In Capital in the Twenty-First Century, Thomas Piketty presents a compelling story of the ascendency of capital and the powerlessness of the market forces of capitalism to arrest the growing threat to democracy from growing wealth and its increasing concentration in the hands of the few. Piketty prescribes a global, coordinated wealth tax as the antidote to this dystopian trend, arguing that only such a direct assault on wealth concentrations will succeed where the other policies of governments that already play large roles in their respective economies have failed.

I. A Note on Data and Data Sources

While Piketty’s discussion of data and contemporaneous European literature from earlier eras is among the book’s more appealing aspects, postwar trends are the most immediately relevant in evaluating his theory and policy recommendations. Others have raised a variety of issues concerning the sources and construction of the data, and we will not attempt to review all of these issues here. However, as discussed in the longer version of our paper (Auerbach and Hassett 2015), in translating data from other sources on US wealth concentration, Piketty changes the timing of observations in a manner that overstates the strength of the recent upward trend and obscures a downtrend present in his source data at the end of the sample period.

II. $r$ versus $g$

In Capital, the relationship between the return to capital, $r$, and the economic growth rate, $g$, is presented as a fundamental relationship determining our economic path. The basic syllogism is (i) $r$ exceeds $g$; (ii) saving generated by this high rate of return causes capital and wealth to grow faster than the economy; and (iii) capital income grows as a share of income because the rate of return does not fall sufficiently fast with capital deepening. But how should one measure $r$? As discussed by Piketty and Zucman (2014), since the early twentieth century capital-income ratios exhibit a u-shaped pattern, falling during major disruptions—two world wars and the worldwide Great Depression—before recovering. One interpretation is that the capital-income ratio is normally very high. But another is that bad things happen to capital on occasion, which one should not ignore any more than one should count only the heads from a series of coin flips. The analogy from standard financial theory is between the safe and market rates of return. Absent fundamental risk or capital taxation, these returns would be equal. But with market risk and risk-aversion, the expected return should include a risk premium, so that markets will outperform safe investments on average, but will do worse in bad states of nature where resources are particularly highly valued. Thus, excluding returns in bad states is certainly not the way to measure $r$, and even including all returns misses the point that one should not weigh good and bad outcomes equally.

Further, the rate of return to investors relevant to Piketty’s comparisons with the rate of economic growth is an after-tax return. Piketty’s time series on after-tax rates of return faces two shortcomings. First, the tax rates used to calculate the after-tax returns on capital in Piketty and Zucman (2014) are average tax rates. But given the book’s focus on the share of wealth held by the top 1 percent and even the top 0.1 percent, the relevant tax policy parameter seems...
to be the top marginal tax rate rather than the average tax rate. Second, Piketty calculates the return on capital based on national accounts data and does not adjust for risk. We rely on an alternative time-series on the after-tax rates of return in the United States that takes into account these two criticisms. To derive the after-tax rate of return from the pre-tax rate of return, we simulated using NBER’s TAXSIM the increase in tax liability that would result from an increase of 1 percent in the interest income accruing to the top 1 percent of income earners in each year, and then calculated the effective tax rate that would be paid on the average dollar of that additional income.1 To proxy for the risk-free pre-tax rate of return, we use historical time-series data on ten-year Treasury bond yields.

Figure 1 graphs both this alternative series and the series on pre- and post-tax returns on capital from Piketty and Zucman (2014). As one can see, the pre-tax rate of return using the alternative specification is substantially lower than the national accounts based series from Piketty and Zucman (2014). Likewise, the post-tax rate of return using the top marginal tax rate is substantially lower than their post-tax rate. Indeed, the alternative post-tax rate of return remains consistently lower than GNP growth. From this perspective, the apocalyptic $r > g$ “exploding wealth inequality” scenario does not look especially likely.

III. If a Global Wealth Tax is the Answer, Then What is the Question?

The essence of Piketty’s theory is that societal inequality arises from a combination of unequal capital ownership, a high rate of saving from capital income, and a high degree of substitutability between capital and labor that allows capital to accumulate without causing a fall in the rate of return to offset the growing share of capital income. From such a theory, the jump to recommending a global wealth tax is understandable, if not without its problems. But gaps between theory and reality lead one to question the logic underlying the wealth tax prescription.

Few would argue that the distribution of US pre-tax income has become more unequal or dispute that capital income is more concentrated than labor income. But Piketty’s own evidence suggests that the recent growth in before-tax income inequality is to a large extent attributable, in a simple accounting sense, to the growing inequality in wage and salary income. Furman (2014) decomposes changes in the share of income going to a top quantile into three components, associated with changes in the labor income share, changes in the capital income share, and changes in the share of income going to capital, which would be associated with higher inequality because capital income is more unequally distributed than labor income. That is:

$$d\left(\frac{Y_i}{Y}\right) = (1 - \kappa) d\left(\frac{l_i}{L}\right) + \kappa d\left(\frac{k_i}{K}\right)$$

$$+ \left(\frac{k_i}{K} - \frac{l_i}{L}\right) d\kappa,$$

where $\kappa$ is the overall capital income share, $l_i$ and $L$ are quantile $i$’s and overall labor income, and $k_i$ and $K$ are quantile $i$’s and overall capital income. Based on the data provided by Piketty and Saez (2013a), Furman (2014) reports that (excluding capital gains), roughly two-thirds of the increased share of income going to the top 1 percent since 1970 (and roughly half of the increased share of the top 0.1 percent) is attributable to increases in labor-income inequality.

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1 We are grateful to Dan Feenberg for performing these calculations.
To the extent that labor income inequality is the underlying source of overall inequality, it is hard to see why the appropriate policy response is a wealth tax, rather than, for example, an increase in the progressivity of labor income taxes, as indeed Piketty and his collaborators have proposed (Piketty, Saez, and Stantcheva 2014). It may well be true that the growing inequality of labor income is leading to a growing concentration of capital ownership. Even so, the underlying factor driving inequality would be the dispersion of labor income.

B. The Growth of Housing Capital

While Piketty’s theory may evoke the image of a steady process of workers being displaced from their jobs by an expanding stock of productive capital, as discussed in Auerbach and Hassett (2015), the increasing share of capital income in national income reflects to some extent an increase in housing’s share of capital income. The distinction between housing and other types of capital is consequential: a key factor determining whether it is plausible that the capital income share will increase as the capital stock increases is the substitutability of capital for labor. Piketty argues that this substitutability is very high. The traditional production function intuition that he relies upon, however, is suspect with respect to housing capital, which presumably is a very poor substitute for labor. If the growth in the capital-output ratio and capital income’s share of overall income is attributable to the growth in housing capital, focusing on a general wealth tax again seems like a missed opportunity. This is particularly the case for the United States, where the tax benefits for both owner-occupied and rental housing have long been recognized as the source of a major distortion in the allocation of capital. Also, as markets with high housing costs may have those high costs in part because of building codes and land use regulations that create conditions of artificial scarcity, land use regulations, rather than taxation, may be a more direct tool for addressing the high value of housing capital.

C. Post-Tax Inequality

The distinction between after-tax and transfer inequality and pre-tax and transfer inequality is also lost in Piketty’s baseline framework. This is not a trivial distinction. According to the Bureau of Economic Analysis, government transfer payments have more than doubled as a share of GDP between 1970 and 2009, from 6.7 percent to 14.7 percent. By contrast, according to Piketty’s data, the top decile’s share of US income increased by about 43 percent, rising from 32.6 percent to 46.5 percent over that same time period. The pre-tax and transfer measures analyzed by Piketty therefore tend to overstate the differences in economic welfare of those at the top versus those at the bottom. Moreover, many economists would agree that consumption is a better measure than income of economic welfare. Hassett and Mathur (2012) show that the difference between the consumption of those at the bottom and those at the top remained relatively stable from 1984 to 2010. Though the market income data cited by Piketty appears to show a surge in inequality, this measure alone therefore overstates the extent of inequality in economic welfare.

D. Capital Prices versus Quantities

Wealth accumulation occurs not only because of increases in the amount of capital, but also because of increases in asset prices, as Piketty himself discusses (see, e.g., Piketty 2014, pp. 187–191). But the implications for his theory and prescriptions differ according to the decomposition of increases in wealth between prices and quantities and the causes of price increases. First, as discussed by Rognlie (2014), calculations of the elasticity of substitution between capital and labor, which plays a key role in Piketty’s argument about the persistence of $r > g$, require adjustment when capital-output ratios are based on market values. Second, to the extent that asset price increases do not reflect increases in capital productivity, but are attributable to factors such as a decline in discount rates or increasing scarcity of land, one would not necessarily want to include capital gains in assessing trends in capital income. As shown by Saez and Zucman (2014, Figure 3), excluding capital gains significantly moderates the increase in the estimated taxable capital income share of the top 0.1 percent of households between 1962 and 2012.

IV. Global Wealth Taxation and its Alternatives

Piketty (2014, pp. 528–530) argues passionately for a substantial annual wealth tax, with
a progressive rate structure with marginal tax rates of 2, 5, or even 10 percent on the highest wealth levels. Putting forward such a proposal is truly a bold step, taking place as it does against a backdrop of intense international tax competition. It is a bold step, also, in terms of the logical support one can find for it elsewhere in the book or in the substantial literature on the design of optimal tax systems. Though some research has stepped back from the view that capital income tax rates should be zero, it has not suggested that capital income taxes should be as high as would be equivalent to the annual wealth taxes that Piketty recommends. Indeed, Piketty turns a key insight from this literature on its head.

An important development in the literature on taxation and saving is a fuller understanding of the relationships among different tax bases, in particular consumption taxes, labor income taxes, and capital income taxes. While simple models may equate taxes on labor and consumption, a major difference, implicit in some of the early arguments for consumption taxation (e.g., Kaldor 1956), is the ability of consumption taxes to hit existing sources of wealth, attributable to rents, inheritances, disguised labor income, etc. This broader consumption tax base can provide a tax system that is more efficient (e.g., Auerbach and Kotlikoff 1987) and, with a progressive rate structure, a reasonably progressive distribution of the lifetime tax burden (Altig et al. 2001). As is now also well understood, a consumption tax differs from a capital income tax in its treatment of capital income only by its exemption of the safe rate of return on investment. Thus, consumption taxes hit wealth without interfering with the incentive to save associated with the intertemporal terms of trade. Wealth taxes, on the other hand, effectively tax the safe rate of return on investment because they do not depend on actual rates of return, thereby incurring the intertemporal distortion but forgoing tax on other components of the rate of return. Thus, consumption taxes reduce the value of wealth, just as wealth taxes do, so we see no basis to argue that wealth taxes have a greater capacity to limit the power that wealth provides. A distinct question is how certain expenditures, for example, political campaign contributions, should be taxed. But this question actually highlights a further potential advantage of a consumption tax relative to a wealth tax. A wealth tax reduces the purchasing power of wealth that is spent currently by the same amount, regardless of how the funds are used. Under a consumption tax, however, an additional level of tax could be added by defining political contributions to be consumption, so that both the act of contributing and the expenditures of contributed funds would be taxed. Thus, a consumption tax is potentially a more powerful tool.

Finally, there is an irony in arguing in favor of taxing capital income or wealth and also that the elasticity of substitution in production is very high. While the latter attribute is a key part of Piketty’s dark scenario of the consequences of capital deepening, it also exacerbates the efficiency costs of capital taxation. A low elasticity of substitution would limit the decline in saving in response to capital taxation, as the initial decline in the capital-labor ratio would bring forth a large increase in the before-tax return to capital, thereby muting the substitution effect discouraging saving. But this same general equilibrium response would cause more of a shift in the incidence of capital taxes from capital to labor. Thus, the policy is damaging from an efficiency perspective to the extent that it is effective from a distributional perspective.

In summary, tax policy can play an important role in addressing inequality, but we find little support for Piketty’s particular approach either in Capital or elsewhere in the literature.

V. Conclusions

The sources of economic inequality should be a major concern to economists and policymakers, as should the most effective policies to deal with inequality. In the context of our review of Thomas Piketty’s book, we have argued that the tax system occupies an important place in this endeavor. Serious problems call for

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2 Piketty and Saez (2013b) argue for tax rates on inheritances as high as 50 percent in the United States, but these results come from a model with no other capital income taxes and no saving except for bequests. In a working paper version (Piketty and Saez 2012), they do argue in favor of lifetime capital income taxes as an alternative when there is (i) uninsurable rate-of-return risk; or (ii) a fuzzy borderline between labor income and capital income. But the insurance that capital income taxes (as opposed to wealth taxes, which Piketty and Saez do not consider) can provide is also provided by consumption taxes, without the intertemporal distortion associated with capital income taxation; consumption taxes eliminate the second argument for capital income taxation as well by obviating the need to distinguish between labor and capital income.
serious solutions. But policy can only succeed by addressing actual problems with effective solutions.

REFERENCES


