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Inheritance Tax Regimes: A Comparison

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Working Paper 152

Inheritance Tax Regimes: A Comparison

Stefan Jestl



The Vienna Institute for International Economic Studies
Wiener Institut für Internationale Wirtschaftsvergleiche

Inheritance Tax Regimes: A Comparison

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Overview

- › This paper provides an overview of different inheritance tax regimes in selected European countries and the United States.
- › We identify that in the majority of countries the tax rate is related to the relationship between bequeathing party and the bequeathed as well as the value of the inherited assets. In most countries the transfer of wealth within families is treated preferentially (lower tax rates, tax exemptions and reliefs). This is particularly the case for business assets and family homes.
- › This analysis further discusses the features and effects of inheritance tax regimes based on various criteria. These cover behavioural responses of individuals and different distributional effects of an inheritance tax. Furthermore, the amount of tax revenues varies considerably both between countries and over time.
- › Although the actual revenues of inheritance taxation are quite low in the selected countries (ranging between 0.1% and 0.5% of GDP), some indicators point to higher revenue potentials in the future. Due to an increase in private wealth and its concentration over time, we can expect to observe an increase in inheritance tax revenues, even though countries allow a high tax-free allowance. An appropriate design of inheritance taxation could further help to foster economic growth and decelerate the increase in wealth inequality.

Keywords: inheritance taxation, tax regimes, wealth inequality

JEL classification: D31, H21

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Introduction

Property taxation is currently a hot topic both in politics and economics. In particular, the taxation of wealth transfers over generations is very controversial. In assessing inheritance taxation, opposition is stated by those who prioritise liberal property rights. However, the transfer of wealth may foster wealth inequality, resulting in the rising inequality of opportunities. The latter argument supports inheritance taxation. In discussing the basic concepts of the tax, Marterbauer and Schürz (2007) distinguish, *inter alia*, between the principles of equality, justice, and family. Following the principle of equality, the taxation of inheritance should diminish the intergenerational transmission of inequality and thus at least reduce the growth in concentration of wealth in family dynasties and upper classes. An inheritance tax thus aspires to achieve a higher level of equality of opportunity within a society. The principle of justice suggests that affluent individuals should contribute more to support poorer groups in the society, because the former have a higher ability to pay. In contrast, the principle of family emphasises the role of the family in relation to individual property and therefore also its transfer via bequest. The wealth of a deceased individual is considered as the property of the family and the government is not entitled to intervene. The first two arguments obviously contradict the last one in the discussion on the implementation of a taxation on inheritance.

Bequests were taxed in all EU Member States in 2017, except for Sweden, Latvia, Estonia, Austria, Cyprus and Malta. As outlined by Iara (2015), the design of the inheritance tax across European countries is quite heterogeneous. Although there are some similarities across countries in the general concept of the tax, we can find differences, e.g. concerning tax rates and exemptions. In many countries, even when tax rates are progressive, the family principle is still partly considered in the design of inheritance taxation, i.e. close family members are granted preferential treatment.

In the recent past, many European countries have conducted changes and reforms with respect to inheritance taxation. Austria abolished inheritance taxation in 2008. In addition, inheritance taxation was suspended from 2001 to 2006 in Italy. Most recently, tax reforms have taken place in Germany and the United Kingdom. Reforms in Germany, enacted in 2017, adapted tax exemptions and reliefs for family businesses. In the United Kingdom, additional exemptions for the intergenerational transfer within the family were been introduced. Beyond that, Republicans in the United States have fixed a tax reform plan in order to abolish the taxation of inheritances by 2025 (see *The Economist*, 2017).

This article provides an overview of different inheritance tax systems based on a set of selected European countries as well as the US and aims to identify different economic effects emanating from these systems. We particularly focus on the EU countries Germany, Denmark, Finland, France, Italy, the Netherlands and the United Kingdom as well as on the United States.

General features of inheritance tax regimes

In this section we address the main characteristics of inheritance tax systems across selected European countries and the US. In general, an inheritance tax can be characterised by the following items:

› Basis of tax assessment

Is the tax imposed on the entire legacy or on each legatee separately?

› Tax rate design

What are the determinants of the tax rate?

› Exemptions & reliefs

What is the general design of exemptions?

- Specific groups of individuals
- Specific treatment of business assets
- Discrimination between asset types

1. BASIS OF TAX ASSESSMENT

The taxation of intergenerational transfers related to the death of a bequeathing party is typically called an inheritance tax. However, one can distinguish between an inheritance tax in the narrow sense and an estate tax in the general sense. In the former case the tax is conceived to be levied on the inheritor, whereas in the latter case the tax is levied on the estate itself (see Nass-Schmidt et al., 2011). An estate tax is widely common in Anglo-Saxon countries, whereas an inheritance tax in the narrow sense is applied in most other European countries (see Table 1). However, there are also countries with an inheritance tax composed of both concepts.

Table 1 / Inheritance and estate taxes

Inheritance tax (in a narrow sense)	Estate tax
DE, DK, NL, FI, FR, IT	DK, UK, USA ¹⁾

Note: 1) The US applies an estate tax at the federal level. At the level of individual states, we however find both systems, estate and inheritance tax systems. In our analysis of the US regime we however only consider the federal estate tax.

Source: Nass-Schmidt, et al. (2011) & EY (2015); own illustration.

Germany, Finland, France, Italy and the Netherlands impose an inheritance tax in the narrow sense. The United Kingdom applies an estate tax, i.e. the tax is levied on the assets of the deceased person, although the tax is legally called 'inheritance tax'. Likewise, in the United States an estate tax is imposed on the deceased's estate upon death. Denmark applies both types of inheritance taxation. It levies a tax on the estate and a second one in particular cases (see below) on the individual inheritors.

2. TAX RATE DESIGN

In order to assess the effects of an inheritance tax, it is important to examine differences in the determinants of tax rates. The two major determinants of the tax rate represent the value of inherited assets as well as the relationship between the bequeathing party and the bequeathed. As illustrated in Table 2, we can identify four country groups regarding the determinants of the tax rate design.

Table 2 / Tax rate design

Country	Determinants of tax rates
IT, DK	Relationship between persons
US	Value of (total) inherited assets
DE, NL, FI, FR	Relationship between persons & value of inherited assets
UK	None (flat rate)

Note: Tax exemptions and reliefs are not considered in the determinants (see below).

Source: EY (2015) & EY (2016); own illustration.

In Italy and Denmark, the inheritance tax rate depends only on the relationship between the deceased and the recipient of the inherited wealth. For Denmark this only applies for the inheritance tax in the narrow sense. In contrast, in the US, the sole determinant for the inheritance tax rate is the value of the total inherited assets. In addition, in many countries like in Germany, Finland, France and the Netherlands, the tax rate applied depends on both determinants. In the United Kingdom, however, tax rates are irrespective of both.

Next, we explore how these two determinants shape the structure of the inheritance tax in the respective countries. Based on the relationship between the deceased and the recipient of the inherited assets, we observe different tax classes. Table 3 shows the group of persons in the tax classes within the respective country. In the United States and the United Kingdom we do not find any tax classes, because tax rates do not depend on the relationship between the deceased and the recipient.

Table 3 / Tax classes

Country	Class assignments
Germany	I: close relatives ¹⁾ (incl. grand-/stepchildren), II: wider family (incl. siblings), III: others
Italy	I: close relatives (incl. grandchildren), II: siblings, III: other relatives (stepchildren), IV: others
Netherlands	I: close relatives, II: grandchildren, III: others
United Kingdom	-
Finland	I: close relatives (incl. grand-/stepchildren), II: all other cases
United States	-
France	I: ascendants and descendants, II: siblings, III: blood relatives (up to fourth degree), IV: others
Denmark	I: close relatives, II: others

Note: 1) close relatives comprise spouses (partner) and children.

Source: EY (2015) & EY (2016); own illustration.

Table 4 provides, at a glance, inheritance tax rates applied in our country sample. As provided in Table 3, the consideration of the relationship between persons allows for the definition of different tax classes. Next to that, the asset as a tax rate determinant implies the possibility of imposing a varying tax rate depending on the value of the inherited assets. In countries where both determinants are

implemented, we find increasing average tax rates within and across tax classes. Obviously, closer relatives generally face a relatively lower tax rate. The spouse or the partner in particular, as well as the direct relatives, reveals tax privileges. This implies higher marginal tax rates in higher tax classes. This is often referred to as 'double progressivity'. On the one hand there is a progressivity in the tax rates across the tax classes and on the other hand there is one within the respective classes. Thus, again not surprisingly, the extent of the progressivity in the tax rates is strongly related to the determinants of tax rates discussed above. As expected, we observe the lowest variation in the tax rates in the United Kingdom. In Denmark, the first tax class refers to the estate tax that is levied on the inherited wealth. When inheritors are not family members, an inheritance tax is imposed additionally on the inheritor, whereby the total tax rate then yields 36.25%. In contrast, family members have to pay only the estate tax of 15%.

Table 4 / Tax rate groups

Country	Tax rates
Germany	Tax classes with different progressivity – I: 7-30%, II: 15%-43%, III: 30-50%
Italy ¹⁾	Tax classes with fixed rates – I: 4%, II: 6%, III: 6%, IV: 8%
Netherlands	Tax classes with different progressivity – I: 10%-20%, II: 18%-36%, III: 30%-40%
United Kingdom ²⁾	40%
Finland	Tax classes with different progressivity – I: 8-20%, II: 21-36%
United States	Class with progressivity – 18-40%
France	Tax classes with different progressivity – I: 5-45%, II: 35-45%, III: 55%, IV: 60%
Denmark	Tax classes with fixed rates – I: 15%, II: 36.25%

Notes: 1) Class II contains tax-free amount tax, whereas class III does not have it. - 2) The tax rate can be reduced in case of leaving 10% of estate to charity.

Source: EY (2015) & EY (2016); own illustration.

3. EXEMPTIONS AND RELIEFS

A further characteristic of inheritance tax systems regards tax exemptions and reliefs. In principle, tax exemptions and reliefs allow the reduction of the tax base and subsequently the tax burden. This section addresses inheritance tax exemptions and reliefs with respect to specific groups of individuals and specific treatment of business assets, as well as discrimination between asset types.

Specific groups of individuals

Countries where the relationship between the bequeathing party and the bequeathed is considered in the design of the inheritance tax are generally characterised by a system of different tax-free amounts. For example, in Germany we even find different tax-free amounts within these classes.

The pattern of the tax-free amounts corresponds largely to the structure of the tax classes in Table 3 and Table 4. The closer the relatives, the lower the tax rate and the higher the tax-free amounts.

Furthermore, only a small – or even no – tax-free amount is available when deceased and heir are not related. A common characteristic in nearly all our selected countries is that the spouse/partner can receive the inheritance tax-free. This is even the case in countries where the relationship between persons is actually not considered in the tax rate design, as in the United States and the United Kingdom. An exemption to this is Italy, where the spouse is not exempted from tax. However, individuals

in the first tax class can make use of an exemption amount of EUR 1 million. In the US and the UK we find uniform tax-free amounts. In the US, this amount covers wealth assets of USE 5.45 million and is called 'unified credit'. In the UK, the amount is only £ 325,000, but could however be extended for close family members. Further special cases are Denmark and the Netherlands, where even the state can benefit from exemptions.

Table 5 / General exemptions and reliefs

Country	Exemptions and reliefs
Germany	Different tax-free amounts within classes depending on degree of kinship, decreasing tax-free amounts across classes, family home for spouse as well as children and stepchildren
Netherlands	Different tax-free amounts depending on degree of kinship, special exemptions for disabled persons
United Kingdom	Uniform tax-free amount, transfer to spouse/civil partner is tax-free
Finland	Exemptions for the state and its institutions, special public employees (e.g. diplomats), exemption for spouse possible
United States	High tax-free amount, unlimited deduction for spouses that are US citizens, deduction for non-US citizen spouse limited.
France	Different tax-free amount across tax classes, transfer to spouse is tax-free
Denmark	Exemption for transfers to spouse or an organisation of public utility as well as state.
Italy	Different tax-free amounts across classes, no tax-exempt threshold for other relatives (stepchildren) and others (III & IV), special exemptions for disabled persons

Source: EY (2015) & EY (2016); own illustration.

Specific treatment of business assets

The preferential treatment of family businesses and businesses in general is a debated central theme, and was so particularly in the discussion on the most recent reform of the German inheritance tax regime. The main argument for preferential treatment suggests that the taxation of such transfers may lead to liquidity problems of firms and subsequently to its liquidations (see Bräutigam et al., 2017). Thus, it is beneficial for the economy to dampen the inheritance tax burden on businesses. In 23 out of 28 EU Member States we find exemptions or special reliefs for the intergenerational transfer between family and closely held businesses upon death. The countries without an exemption or special relief are BG, DK, LU, LT and SI. Furthermore, the US does not assign tax privileges to family or closely held businesses. This might be related to the generally high tax-free amount ('unified credit'). In some countries, the exemptions only refer to transfers of businesses where the prospective bequeathing party acts as an entrepreneur and/or the individual must own the business a certain period of time before death. For example, the latter fact constitutes a prerequisite for tax relief in the UK. In addition, the inheritor needs to continue the business after the receipt at least for a specific period of time in some countries (e.g. IT, NL). Beyond that, tax exemptions and reliefs for businesses may principally favour a typical sort of legal form, in so far as family businesses as well as business partnerships are preferred as compared to corporate enterprises (see OECD, 2016).

In Germany the exemptions with respect to business transfers are not restricted to a specific tax class and thus are independent of the relationship between bequeathing party and bequeathed. In general, these exemptions and tax reliefs are clearly aimed at supporting the continuity of the business across generations. Potential negative impacts of an inheritance tax on business activities are addressed by Astrachan and Tutterow (1996). They point to negative impacts on investment decisions of companies

due to an inheritance taxation, which may limit the growth of companies. Likewise, Brunetti (2006) explored the impact of the estate tax on business sales by using probate records for San Francisco. The estimation results suggest a positive effect of taxation on business sales. In contrast, Houben and Maiterth (2011) drew on data from German inheritance tax statistics as well as SOEP data and compared the German inheritance tax system with the former system with respect to privileges for bequeathed businesses. The former tax system generally allowed privileges to a lower extent. They concluded that there is no need for inheritance tax exemptions and reliefs for businesses in order to support the business continuation. Similarly, the German Wissenschaftlicher Beirat beim BMF (2011) argues that inheritance tax relief in Germany is designed improperly to protect businesses. In 2016, a tax reform took place in Germany concerning the intergenerational transfer of businesses. Stricter regulations for business transfers were enacted as well as the reduction of tax-free amounts in case of enterprise values exceeding a certain threshold. Moreover, the allocation of inherited businesses to a larger number of persons is taxed at a lower rate than otherwise. However, the preferential treatment of family businesses is still criticised after the reform. The exemptions still constitute a complex system, where discrimination between assets types prevails (see Brauns and Schuler, 2016).

Discrimination between asset types

Finally, we find discrimination between specific asset types. In this respect, the bequest of family homes receives a preferential tax treatment in some countries. For example, in the UK a high tax-free amount is deductible if the inherited family home is transferred to the children. Likewise, a higher tax-free amount for family homes is applied to relatives in class I in Germany. Specifically, the family house is even tax-free for spouses/partners in case they use it. Moreover, agricultural and forestry assets are treated preferentially with respect to inheritance taxation in some countries (e.g. DE, FR).

Evaluation of inheritance tax systems

In order to compare systems of inheritance taxation, we need to evaluate the tax based on meaningful criteria. Brunner (2014) generally argues for criteria such as potential revenues, potential costs and distributional effects to evaluate an inheritance tax. In addition, Schratzenstaller (2015, 2013) suggests a list of evaluation criteria to assess and compare different property taxes. In the following we compare the inheritance tax regimes of our selection of countries applying the following criteria:

› Individual's response to inheritance and inheritance taxation

Are there (un)favourable responses of individuals to the receipt of the inheritance as well as the imposition of the inheritance taxation? How do they occur in the different inheritance tax systems?

› Distributional effects / Accuracy of taxation

What distributional impact does inheritance taxation offer? What are the differences concerning distributional effects between inheritance tax regimes across countries?

› Actual tax revenue and potentials

How does the actual tax revenue differ between countries and what may be the revenue potential of inheritance taxation?

1. INDIVIDUAL'S RESPONSE TO INHERITANCE TAXATION AND INHERITANCE

In general, the inheritance tax is regarded to be growth-compatible. Since the time of the intergenerational transfer is generally unknown, individuals' reactions to an inheritance tax seem to be limited (see Arnold et al., 2011). However, responses in the individual's behaviour cannot be completely precluded. The literature distinguishes between responses in the behaviour of the prospective decedents and the heirs. In general, potential reactions might be changes in the savings behaviour as well as in the wealth accumulation behaviour. The tax might even result in the emigration of prospective bequeathing parties and potential heirs (see Schratzenstaller, 2013). In this respect, Bakija and Slemond (2004) analysed migration behaviour of rich individuals due to changes in estate taxation, using data for the United States from 1965 to 1998. The results suggest that there were movements of rich to regions with lower estate taxes, however the numbers were only small. They further underline negative net effects on tax revenues. The negative effect due to the tax reduction in a region could not be offset by the afflux of richer individuals to this particular region.

Potential responses of prospective decedent on inheritance taxation

The response in the behaviour of the prospective decedent is mainly determined by the bequest motive (see Cremer and Pestieau, 2011). These behavioural responses are mostly modelled and analysed in a theoretical framework while empirical evidence is scarce (an overview of analysis done see Kopczuk, 2013b). Is the inheritance related to a specific motive, such as altruism, joy of giving or even strategical, the inheritance tax is supposed to exhibit an impact on the decedent's behaviour, potentially resulting in

changes in the consumption as well as saving behaviour. Since these motives are strongly focused on the family, we can expect stronger behavioural changes when the recipients are closer relatives. In this regard, lower tax rates as well as tax exemptions for close relatives could dampen such an effect (see Cremer and Pestieau, 2011). Thus, this relationship favours inheritance tax systems where the relationship between persons is considered.

In addition, inheritance tax exemptions and reliefs for business assets may affect the behaviour of the prospective decedent. In this respect, tax privileges may divert investments towards certain business assets or influence the choice of the legal form of businesses, even though these options are less productive. This might also lead to inefficient tax planning activities. Furthermore, an inheritance tax privilege for family businesses may result in lower managerial quality, since the pool of potential managers is restricted to the managerial ability of family members (see Andrews and Westmore, 2014). Thus, tax privileges for family businesses are likely to result in lock in effects which prevent the reallocation of capital (see OECD, 2016) and may induce biased investment decisions (see Wissenschaftlicher Beirat beim BMF, 2012).

A further direct response to inheritance taxation in general may refer to tax avoidance. Under a tax system where the degree of the relationship between bequeathing party and inheritor influences the actual tax burden, tax avoidance might be more common. As we have already discussed, the tax can be principally levied on the total property of the decedent or on the inherited assets received by individual recipients. Thus, bequeathing parties could lower the tax burden by allocating the bequest to a larger number of recipients in case of an inheritance tax in the narrow sense.

Potential responses of heirs on prospective inheritance

Furthermore, the literature discusses potential behavioural responses caused by an inheritance. Not only the actual receipt, but even the expectation of an inheritance may already influence the behaviour of (potential) heirs.¹ A direct behavioural change of inheritance receipt is discussed by Holtz-Eakin et al. (1993) pointing to reduced tax revenues due to the so-called 'Carnegie effect'. It describes the observable reduction in labour supply after the transfer, triggered by an increased capability to consume. There are three determinants for the magnitude of this effect: fixed costs of adjustment (i.e. cost for reduction in labour supply), age and family structure. The higher the amount of inherited wealth, the stronger the 'Carnegie effect', since fixed costs of adjustment are already covered. The magnitude of the effect correlates positively with the age of the recipient. Older individuals tend to react more sensitively to inherited assets, especially when they have high alternative income sources in non-work alternatives (e.g. early retirement schemes). Moreover, heirs without children and non-related heirs tend to respond with stronger reductions in labour supply. Bo et al. (2018) provide results on the negative impact of the 'Carnegie effect' by using Norwegian administrative register data. They point out that progressive tax rates in general as well as a higher tax burden of non-relatives can mitigate the 'Carnegie effect'. This favours again an inheritance tax system where the relationship between persons is implemented. Similarly, Kopczuk (2013a) argues that an inheritance tax is preferable over an estate tax, since it can influence the (negative) behaviour of heirs to a larger extent.

¹ From a theoretical point of view, in case of a completely foreseen inheritance the behaviour has already been adjusted before the inheritance is actually received.

Moreover, Elinder et al. (2016) emphasise the role of different saving and consumption propensities across the wealth distribution. By using population-wide register data for Sweden, they found evidence that households at the lower part of the wealth distribution consume steadily more out of the inherited wealth over time. This further has implications on the evolution over time of wealth inequality (see below).

2. DISTRIBUTIONAL EFFECTS / ACCURACY OF TAXATION

The intergenerational transfer of wealth plays a major role in the accumulation of wealth as well as in wealth inequality (see Leitner, 2016 and Humer et al., 2016). Thus, one of the main arguments for an inheritance tax is its potential equalising effect on the wealth distribution within a generation of heirs. However, the magnitude of the inequality-reducing effect of an inheritance tax depends crucially on the ability to levy the tax on wealthy individuals. Since wealth is typically highly concentrated, the accuracy of the taxation seems to be fulfilled. Moreover, the accuracy of an inheritance tax is more pronounced, the higher the tax free amount and the more progressive the tax rate (see Schratzenstaller, 2013).

As discussed above, inheritance tax systems can, inter alia, be characterised by the tax rate design as well as tax exemptions and reliefs. The tax rate design is typically determined by the relationship between the decedent and the recipient and/or the value of the assets. By applying a progressive tax rate the distributional effect of inheritance taxation can be increased. In contrast, the consideration of the relationship between persons allows only different fixed tax rates across tax classes. In this case, the distributional effect is totally limited to the kinship between the persons involved in the inheritance process. A combination of both determinants, however, means distinct average tax rates across and within groups. In those inheritance tax systems we thus find a double progressivity. When intergenerational transfers mainly occur within the close family, there is a lower progressivity in the tax rates in addition to a lower general tax level, limiting the equalising effect even further.

Tax exemptions are closely related to the determinants of the inheritance tax design. In countries where the relationship between individuals is irrelevant for the tax rate design, there are general tax exemptions which apply to all individuals. Tax-free amounts are usually higher for close relatives. The spouse/partner in particular enjoys a higher tax-free amount or pays no tax, even in systems with an estate tax. Although higher tax free amounts imply a higher progressivity in taxation, tax exemptions induce a weaker inequality-reducing effect, since intergenerational transfers tend to occur mainly within the close family.

Moreover, the basis of tax assessment might have an impact on the wealth distribution. There is an incentive to divide the inheritance and allocate the wealth to a larger number of individuals when the tax is levied on the recipients. The inherited wealth would be therefore broader distributed resulting in an equalising effect, especially in case of a highly-concentrated wealth at the top.

In order to assess the distributional effect of inheritances, Karagiannaki (2017) and Bönke et al. (2017) compare the wealth distribution with bequests to the wealth distribution without bequests. As most other studies that apply this simple comparison they find a reduction in the relative wealth inequality, although the absolute wealth inequality increases. Inheritances are relatively more important for the accumulation of wealth for less wealthy households than richer ones. This approach, however, assumes that the total

inherited wealth is saved and thus increases the wealth stock of individuals and households. Differences in the saving as well as consumption behaviour across the wealth distribution may however result in diverging outcomes (see Elinder et al., 2016). In principle, a higher marginal propensity to consume reduces the wealth stock over time. The direction of the distributional effect depends on the actual marginal propensities to save and to consume across the wealth distribution. Elinder et al. (2016) and Karagiannaki (2017) provide evidence that households at the lower part of the wealth distribution tend to reveal a higher propensity to consume out of the inherited wealth. Thus, wealth inequality is assumed to increase steadily over time with respect to inheritances.

3. TAX REVENUE POTENTIALS

The main determinants of the potential revenue of an inheritance tax regime are the definition of the inheritance tax base including exemptions and the dynamics of inheritance flows, behavioural responses of concerned individuals and the explicit tax rate design. A progressive tax rate generally implies a high tax revenue potential, especially in the context of highly-concentrated wealth. However, when the design of the tax rates also considers the relationship between bequeathed and decedent, the progressivity and tax revenue potential are likely to be reduced. Moreover, tax exemptions influence the tax base and thus the potential revenue. In the case of an inheritance tax the bequeathing party may lower the prospective tax burden by allocating the bequest to a larger number of recipients. This might also result in a bias towards lower tax revenues as compared to an estate tax.

In order to shed light on differences in revenues of inheritance tax systems, we compare the tax income of selected countries as % of GDP over time. Obviously, in various countries there have been significant reforms in the inheritance tax regimes in operation, resulting in considerable changes of revenue potentials.

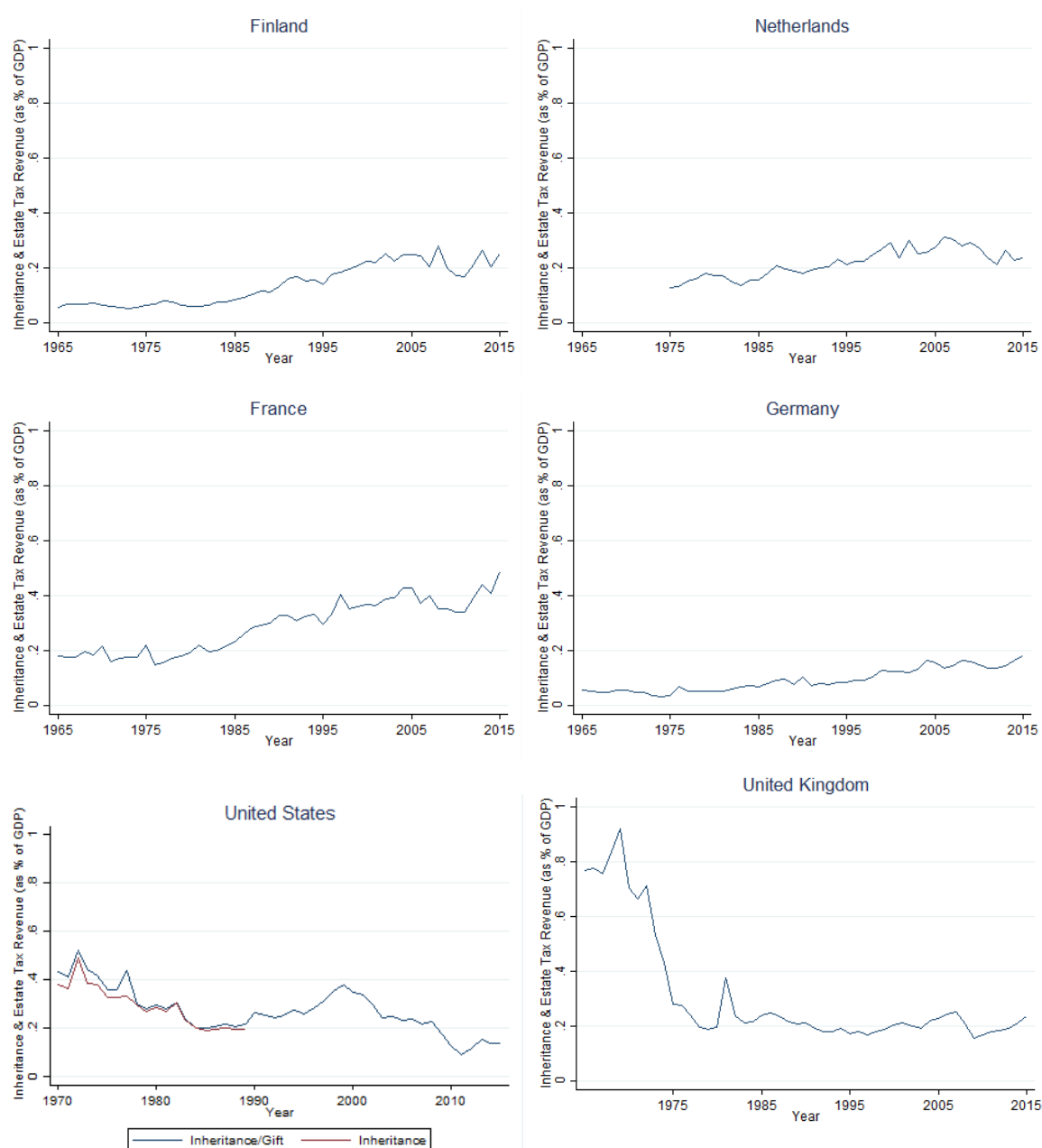
Figure 1 illustrates the evolution of inheritance and estate tax revenues in Finland, the Netherlands, Germany, France, the United Kingdom and the United States from 1965 to 2015 (US data for the estate tax are available only for 1970-1989 from the OECD, thereafter estate and gift tax is provided combined). In general, tax revenues are quite small, ranging between 0.05 and 1 % of GDP. The inheritance tax system in Finland, the Netherlands, France and Germany is characterised by a double progressivity (see Table 3 and Table 4), whereas a uniform flat rate is applied in the United Kingdom and a progressive rate based on the asset value only, in the United States. Both in the United States and the United Kingdom liberal tax reforms resulted in sharp drops in revenues until the end of the 1980s. In those countries applying double progressivity we observe an increasing trend in the revenue (relative to GDP) while almost constant revenues in the United Kingdom. In 2015, France, Finland and the Netherlands exhibit the highest inheritance tax revenues in our country sample. Their tax regimes are characterised by a strong progressivity across tax classes (see Table 4). This simple descriptive comparison between countries suggests that inheritance tax systems with a double progressivity tend to result in higher tax revenues over time as compared to differently designed regimes. However, the actual tax revenue in the US and the UK also ranges at a high level.

The overall low rates of tax revenues are often used as an argument against inheritance taxation (see Brunner, 2014). However, since the overall wealth stock tends to increase in the long-run, an inheritance tax possesses a high tax revenue potential (see Schratzenstaller, 2013). Even when the tax-free amount

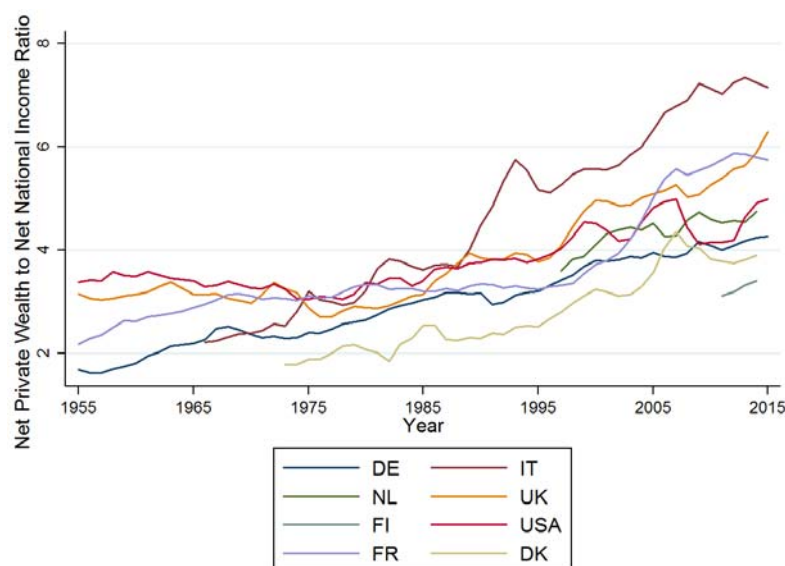
is high, there are still tax revenue potentials due to the concentration of wealth (see Bach, 2016; Humer, 2014).

Figure 2 presents the net private wealth to net national income ratio for our group of selected countries. The ratio has continuously increased in all countries since the 1990's. This implies that private wealth stocks have risen faster than GDP in these countries indicating a rising tax potential. The highest ratio features Italy, followed by the United Kingdom and France.

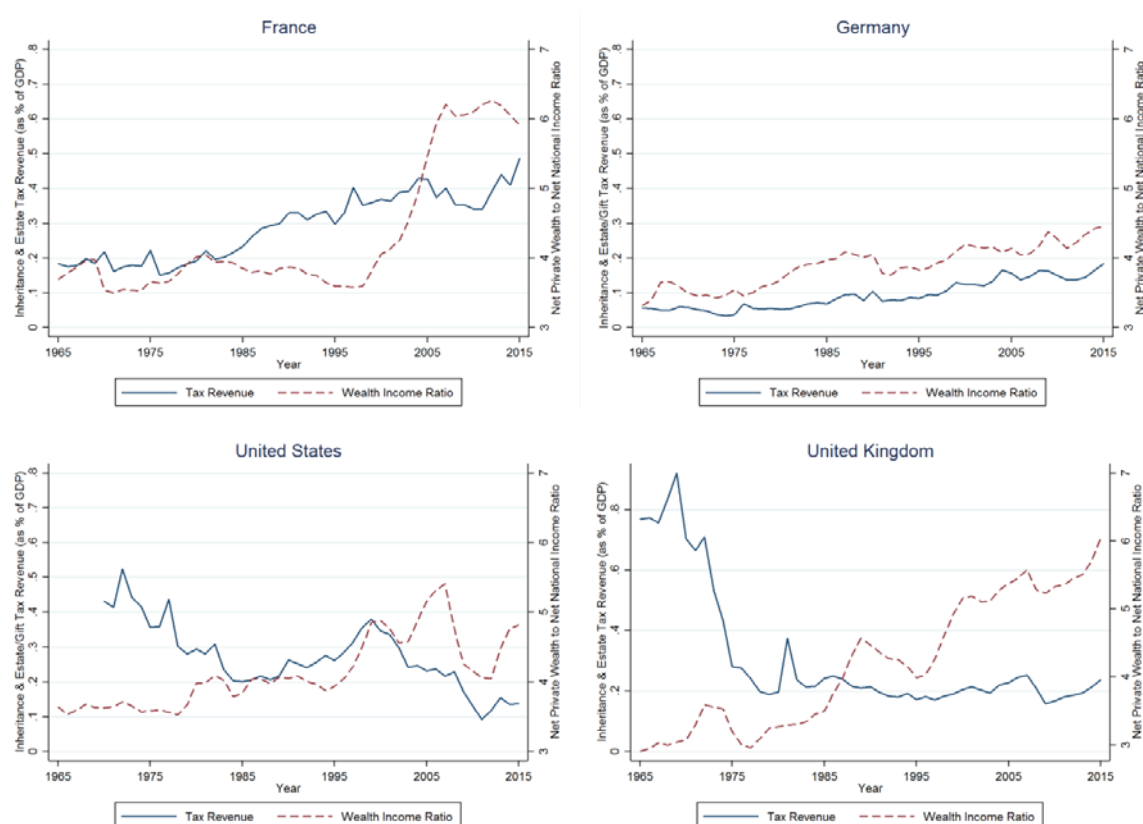
Figure 1 / Inheritance & estate tax revenues (as % of GDP) in FI, NL, DE, FR, US and UK, 1965-2010.



Source: OECD database, own illustration.

Figure 2 / Net private wealth to net national income ratio, 1955-2015

Source: World Wealth and Income Database (WID), own illustration.

Figure 3 / Wealth-income ratio versus inheritance tax revenue (as % of GDP), 1965-2015

Source: World Wealth and Income Database (WID) & OECD database, own illustration.

Moreover, in Figure 3 we compare the actual inheritance tax revenue² and the corresponding potential approached by the net private wealth to net national income ratio for France, Germany, the United States and the United Kingdom.³ These countries are generally characterised by different tax rate designs (see Table 3 and Table 4). France and Germany apply a double progressivity in the tax rate system, whereas the United States only considers the value of inherited assets as a determinant for tax rates. Contrary to this, we find none of the discussed determinants in the tax rate system of the United Kingdom. The French, as well as the German system of inheritance taxation seems to make use of the growing potential accruing from the rising wealth-income ratio. In contrast, the regimes applied by the UK and the US lack of exploiting the increased wealth stock.

² For the US we consider the inheritance and estate tax as well as the gift tax revenues combined.

³ Due to data limitations, we cannot show graphs for Italy, Denmark, Finland and the Netherlands.

Conclusion

The taxation of intergenerational transfers is a much debated topic in the public discourse. One of the main arguments against an inheritance tax refers to the role of the family in relation to the individual property and therefore also to intergenerational transfers. The accumulated wealth over generations is the property of the family and the government is not entitled to intervene. By contrast, the basic principles of taxation suggest that individuals should be charged according to their ability to pay. Therefore affluent individuals should contribute more in order to finance public goods. In addition, intergenerational transfers influence the wealth inequality within a society and determine substantially the level of the equality of opportunity.

The analysis presented in this paper addresses differences in the design of inheritance taxation across selected European countries and the United States. In general, the main determinants in the design of the inheritance tax consider the relationship between bequeathing parties and inheritors as well as the progressivity depending on the value of the inheritance. Most of our selected countries apply both in their taxation design. Intergenerational transfers within the kinship are in general treated preferentially; graduated tax free amounts and exemptions are common as well as progressive tax rates. Exemptions for family businesses however often result in negative incentives for investment decisions and could thus be detrimental to economic growth. Alternatively, the taxation of intergenerational transfers of businesses could be linked to a tax deferral in order to mitigate the tax burden (see OECD, 2016).

In general, it is difficult to assess the total distributional effects which result from different regimes of inheritance taxation. The overall effect is determined by the design of the tax rate, tax exemptions and reliefs, the individual's behaviour as well as the actual wealth concentration. However, since we can expect a further increase in the total wealth stock and its concentration over time, an inheritance tax appears to be accurate to burden wealthier households and thus foster the ability-to-pay principle of taxation. When most intergenerational transfers occur within the close kinship, taxes are levied predominantly on wealthier households. In this respect, inheritance taxation can have an equalising effect. This argument supports a strong progressivity in tax rates depending on the value of the inherited assets combined with a higher tax-free amount.

Thus, an inheritance taxation rate design should incorporate a preferential treatment of family members and consider at the same time the higher ability to pay of wealthier individuals. The consideration of both arguments in a taxation system may also improve the justification of the inheritance taxation within a society. On the one hand, a progressivity of tax rates depending on the kinship, and on the other hand, a high progressivity depending on the value of inherited wealth seems to be appropriate to fulfil these requirements. Exemptions for family homes and tax-free amounts for family members can further foster the acceptance for an inheritance tax. Countries that correspond to this inheritance tax system represent France and Germany. France especially has increased its inheritance tax revenues over the last decades substantially by following a system of a double progressivity with a preferential treatment of family members.

References

- Andrews, D. and B. Westmore (2014): 'Managerial Capital and Business R&D as Enablers of Productivity Convergence.' *OECD Economics Department Working Papers*, No. 1137, OECD Publishing, Paris.
- Arnold, J. M., Bris, B., Heady, C., Johansson, Å., Schwellnus, C., Vartia, and L. Tax (2011): 'Policy for Economic Recovery and Growth.' *The Economic Journal*, 121(550), 59-80.
- Astrachan, J. H. and R. Tutterow (1996): 'The effect of estate taxes on family business: Survey results.' *Family Business Review*, 9(3), 303-314.
- Bach, S. (2016): 'Erbschaftsteuer, Vermögensteuer oder Kapitaleinkommensteuer: Wie sollen hohe Vermögen stärker besteuert werden?.' Discussion Papers, 1619, DIW Berlin – German Institute for Economic Research, Berlin.
- Bakija, J. and J. Slemrod (2004): 'Do the rich flee from high state taxes? Evidence from federal estate tax returns.' Working Paper 10645, National Bureau of Economic Research.
- Bo, E. E., Halvorsen, E. and Thoresen, T. O. (2018): 'Heterogeneity of the Carnegie effect.' *Journal of Human Resources*, 0915-7366R1.
- Bönke, T., M. van Werder, and Ch. Westermeier (2017): 'How inheritances shape wealth distributions: An international comparison.' *Economics Letters*, 159, 217-220.
- Brauns, B. and Schuler, K. (2016): 'Erbschaftssteuer – Verpasste Chance?.' *Die Zeit*. Source: www.zeit.de/politik/deutschland/2016-06/erbschaftssteuer-cdu-csu-spd-einigung/komplettansicht.
- Bräutigam, R., Dutt, V., Evers, M. T., Heinemann, F. and C. Spengel (2017): 'Länderindex Familienunternehmen-Erbschaftsteuer im internationalen Vergleich.' ZEW-Gutachten und Forschungsberichte.
- Brunetti, M. J. (2006): 'The estate tax and the demise of the family business.' *Journal of Public Economics*, 90(10), 1975-1993.
- Brunner, J. K. (2014): 'Die Erbschaftsteuer – Bestandteil eines optimalen Steuersystems?.' *Perspektiven der Wirtschaftspolitik*, 15(3), 199-218.
- Cremer, H. and P. Pestieau (2011): 'The tax treatment of intergenerational wealth transfers.' *CESifo Economic Studies*, 57 (2), 365-401.
- The Economist (2017): 'The case of taxing death.' November 25th 2017.
- Elinder, M., O. Erixson and D. Waldenström (2015): 'Inheritance and wealth inequality: Evidence from population registers'. Uppsala Center for Fiscal Studies Department of Economics, Working Paper 3.
- EY (2015): 'Wealth under the spotlight 2015 – How taxing the wealthy is changing.' Report.
- EY (2016): 'Worldwide Estate and Inheritance Tax Guide.' Report.
- Holtz-Eakin, D., D. Joulfaian and H. S. Rosen (1993): 'The Carnegie conjecture: Some empirical evidence.' *Quarterly Journal of Economics* 108, 413-435.
- Houben, H., and R. Maiterth (2011): 'Endangering of Businesses by the German Inheritance Tax? – An Empirical Analysis.' *Business Research*, 4(1), 32-46.
- Humer, S. (2014): 'Aufkommen von Erbschaftssteuer-Modellrechnung exemplarischer Tarife.' *Wirtschaft und Gesellschaft* 40(1), 151-159.

- Humer, S., M. Moser and M. Schnetzer (2016): 'Bequests and the Accumulation of Wealth in the Eurozone.' INEQ Working Paper Series 1, Vienna University of Economics and Business, Vienna.
- Iara, A. (2015): 'Wealth distribution and taxation in EU Members.' Office for Official Publications of the European Communities, Brussels.
- Karagiannaki, E. (2017): 'The Impact of Inheritance on the Distribution of Wealth: Evidence from Great Britain.' *The Review of Income and Wealth*, 63 (2), 394-408.
- Kopczuk, W. (2013a): 'Incentive effects of inheritances and optimal estate taxation.' *The American Economic Review*, 103 (3), 472-477.
- Kopczuk, W. (2013b): 'Taxation of Intergenerational Transfers and Wealth.' *Handbook of Public Economics*, 5, 329-390.
- Leitner, S. (2016): 'Drivers of wealth inequality in euro area countries: the effect of inheritance and gifts on household gross and net wealth distribution analysed by applying the Shapley value approach to decomposition.' *European Journal of Economics and Economic Policies*, 13(1), 114-136.
- Marterbauer, M. and M. Schürz (2007): 'Der Streit um die Abschaffung der Erbschaftssteuer in Österreich.' *WISO* 30(1), 32-52.
- Nass-Schmidt, H. S., T. T. Pedersen, F. Harhoff, M. Winiarczyk and Ch. Jervelund (2011): 'Study on inheritance taxes in EU member states and possible mechanisms to resolve problems of double inheritance taxation in the EU.' European Commission Directorate General Taxation and Customs Union.
- OECD (2016): 'OECD Economic Surveys: Germany 2016.' OECD Publishing, Paris.
http://dx.doi.org/10.1787/eco_surveys-deu-2016-en
- Schratzstaller, M. (2013): 'Vermögensbezogene Steuern: Ansatzpunkte, internationaler Vergleich und Optionen für Deutschland.' Österreichisches Institut für Wirtschaftsforschung.
- Schratzstaller, M. (2015): 'Vermögensbezogene Steuern – die österreichische Perspektive.' *WISO* 38(1), 34-62.
- Wissenschaftlicher Beirat beim BMF (2012): 'Begünstigung des Unternehmensvermögens in der Erbschaftsteuer.' Gutachten.

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