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A Survey of the Issues

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The Economics of Taxing Net Wealth: A Survey of the Issues

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Abstract. This paper surveys possible motivations for having a net wealth tax. After giving a short overview over the state of wealth taxation in OECD countries, we discuss both popular arguments for such a tax, as well as economic arguments. It is argued that classical normative principles of taxation known from public economics cannot give a sound justification for a net wealth tax. The efficiency-related effects are also discussed and shown to be theoretically ambiguous, while empirical evidence hints at a negative effect on GDP growth. Finally, it is argued that despite of widespread and persistent lobbying for a revitalization of the net wealth tax, this is unlikely to happen due to political economy constraints.

JEL-Classification: H24, D31, H23, H21, H22.
Keywords: net wealth tax; wealth; inequality; redistribution.

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1 Introduction

Most governments in developed countries levy a direct tax on revenue from individuals' capital incomes, which often accounts for a substantial fraction of overall revenue from the personal income tax. Usually, the personal capital income tax is complemented by a tax on corporate income, levied on the business level. Even without a net wealth tax, conventional systems of taxation thus already ensure that the government participates in incomes generated by individuals and corporations, using their stocks of physical and financial capital. This matter of fact immediately leads to the question that is discussed in this paper: Are there sound economic reasons for the net wealth tax, as an instrument to tax stocks of physical and financial capital, to be levied in addition to taxes on capital incomes?[1]

We will briefly discuss the wealth tax as an equivalent to the capital income tax in Section 3 of this paper. Following this, Section 4 will offer a discussion of possible economic justifications of a wealth tax as an *equitable* tax. Section 5 will look at the effects of such a tax on *efficiency*, and in Section 6 some tentative explanations for the (non-)existence of wealth taxes from a *political economy perspective* are given. But before we proceed to the analytical part of the paper, we will first of all give a short overview over the current

[1]Note that this paper has a focus on the economic rationality of taxing net wealth. For a summary of technical problems associated with the drafting of a tax code for a net wealth tax, see e.g. Rudnick and Gordon (1996). A detailed account of the practical problems with implementing a net wealth tax is also given by Boadway et al. (2010).

empirical state of affairs regarding the use of net wealth taxes in developed economies.

2 The practice of taxing wealth: a snapshot

In the year 2011, a comprehensive and recurring tax on individual net wealth, defined as the surplus value of assets held by an individual over her liabilities, existed in only three OECD countries: France, Norway and Switzerland. There has been a wave of OECD countries abolishing their personal net wealth taxes recently. Examples are Spain (abolished in 2008), Sweden (2007) as well as Finland, Iceland and Luxembourg (all 2006). Nevertheless, the net wealth tax repeatedly surfaces again in the public debate. Germany, for example, experiences recurring, albeit so far unsuccessful, lobbying initiatives aiming at a reinstatement of the wealth tax. It had been suspended by the constitutional court for being unconstitutional effective 1997, but proponents of a reinstatement believe that a constitutionally acceptable law for a wealth tax can be phrased. There are precedents for such new editions of already abolished wealth taxes; France, for example, has introduced a novel '*solidarity tax on net wealth*' in 1989, after having done away with its predecessor in 1986. The Netherlands have introduced a *de facto* wealth tax within their income tax system, by assuming a 4% return on financial and physical capital, and taxing these assumed profits at a flat rate of 30%.

The burden on net wealth differs considerably between those countries that are still taxing it. In France, the tax-free threshold is relatively high with 1.3 million euros per taxpayer, and there are two tax bands at 0.25% and 0.5% (on fortunes above 3 million euros). In Switzerland, the tax burden differs between cantons and municipalities. Despite relatively low tax-free allowances, effective tax rates remain below 1% even for very high values of personal net wealth. In Norway, the current overall (municipal and central government) tax rate is 1.1% for individuals with a net wealth above NOK 700k ($\approx$ 90k euro), which implies a much higher burden for moderately wealthy individuals compared to Switzerland and France. In terms of tax revenue, the Swiss individual wealth tax generated tax revenue of 1% of GDP in 2010. The corresponding values for France and Norway are 0.2% and 0.5%, respectively. In all of these countries, the revenue from the net wealth tax is minuscule compared to the revenue from the personal income tax or from the VAT (see OECD 2012).

Those countries that do not have a comprehensive tax on net wealth do in most cases levy some taxes on more narrowly defined tax bases which contain only a fraction of the capital stock owned by the taxpayers. In the United States, a substantial fraction of local public goods on the municipal level is financed through property taxes levied on real estate. In Germany, even with a net wealth tax not being levied, municipalities rely to a substantial extent on revenue from the *Grundsteuer* levied on the taxable value of realty. The overall quantitative relevance of taxes on property varies significantly between OECD countries. In 2009, revenue from such taxes amounted to 1.8% of GDP in OECD countries. Curiously, the United Kingdom and the United States are on top of the list, generating 4.2% and 3.2% of their tax revenue from taxes on property. On the bottom of the table are countries like the Czech Republic and Estonia (0.4%). Most Western European countries find themselves in the midfield, but still with substantial variation.

Also somewhat surprising is the fact that Scandinavian countries, with their supposedly strong taste for redistribution, find themselves in the lower ranks.[2]

Finally, there is another interesting detail to be recognized in the data. For 33 OECD countries, the data on the taxation of net wealth are available either for the entire 1965-2009 period, or for shorter sub-periods if a country has abolished the tax. During the periods where the tax was levied, relative fiscal importance of the net wealth tax (the fraction of revenue from the wealth tax relative to total revenue) has declined in each of these countries over time, with the exception of Luxembourg, Spain, Greece and Belgium. However, in all of these countries except Luxembourg, the wealth tax accounted for less than one percent of total tax revenue. The generally declining relative importance is not necessarily surprising: Revenue from income and sales taxes rises automatically with wages and commodity prices, in the former case even more than proportionally if the income tax system is progressive. The taxable value of many assets that are subjected to net wealth taxes does, however, often differ from their market prices, and it does not increase automatically through time. Often, the taxable value is set substantially below the market value of an asset simply because the law-making process does not catch up with the market process. In this sense, a decline of the relative fiscal importance of wealth taxes vis-à-vis income and sales taxes does often reflect political negligence.

[2] All data are from OECD (2011). A detailed, comparative survey of the tax laws governing the taxation of wealth in several countries is offered in Lehner et al. (2000).

3 The wealth tax as an equivalent to the capital income tax

What makes the wealth tax politically appealing is, first and foremost, a very large tax base, which trivially must be a multiple of the base of a tax on capital income. This leads the political proponents of the wealth tax to argue that low tax rates are sufficient to generate a substantial amount of revenue, implying that the distortionary side-effects of such a tax are small or even negligible. The subtle message is that society needs to put only a relatively small fiscal burden on capital owners in order to finance redistribution, or public goods that are in the interest of a large number of individuals (e.g. Dugger, 1990).

Whether this is true does to some extent depend on the type of wealth tax that is implemented. Suppose first that a country attempts to tax wealth as the source, i.e. it attempts to tax wealth located within its borders. Such a tax on the domestic capital stock must, from an *ex ante* perspective, be financed out of the income that is generated from this very stock of capital. Suppose further that we observe a small open economy, facing an equilibrium interest rate r^*. The net return of a Euro invested in this economy is $(1-t)r-t$, since the tax is payed both on on the capital stock, and on the interest earned from that stock.[3] The arbitrage condition $(1-t)r-t=r^*$ implies an equilibrium

[3] To simplify, we assume that the interest payment is re-invested immediately—and before the tax administration's valuation date of the capital stock—and thus increases the taxable value of the capital stock in the same period in which interest is paid.

rate of return of $r = \frac{r^*+t}{1-t}$ for our small open economy. An r^* at 5% and a tax rate of only 1% would for example imply an $r = 6.06\%$, i.e. an increase in the cost of capital of more than 20%. In our example, a similar increase in the cost of capital as due to the 1% net wealth tax would be caused by a 17.5% capital income tax rate. Since *ex ante* every tax on domestic wealth needs to be paid out of the returns on wealth, every net wealth tax with a given rate is trivially equivalent to a capital income tax with a substantially higher rate.

From an *ex ante* perspective, a net wealth tax will have similar distortionary effects as a capital income tax. In the open economy case, a source-based system taxes domestic investments, while a residence-based system taxes the future consumption of domestic residents. The former distorts the international allocation of capital and thus inhibits the global economy from operating in a state of production efficiency; the latter affects individual intertemporal consumption decisions. With a residence-based wealth tax, the tax burden on holding an asset would however be independent of its geographical location, and depend only on the country of residence, or on the citizenship of its owner. A residence-based net wealth tax is therefore neutral in international investment decisions. It has been argued on empirical grounds that the quantitative magnitude of the welfare loss from distorting intertemporal consumption will tend to be smaller than the effect resulting from distortions of production efficiency (e.g. Giovannini, 1989). The reason is that most individuals appear to have a low cross-price-elasticity between present and future consumption. Obviously, this is a pragmatic argument that does not rest on the analysis of a fully-fledged second best framework.

From a theoretical point of view, small open economies in tax competition always find it optimal to set source-based capital taxes to zero (Razin and Sadka 1991), due to capital being infinitely elastic to changes in the net interest rate. This result relates to the production efficiency lemma (Diamond and Mirrlees 1971), but is also robust when assumptions of the lemma do not hold, i.e. when full taxation of pure profits is not possible and when the set of tax instruments does not cover each commodity that can be consumed by households. Eggert and Haufler (1999) drop the assumption of small open economies, generalize the result of Razin and Sadka to symmetric jurisdictions, but in turn require a full set of tax instruments like Diamond and Mirrlees. When neither of these assumptions holds, then Keen and Piekkola (1997) show that it is not generally optimal for countries to restrict themselves to the residence principle, and that second best international capital taxation requires source-based taxes to be used.[4]

Wealth taxation in practice often applies a mix of both residence and source taxation. For example, France levies a residence-based net wealth tax on its domestic residents, and a source-based tax on French property owned by non-residents. This pattern is not in open contradiction to the theoretical arguments on capital taxation in a second-best world. However, the crucial question remains: Why tax the stock of wealth *in addition to* having a capital income tax, as the popular advocates of wealth taxation demand? Many of the relevant arguments aim at equity rather than efficiency. We will discuss these

[4]See also Sørensen (2007) for a survey of arguments in favor of source-based capital taxation, and Homburg (1999) for a model where production efficiency in international taxation holds in a second best optimum, and is achieved through positive, but harmonized taxes on capital at the source.

in detail Section 4. An argument that concerns both a utilitarian concept of equitable taxation and efficiency relates to the breadth of the tax base. A properly designed net wealth tax could allow the taxation of assets that increase their owners' welfare, but are not associated with monetary payoffs, such as self-used residential property, or even works of art.

Thus, a wealth tax could be useful when the income tax in place is not a perfect Schanz-Haig-Simon tax system, where the entire periodic increase in wealth is subject to taxation. Suppose, for example, that a taxpayer owns a work of fine art that greatly appreciates in value. As long as she does not sell the piece, the appreciation will not be subjected to the income or capital gains tax in most real-word tax systems. Even if our taxpayer sells it on the market, there are often tax exemptions if she owned the asset for a sufficiently long time. But economically, the appreciation of her asset is income, and thus should be taxed. A wealth tax with a broadly defined tax base encompassing the market values of all assets held by a taxpayer would therefore, albeit in an imperfect fashion, fill a gap within the tax system.

Note, however, that such a wealth tax with a more encompassing base than a capital income tax would be associated with extreme administrative costs. It may, for instance, not be a trivial task to find the correct value for self-occupied property, which may not have been the object of a market-priced transaction for decades. These administrative problems multiply with a wealth tax imposed in the residence country and assets being held in foreign territories. Thus, it is not surprising that many real-world policy proposals for the net wealth tax pragmatically suggest to exempt many assets that contribute to an individual's net wealth, but are difficult to appraise (e.g. Bach et al. 2011). Even worse, extending the base of a wealth tax in such a fashion also increases incentives for legal tax avoidance and illegal tax evasion. Rudnick and Gordon (1998) give an overview over problems of administration and valuation in a net wealth tax. These problems often also open up possible loopholes for tax avoidance.

A residence-based wealth tax thus also entails a risk of negative effects on the tax bases of other taxes. Wealthy individuals can avoid the tax relatively easily by legally relocating to tax havens, or by transferring assets to foreign jurisdictions in order to evade the tax.[5] Introducing a comprehensive net wealth tax would then, through the creation of new incentives for tax avoidance and evasion, also diminish the base of the income tax.[6] Scenarios with even a negative overall revenue effect would be conceivable.[7]

There is thus good reason to cast doubt on the popular belief that a net wealth tax combines little distortions and large amounts of revenue. Popular political initiatives in favor of introducing a net wealth tax on top of an existing capital income tax system

[5]For travel instructions, and for a theory explaining the emergence of tax havens, see Hansen and Kessler (2001).

[6]This is not only a theoretical possibility. Bernheim (1987) argues that in the United States, revenue from the estate tax was *de facto* zero, if revenue losses in the income tax are accounted for that were caused by behavioral adjustments of individuals under the estate tax code.

[7]Note, however, that such an argument would be invalid for unanticipated, one-off charges on net wealth, as proposed by Bach et al. (2011) in order to significantly reduce the level of public debt.

appear to be in pursuit of pragmatically increasing government revenue in order to solve distributional problems. However, they also underestimate the distortionary effects of a net wealth tax even with very low nominal tax rates. These effects follow from the similarity of wealth and capital income taxes: A wealth tax aggravates the distortions and the incentives to evade that already exist due to a pre-existing capital income tax.

4 Equity considerations and the taxation of net wealth

4.1 The benefit principle and the ability to pay principle

We know two basic, and some would say: old-fashioned, criteria of equity in taxation, the benefit principle and the ability-to-pay principle. Both principles do not systematically yield concurrent policy recommendations; in fact, the two principles regularly prescribe different measures of tax reform. Demanding equivalence between a taxpayer's willingness to pay for a given quantity of public goods and her tax payment must, if the benefit principle is applied intransigently, result in a system of Lindahl taxes, i.e. a system of differentiated head taxes whose amount follows from the individual willingness to pay for public goods.[8] Such a tax and spending proposal would find unanimous consent among tax payers; each of them would benefit from such a bundle of public goods and tax payments if the alternative is no supply of public goods (Wicksell 1896). In this tradition, the benefit principle still is a relevant benchmark for the evaluation of tax systems, in

[8]For the fundamental considerations that eventually led to this concept, see Lindahl (1919).

the sense that it is an individualistic criterion which reflects the idea of public policy as voluntary exchange (Buchanan 1975). The benefit principle acknowledges the individual as sovereign decision-maker.[9]

For well-known reasons of free-riding, of concealing the true willingness to pay and of infinitely high transaction costs for unanimous decisions among large groups, it is unlikely that actual consent will ever be reached and that a tax system complying with the strict benefit principle will ever be implemented in practice. The benefit principle must nevertheless not be dismissed prematurely as a criterion met only by utopian policies. If it is applied in an alleviated form, not as a strict instruction but as a fingerpost indicating an acceptable direction of tax reform, it may be possible to motivate measures of tax reform that are actually viable by arguing that they represent an, albeit imperfect, move towards applying the benefit principle. A problem is that discussions in the economic literature often substitute actual consent by hypothetical consent, where the status quo in which a policy change is discussed is not the actual status quo, but a hypothetical one, such as a fictitious state of nature.

A proponent of the wealth tax might, for example, argue that an individual commanding a huge stock of wealth benefits to a larger degree from the protection of property rights than her neighbor, who only earns a modest income from her labour and owns no further wealth that could be secured by a government enforcing property rights. Thus, it seems obvious that ownership of assets, and not only the flow of incomes from them, must be

[9]See also Vanberg (2005) for a discussion of citizen sovereignty in constitutional economics.

a legitimate subject for taxation according to the benefit principle. In other words, if it could be established as an empirical regularity that demand for public goods is positively wealth elastic, then the benefit principle can serve as an argument for the introduction of a net wealth tax. In our example, one could however also argue that the wealthiest individuals certainly own sufficient resources to be able to provide security for themselves. In fact, they usually do so by purchasing large quantities of private security in addition to the modest level of security that is supplied as a public good. If the relatively poor in a society are not able to easily substitute the public good with a private demand for security – do they then not benefit much more from publicly provided security, compared to the wealthy?[10] Given two contrasting, but plausible hypotheses, the argument could only be settled empirically. Unfortunately, it has not been of interest to empirical economists recently.

To sum up, the benefit principle is not useless to evaluate proposals for the introduction of net wealth taxes. In order to yield meaningful judgments it needs, however, to be applied with caution to specific situations in specific economies, and adjustments made on the expenditure side of the budget would also need to be taken into account. General, context-independent statements on the desirability of a wealth tax can not be reached using the principle.

The ability-to-pay principle can be traced — at least — to Adam Smith: "*The subject of every State ought to contribute towards the support of the government, as nearly as*

[10]This point has already been made by Mill (1863), chapter 5.

possible, in proportion to their respective abilities; that is, in proportion to the revenue which they respectively enjoy under the protection of the State."[11] Later, the ability-to-pay principle was specified in greater detail, following the utilitarian proposal to enforce an equal sacrifice in terms of welfare loss through the tax system for all individuals.[12] When the principle is pragmatically applied, periodic income or stocks of wealth are used as proxies for ability to pay, but it is useful to keep in mind that both are highly imperfect proxies for actual welfare, and that tax payments are similarly imperfect proxies for actual welfare losses.

Assuming for a moment that, for whatever reason, we accept the ability-to-pay principle as the relevant guideline for tax policy, the question is: Can we arrive at any robust recommendations regarding the net wealth tax from this principle? Apparently, we can not. To illustrate this point, consider two individuals x and y. x has inherited a substantial amount of wealth, e.g. in form of government bonds, does not work himself and simply consumes every year's interest payments on his bonds. y, on the other hand, has no savings at all and does not intend to save in the future, but his excellent university degree has helped him into a secure employment contract, e.g. at a government agency, and the present value of his expected future payments does exactly equal the value of the assets held by x.

Under a comprehensive income tax, both income streams in time are treated equally, which seems to be perfectly in line with the ability-to-pay principle. After all, both x

[11] See Smith (1784), vol. 2, p. 310.

[12] See Mill (1868).

and y generate the same income from their respective capital stocks, one being composed of financial assets and the other being human capital. Introducing a net wealth tax changes the picture. It is nearly practically impossible to include human capital in the base of a net wealth tax. In general – and in particular when individuals are not tenured employees with a high degree of job security – the present value of human capital is extremely difficult to ascertain. This is also a reason for the fact that faculty taxes on expected incomes, which would theoretically be first best, are not levied in any modern tax systems. Accordingly, none of the wealth taxes imposed in OECD countries at the moment accounts for human capital, and it is unlikely that any wealth tax will ever cope with the problem of correctly evaluating this component of taxpayer wealth. Thus, introducing a wealth tax that taxes only the financial assets in our example discriminates against x, who has the same ability to pay as y. x cannot sustain the same after-tax consumption level as y if a wealth tax is imposed.

An argument could be made against this conclusion by means of a more encompassing utilitarian reasoning. Individual x does not need to endure the troubles of paid labor, and thus might enjoy a higher individual welfare, which warrants taxation. While this in line with the standard economic view of the trade-off between labor and leisure, empirical evidence suggests otherwise: Even controlling for income effects, being employed generally increases happiness (e.g. Frey, 2008: 46-53). If we accept this result, then a tax base excluding wealth and focusing on income is in fact a better proxy for individual welfare.[13]

[13]However, from a paternalist point of view, a high tax on net wealth could then be interpreted as a *nudging* individuals who are living off rent income into a life of happy productivity.

But individual x has another advantage: If he keeps his capital stock intact, he can pass it on to the next generation of his family. The human capital stock commanded by y, on the other hand, is irrevocably gone when he is. While this is certainly true, it is also true that the beneficiaries of the remaining capital stock at the time of death are the heirs, not the bequeather himself. The burden should thus be placed on the heirs through the imposition of an inheritance tax. This picture changes of course if we do not assume accidental inheritances, but intergenerational altruism instead.

Intergenerational altruism – gaining utility from the prospect of bequeathing wealth to one's heirs – is one example for the possibility that owning a fortune is associated with a consumption component, which follows from the mere right to dispose over this fortune. Other examples are a sense of security and independence, or even societal esteem as sources of utility directly associated with wealth, rather than income alone.[14] In our example discussed above, the knowledge of x that he will transfer wealth to his heirs when he dies may also such a source of utility. Intergenerational altruism felt by the current owner of a capital stock may thus indeed be an argument for having a net wealth tax, rather than (or in addition to) an estate tax. A wealth tax would then be a viable instrument to enforce vertical equity.[15]

[14]This point has been made by Meade (1978) and Haller (1981). A more recent overview over sources of utility associated with wealth is given by Carroll (2000). A problematic interaction of wealth and political power is discussed by Bartels (2008). On the other hand, happiness research (e.g. Layard 2005) suggests that people do not become substantially happier with increasing wealth once they have reached a reasonably high threshold.

[15]Vertical equity in the traditional sense that individuals who enjoy a higher pre-tax welfare are to

There are some caveats, however. Relying on intergenerational altruism as an argument for a net wealth tax can have peculiar policy implications. As an example, consider a government whose concept of equitable taxation leads it to enforce the same relative welfare loss on different individuals. Wealthy singles, whose marginal utility of wealth is consistently lower than that of intergenerational altruists, would need to be taxed at lower rates than equally wealthy individuals with close family members, where close intergenerational ties could be reasonably expected. A concept of equity as equal absolute or marginal welfare losses (i.e., static welfare maximization) would on the other hand lead to more intuitive policy recommendations, with higher tax rates on the single taxpayer. But in these two cases, the entire argument for having a wealth tax for equitable reasons becomes shaky. If we want to place a lower relative tax burden on individuals who accumulate wealth for reasons of intergenerational altruism, then why should we tax wealth in the first place, provided we can tax income?

A different situation occurs when the income tax system is not a perfect Schanz-Haig-Simon system, but systematically discriminates against labor income relative to capital income. This is the case in a number of European countries, including Germany and Austria, where a flat tax on capital income coincides with a progressive tax on other income types, including labor income. In such cases, an additional wealth tax could as a matter of principle help to close an existing equity gap. The problem, however, is that the very *raison d'être* of the flat taxes on capital income is the attempt to reduce tax evasion through capital flight and tax avoidance through migration of wealthy taxpayers.

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pay a higher tax.

The empirical question to be pondered by any government is thus whether in the special case of their country, the introduction of a wealth tax (or alternatively, a return of a progressive capital income tax) is viable without triggering new waves of tax evasion.

To sum up, the two classical principles of just taxation do not offer a secure ground for introducing a wealth tax in addition to a progressive income tax schedule, as we can find it in almost every modern economy. The next issue to be discussed is thus whether a more straightforward approach to welfare maximization leads to any convincing arguments for taxing net wealth.

4.2 Welfare maximization, inequality aversion and the net wealth tax

Social welfare is normally represented by (strictly) convex social indifference contours, which under standard assumptions lead to the identification of welfare maxima that are characterized by only moderate inequality. The Bergson-Samuelson SWF is one commonly used specification, but a Benthamite SWF with individual preferences that are strictly concave in income or wealth will often have roughly similar distributive implications. While one can dispute the relevance of social welfare functions in general, with well-known arguments such as the impossibility to establish them through democratic decision-making,[16] recent experimental evidence nevertheless indicates that individuals

[16] See Arrow (1951) and the ensuing social choice literature.

do have an aversion against highly unequal distributions of income,[17] which may even be the result of a natural dispositon (Brosnan and de Waal 2003). If such a disposition is prevalent in a population, then even a staunch classical liberal, who is skeptical of redistributive policies, has to acknowledge that policies aiming at inequality reduction are likely, and legitimate, outcomes of democratic processes. He might attempt to enlighten individuals about the unintended, costly consequences of their taste for equality. But for the time being, and from a static perspective, a Bergson-Samuelson-SWF may, despite all theoretical difficulties associated with it, be a reasonably good representation of many individuals' preferences over distributive outcomes.

The aim to reduce inequality is indeed also the major motive of most popular movements for the net wealth tax. They all diagnose an increasingly unequal distribution of wealth, and argue that this supposed trend is grossly unjust. Such patterns of argumentation can also be found in the economics literature, as the following statement shows: "*Outside the normal utility-based framework employed by economists, an additional basis for taxing wealth and wealth transfers exists if wealth independently confers economic, social or political power.*" (Aaron and Munnell 1992). This statement is motivated by the empirical finding that, in the United States and depending on the estimation technique, up to three quarters of individual wealth is inherited, which would imply only very loose ties between individual wealth and individual effort or skills. However, in order to accommodate

[17]See e.g. Carlsson et al. (2005) and for survey evidence Pirttilä and Uusitalo (2010). See, however, also Binmore and Shaked (2010) for a critical discussion on the external validity of experimental results on inequality aversion.

inequality aversion that is directed only against effortlessly accrued wealth (e.g. through receiving bequests), an estate taxes and other wealth transfer taxes that place the tax burden on the recipients of wealth transfers are more conducive.

Consciously or not, all of this reasoning on inequality is rooted in a tradition of occidental political thought, which has long been concerned with the antagonism between an appraisal of private property rights on the one hand, and a mistrust towards unequal distributions of material wealth and income on the other hand. This line of thought is found in the works of Aristotle, who defends private ownership, but also fears that aspiration for more than a medium level of wealth will lead to both unethical individual behavior, and to a perversion of the political constitution into an oligarchy, that is in danger of sliding into either tyranny or revolutionary instability. The line of thought runs through Thomas Aquinas' argument that private property has a legitimate place in the *ius gentium*, but is at the same time to be generously shared with those who own less. And it can also be found in the modern *Theory of Justice* by John Rawls, with its high stakes for the justification of inequality and the simultaneous affirmation of private property. Throughout the history of thought, social philosophers have given different reasons for both the affirmation of private property and the skepticism towards high degrees of inequality, and they have looked for mechanisms to reconcile these two positions.

Can we expect a net wealth tax to be an appropriate instrument to achieve such a reconciliation? There are a number of reasons to seriously doubt this. First of all, recent empirical evidence suggests for many developed economies that the top income earners have, since the 1970s, turned out to be predominantly wage earners.[18] The relative importance for explaining income inequality of wealthy dynasties bequeathing huge fortunes from one generation to the other appears to be declining in these countries, while wage-earners with specific human capital – from sports superstars and computer geniuses to investment bankers – are able to realize higher returns on their investments. With the data suggesting that capital incomes are not the driving force behind growing incomes of top earners and thus behind income inequality, a net wealth tax on the stock of financial and physical capital is hardly the appropriate policy instrument for a social planner maximizing welfare in an inequality-averse society. Since the human capital responsible for high wages of top income earners is, as we have seen above, routinely not included in the tax base of a wealth tax, a progressive income tax is a relatively more targeted instrument to counter income inequality.[19]

There is another, more systematic problem: The intrusion into private property rights may be far more severe for a wealth tax compared to an income tax. For an income tax, it can be argued that the treasury participates in the income generated by an economic activity, and it can also be argued that this income was generated using public inputs. The argument along the lines of a pragmatically interpreted benefit principle is quite

[18] See Atkinson et al. (2011) for a recent, comprehensive survey of this literature.

[19] It is also interesting in this respect that Dell et al. (2005) report that income and wealth concentration in Switzerland has recovered quicker than in other countries during the second half of the twentieth century. Switzerland levies a moderate wealth tax and relatively low, only weakly progressive income taxes. Other developed countries that do not levy a wealth tax, but more progressive income taxes have seen a slower increase in income and wealth inequality during this period.

clear here, as long as only the mere existence of an income tax needs to be justified and not its detailed characteristics. For a wealth tax, such a justification cannot be made. It takes hold of a stock of wealth that consists of saved incomes which have already been subject to an income tax in the past; it does not allow for the government's participation in enjoying the fruits of a successful use of resources, but it is a claim on these resources itself, regardless if they have actually carried a yield or not.

As a response to this problem, net wealth taxes are and have been usually designed as non-confiscatory taxes.[20] By definition, the rate of a non-confiscatory wealth tax is low enough such that it can be paid out of the expected yield that is normally carried by the taxed assets.[21] From the aggregate perspective, such a tax slows down further wealth accumulation and may thus decelerate a trend of increasing wealth inequality, but it will not actually reduce wealth inequality in the short run. This result can, however, just as well be achieved by imposing an income tax. There is some empirical evidence that tentatively hints at the importance of this argument. As we have seen in Section 2, Sweden did impose a tax on net wealth until 2007. The tax rates have been relatively modest, and the tax could not be classified as confiscatory. On the other hand, the country is well-known for relatively high marginal income tax rates and a sharp income

[20]See Sandford et al. (1975).

[21]This is the way net wealth taxes are and have been usually conceptualized, see Sandford et al. (1975).

tax progression.[22] It is therefore not surprising that the data suggest that the income distribution in Sweden is much more equal than the underlying distribution of wealth (Klevmarken 2006).

When we leave the aggregate perspective and take an individual-level perspective instead, matters change. A tax rate on the stock of wealth that is deemed non-confiscatory for an average expected return discriminates against individuals whose investments have performed worse than expected, and is to the benefit of individuals whose investments have been unexpectedly successful. Focusing on the distributional effects and taking inequality aversion as given, a non-confiscatory wealth tax is a less effective tax instrument than a capital income tax, which taxes actual returns. At the same time, even an – on aggregate – non-confiscatory wealth tax may at least temporarily actually have confiscatory effects on individuals in periods where they realize sufficiently low returns on their capital stock.

Therefore, if the aim is indeed to *reconcile* the security of private property rights with redistributive policies, then the wealth tax is not the appropriate instrument, because (i) there are other taxes like the income tax that can achieve a redistribution of incomes and are associated with less severe encroachments into the taxpayers' property rights, and (ii) if not only incomes but the underlying distribution of wealth is to be equalized, a confiscatory wealth tax would be the only instrument capable of achieving this in the

[22] Although in the early 1990s, dual income tax including a flat tax on capital incomes at a rate of 30 percent has been introduced.

short run[23] – but it would also be an open attack on private property rights.

In this and the preceding section, we have examined whether the wealth tax can be motivated using the three classical pillars of the normative theory of taxation and of normative public economics – the benefit principle, the ability-to-pay principle, and a standard social welfare calculus that reflects inequality aversion. We have seen that there is no secure ground for establishing the need for a net wealth tax. However, one question has been left unanswered so far: Could a net wealth tax be expected to have positive effects on economic efficiency?

5 The wealth tax and economic efficiency

In some older contributions to the literature, we can find the argument that a wealth tax enhances economic efficiency because it induces taxpayers to look for more efficient investments. If government puts additional pressures on taxpayers by claiming a part of their wealth for itself, the argument goes, they will become motivated to look for more profitable investment opportunities (e.g. Sandford 1971). This argument can be easily made in a simple household optimization framework. Suppose, quite realistically, that collecting information on potential investments is costly, and suppose further that marginal utility of income is positive and strictly concave. The burden of a wealth tax reduces household income even before any capital returns are realized; it thus increases

[23]See also the simulations run by Yunker (2010) with United States data.

the marginal utility of any additional gross income earned by investing the available funds. Compared to a tax-free world, the individuals will thus *ceteris paribus* be willing to incur higher costs of informing themselves on alternative investment opportunities. This effect could be reinforced if the revenue from the wealth tax was used to cut marginal income tax rates.

Generally, such information-related arguments can be challenged on the grounds that most often, gathering information is delegated to specialized agents by households sufficiently wealthy to pay substantial amounts of wealth tax, so that the actual effect of the tax on the quality and quantity of information that is used in investment decisions will most likely be small.

A substitution of a wealth tax for an income tax would reduce the tax burden on marginal incomes that could be realized by increasing work effort in the present period. In other words, such a policy could set incentives to increase effort, in particular work effort, in the present, because the burden is shifted towards a different and larger tax base, consisting of accumulated savings from past incomes. The downside of this argument is of course that taxes on wealth tend to discourage life-cycle saving, provided individuals' savings react sufficiently strongly to the increase in the relative price of future consumption. They may, however, have further repercussions insofar as investments into human capital are also discouraged (Ihori 2001). Furthermore, wealth taxes *per se* also distort decisions on the labor-leisure margin, and induce individuals to put less effort into work at young age, when they would typically build up their stock of life-cycle savings, and relatively more effort at old age (see Burbridge 1991). The overall effect on current work effort of a tax reform that substitutes wealth for income taxation is thus theoretically uncertain.

Given the theoretical *ex ante* equivalence of a net wealth tax and capital income taxes established earlier in this paper, there are of course many second-best frameworks, where a wealth tax could, similar to a capital income tax, be used to compensate for distortions already in place due to other policy instruments or institutional constraints. An recent overview of second-best arguments in favor of capital income taxation can be found in Sørensen (2007). However, we have also seen in the discussion above that actual wealth taxes are imperfect substitutes for capital income taxes, and there are no convincing efficiency-related arguments in the literature in favor of using a wealth tax instead of a capital income tax. The general theoretical ambiguity with regard to the efficiency properties of wealth taxes leads Burbridge (1991, p. 275) conclude that "*in the present stage of knowledge, strong positions in either direction on the effects of wealth taxation are untenable.*"

It is therefore also necessary to take a skeptical approach towards arguments of the Corlette-Hague type, which state that a wealth tax can be interpreted as an indirect tax on leisure, and thus induces higher work effort (Tait 1967). Distortions of the consumption-saving margin caused by a wealth tax are likely to result in a smaller stock of financial capital. In general equilibrium, the physical capital stock may shrink when wealth is taxed (with the exception of a small open economy), and the resulting lower wages would again negatively affect work effort. It is also important to note that efficiency-related arguments in favor of a wealth tax are often not very coherent with distributional arguments. If, for example, a wealth tax is compensated by decreasing marginal income tax rates, and by reducing income tax progression in order to secure efficiency gains, it is doubtful that a significant redistributive effect remains.

More recent optimal tax models analyze the wealth tax as a policy instrument in dynamic models of the Mirrlees type, where the tax system is designed to induce optimal individual labor supply decisions when true skill levels are private information. An example is Kocherlakota (2005), who shows that the optimal rate of wealth tax at a given point in time depends on current and past labor incomes. The optimal tax schedule is regressive: Individuals who receive a positive skill shock and report high labor incomes receive a wealth subsidy, while individuals with a negative skill shock and low labor income pay a positive wealth tax. This tax system sets an incentive not to reduce work effort at the latter stage of the model. The government levies no net revenue from this wealth tax and subsidy scheme, so the expected wealth taxes from an individual *ex ante* point of view are also naught.[24] The system thus exists not for fiscal reasons, but purely to incentivize individuals in their labor supply decisions. In this case, a wealth tax would perform a task that could not be performed by capital income taxes.

Another interesting question is the impact of a net wealth tax on entrepreneurial activity. Stiglitz (1969) has analyzed the effects of different tax instruments on the propensity to invest in risky assets with an uncertain outcome vis-á-vis a secure asset. Using the Arrow-

[24] See in contrast Albanesi and Sleet (2006) for a Mirrleesian dynamic optimal tax model with positive wealth tax revenue.

Pratt measure of relative risk aversion, he straightforwardly shows that the fraction of a portfolio invested in a risky asset increases (decreases) *ceteris paribus* with the rate of a proportional wealth tax if the individual has increasing (decreasing) relative risk aversion. Given that the cases of increasing or constant relative risk aversion are generally considered to be empirically more relevant, this leads to the hypothesis that the introduction of a wealth tax will not lead to a declining weight of risky assets (and therefore entrepreneurial activity) in individual investment portfolios, but that it may even lead to its increase.

There are, however, other factors influencing the decision to become an entrepreneur beyond the effect of risk aversion. For example, the introduction of a net wealth tax may be perceived as a signal that the fast accumulation of wealth is not positively valued in a society and that entrepreneurs are not highly esteemed, which may reduce the pool of individuals interested in entrepreneurial activity. Similarly, the reduction of the expected net return to entrepreneurship can deter potential entrepreneurs at the extensive margin, when occupational choices are made. In a pioneering empirical study on the impact of wealth taxes on entrepreneurship and using OECD data, Hansson (2008) finds a small, negative effect on self-employment for countries taxing not only capital income, but also wealth. However, the difficulty of assessing the impacts of tax reforms in general equilibrium is again relevant. In a rather elaborate simulation model calibrated for US data, Cagetti and De Nardi (2009) evaluate the impact of abolishing the estate tax and compensating the loss of revenue with other tax instruments. One result is that a compensating increase of the income tax would have an adverse effect on credit constrained small entrepreneurs, which wipes out positive effects on output generated by the abolishment of the estate tax alone. Similar arguments could be made for a wealth tax.

As far as the overall growth effects of wealth taxation are concerned, the empirical evidence is very scarce indeed. To the best of our knowledge, the only econometric study is Hansson (2010). For a sample of 20 OECD countries and the 1980-1999 period, Hansson finds a robust, albeit quantitatively small negative relationship between wealth taxation and economic growth.

6 The political economy of (not) taxing wealth

We have seen in the discussion so far that the arguments for taxing wealth are generally quite weak. Why, then, has the wealth tax been a relatively popular tax instrument in the past? And why are there discussions of revitalizing the wealth tax in many countries that have abolished it?

On closer inspection, these questions are ill-posed. It is rather the non-existence of confiscatory wealth taxes that calls for a good explanation. The group of very wealthy individuals constitutes a clear minority in all modern economies, and it is therefore vulnerable to fiscal exploitation in a simple median voter framework appropriate for modeling direct-democratic decisions on tax rates. In analyzing representative democracies, however, it is often argued that relatively poor individuals, who would benefit from extensive wealth taxation, are not very well-organized as a political force (Banting 1991) and that they are also not very well informed. In models of probabilistic voting (see e.g. Persson and Tabellini 2000) this would imply that the poor are not an attractive constituency to compete for with policy proposals tailored in their interest.

A different argument is that voters actually are well-informed, and thus also take into account the incidence of a wealth tax, which is more complicated than the direct, fiscal redistribution effect. It is well-known that if levied at the source, capital taxes are not borne by capital owners in open economies with mobile capital. On the contrary, with the stock of physical capital being reduced, the entire burden of the tax would fall on immobile factors; earners of low wages supplying relatively unproductive types of labor are considered particularly immobile. Similarly, rents accrued by land-owners can be expected to decline. With a residence-based tax on the other hand, mobility of taxpayers becomes an issue. Introducing a wealth tax on top of an existing tax system may drive wealthy taxpayers out of the country and into tax havens.[25] As a collateral damage, the effective redistribution achieved through the tax system as a whole may actually be reduced if the elasticity of residence choice towards the tax burden is sufficiently large.

Due to such hard economic constraints, a cautious use of wealth taxes is prudent even from the perspective of individuals who are not wealthy themselves. There are further

[25]Unfortunately, mobility of households triggered by tax burdens has been empirically studied predominantly for intra-federation and not for international mobility. However, the existing evidence suggests that households show substantial responses to inter-jurisdictional tax differentials, e.g. Schaltegger et al. (2011) and Schmidheiny (2006).

mechanisms that may be at work here. Harms and Zink (2005) model the co-evolution of social conflict and long-run economic development. They argue that in the early stages of economic development, the demand for redistribution is relatively low because wealth concentration is necessary to foster economic growth. In intermediate stages of development, large-scale redistribution is desired by individuals with low incomes, because it expands their economic opportunity set. But in highly developed economies, upward social mobility increases. Thus, the demand for redistribution declines – plotting the demand for redistribution against the stages of development yields an inverse U-shape. Interestingly, this pattern fits the long-run prevalence of wealth taxes quite well: The tendency to abolish wealth taxes is a relatively recent one, and it concerns highly developed economies.[26]

There are further limits to redistribution that are also relevant for the use of net wealth taxes discussed in the literature.[27] An example is the possibility that earners of moderate incomes in the middle classes are concerned about the possibility to signal their status. Their ability to send unambiguous status signals through consumption may be reduced with extensive redistribution to the poor (see Corneo and Grüner 2000), which leads the middle classes to join a coalition with the rich rather than the poor in distributional con-

[26]This would also be consistent with survey evidence for the United Kingdom presented by Alt et al. (2010), which shows a trend of declining demand for redistribution in the general population for the recent decades.

[27]For a survey of other democratic limits to redistribution discussed in the political economy literature, see Harms and Zink (2003).

flicts. Another well-established empirical fact is that individuals with relatively low incomes systematically overestimate their true relative income position (Alt et al. 2010). If the same was true for wealth, this could also explain some of the reluctance of households with sub-average wealth to demand the introduction of wealth taxes, or the increase of tax rates.

A lesson on the political economy of a tax becoming unpopular can also be learned from the case of the estate tax. Graetz and Shapiro (2005) analyze the political campaign against the estate tax in the United States and find that moral narratives play an important role. A majority of the general public was long in favor of having an estate tax largely due to moral reasons, such as the argument that young people ought to work themselves rather than live off inherited wealth. Graetz and Shapiro argue that moral narratives like this have by now been replaced by other normative beliefs, e.g. by the belief that an inheritance tax interferes with property rights and imposes an unjust double taxation of income. Similar changes of popular sentiment may have taken place with regard to the wealth tax.[28]

Finally, the relatively weak political attractiveness of the net wealth tax may also be caused by doubts regarding the efficient use of additional tax revenue. Modern political economy models (see e.g. Persson and Tabellini 2000) suggest that the competition for votes drives representatives to supply less general public goods and more targeted spending, directed at winning the votes of well-organized and politically mobile interest

[28] See also Bartels (2008) for the argument that relatively wealthy individuals tend to have a relatively large impact on the formation of public opinion in policy debates.

groups. If that is the case, even inequality-averse individuals have little reason to expect that the tax revenue generated by a revitalized net wealth tax would be used to fund general redistribution schemes, or to supply efficient public goods. Taken the expenditure side of the budget into consideration, the eventual reduction in inequality may be much smaller than many pundits in favor of the tax are expecting.

7 Conclusions

Our discussion has shown that economically, the wealth tax walks on thin ice. The traditional normative criteria of equitable taxation do not offer a convincing normative foundation for the net wealth tax. Even if inequality aversion is acknowledged as a motive for policy-making, tax instruments that are less intrusive into private property rights, such as a progressive income tax, are preferable relative to a net wealth tax. With regard to efficiency, the arguments for a wealth tax are also weak and not very robust. Only if revenue from a wealth tax is used to reduce marginal income tax rates, positive overall effects on efficiency are likely. This, however, calls into question the redistributive goals that motivate most of the proponents of a net wealth tax.

The short discussion of the political economy of the wealth tax suggests that, somewhat surprisingly, the net wealth tax is not a very popular tax instrument. This may be due to the fact that voters are very rational and correctly perceive the hard economic constraints that restrict the redistributive scope of a wealth tax. It may be due to the fact that voters are not very rational at all and incorrectly believe to be taxed themselves, although they probably will be tax exempt due to low wealth endowments. Even if the latter is true, our discussion of the net wealth tax suggests that voters are making the right decision, albeit for the wrong reasons.

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