## Wealth Taxation in the 21<sup>st</sup> Century: A Personal View

Comments on "Taxation of wealth and wealth transfers"

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Thomas Piketty Paris School of Economics April 2008 This commentary offers a personal perspective on wealth taxation in the 21<sup>st</sup> century. Wealth taxation has been the subject of substantial policy action in recent years, with the implementation of large inheritance tax cuts in several OECD countries (e.g. U.S., Italy, U.K., France). More generally, I believe that the issue of wealth and wealth transfer taxation is very likely to play an important role in the public finance debates of the coming decades, for at least two reasons: a theoretical reason, and an empirical/historical reason.

Let me start with the theoretical reason. In spite of the voluminous existing literature, the current state of optimal capital taxation theories is wholly unsatisfactory, and one can (hopefully) expect major developments in the future. Existing theories of optimal labour income taxation, as pioneered by Mirrlees (1971) and recently reformulated by Diamond (1998) and Saez (2001), are in a relatively satisfactory state. They offer formal models and optimal tax formulas that can be calibrated with estimated labour supply elasticities and other parameters (in particular the shape of the labour income distribution) and that can be used to think about the real world and possible tax reforms. These theories are of course imperfect and still need to be improved. But at least they provide normative conclusions about optimal tax rates levels and profiles that are not fully contradictory with what one observes in the real world. For instance, the Diamond-Saez U-shaped optimal profile of marginal rates is observed in most countries (i.e. effective marginal rates tend to be higher for low income and high income groups than for middle income groups), for reasons that are probably to a large extent identical to those captured by the theory (i.e. it is less distortionary to have high average rates but moderate marginal rates on high-density middle income

groups). The Diamond-Saez formula for asymptotic marginal rates is also remarkably simple and delivers results that are relatively reasonable.<sup>1</sup> Needless to say, wide disagreements still exist about the level of desirable labour income tax rates – in particular because of persisting disagreements about labour supply elasticities. But at least existing theories of optimal labour income taxation do offer a useful basis for an informed policy discussion.

Nothing close to this exists regarding theories of optimal capital taxation. To put it bluntly, existing models are completely off-the-mark if one tries use them to think about real world capital taxation. For instance, most models prescribe 100% capital tax rates in the very short run and 0% capital tax rates in the very long run. How can one apply these results to the real world? Is today the short run or the long run? These extreme conclusions reflect inherent difficulties in the modelling of time and the choice of a proper time frame to study these issues. In the short run, capital income is viewed as a pure rent coming from past accumulation, so that the existing capital stock should be taxed at a 100% rate. In the long run, the elasticity of savings with respect to the net-of-tax interest rate is typically infinite,<sup>2</sup> so that even dynasties with zero-capital-stock would suffer enormously from any capital tax rate larger than 0% (i.e. even an infinitely small tax rate would have enormous, devastating effects). Unlike labour supply, capital accumulation is an intrinsically dynamic phenomenon, and economists have not yet found the proper way to develop useful dynamic models of optimal capital taxation, i.e. models that can be used for an informed policy discussion.

<sup>&</sup>lt;sup>1</sup> For example, an uncompensated labour supply elasticity of 0.5, zero income effects and a Pareto parameter of 2 for the distribution of top labour incomes imply an optimal top marginal rate of 50%.

<sup>&</sup>lt;sup>2</sup> E.g. in standard dynastic models, this follows immediately from the golden rule of capital accumulation, which requires the marginal product of capital to equate the rate of time preference in the long run.

Another major theoretical difficulty that needs to be addressed has to do with the necessity to distinguish between corporate profits taxation and household capital income taxation. In standard theoretical models both concepts are identical, but in the real world they are not. In order to address this issue, one would need to integrate a proper theory of the firm and retained earnings (as well as a theory of the real estate capital sector) into models of optimal capital taxation. Finally, one needs to introduce new theoretical ingredients in order to distinguish between capital taxation and capital income taxation. In standard theoretical models, all agents obtain the same rate of return on their capital stock, so that both forms of taxation are fully equivalent. But in the real world they are not. In particular, the central – and fairly reasonable - political argument in favour of capital taxation has always been that taxing the capital stock (rather than the income flow) puts better incentives on capital owners to obtain high return on their assets. In order to address this issue, one would need to develop model with heterogeneous returns to capital (presumably depending on effort put by the capital owner, among other things). Capital taxation theory faces major difficulties and is still in its infancy. This is one of main shortcomings of current economic theory. It seems likely (and highly desirable) that progress will be made in the coming decades.<sup>3</sup>

Second, and maybe more importantly, the issue of wealth taxation is likely to be a big issue in the future simply because wealth is going to be a big issue in the coming decades. In most OECD countries, and especially in Continental Europe, aggregate (household wealth)/(household income) ratios have increased substantially since the

<sup>&</sup>lt;sup>3</sup> This (very) brief review does not do full justice to the extensive recent literature on optimal capital taxation theory (surveyed by Banks and Diamond, this volume). However, it is fair to say that existing models so far do not provide plausible conclusions about optimal capital tax rates.

1970s, with an acceleration of the trend since the 1990s. This is certainly a complex phenomenon. To some extent, it is simply due to the rise of asset prices (both property prices and share prices), which in a number of countries were historically low between the 1950s and the 1970s, and have increased enormously since the 1980s-1990s. In countries strongly hit by the twentieth century's World Wars (especially in Continental Europe), the rise of the wealth/income ratio also seems to reflect a long term recovery effect. For instance, figure 1 shows that the aggregate (household wealth)/(household income) ratio in France was around 6 at the eve of World War I, fell as low as 1-1.5 in the aftermath of World War 2, and then went back up again to around 3 in 1970 and 6 in 2006. Note that there is no strong theoretical reason why the long-term, steady-state wealth/income ratio should be stationary along the development process: it could go either way. However, this kind of long term picture does suggest that the recent rise of wealth/income ratios is at least in part a structural phenomenon, i.e. the capital accumulation patterns of cohorts hit by the wars were severely disrupted, and it took several generations to recover. Capital accumulation takes time.



Figure 1: The wealth/income ratio in France, 1908-2006

Source: Author's computations based upon Piketty (2003) and National Income and Wealth Accounts (INSEE)

It would be surprising if the kind of evolution depicted in Figure 1 had no long term impact on the observed tax mix. On purely a priori grounds, the main impact of such an evolution should be to push the tax mix in the direction of greater reliance on capital taxation (broadly speaking), at least in absolute terms. Other things equal, the share of capital tax revenues in total tax revenues should go up when the aggregate capital/income ratio goes up. It is hard to think of a normative model or a political economy model in which the rise in this ratio would be more than offset by a decline in tax rates on capital relative to other tax bases.

Note, however, that it would be misleading to make predictions about the future tax mix solely on the basis of the aggregate capital/income ratio. Many other effects are at play, e.g. the changing distribution of wealth. In most political economy models, a less concentrated distribution of wealth would tend to make the median voter (or whoever is in power) less inclined to heavily tax wealth. If the wealth distribution became less and less concentrated, this could possibly undo the effect of rising capital/income ratios. There is evidence showing that wealth concentration has indeed significantly declined in the long run. For instance, in the case of France, and notwithstanding substantial measurement and time lag issues, the top 1% of estates accounted for over 50% of the total value of estates at the eve of World War I, and for about 20% during the 1990s (see Figure 2).



Figure 2: Wealth Concentration at Death in France, 1807-1994

Whether this long run decline in wealth concentration is going to continue during the first decades of the 21<sup>st</sup> century is, however, quite uncertain. In particular, it seems plausible that the rise in top income shares observed since the 1970s-1980s – especially in Anglo-Saxon countries, but also, more recently, in other developed countries – will eventually trigger a rise in wealth concentration.<sup>4</sup> Other factors,

<sup>&</sup>lt;sup>4</sup> For an international perspective on top incomes shares in the long run (and especially the key role played by top capital incomes), see the country chapters collected by Atkinson and Piketty (2007).

including changes in the income profile of savings behaviour and the age structure of the wealth distribution, might, however, play a key role as well.<sup>5</sup> Note also that there can be some two-way interaction between wealth distribution and wealth taxation. A highly progressive system of wealth and income taxation certainly acts to reduce wealth concentration in the long run. For instance, it seems likely that the highly progressive estate taxes applied in most developed countries since World War 2 have contributed to the long run decline in wealth concentration.<sup>6</sup> This decline can then reduce political support for wealth taxation. In turn, large cuts in estate tax progressivity – such as the ones recently adopted in the United States – are likely to contribute to a rise in wealth concentration a couple of decades down the road, thereby reinforcing the impact of rising top income shares.<sup>7</sup> One can easily see how this kind of process can generate long run cycles in wealth concentration and wealth taxation.

Quite independently from these long run effects, the fast rise in asset prices can also have contradictory and non-monotonic impacts on the political economy of wealth taxation, at least in the short and medium run. For instance, because wealth taxes in many countries tend to use exemption thresholds and tax brackets that are fixed in nominal terms (not normally increased even in line with overall price inflation, and never in line with asset price inflation), the initial effect of rising asset prices since the 1980s-1990s has been a marked increase in the percentage of the population hit by these taxes, especially by inheritance taxes. This clearly contributed to a strong

<sup>&</sup>lt;sup>5</sup> The recent study by Kopczuk and Saez (2004) found no evidence for a rise in U.S. wealth concentration, in spite of the very large rise of top income shares. This might reflect time lag issues as well as complex demographic and asset price effects (e.g. middle wealth and elderly individuals have benefited a lot from the particularly fast rise in real estate prices).

<sup>&</sup>lt;sup>6</sup> For simple simulation results illustrating the long run impact of capital tax rates on equilibrium wealth concentration, see Piketty (2003) and Dell (2005).

<sup>&</sup>lt;sup>7</sup> See Piketty and Saez (2003).

political demand for inheritance tax cuts. For instance, this is certainly part what happened in the U.K.: only 2.3% of estates paid inheritance tax in 1986/87; this percentage rose to 5.9% in 2005/06, and 37% of households now have an estate with a value above the threshold.<sup>8</sup> This is also what happened in France: the nominal exemption threshold had not increased since the early 1980s, which largely explained the huge rise in the exemption level that was implemented in 2007.

Finally, historical experience suggests that the political economy of capital taxation involves complex, country-specific and quantitatively important issues. For instance, a recent study has shown that diverging trends in capital tax progressivity (especially estate tax progressivity) largely explain why the U.S. and U.K. tax systems have become less progressive overall than that of France during the past decades, while they were more progressive than France's until the 1970s.<sup>9</sup> The central conclusion is that the contribution of capital taxation to overall progressivity – both in terms of level and trend – is larger than is commonly assumed. Capital taxation is a key and complex issue and should rank highly in the tax debate and research agenda of the coming decades, both from a normative and a political economy perspective.

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<sup>&</sup>lt;sup>8</sup> See the Boadway et al chapter.

<sup>&</sup>lt;sup>9</sup> See Piketty and Saez (2006).

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