Taxing Immobile Factors and Wealth

5.1 INTRODUCTION

In a globalized world, the taxation of immobile factors becomes a major policy question. Mobile factors can change their location in response to differential taxation, leading to a loss of revenue for the national government,[1] either because of actual geographical reallocation (the firm or the individual move to another country) or due to the *threat* of mobility. This engenders 'tax competition' between states that choose to lower their tax rates in order to prevent factors from departing. Consequently, national governments cannot ignore these effects when choosing the structure of their fiscal system and are hence constrained in the amount of taxation that they can impose on mobile factors. In contrast, an immobile factor cannot, by definition, cross borders. Tax rates may have an impact on its use or accumulation, but the possibility of fleeing to reduce the tax burden is not an option, thus eliminating an important behavioral reaction and making it an attractive source of revenue.

One example of an immobile factor is consumption, which occurs in the location where the individual resides. Land and housing are also immobile, raising questions about how to tax those and, more generally, how to tax wealth, in a world where different types of assets differ in their degree of mobility. One final aspect we will consider is inheritance taxation, both because it is closely related to wealth taxes but also because it has been considerably affected by increasing mobility.

5.2 THE WEIGHT OF IMMOBILE FACTORS IN TAX SYSTEMS

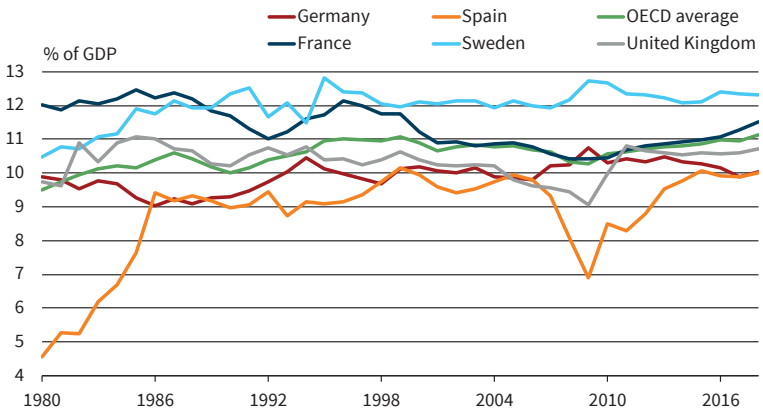
Consumption and excise taxes are among the oldest forms of taxation. Salt was taxed from classical antiquity, and the French version, the *gabelle*, was one of the most hated taxes of the ancient régime. As we will discuss, taxes on consumption are regressive and, since they were first used, figure prominently in debates about fairness. The balance of taxation has been the subject of vigorous public debate. In the aftermath of political revolutions, new representative assemblies often tried to move to an assessment of property instead. Thus, in the aftermath of the 1688 change of dynasty in England (the 'Glorious Revolution'), Parliament passed a tax on windows, exempting modest houses with a small number of windows. France in 1798 enacted similar legislation, which was only repealed in 1926, after taxes were modernized and income tax introduced during the First World War. Compared to income taxes, consumption and property taxes hence have a much longer history and were, until the 20th century, the main sources of fiscal revenue.

Today, consumption taxes amount to a considerable share of GDP (around 11 percent for the OECD average). This share has been stable over time, with a few exceptions such as Spain, where very low rates were progressively increased to close the gap with the OECD average. Despite a variation in rates (19 percent in Germany, 25 percent in Sweden), revenue shares are relatively similar across countries, ranging between 9.8 and 12.4 percent in 2016. In contrast, the extent to which countries rely on the tax varies considerably: as a share of total tax revenue, consumption taxes range from 25 percent in France to 32 percent in the United Kingdom.

Compared to consumption taxes, property taxes amount to a smaller share of GDP and vary considerably more across countries. For the OECD average,

Figure 5.1

Tax Revenues from Consumption Taxes in Selected OECD Countries, 1980–2018



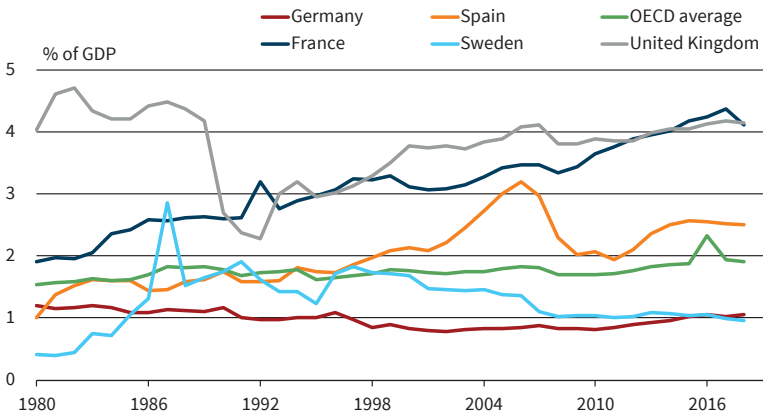
Note: Data is not available for Chile, Czech Republic, Estonia, Hungary, Israel, Latvia, Lithuania, Poland, Slovakia, and Slovenia until 1995.
Source: OECD.

[1] A vast literature has empirically identified sizeable responses to tax differentials. See Wilson (1999) and Cremer and Pestieau (2004) for reviews of the literature on tax competition, and Hines (1999) on empirical work on behavioral responses.

EEAG (2020), "Taxing Immobile Factors and Wealth",
EEAG Report on the European Economy, CESifo, Munich, pp. 92–104.

Figure 5.2

Tax Revenues from Property Taxes in Selected OECD Countries, 1980–2018



Note: Data is not available for Chile, Czech Republic, Estonia, Hungary, Israel, Latvia, Lithuania, Poland, Slovakia, and Slovenia until 1995.
Source: OECD.

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they rose from around 1.5 percent of GDP to 2.0 percent over the period from 1980 to 2016. This masks very different patterns, with Germany displaying a stable share of around 1 percent of GDP and France experiencing an increase from 1.9 to 4.4 percent of GDP (and from 4.8 to 9 percent of revenue). The role that property taxes play in overall tax receipts varies enormously across countries. It is low in Germany and Austria (2.8 and 1.3 percent in 2016, respectively) as well as in the Scandinavian economies, where it amounts to between 2 and 4 percent, and is highest in France and especially in the United Kingdom, where it accounted for 12.3 percent of receipts in 2016. In fact, in the UK property taxes are substantial and are a key component of local governments' finance, accounting for around 30 percent of their revenue (Ministry of Housing, Communities, and Local Government, 2019).

Data on wealth and inheritance taxation is less readily available and more difficult to compare across countries. As well as a variety of tax rates and brackets, this type of taxation is characterized by a plethora of exemptions. For example, some countries do not include the main residence in net wealth tax bases, while inheritance taxes often exclude family firms and inter vivos gifts may not be taxed at all. What is clear is that these two forms of taxation, which were prevalent across the European

Table 5.1

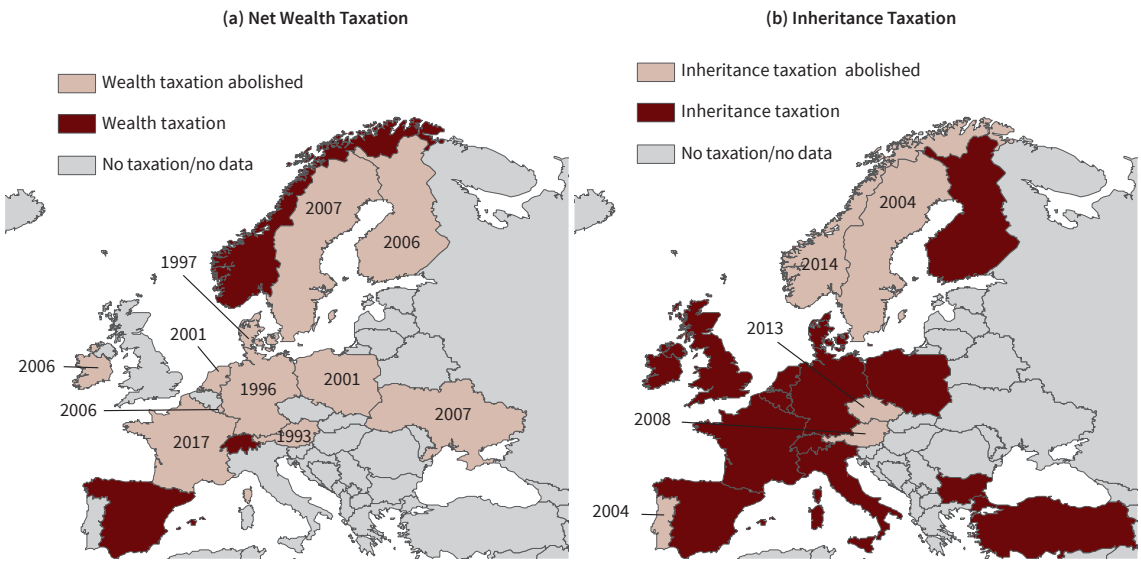
Consumption and Property Taxes as a Share of Tax Revenue in 2018

	OECD Average	Austria	Belgium	Denmark	France	Germany	Italy	Spain	Sweden	UK	US
Consumption tax receipts as % of tax revenue	32.5	27.5	24.4	32.7	25.0	26.2	28.3	29.1	28.0	32.0	17.6
Property tax receipts as % of tax revenue	5.5	1.3	7.8	4.1	8.9	2.7	6.1	7.3	2.2	12.3	12.2

Source: OECD.

Figure 5.3

Net Wealth and Inheritance Taxation in Europe, 2017/2018



Note: The year marks the date of abolition of the tax.
Source: ifo DICE Report II/2018, Drometer et al. (2018).

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Union in the second half of the 20th century, have been abolished in a large number of countries, starting in the mid-1990s. In 2017, France, Norway, Spain, and Switzerland were the only EU countries with a net wealth tax (OECD, 2018), and France has since removed and replaced it with a property tax. Inheritance taxation is still common, though some countries, notably Norway and Sweden, have recently abolished it.

5.3 CONSUMPTION TAXES

5.3.1 The Impact of Consumption Taxes

Consumption taxes, notably VAT, have become one of the main sources of tax revenue in most high-income countries (the United States being the notable exception, with local and state sales taxes, but no deferral sales tax). They have the advantage that consumption is, generally, not mobile and hence they do not affect location choices. Moreover, if all goods are taxed at the same rate, they do not distort the choices made by individuals over different consumption goods.

The main argument against consumption taxes concerns redistribution. Given that the propensity to consume is higher for those with lower incomes, a proportional tax on consumption implies that high-income individuals will be paying a lower share of their income than low-income ones.[2] When such taxes are considered in isolation, there are hence concerns for fairness, and these have often been voiced through claims for lower tax rates on goods that are disproportionately consumed by low-income households. However, consumption taxes are rarely the only fiscal instrument used by a state, and their distributional implications should be assessed in conjunction with those esteeming from direct taxation and the welfare benefit system. Moreover, consumption taxes are difficult to avoid, and hence in a context of income tax optimization and evasion, they may at least tax at the point of expenditure incomes that would otherwise go untaxed.

Tax exemptions are an important concern. Many European countries create complexities by imposing different rates of VAT, with the United Kingdom for instance taxing hot and cold takeaway food at different rates. Exemptions affect a variety of goods, including amusement parks in France, gold coins in Germany, and cut flowers in both countries. A considerable part of these exemptions are simply the result of lobbying, have no economic rationale, and may have adverse distributional consequences. In some cases, the exemptions were introduced with a distributive aim but have failed to play such a role. For example, in the United Kingdom the total exemption from VAT of children's clothing – originally seen as a staple – favors those who purchase designer clothes for children (most likely high-income households), while distorting expenditure towards clothing. Because of such distortions, much of the literature favors a common tax on all consumption goods combined with a progressive income tax system and redistributive benefits; see for example the Mirrlees Review. A different VAT rate is nevertheless justified for goods with a clear externality, such as an impact on the individual's future health (e.g., tobacco) or environmental externalities (which we will discuss below).[3]

Indirect taxes face two major constraints. First, given that the way to evaluate the distributive consequences of a fiscal system is to consider all its components, the extent to which consumption taxes can be used to raise revenue without having undesirable distributional consequences depends on the degree of redistribution operating through direct taxes. In other words, there are limits to the extent to which consumption taxes can be used if fairness in the overall tax system is a concern. Second, indirect taxes must be considered in an international context, notably by EU countries. The creation of the single market raised the question of *where* taxes should be levied. The decision in the European Union (and in many other countries) has been that indirect taxes are levied in the destination country, i.e., the one where the consumer purchasing the good is located, and not in the country that produces the good. This can create a number of inefficiencies in terms of fraud and cross-border shopping that results in a considerable loss of revenue (see Box 5.1).

Despite these drawbacks, consumption taxes remain a major tool for raising revenue, a tool that is to a large extent immune to mobility and should hence be a central part of fiscal systems, as is currently the case. As we have seen, the arguments for reduced rates are seldom solid and a common tax on all consumption goods would avoid distortions and be an improvement over existing systems. There is one notable exception: taxing externalities.

5.3.2 Taxing Goods with Externalities

Differential VAT rates are justified when an externality stems from the consumption of a particular good. Externalities can be positive or negative, resulting in lower or higher rates respectively, and a common practice across EU countries is to impose lower rates on books and cultural events. A more controversial question is how to tax negative externalities. In this section we consider a particular example, the taxation of environmental externalities – particularly carbon emissions[4] – as they are closely related to the process of globalization. Emissions themselves are

[2] The propensity to consume is also higher for older individuals, implying some intergenerational redistribution too.

[3] The Pigouvian approach and optimal tax theory imply that high tax rates should be imposed on goods with negative externalities as well as on those with low demand elasticity and those which complement leisure.

[4] Environmental taxation should apply to a variety of activities, including those that produce nitrogen, which is a major source of acid rain, or those that use microplastics, which have damaging consequences for oceans and marine life.

BOX 5.1 VAT AND CROSS-BORDER EFFECTS

Taken together, in 2016 the 28 countries in the European Union experienced a total VAT loss estimated at EUR 147.1 billion, amounting to 12.3 percent of the total expected VAT revenue (Davoine et al., 2018). This so-called 'VAT Gap' is due to lax tax compliance, tax fraud, tax avoidance, bankruptcies, and insolvencies. Both liquidity constraints on firms and the size of the tax administration have a significant impact on the VAT Gap, but the increase in cross-border transactions seems to be a major factor facilitating fraud. One type of scheme consists of fraudulent traders supplying goods to other business, collecting VAT from them, and then not remitting VAT to the tax authorities, a procedure that is vastly facilitated by the fact that no VAT is chargeable on cross-border transactions between EU member states. Fraud also emerges due to the non-payment of VAT on imports into the European Common Market (ECM), particularly when goods enter one EU state and are then transported to another member state, with VAT being due only in the latter. Fraud occurs if the goods stay in the initial state without payment of the tax or if the goods move to the country of destination, but VAT is not collected because the customs authorities are not aware that the good was imported into the ECM.

A second cause of concern are VAT refunds to non-residents. In 2016, EU tax administrations received almost 700,000 claims amounting to EUR 109.4 million (Larhlid et al., 2017), with the majority of claims being worth less than EUR 1,000. One cost of these claims is simply administrative. As trade volumes keep growing, these claims take up an increasing amount of time of tax administrations across the EU. Cross-border shopping also results in a loss of revenue for the fiscal authorities, and this has been well documented in the case of North America. Ferris (2000) estimates that in the 1990s, Canada was losing 4 percent of its potential revenue from sales tax due to cross-border shopping in low-sales-tax US states. Even within nations, this is an important effect. Manuszak and Moul (2008) examine gasoline purchases in the Chicago area – which had the highest gasoline taxes in the region at the time – and estimate a loss of 40 percent of potential revenue. Similar effects can be expected to exist in the European Union.

Swiss residents systematically engage in considerable cross-border shopping to profit from lower prices in neighboring EU countries. For the latter, this implies an administrative cost related to the reimbursement of taxes; for the Swiss state, there is a considerable revenue loss. For example, the Swiss canton of Geneva has estimated that in 2018, 5.5 percent of household consumption (EUR 361 million out of EUR 6,524 million) consisted of goods purchased across the French border (Etat de Genève, 2019), implying a loss of about 5 percent of the tax revenue stemming from consumption taxes.

mobile and hence policies (or the lack of) in one country will affect the environmental quality in another. Another issue is that of carbon leakages: as one economy increases environmental restrictions, the production of high-carbon-content goods moves to less regulated economies, thus increasing their level of emissions.

Environmental concerns imply that the European Union needs some form of carbon pricing in order to reduce the burning of carbon-based fuels and comply with announced climate change objectives. Two possibilities exist: carbon taxes and emission permits. The current system consists of traded permits, the EU Emissions Trading System (ETS), which has been in place since 2005 (see Flachsland et al., 2018 for a discussion). The ETS is efficient as it enables direct control of the level of emissions, something which carbon taxes do not do. Yet the system has several drawbacks. The first concerns the resulting market prices. The EU ETS has delivered prices that have been well below the initial expectations and which are perceived as having failed to decarbonize the European economy. Moreover, price volatility and the possibility of an unpredictable collapse make it difficult for the price to steer investments. A solution would be the creation of a *price corridor* that limits fluctuations and reduces uncertainty,[5] hence providing a more stable investment climate.

The current ETS system is also unsatisfactory in that it does not cover the energy used in housing and other buildings as well as in private transport, which together account for a considerable share of total emissions. On the international level, the need to buy permits creates a wedge between the costs of firms in the European Union and those outside it (for whom there is no or little regulation). The resulting loss of competitiveness of the former shifts production to the latter, implying that while the permits reduce the emissions associated with European production, they may have only a limited effect in reducing those associated with the consumption by EU citizens, i.e., there are carbon leakages. A carbon tax can help tackle both problems.[6]

[5] The idea of introducing at least a carbon price floor has been debated, yet it has so far been blocked due to the Council's unanimity requirement in EU treaties on tax matters.

[6] An additional concern is competition as the first wave of permits were given out for free to existing firms according to their emissions at the time, making the costs higher for an entrant that has to buy permits. However, new issues have progressively moved towards auctioned permits, largely solving this concern.

A carbon tax is a fee imposed on the carbon content of any type of greenhouse gas emitted by a sector and can be used to complement the ETS. More precisely, it would be possible to introduce a VAT system calibrated by the carbon content of goods, so that those commodities or services that do not fall within the ETS framework pay the standard VAT plus a rate depending on their carbon content. This calibrated VAT would reduce the carbon leakage problem, hence addressing the emissions generated by domestic consumption of imports by ensuring a level playing field between EU and foreign producers as far as carbon emissions are concerned. A calibrated VAT should also be applied to heating fuels and gasoline to reduce emissions by households. Although both policies are likely to be difficult to implement, steps could be taken at the EU level to facilitate them. Notably, just as there are requirements for a minimum VAT, a minimum tax rate on heating fuels and gasoline would be desirable, at least in the short run while possible extensions of the ETS to cover these sectors are considered. Concerning the calibrated VAT on imports, the European Union should ensure that discussions of carbon emissions are part of trade negotiations, ideally seeking an international agreement on available instruments. This agreement should emphasize that a calibrated VAT is not a form of protectionism, but is rather a tool for equal treatment of emissions irrespective of their geographical origin.

Lastly, both carbon taxes and ETS have undesirable domestic distributive consequences as they increase consumer prices, thus hurting low-income households the most. The distributional consequences can be addressed by using the proceeds for redistribution. For example, in Canada, tax revenue from the federal carbon tax is used as a rebate in income tax for households, and it is estimated that these refunds offset the higher prices for about 70 percent of households. This idea could potentially be pushed further by channeling carbon tax receipts from imports to low-income economies hurt by the tax, for example in the form of development aid.

5.4. TAXING LAND AND HOUSING

5.4.1 The Arguments for Taxing Land

David Ricardo termed income from land a rent paid to the landlord for the unearned quality of soil, and starting with Henry George (Progress and Poverty, 1879), many economists have argued that taxing the value of land is an efficient source of public revenue, as it allows for the reduction of more distortive taxes on labor and capital. Land prices reflect one of two things: either the presence of natural resources (such as gold, rare earths, or vine-friendly soil) or the value of location (in terms of access to productive activities or amenities). Either way, landowners enjoy rents that are due to natural randomness or to the benefits resulting from externalities, the latter often due to public investments in the form of good transport, access to supply chains, or the quality of schools. Taxing these rents will consequently not affect the productive capacity of the land.

Indeed, land-value taxes have little disincentive effect as they cannot reduce the supply of land nor distort individual investments on what is built. They are unlikely to result in fiscal optimization since plots cannot be hidden or moved to tax havens, and provide easy collateral for the tax authorities in case of payment default. They may even stimulate economic activity by ensuring that all profitable land is used and not kept idle,[7] and are likely to reduce housing prices in dense urban areas, thus benefiting young workers who are on average less well-off than their elders. Moreover, as land prices increase because, say, investments in transport and infrastructure turn low-value farmland into high-value plots for commuters, a land tax recovers part of the investment as tax revenue rather than leaving it all as a windfall to the original owners.

As a way of charging for the costs of providing local services, land-value taxes are hence efficient, yet they raise concerns about fairness. The tax bill does not depend on the landowner's ability to pay, but rather on the value of an asset, implying that a high payment may be required from individuals with moderate incomes. There is nevertheless a strong correlation between income and housing wealth, but as we will discuss below, fairness is an important concern when designing this type of taxation.

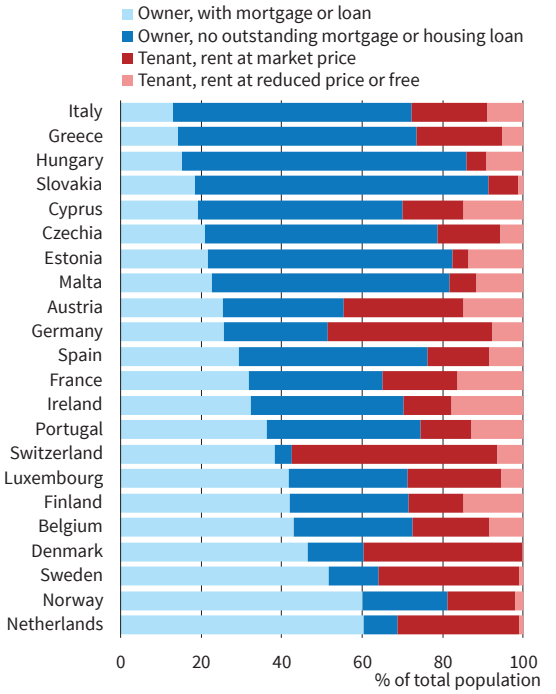
5.4.2 Why Is Land Taxed So Little?

In the light of these arguments, it is surprising that land is so little taxed. The traditional argument explaining the low taxation of land is called the "homevoter" effect (Fischel, 2001). For most households, their home is their most important asset, in many cases their only asset, and hence a vast number of households feel that land-value taxes will be a double penalty, as they would not only be a burden on their own finances but also reduce the price of their property as future buyers factor in the increased tax. Figure 5.4 shows the proportion of households in the European Union according to whether or not they live on their own property, and indicates the prevalence of homeowners. Homeowners are consequently a large fraction of the electorate and argue that because they have paid for the land, they should be allowed to enjoy its rents. Consequently, homeowners, even of modest properties, tend not to support land and property taxes. As homeownership has expanded, the

[7] There is already a cost of not using land in terms of its opportunity cost, but in certain locations with a considerable share of vacant property (e.g., Paris), this cost seems not to be sufficiently high to encourage full occupation. A land-value tax would be an additional cost that should decrease vacancy rates.

Figure 5.4

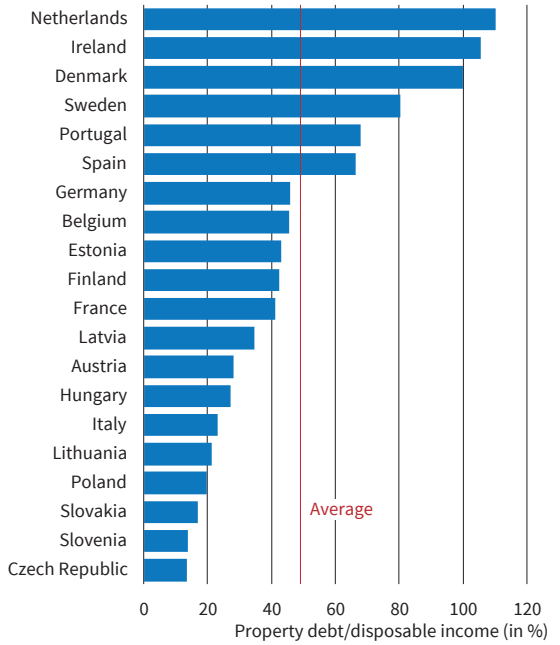
Distribution of Population by Tenure Status in 2018



Source: Eurostat. © CESifo

Figure 5.5

Real Estate Debt of Households in Various European Countries in 2010



Source: Trannoy and Wasmer (2013). © CESifo

support for such taxes has fallen, capturing the fact that the median voter has shifted from being a renter to an owner.

Moreover, as the real-estate debt burden of households has increased, homeowners have probably become more sensitive to land taxes. Taxation that reduces the price of their property could potentially imply negative equity, with important implications for both household finances and their opportunity to move to other locations should the need arise. Figure 5.5 shows the ratio of debt to disposable income in EU countries and indicates that, given its magnitude, price changes could represent a major problem for households in many countries.

This hypothesis is supported by empirical analyses for the United States. Dehring et al. (2008) examine the political support for public projects in the United States that are perceived as increasing property values and show that support crucially depends on the size of the home-owner population. Moreover, politicians respond to such attitudes by adapting policy to the demands of the home-voter. Ahlfeldt et al. (2015) examine the results from a referendum concerning a major public project in Germany to test the hypothesis that, compared to tenants, homeowners are more (less) likely to support initiatives that positively (negatively) affect the amenity value of a neighborhood and hence its house prices. Their results indicate that this is the case, implying that political choices are strongly influenced by the property status of a constituency.

An additional mechanism is put forward by Hilber and Robert-Nicoud (2013), who present a broader theory of the political opposition to land taxes. They suggest that, as well as homeowners, powerful groups engage in lobbying aimed at keeping property and land prices high. This includes those in professions whose income depends on the cost of land and property, such as notaries, real estate agents, and real estate developers. Interestingly, Solé-Ollé and Viladecans-Marsal (2007) show, using Spanish data, that local governments are more likely to implement policies reducing property and land prices when they face little political competition than when the competition is strong, implying that the political class sees expected house price dynamics as a key determinant of political support.

5.4.3 How Feasible Are Land-Value Taxes?

Introducing a tax on the value of land presents some problems. The first is balancing winners and losers within cities. Some businesses require much more space than others and will be penalized, with city cinemas and urban car-repair shops being hit hard. Private urban gardens, which clearly provide an externality in terms of environmental conditions, may disappear as owners will be encouraged by the tax to convert them into extra housing, which would itself be efficient by increasing the supply of housing.

A second concern is the valuation of land. This is never straightforward but even less so in the case of expensive urban land, which is rarely vacant. Transaction prices are useful information, but they are prices for properties, not plots of land, and separating the two components is difficult. A plot should be valued

as if it were vacant and this requires approximations of the cost of building and depreciation rates. A further question is how to take into account different planning restrictions on land use.

The distributive implications of land taxes are complex. First, the tax would be particularly burdensome on certain categories. Low-income pensioners who live in large family homes would have to pay a large bill irrespective of their incomes, although in the tight housing markets of most EU countries, there may be benefits in terms of encouraging older people in large properties to move to more suitable accommodation and free up housing for larger families. The tax would also hurt owners with a mortgage (usually younger individuals), as the value of their land may be considerable even if their net wealth is low, although this problem could be solved by sharing the tax burden between the owner and the lending institution. Second, the redistributive properties so strongly defended by George and his followers are today only partially true. As argued by Piketty (2014), since much of the increase in wealth inequality during the second half of the 20th century has been due to rising house prices, landvalue taxes are a simple way of taxing capital gains associated with these price increases and which, generally, do not depend on individual actions.[8] Taxing land implies a greater fiscal burden for the voting middle class as compared to those on low wages and welfare, which are less likely to own property.[9] In contrast, what separates the middle class and the top percentiles of the distribution is precisely that home ownership constitutes a major share of wealth for the former yet not for the latter. Land is hence less concentrated than it was in the past and, as a result, the burden of a land-value tax falls largely on the middle class.

Some of these objections can be overcome, and to do so, three aspects are fundamental. The first is that a land tax should not be implemented overnight but rather be introduced gradually so as to allow for market signals to progressively reflect the changes. This would help spread the costs to the losers both over time and across individuals if there are several successive owners. Second, the existence of winners and losers implies that there will be pressure to protect certain categories. The danger with such considerations is that the tax on land values may de facto be eroded by a plethora of exemptions. Third, the valuation of land is not an insuperable problem and will likely become easier in the light of the IT developments discussed in Chapter 2 that can help gather information on transactions, improvements, and access to public services. The main drawback of a land-value tax is that it is 'not fair' in the sense that it is not based on ability to pay. In order to further explore this aspect, the next section discusses the taxation of land, property, and net wealth.

Table 5.2

Housing Wealth

	France			Germany			United Kingdom		
	Wealth as % of income	Housing as % of income	Housing as % of wealth	Wealth as % of income	Housing as % of income	Housing as % of wealth	Wealth as % of income	Housing as % of income	Housing as % of wealth
1950	278	85	31	233	60	26	235	94	40
1970	363	122	34	313	128	41	333	124	37
2010	605	371	61	414	231	56	523	300	57

Source: Piketty (2014).

5.4.4 Land-Value Taxes, Property Taxes, and Wealth Taxes

The value of land is part of the value of a property, which in turn is part of an individual's net wealth. Although taxing one or the other of these assets is closely linked, which one is chosen as a tax base can have different implications both in terms of efficiency and fairness. Before considering these, it is worth examining the composition of household wealth. Computing the share of land in the latter is not straightforward, as most countries do not assess the value of land. It is nevertheless possible to consider the importance of property wealth, of which land is a substantial component, in income and in total wealth. Table 5.2 reports the increasing importance of wealth relative to annual household income in France, Germany, and the United Kingdom over the past six decades. Overall, wealth relative to annual income is lowest in Germany and largest in France, but in all three countries it has roughly doubled between 1950 and 2010. In contrast, housing wealth as a proportion of annual income has tripled or quadrupled. The result is that by 2010, property was a much larger share of total wealth than in 1950, rising from 31 percent to 61 percent in France, from 26 percent to 56 percent in Germany, and from 40 percent to 57 percent in the United Kingdom.

Property-value taxes share many of the features of land-value taxes, notably that the tax base is immobile. They have the drawback that they create a distortion as they penalize improvements to the buildings standing on it, and the advantage that since the price of a property is to a large extent related to the number of dwellers, they imply a stronger correlation between the tax bill and the use of public services than a land-value tax. In contrast, because other types of wealth are mobile, a net wealth tax results in tax optimization and capital flight. This reduces tax revenue and, potentially, output.

[8] This is an important loophole of most European tax systems, in which capital gains associated with the household's main residence go untaxed.

[9] This group is also often characterized by low turnout rates in elections and hence yields less political pressure.

In terms of fairness, net wealth taxes are in principle assessed on the individual's capacity to pay (in terms of wealth, not necessarily of income), which, as we have seen, is not the case for land-value taxes nor for property taxes. There are nevertheless several caveats. First, a broadbased capital income tax can play the same distributive role as a net wealth tax, and has the advantage of not creating liquidity problems[10] and of taxing capital gains, which are harder to evaluate with an annual wealth tax. Second, the valuation problem associated with land-value or property taxes is even greater in the case of the plethora of assets and debts included in net wealth. When this is combined with the use of exemptions (such as that on the main residence, which is common in many countries), it can potentially give rise to unfair treatment of taxpayers.[11] Lastly, tax optimization and changing country of fiscal residence are more frequently undertaken by those at the top of the distribution, and hence *de facto* curb the relationship between the capacity to pay and the tax bill of individuals. As a result, mobility implies that a net wealth tax may not be fairer than land-value or property taxes.

In the current context of (financial) capital mobility, the majority of EU countries have removed taxes on wealth, precisely because of the perception that mobility implied both an erosion of the tax base and difficulties in taxing those at the top of the distribution. In 2017, France, Norway, Spain, and Switzerland were the only OECD countries with net wealth taxes (OECD, 2018). The current French government has since removed the wealth tax and replaced it with a property tax, mainly as a reaction to the forces of globalization and the flight of major fortunes out of the country.

Overall, because the tax base consists of immobile factors, land-value or property taxes are an efficient source of revenue that governments could use more than they currently do, despite the drawback of not fully reflecting the ability to pay. A net wealth tax is in principle fair, yet international mobility and the ease of tax optimization imply that in practice, highwealth individuals can avoid the tax, reducing both the tax base and its distributional properties. If countries want to implement a net wealth tax, these arguments imply that they should consider the possibility of a dual wealth tax, with a higher rate on immobile assets and a lower one on mobile wealth. Wealth taxes should also be considered in interaction with income taxes and the overall tax burden on an individual should be assessed taking both into account.[12]

[10] These often concern elderly individuals with high wealth but low income. See Boadway and Pestieu (2018) for a discussion on the wealth versus capital income tax.

[11] See Saez and Zucman (2019) for a discussion of how increased information exchange and better use of digital information can be used to evaluate a taxpayer's holdings. Note, however, that this comes at the cost of considerable invasion of personal privacy.

[12] One possibility is to have a ceiling on the share of income paid once both taxes are taken into account.

5.5 INHERITANCE AND ESTATE TAXES

5.5.1 Why Tax Inheritances?

An inheritance is income accruing to the recipient and as such it increases her ability to pay, implying that it should be taxed to maintain fiscal fairness. Inheritances are likely to become an increasingly important issue as the baby boomers age, a generation that has accumulated considerable assets and currently has a life expectancy of 10 to 30 more years. Given their weight in European populations and the fact that the quantitative importance of bequests has increased over the past few decades in slow-growing European economies,[13] the volume of bequests is likely to rise dramatically in the next few decades. For example, in France, in recent years bequests and donations amounted to about 20 percent of annual household income (France Strategie, 2017), while for the United States over USD 45 trillion of wealth (in 2002 dollars) has been predicted to be transferred as estates between 1998 and 2052 (Schervish and Havens, 2003). As the age pyramid is inverting, bequests and donations increase and greater taxation of such incomes would allow for a reduction in other distortionary taxes.

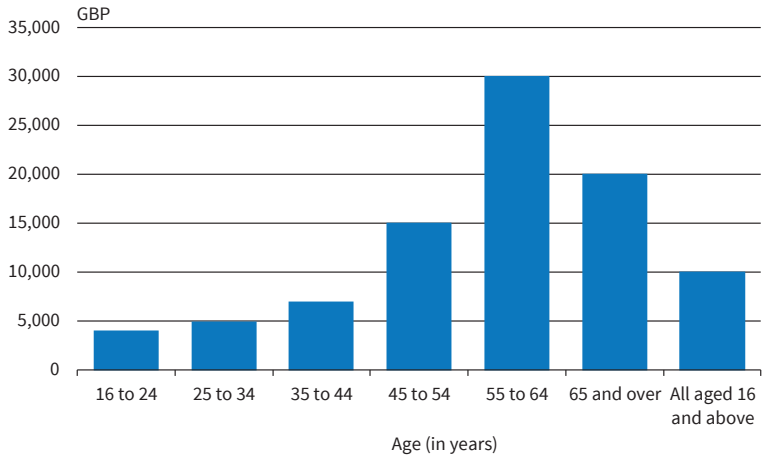
Governments may also want to tax inheritance for equity reasons.[14] The distribution of inheritances is highly skewed as a large fraction of young adults are born into households with little wealth where no bequests will be made. In France, for example, this is the case for about 50 percent of the population (France Strategie, 2017). Differences in inheritances received hence result in unequal opportunities across individuals of the same generation, and social justice objectives may call for reducing these differences.[15] Moreover, bequests also affect intergenerational equity. Over the past few decades, higher life expectancy has increased the age at which bequests are received. Figure 5.6 presents data on the age at which individuals inherit in the United Kingdom (for the period between 2014 and 2016) and indicates that the largest bequests are received by those above the age of 55. Piketty (2014) reports that in France, the average age at which an inheritance is received rose from 38 in 1950 to 49 in 2010, and is predicted to peak at 55 in 2040. These figures indicate that the bulk of intergenerational transfers occur relatively late in the individual's working life,

[13] See Piketty (2011) and Ohlsson (2011).

[14] Several countries, notably the United Kingdom, also use the inheritance tax system to encourage bequests to charities, for example by reducing the rates applicable to the rest of the estate if at least a certain share is bequeathed to a charity. We will not consider this potential use of the fiscal system, as it would require a broader discussion of the treatment of charitable donations out of other incomes and from the government itself.

[15] The role of inheritance taxes in the accumulation of wealth is highlighted by Piketty (2003, 2014). Dell (2005) simulates the cases of France and Germany, which have similar progressive income taxes but where the latter has a much higher exemption for inheritance taxes. He finds that the greater concentration of wealth in Germany at the very top can be explained by this difference.

Figure 5.6
Median Value of Individual Inheritances Received in the United Kingdom, 2014–2016



Source: Office for National Statistics (2018).

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thus becoming a source of intergenerational inequality. The taxation of bequests hence has the potential to reduce income and wealth differences across generations.[16]

Fairness (and, potentially, redistributive aims) imply that governments should tax the transmission of wealth. The policymaker also has several options on how to define the tax base, by using either an estate tax or an inheritance tax and choosing whether or not the tax also applies to gifts and donations. Estate taxes are levied on the entire property of the deceased, while inheritance taxes are levied on the amount received by a particular individual from the deceased. Estate taxation is attractive in that it is a way of taxing the capital gains associated with the assets of the deceased, but is not fair as it does not take into consideration the heirs' capacity to pay, notably whether the entire state is bequeathed to a single individual or split among many. Inheritance tax, in contrast, considers the recipient as the tax unit and hence better captures the ability to pay. In what follows, we will focus on inheritance taxation, although many of the aspects discussed apply to the two fiscal instruments. Both have potential incentive effects that need to be evaluated, and face political-economy arguments that explain why such taxes are so unpopular.

5.5.2 The Economics and Politics of Inheritance Taxation

5.5.2.1 Tax Distortions

If bequests were all accidental and due to uncertain life spans, inheritance taxes would have no distortionary impact. Existing evidence, however, indicates that bequests are at least in part intentional,[17] as people with children seek to pass on some of their accumulated wealth to the next generation, and consequently the fiscal treatment of bequests can affect their behavior. A first distortion resulting from the tax is international mobility of households that change country of residence in order to avoid the tax. As is the case with the net wealth tax, such mobility implies a loss of revenue and lack of fairness. Since it is usually the wealthiest individuals who engage in activities to avoid paying this tax, inheritance tax is mainly paid by the middle class. Unfortunately, data on the extent to which changes in fiscal residence are due to tax considerations does not exist, but casual observation indicates that the phenomenon is not negligible.

A second concern is that in the absence of the tax, people with children would work harder and save more in order to leave a larger bequest, thus increasing aggregate capital accumulation.[18] However, the impact crucially depends on the motive behind bequests. Bequests can be due to purely altruistic motives or the result of an exchange, with parents transferring wealth in exchange for care by their children. Observed behavior seems to be best explained by the individual deriving utility from the amount bequeathed rather than from the utility of the individual to whom she leaves the bequest, which is consistent with either a 'warm glow' effect or an exchange motive. In fact, the (limited) empirical literature that exists has had difficulty establishing an effect of inheritance taxes on savings.[19]

Inheritances have also been argued to affect the incentives of the recipient to work. For example, Brown, Coile, and Weisbenner (2010) find that, in the United States, inheritance receipt is associated with a significant increase in the probability of retirement, and using Swedish data, Elinder et al. (2012) estimate a significant reduction in labor income for old recipients. Receiving a bequest is also likely to create new opportunities, especially for younger recipients, as it relaxes credit constraints. Bequests

[16] In the United Kingdom more than half of the recipients that were over 55 saved their inheritance, while younger recipients were more likely to spend it, often in buying a first home or using it in businesses (Office of National Statistics, 2018).

[17] For example, using US data, Kopczuk and Lupton (2007) find that about 75 percent of the population intends to leave a bequest; see also Poterba (2001) and Kopczuk (2013).

[18] See Stiglitz (1978), Kotlikoff and Summers (1981), McCaffery (1994), and Piketty and Saez (2013).

[19] Attempts to estimate the elasticity of savings to the US estate tax have faced considerable problems, from data availability to conceptual issues about relating short-term tax changes to long-term responses, as discussed by Kopczuk (2013). Kopczuk claims that: "Taken at face value these results would be consistent with the notion that tax avoidance is not the main driver of the [savings] response."

allow individuals to acquire education or train, thus improving future labor market opportunities, facilitate geographical labor mobility, and hence increase the range of jobs considered, and increase entrepreneurship.[20] These aspects point to the importance of the age of the recipient as a determinant of the potential effect of inheritance taxes.

Overall, the literature points towards considerable incentive effects of inheritance taxes. Mobility is a major concern, while the impact on savings is unclear. The age structure of recipients is also important. Inheriting late in life often results in anticipated retirement, which is costly both in terms of lost output and for public finances (if retirement pensions are public), while for young recipients a bequest may increase opportunities for employment and business activity.

5.5.2.2 Family Firms

A variety of tax exemptions exist in different countries, depending on the nature of the goods (for example, works of art) or the particular origin of the asset (parental home). One of the most frequent exemptions from inheritance taxes are family firms. Family-owned firms account for a substantial fraction of economic activity: according to Eurostat, over 60 percent of EU firms are family businesses, and in some countries they represent a large share of employment (for example, in Italy they account for 98 percent of all employees in firms of under 50 workers; Mandl, 2008). It is hence not surprising that how they are affected by intergenerational transfer of control has always been a major policy concern.

In most European countries, the transmission of a family firm is either not subject to inheritance taxation or faces substantial exemptions, and as a result, large inheritances may go untaxed. The argument usually put forward as a justification is that in many cases, the only way for the heirs to pay the tax would be to sell the firm, resulting in a reduction in economic activity and employment. Whether this is so is not clear,[21] and if it were, it is possible to conceive solutions that ease the payment of the tax bill over time.

Two issues are central to assessing the preferential treatment of family firms: whether such firms create externalities, and if existing exemptions entail costs. In terms of external effects, families may be more reluctant than corporate owners to sell or dismantle a firm during bad times, hence providing a source of stability in output and employment during recessions.[22] If this were the case, it would justify a favorable fiscal treatment of family firms, although there is no reason for it to be restricted to inheritance and not encompass other aspects of firms' taxation. Concerning the costs, the special treatment of family firms is strongly regulated, with the family link between the deceased owner and the heirs being a crucial factor, and restrictions on changes in employment or on the sale of the family firm over a certain period of time.[23] As a result, firms may be run by relatives who are less suitable than external managers or they may avoid necessary adjustments in order to comply with the restrictions associated with the exemptions, both of which impose costs and inefficiencies.[24]

Overall, there seems to be no clear externality stemming from family firms that would justify differential inheritance taxation, while existing restrictions required in order to benefit from inheritance tax exemptions seem to impose costs on firms of which the policymaker needs to be aware.

5.5.2.3 Political Economy

Inheritance taxes are unpopular everywhere despite the fact that they have the potential to be fair. As is the case for wealth taxes, they are paid infrequently, which makes them more salient than taxes that are paid on a regular basis, and this probably partly explains their lack of popularity. The argument that they imply double taxation as they tax income that has already been taxed (when the deceased received that income) only makes sense if the tax unit is the dynasty. If, instead, taxes are borne by individuals, then an inheritance is an income for the recipient that has never been taxed as such.

An important aspect that opponents to such taxes have always put forward is the impact on small firms, emphasizing examples of hard-working business owners whose heirs had to dismantle or sell the firm to pay the taxman. The growing unpopularity of inheritance taxes is also probably related to the expansion of the middle class and of home ownership in the second half of the 20th century.[25] Such expansion has had two effects: a larger middle class with considerable housing assets now sees itself at risk of having to pay inheritance tax and as a result votes to remove it, while the sharp increase in housing prices may have accentuated the desire to transmit to their offspring assets that would allow entry into the housing market. If we add the fact that loopholes and mobility allow the very rich to optimize in order to avoid inheritance

[20] On the relationship between inheritance and education, see García-Peñalosa and Wälde (2000), Farhi and Werning (2010), and Strawczynski (2014). Numerous studies find that receiving an inheritance has a positive impact on self-employment and business entry; see for example Blanchflower and Oswald (1998) or Hurst and Lusardi (2004).

[21] Brunetti (2006) finds, using US data, that the impact of inheritance taxes on the likelihood that a decedent's firm will be sold is at best small, while in the case of Greece, Tsoutsoura (2015) obtains a stronger effect.

[22] See James (2013) for a discussion of the historical importance of European family firms during periods of major social or economic disruption, and Foster and Kaplan (2001) on the long-run survival of firms.

[23] See for example KPMG (2018).

[24] If these restrictions were costly, we would expect worse performance from inherited family firms. Indeed, Bloom, Sadun, and Van Reenen (2015) find that family-owned inherited firms are less well managed than other types of firms.

[25] See Graetz and Shapiro (2005).

taxes, the majority of the middle class is likely to see taxing bequests as unfair. The overall outcome is that such taxes are deeply unpopular.

5.5.3 Policy Options for Inheritance Taxation

Our discussion above points to some general principles that should be considered when choosing the way in which inheritances and donations are taxed. The first is keeping it simple. The simplicity and readability of a tax system makes it harder to engage in fiscal optimization and hence prevents the erosion of the tax base. In most cases, existing exemptions have no economic rationale and can be justified only through social norms, which governments may or may not want to support. Certain countries also exclude from a deceased person's estate assets placed in a trust or in certain financial products (the so-called "assurance vie" in France). Again, the economic arguments for such special treatments are weak at best, while the existence of these exemptions considerably dampens support for inheritance taxes by creating the (largely correct) impression that they serve the rich by reducing their tax bill. As we have seen, the most common exemption is that concerning the inheritance of family businesses. The absence of externalities stemming from inheriting a family firm implies no efficiency justification for such an exemption, hence a family firm should be treated as any other asset. Cash flow considerations may come into play, but it is possible to devise a system that spreads payments over time.

A second consideration is *seeking greater fairness,* ensuring that individuals contribute (at least) in proportion to their ability to pay. Most countries that have an inheritance tax use a progressive tax schedule; some have a large allowance and a single bracket, such as the UK (with a non-taxable allowance of GBP 325,000 and a tax rate of 40 percent), others have several brackets, such as France (which has an exemption of EUR 100,000 and six brackets going from 5 percent to 45 percent). Yet most feature sufficient exemptions in terms of types of assets and inter vivos donations such that careful planning allows a parent to bequeath a considerable estate with little or no tax. For example, despite France's high tax rates and a highly skewed distribution of inheritances, tax revenues from this source amount to only 5.5 percent of the total amount bequeathed, and the top 0.1 percent of the distribution of bequests (which on average amount to EUR 5.5 million) are estimated to pay at most 20 percent (Dherbécourt, 2017). Simplicity is hence important, not only to avoid tax optimization, but also in order to prevent an unfair distribution of the tax burden.

If social preferences seek to foster intergenerational equity, it seems desirable to consider the *age structure* of the fiscal system, so as to encourage donations to younger heirs. A number of countries have schemes that result in lower (or zero) tax rates on inter vivo gifts, yet such schemes do not depend on the age of the recipient but rather on the age of the donor (if at all). Provisions that encourage transfers to the young could be used if a country wished to foster this particular form of equality.[26]

Setting the *appropriate tax rate* requires resolving the tension between two arguments. On the one hand, raising revenue calls for high tax rates. On the other, both theory and empirical work indicate that the higher marginal tax rates, the greater the extent of tax optimization and evasion.[27] In practice, this means that there is a trade-off between a high tax rate that raises more revenue and a low tax rate that is seen as politically acceptable and gives individuals little incentive to reduce the tax bill. The resulting question is whether there is a Laffer curve in inheritance tax, with high tax rates leading to substantial efforts to engage in tax optimization that result in low effective taxes. If so, it would be desirable to enlarge the tax base and lower the rates.

5.6 POLICY RECOMMENDATIONS

In a globalized world, the taxation of immobile factors should be a key element of fiscal systems. Although taxing immobile factors is efficient because it avoids the erosion of the fiscal base associated with international mobility, it is not always fair, and this imposes limits on the extent to which governments may wish to use such taxes.

Consumption taxes are widely used in the European Union and VAT has indeed few distortionary consequences. The limits on its use arise from its distributional implications. Because those with a greater ability to pay tend to consume a lower share of their income, they pay proportionally lower taxes, and as a result, consumption taxes need to be combined with other sources of tax revenue (such as a progressive income tax) to preserve fairness in the fiscal system. Moreover, VAT rates are marred by exemptions, many of which are the result of lobbying and for which it is hard to provide an economic rationale. Moving towards a more uniform taxation of consumption would reduce distortions, and governments should seek to allow for differential rates only on goods and services with clearly identified externalities.

Negative externalities imply that there are solid arguments for consumption taxes covering, for example, CO_2 emissions, and having them exceed standard VAT rates. The possibility of a calibrated VAT rate that imposes a higher rate on both imports and domestic sectors which are not currently covered by the European emission trading system is worth exploring. Coordination is particularly important in this case,

[26] A simple way would be to make the tax-free allowance present in most systems decrease as the age of the recipient increases.
[27] See, for example, Crane and Nourzad (1987), Poterba (1987), Alm, Bahl, and Murray (1990), Pommerehne and Weck-Hannemann (1996), and Lang, Nöhrbab, and Stahl (1997).

and it would be desirable for the European Union to ensure that future trade negotiations include a discussion of carbon emissions and that the possibility of a calibrated VAT, if a country were to implement it, is understood not to be a disguised form of protectionism.

Policymakers should pay particular attention to the taxation of land and property, both of which are lightly taxed in most (though not all) EU countries. Both land-value and property taxes are levied on immobile assets and engender few distortions, making these attractive fiscal instruments. Their implications in terms of fairness are ambiguous. On the one hand, such taxes are not defined according to the individual's ability to pay, and although there is a positive correlation between income and property holdings, it is far from perfect. Notably, property represents a smaller share of wealth for those at the very top of the income distribution than for the middle class, implying that the tax burden falls heavily on the latter. On the other hand, property and/or land-value taxes allow for the taxation of capital gains associated with increases in land value, which in many fiscal systems go untaxed despite the fact that they reflect the household's ability to pay. The taxation of land value or property may raise considerable political opposition, yet in a globalized world it is a source of potential fiscal revenue that governments should seriously consider. An important caveat is that if such taxes were to be more intensively used, they should be implemented incrementally, in such a way as to spread the costs of the policy change over individuals and time.

A net wealth tax is attractive from a fairness perspective as it captures households' expenditure possibilities better than land-value or property taxes. However, it is problematic in that both households and certain assets are mobile, implying that the tax results in optimizing behavior. The combination of international mobility and numerous loopholes implies that not only is the de facto tax base reduced, but also that those with high wealth holdings manage to pay low taxes and thus erode the fairness of the tax. Whenever countries choose to implement a net wealth tax, it is hence essential that it has as few exemptions as possible and that there is an effort to close the (often highly distortive) loopholes that abound in EU economies so as to avoid tax optimization. Concerning the impact of international mobility, a possible policy option would be a dual wealth tax, with a higher rate on immobile assets and a lower rate on mobile wealth.

Taxing inheritances (or donations) is part of a fair tax system since receiving an inheritance increases an individual's ability to pay. Interest in such tax has been growing, both because it is seen by some as a major tool to reduce wealth inequality and because of the evolution of the age structure of European countries, which implies that the quantitative significance of transmitted wealth will increase over the next few decades. Two key aspects should be borne in mind. First, it is important to tax inheritances in a way that does not exempt large parts of inherited wealth (such as family firms). Second, just as in the case of the net wealth tax, international mobility and the use of the tax loopholes allow those at the top of the distribution to avoid or diminish the amounts paid, again reducing both efficiency and fairness.

Taxes on net wealth and inheritances share the same basic drawbacks and, if they are to be used, they should be designed with the same principles in mind. The first is to eliminate exemptions in order to broaden the tax base and keep the system simple so as to reduce the possibilities for tax optimization. Second, the incentives for capital flight and international mobility are strongly affected by tax rates. A rethink of rates involving both simplification and reduction so that they are politically acceptable is hence essential.

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