a net shifting of profits out of Norway by foreign-owned enterprises. Balsvik et al. (2009) expand the data set used by Langli and Saudagaran (2004). They find that multinational corporations shift profits both out of Norway and into Norway but that the net flow is out of Norway. The loss in tax revenue is estimated to be in the order of 30 percent of the potential tax revenue from foreign multinational enterprises. Another finding in this study is that multinational enterprises in Norway have a profit margin of 1.5 to 4 percentage points lower than comparable domestic enterprises. Their findings, then, are consistent with the findings of Langli and Saudagaran (2004).

The fact that multinationals pay less tax than national firms is not only due to abusive transfer prices. Multinationals can also structure their financing arrangements to minimize tax. The capitalization of a company has an impact on the amount of profit a company reports for tax purposes. Since interest is tax deductible in most countries, a high level of debt, and thus the amount of interest it pays, reduces taxable profit. Lending and borrowing arrangements can be structured so that affiliates in high-tax countries have “too much debt” (thin capitalization) and where the set-up is that interest is received by an affiliate in a jurisdiction that does not tax interest income.

Tax motivated profit shifting by multinationals erodes national tax bases and constitutes a serious risk to tax revenues, tax sovereignty and tax fairness. It also means that multinationals have a

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<sup>8</sup> Evidence for transfer pricing in the U.S. is given in Clausing (2003) and Bernard et al. (2006); for Norway in Langli and Saudagaran (2004); for Germany in Weichenrieder (2009). Oyeler and Emmanuel (1998) show that foreign-owned affiliates in the UK are characterized by lower profits but higher dividend distributions (than UK-controlled firms). Evidence for transfer pricing in European multinationals is given in Dharmapala and Riedel (2013).

competitive edge that has implications for competition in markets and in the long run, the ownership structure in industries. It also implies that the multinationality in the tax base rises and thus that the tax sensitivity of the corporate tax base goes up. The latter may limit the scope for corporate taxes and increase the excess burden from taxation due to a narrower tax base. This prompts the question of what countries can do to reduce this problem.

## **5. Curbing base erosion**

The main challenge for tax authorities is to figure out whether intra-firm transactions across borders satisfy the arm's length principle (ALP). This means leverage and the prices on intra-firm transactions correspond to what two independent entities would have agreed on. This is often difficult, since some goods especially intangibles have no obvious market parallel. Loans are also firm and project specific, and it can be a challenge to assess the terms a third party lender would be willing to enter into. The OECD identifies five factors that determine comparability: the functions performed by the parties, the contractual terms, the economic circumstances, the characteristics of the property or service transferred, and the business strategies pursued by the parties (OECD 2010). To carry through an evaluation based on these criteria is costly and very difficult. For such reasons some have proposed abandoning the principle of separate accounting (SA) that most countries rely on to determine profits, but rather to consolidate all profits into a worldwide single measure and then apportion taxable income to countries based on activity weights of each firm.

There is much to be said about a transition to formula apportionment (FA), but it requires, among other things, political cohesion to agree on uniform apportionment weights. Nielsen et al. (2010) develop a theoretical model that compares basic properties of FA to SA. The focal point of their analysis is how changes in tax rates affect capital formation, input choice, and transfer pricing, as well as on spillovers on tax revenue in other countries. A significant difference between the two tax principles is that the SA system is based on reported income whilst taxation under the FA system is based on reported activity. They show that these fundamental characteristics introduce different tax spillovers across countries under the two tax systems, which makes it impossible to unambiguously favour one system over the other. Nielsen et al. (2010) find that the relative strength of tax spillovers under the two regimes depends on how costly it is for multinational enterprises to undertake transfer pricing, and how much pure profit the MNEs generate. These considerations also determine whether SA or FA implies the higher level of tax in a non-cooperative equilibrium, and in the end which of the two schemes is preferable from an international perspective.

Under the SA system, the amount of interest that an affiliate of a multinational can deduct is determined by the rate of interest applied to its debt and the amount of its debt. Countries limit tax-induced income shifting via the transfer price by auditing a firm's transfer price to make sure that the interest rate is in line with what ALP. This involves considering the specific attributes of the company in determining the amount of debt that the company would be able to obtain from independent lenders. There are clear disadvantages to using the ALP on the interest rate, because it requires skills, resources, and specialization to establish what a third party would lend. For such reasons many countries rely on ratio approaches.

Under a ratio approach, also often referred to as a safe harbor rule or a thin capitalization rule, the amount of debt on which interest may be deducted for tax purposes is set by a pre-determined ratio. The exact definitions of the debt measure in the numerator of the ratio and of assets or equity in its denominator vary across countries, but the most common rule is either to use a ratio based on total debt-to-equity or internal (corporate group) debt-to-equity. The empirical literature on the effect of different types of thin capitalization rules on the firm's financial structure encompasses both US and European multinationals. It concludes that thin capitalization rules have a substantial effect on both internal and external leverage.<sup>9</sup>

Despite that empirical studies show that the ratio rules have an impact on multinationals' ability to shift profit by debt, there is a growing perception that these rules are not effective. A small but growing group of countries have therefore implemented what is called earnings stripping rules.<sup>10</sup> These rules operate to restrict interest deductions that exceed a certain threshold, such as a percentage of EBITDA or EBIT.<sup>11</sup> Finland, Germany, Italy, Norway, Portugal, and Spain have implemented such rules. The Norwegian Tax Committee proposed in 2014 (NOU 2014:13) that both internal and external debt should be embedded in the earnings stripping rule and that EBIT was a better measure. They argued that external debt could be used to shift profit and that firms' leverage was too high due to the deductibility of interest. The latter implies too high risk premiums and too little investments.<sup>12</sup>

There is a literature that discusses which rule, ratio or earnings stripping, should be preferred if the aim is to maximize national income. In a recent paper this question is answered by Gresik et al.

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<sup>9</sup> Buettner et al. (2012) study foreign affiliates of German multinationals whereas Blouin et al. (2014) investigate how thin capitalization rules worldwide affect the capital structure of foreign affiliates of US multinational firms. Both find that thin capitalization rules affect the leverage in multinationals.

<sup>10</sup> A handful of countries use both safe harbour rules and earnings stripping rules, either simultaneously or they impose a marginal earnings stripping requirement that applies only if the safe harbour limit is exceeded. The countries that fall into the first category are Denmark and Japan. Bulgaria, France and the US impose an earnings stripping rule only if the safe ratio rule is exceeded.

<sup>11</sup> EBITDA= Earnings Before Interest, Tax, and Depreciation Allowances. EBIT = Earnings Before Interest and Tax.

<sup>12</sup>See Sørensen (2014) for an analysis.

(2015b). They develop a general equilibrium framework with both labour and capital that allows them to analyze the variation in thin capitalization rules observed in practice. Their model embeds thin capitalization and transfer pricing behaviour of multinationals. They show that the policy that maximizes the host country's national income is an earnings stripping rule without a safe harbour rule.

## **6. FDI, tax havens and multinationals: A bane or a boon for a host country?**

An interesting question is whether attracting foreign direct investment (FDI) from multinationals is a bane or a boon for a host country given the ability multinationals have to shift income. Multinationals often use tax haven conduit companies to shift income. Hines (2010) argues that although the tax avoidance opportunities presented by tax havens may reduce revenues in high-tax jurisdictions, they may have offsetting effects on FDI that are attractive to the same governments. If governments cannot distinguish between mobile and immobile investments, tax havens permit governments to subject immobile investments to higher taxes than mobile investments. Hong and Smart (2010) demonstrate this effect in a model where multinationals shift profit by debt from a tax haven affiliate. They show that providing a tax deduction for interest payments on subsidiary debt allows host countries to maintain or even increase high business tax rates, and to attract more mobile investments from multinationals because the tax deductibility of interest reduces the firm's after-tax cost of capital. The end outcome is higher host welfare.

Slemrod and Wilson (2009) model tax havens that are "parasitic" on the tax revenues of non-haven countries in that they sell concealment services to taxpayers in non-havens. Non-haven countries must expend real resources to prevent tax base erosion. They show that tax havens increase the social costs that a country incurs when it increases its tax on capital. This aggravates the tax competition problem and results in lower welfare.

Gresik et al. (2015a) use the model by Hong and Smart but also include transfer pricing in the model. They allow the host country to decide on the corporate tax rate and thin capitalization rules (equity-debt-ratio) that may limit profit shifting by excessive interest deductions. In their model the multinational firm has a financing subsidiary located in a tax haven and an operational subsidiary in a high-tax country. The multinational can shift profit to the tax haven affiliate by the level of internal debt and the interest rate (transfer price) it charges on intra-company loans.

Which countries benefit or lose from attracting FDI depends in general on country characteristics. Developed countries have better institutional quality than emerging or developing countries in the sense that their tax systems make it more costly for multinationals to engage in aggressive tax-induced transfer pricing. They also have a low cost of capital, high rents for domestic

entrepreneurs, and a moderate to high capital share in multinational production relative to emerging and developing countries. Gresik et al. (2015a) show that these differences matter. Developed countries can benefit from FDI and that a welfare maximum exists with an optimal corporate tax rate and a thin capitalization rule that are largely in line with average current tax rates and thin capitalization rules in the OECD. Developing countries, however, do not stand to benefit from policies that attract positive FDI. While permissive thin capitalization limits may be needed in developing countries to attract FDI, the amount of debt financing allowed by such permissive rules may facilitate aggressive transfer pricing that can result in lower welfare. The optimal tax policy for developing countries is to effectively eliminate the tax benefits of debt financing and only tax domestic firms.

Those who advocate the usefulness of tax havens as conduits lack a fully convincing explanation for why governments need to use tax havens to discriminate between mobile and immobile tax bases, rather than designing their tax systems to achieve this discrimination at lower costs.<sup>13</sup> Is the inability to conduct rational tax policy due to failures in the political system and/or lobbying, say? Schjelderup (2015) emphasizes the secrecy aspects of tax havens and argues that tax havens extend beyond just profit shifting activities and that to fully assess the welfare effects of them we need to fully assess the full range of their activities. Nevertheless, the lesson from a policy perspective from these studies is that the tax authorities must have resources and tools to secure tax compliance at their disposal. If not multinational investments may be a bane.

## **7. Some concluding comments**

In this paper I discuss the challenges of taxing capital for small open economies. Although the corporate tax share of GDP in most countries is only around 3-4%, it is an important tax because it acts as a “backstop” for the personal tax rate. Wealthy individuals in particular would be given an incentive to reclassify their labour income as corporate income typically using offshore corporate structures to escape tax. The pressures of tax competition are exacerbated by tax planning and income shifting to low tax countries by multinationals. Studies show that multinationals pay less tax than domestic firms and this may give them a competitive edge over domestic firms. The long term effects may be changes in ownership structure that affect competition in markets and make the corporate tax base more tax sensitive. Profit shifting is undertaken through transfer pricing and thin capitalization (excessive debt). Recent studies show that rules that restrict interest deductions that exceed a certain threshold such as a percentage of EBIT or EBITDA are the best defence against the use of debt to shift profit. Source taxes on royalty payments that are another effective defence

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<sup>13</sup> Wilson (2015) points this out in a survey of the literature on tax havens and tax competition.

mechanism. Yet establishing arm’s length prices in transactions between affiliates of multinationals is a problem that will rid tax authorities also in the future.

I have not discussed taxes that fall on the capital stock such as property taxes, the wealth tax and the inheritance tax. Concerning the two latter taxes, the Nordic welfare states set themselves apart from larger countries. Figure 4 provides an overview of the wealth and inheritance tax in the Nordic countries versus some large countries.

**Figure 4. Wealth and inheritance taxes (Source: Center For Federal Tax Policy, 2015)**

	Wealth Tax	Inheritance tax
Denmark	NO	15%-36,15%
Finland <sup>14</sup>	NO	10%
Iceland	NO	10%
Norway	YES	NO
Sweden	NO	NO
United States*	NO	40%
United Kingdom*	NO	40%
France*	YES	45%
Germany*	NO	30%

\* The U.S. inheritance tax has an exemption of \$5,430,000 in 2015. This is considerably larger than the exemptions in France (\$105,945), Germany (\$423,782), and the UK (\$488,280).

It is interesting to note that the Nordic countries seem to have gone further in terms of abolishing redistributive capital taxes than countries traditionally associated with policies much less tuned to redistribution. Aaberge and Atkinson (2010) shown how income inequality at the top of the distribution has increased in Anglo-Saxon countries, whereas the same rise in top income shares was not experienced by Continental European countries. They find that the Norwegian and Swedish experience over the twentieth century is similar to the Anglo-Saxon countries in that top shares, and the concentration among top incomes have first fallen and then risen. Norway differs from Sweden in that that the top shares rose more sharply in the period 1990-2006. Between 1980 and 2004, for example, the share of the top 1 per cent more than doubled in Norway, but rose less than half in Sweden.

Several explanations have been put forward to explain why Norway sets itself apart. The implementation of the 1992 tax reform abolished the dividend tax and lead to a sharp increase in dividends and capital gains among the richest in Norway. Capital taxation in Sweden was less favourable. Substantial oil production in Norway started some 15 years before the rise in inequality, but could still be an explanatory factor due to constrained cash in this sector in the initial phase of

<sup>14</sup> Finland had a wealth tax until 2006 and a temporary wealth tax reintroduced in 2010, for four years.



production. Capital market reforms with liberalization of interest rates and an upturn in business cycles are also important factors that are hard to disentangle, but they certainly played a role.

Capital taxation also affects income mobility, and concerns about rising inequality have often been countered by constant changes in the composition of top income earners. If so, the rise in top incomes may not translate into “economic power”. Aaberge et al. (2013) study who enters and leaves the top income groups in Norway in the period 1967-2011. Their main conclusion is that despite large changes in top income mobility over the last four decades, the magnitude of the effect of the changes in mobility on the income shares was moderate.

An interesting question is how voters will respond to rising inequality. Standard neoclassical theory predicts that inequality and the size of behavioural responses determines redistributive preferences (Meltzer & Richard, 1981). Following this literature one would expect voters to respond to lower capital taxes and increased inequality by demanding redistributive measures. A major concern, however, is that the public is misinformed about income inequality (Bartels, 2005; Slemrod, 2006). Such misconception may explain why there has been so little redistribution in the US, and that the political response to rising inequality in the US has been to further decrease capital taxes by reducing the top marginal tax rate from 75% in 1970 to 35% in 2012 (see IRS, 2014).

Gilens and Page (2014) study American politics and use data from 1981-2002 that has been collected with the purpose for estimating the influence upon public policy of poor citizens, “affluent” citizens, and those in the middle of the income distribution. A central message that emerges from their study is that: *“...economic elites and organized groups representing business interests have substantial independent impacts on U.S. government policy, while mass-based interest groups and average citizens have little or no independent influence”*. Their study indicates that the majority does not rule, and that when the majority of citizens disagree with economic elites or their organized interest, they generally lose. In the Nordic countries, the economic elites and commercial interests have been strong drivers in reducing capital tax rates. In particular, this pertains to the abolishment of the wealth and the inheritance tax. But it is not clear in these specific cases what the preferences of the majority of voters were. A better example of conflict between the majority of voters and the economic elite is the increase in property taxes. In Norway, for example, “affluent voters” and organized interest from the business community have been advocates of a transition from the wealth tax to higher property taxes. The median voter, in contrast, is strongly against property taxation. Property taxes have certainly gone up through higher valuation of housing values, and the wealth tax has been reduced.

Top income earners in the Scandinavian countries mainly derive their income from capital. Competition among countries to attract mobile capital is a persistent phenomenon and will be a driver towards still lower taxes on mobile capital. A major change from the past, then, is less ability

to redistribute, increasing income inequality, and rising immigration from poor countries. In sum these forces may affect trust between members of society. The level of trust is positively linked to economic growth.<sup>15</sup> Herein lies a major challenge for the Nordic welfare states

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<sup>15</sup> For a survey of the literature on trust and economic growth see Christian Bjørnskov (2012).

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