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# The Mirrlees Review and the State of Public Economics

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*The Mirrlees Review of taxation in the United Kingdom is a landmark in the analysis of U.K. fiscal policy, and of wide interest to public finance economists around the world. This review concentrates on what we can learn from the Review about the current state of public economics and directions for future research.* (*JEL* E62, H20, H50)

## 1. *Introduction*

With fiction, the appearance of a sequel soon after the first volume is often regarded as a sign of success. With academic studies, the reverse is more commonly the case. The fact that the Mirrlees Review of taxation in the United Kingdom appeared some thirty-three years after the Report of the Meade Committee on the structure and reform of direct taxation (Meade et al. 1978) is a sign of the success of the latter. And the sequel Review provides an equally thought-provoking application of economic analysis to tax policy. The two volumes reviewed here will be, like the Report of the Meade Committee, a standard reference for many years in the field of public finance, and of value to researchers, students and policy-makers all round the world.

There are many similarities between the Mirrlees and Meade Reviews—quite apart from the fact that they were both chaired by Nobel Prize winning former holders of the Chair of Political Economy at Cambridge (England). Both Reviews take a broad view of the issues and are firmly grounded in economic theory. Both Review teams blended the contributions of senior scholars with those of up-and-coming younger researchers. Both demonstrate the value in this politically sensitive field of an independently financed inquiry. The Mirrlees Review was carried out by the Institute of Fiscal Studies and funded by the U.K. Economic and Social Research Council and the Nuffield Foundation. (I should declare an interest as a Trustee of the Foundation at the time.)

There are also important differences. One is scale. The report of the Meade Committee was contained in one volume; the Mirrlees Review has produced two substantial volumes: the conclusions of the Review's editorial team are published as *Tax by Design* and thirteen specially commissioned studies, plus commentaries, are published as *Dimensions of Tax Design*. (The split into these two components works very well.) The Meade Review involved some dozen

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practitioners and academics. (I took part in the first year of the Meade Committee's work.) The present two volumes have nine editors and sixty-three contributors. There are a total of 1,880 pages—nearly a quarter of the length of U.K. primary tax legislation (*Dimensions of Tax Design*, 83n). A second important difference arises from the fact that public economics has moved on. The present report rests heavily on empirical findings, reflecting the revolution in public finance achieved through intensive use of micro-data and the development of micro-econometric techniques.

The emphasis of the Review is on the long-term design of tax policy, taking the United Kingdom as the primary application. The policy recommendations, summarized in the next section, are likely to be of wider relevance, as many countries grapple with fiscal problems. It is however the underlying analysis that is the primary focus of this review: I concentrate on what we can learn from the Mirrlees Review about the current state of public economics and the directions of future research. To give a preview of my conclusions, I am in general agreement with the analytical approach adopted, but there are three aspects where I would give different emphasis, which may lead to different policy recommendations and research agendas. Some of the Review's footnotes are of more than footnote importance.

I should stress at the outset that this review is highly selective. It does not seek to comment systematically on all the recommendations. It cannot do full justice to the rich set of background papers, which cover many subfields of public economics: the taxation of earnings, indirect taxes, environmental taxation, the base for direct taxation, the taxation of savings, asset returns and wealth transfers, corporate taxation, small business taxation, international capital taxation, administration and compliance, and the political economy of taxation.

## 2. *What Does the Review Recommend?*

The Review team set out its primary task as being "to identify reforms that would make the tax system more efficient, while raising roughly the same amount of revenue . . . and while redistributing resources . . . to roughly the same degree. Our motivation [is] to unlock significant potential welfare gains" (*Tax by Design*, 2). In the final chapter, they set out their own "vision of a good tax system" (table 20.1) to achieve this objective. The following are among the principal elements: a progressive income tax, exempting the "normal return to savings," with a coherent rate structure; a single integrated transfer system for those with low incomes or high needs; a largely uniform value-added tax (VAT), with additional taxes on alcohol, tobacco, and road congestion; a lifetime wealth transfer tax; and a single rate of corporation tax, exempting the "normal return on investment."

The Review's "vision" is presented as being of general validity. In contrast, the process of transition from the current state of taxation—the "tax reform" agenda—depends on the particular circumstances of the country in question. The Review is highly critical of the U.K. tax system, which it describes as "a jumble of tax rates, a lack of a coherent vision of the tax base, and arbitrary discrimination across different types of economic activities" (*Tax by Design*, 478–79). More specifically, the U.K. system is seen as suffering from seven major flaws:

i. The "poverty trap": serious disincentives to work for those with low earning power and overcomplex benefit system;
ii. Lack of integration: between income tax and social security contributions, and between personal and corporate taxes;
iii. Inconsistent and inequitable treatment of savings and wealth transfers;

iv. Incoherent environmental taxes;
v. Corporate taxes that discourage investment, favor debt finance, and are subject to increasing international pressures;
vi. Taxes on land and property that are inefficient and inequitable;
vii. Distributional goals are pursued in inefficient and inconsistent ways.

This is a formidable list of indictments, and they are discussed at length in the main report and in the background volume. The resulting recommended "reform package" for the United Kingdom includes the following:

A. Merging the personal income tax with social security contributions;
B. Replacing income-tested (and asset-tested) transfers by a single integrated benefit;
C. Strengthening work incentives for those whose youngest child is of school age and for those aged 55–70;
D. Aligning the tax treatment of income from employment, self-employment, and corporate sources;
E. Exempting interest on bank and building society accounts, making a "rate-of-return allowance" for equities, unincorporated business assets, and rental property), and otherwise taxing capital income at the same rate as earned income (allowing for corporation tax paid);
F. Introducing an allowance for corporate equity into the corporation tax;
G. Removing nearly all zero and reduced rates of VAT and introducing a tax on financial services equivalent to VAT;
H. Introducing a tax on the current value of domestic property, and a land value tax for business, to replace existing council tax (on housing) and transaction tax (Stamp Duty), and business property tax;
I. Introducing a national system of congestion charging in place of current taxes on gasoline;
J. Looking to introduce a lifetime wealth transfer tax.

(This is only an abbreviated summary.)

Each of these proposals warrants careful attention, and I hope that they are being studied by the U.K. Government and by opposition parties. The proposals will undoubtedly represent an important reference point in the U.K. public debate. In the case of B, the Government is already planning to make such a change. I shall not however attempt to go through them exhaustively. I focus instead on the analysis that led to the conclusions.

## 3. *Optimal Taxation and the Review*

Given the importance of the Review Chair in the development of modern optimal tax theory, it is scarcely surprising that the Review is heavily influenced by this literature. The Review recognizes that "optimal tax theory has its limitations" but goes on to say that "it is nevertheless a powerful tool and, throughout this volume, the conclusions of optimal tax theory will inform the way in which we discuss policy" (*Tax by Design*, 39). One key policy recommendation influenced by optimal tax theory is the proposal of a more broad-based VAT. Optimal tax theory is not the only strand in the argument for uniform rates of VAT. The Review attaches weight (rightly in my view) to the administrative advantages and to the probability that a uniform tax would be less vulnerable to lobbying pressure. But chapter 6 of *Tax by Design* on "Taxing goods and services," and the background study by Ian Crawford, Michael Keen, and Stephen Smith, devote considerable space to the optimal taxation argument.

TABLE 1
Optimal Indirect Taxation

| Assumption about direct taxes | Optimal indirect tax |
|---|---|
| 1. No direct taxes | Balances efficiency and equity |
| 2. Uniform poll tax | Ensure equity (e.g., exempt food), since poll tax = most efficient way to raise revenue |
| 3. Fully variable nonlinear direct tax | Under certain conditions of separability in preferences, and absence of externalities, uniform indirect tax, since equity ensured by direct tax |

The argument regarding a uniform VAT does indeed illustrate well one of the key principles of the Review: "the need to think of the tax system as just that—a system" (*Tax by Design*, 45). If indirect taxes are considered in isolation, then they appear to be a classic battleground between efficiency (tax more heavily goods that are inelastic in demand) and equity (exempt necessities)—see table 1. But once we introduce the possibility of levying direct taxes, then the role of indirect taxes changes. Indeed, if the only source of income differences is earning capacity, and there are no restrictions on the government's ability to levy nonlinear direct taxes on earnings, then—under certain conditions—optimality can be achieved without differential rates of indirect tax (Atkinson and Stiglitz 1976). (The conditions include the absence of externalities and for this reason the Review recommends additional taxes on alcohol and tobacco.) Put pragmatically, the Review argues that it is possible to devise a tax reform package that broadens the base for VAT, removing zero rating (notably for food) "to raise net revenue for the Exchequer and to redistribute more resources from better-off households to less well-off households" (*Tax by Design*, 217).

A second application of optimal tax arguments in the Review is to the progression of income tax and the top rate of income tax. This is a controversial topic. In 2010, late in the Labour Government, the top rate was raised from 40 to 50 percent (for broadly the top 1 percent of individuals). The Coalition Government announced in March 2012 its intention to return to a lower top rate, arguing that the 50 percent rate had raised little additional revenue. The official study of the revenue impact described its result as "consistent with that contained in the Mirrlees review" (HM Revenue and Customs 2012, Executive Summary).

The Mirrlees Review does indeed say that "it is not clear whether the 50 percent rate will raise any revenue at all" (*Tax by Design*, 109). What lies behind this statement? It draws on the background chapter by Mike Brewer, Emmanuel Saez, and Andrew Shephard, where they estimate that the elasticity of taxable income, denoted here by $e$, for the highest 1 percent is 0.46, obtained controlling for other factors by comparing the change in the income share of the top 1 percent (affected by the tax cuts) with that of the next 4 percent. In a valuable appendix on optimal income taxation, they show the formula for the tax revenue maximizing top rate as *1/(1+a.e)*, where *a* is a measure of the shape of the upper tail of the distribution (the Pareto coefficient). They take a value for *a* of 1.67, so that the elasticity of 0.46 implies a revenue-maximizing tax rate of 56.6 percent. When account is taken of the social security tax rate and of indirect taxes, they conclude that the income tax rate should be no higher than 40 percent. However, Brewer, Saez, and Shephard "stress that, as our estimate of the elasticity is tentative, so is the estimated optimal top tax rate" (*Dimensions of Tax Design*, 110). This is echoed in the main report: "there is no escaping the uncertainty around the estimate of a 40 percent revenue-maximizing income tax rate" (*Tax by Design*, 109). The reported standard error for the estimated elasticity implies a 95 percent confidence interval from 0.21 to 0.71, with implied revenue-maximizing tax rates from 46 to 74 percent—a wide range around 56.6 percent.

One conclusion that I draw is that we need to highlight the limits to our knowledge and to seek a closer integration between theory and empirical research. At the moment, we are acting as though the estimate of the elasticity is produced in one part of the research, and then applied as though it were a known parameter in the tax optimization. Instead, the calculation of the optimal tax rate needs to recognize explicitly that there is uncertainty surrounding the elasticity and not simply work with a central point estimate. (I am referring here to uncertainty faced by the government, not to uncertainty faced by individuals, as is discussed, for example, in background chapter 6 by James Banks and Peter Diamond.) Going further, the estimation process should take account of the use of the estimates and the associated loss function.

Finally, we should not lose sight of the fact that the optimal tax formula cited above contains two parameters: there is *a* as well as *e*. Economists tend to assume that it is *e* (the elasticity) that is the core of their subject, but equally central should be *a* (the distribution). This is particularly the case where the distribution of top incomes is becoming more concentrated in the form of a lower value for *a,* implying a higher optimal top tax rate. The more general implications of rising inequality are taken up in section 6.

## 4. *Differences in Emphasis: Opening the Box?*

The optimal tax approach provides a rigorous framework within which to address key issues of tax, operating with an explicit objective function and constraints defined by a fully specified economic model. It is used effectively by the Review's authors, who also appreciate the need to accompany the conclusions with other, wider, sets of considerations ("a broad concept of optimality"). The recommendations are typically supported by several different arguments.

At the same time, reading the Review, I am struck by the limitations of both the underlying economic model and the objective function. In what follows, I outline three ways in which I believe the framework needs to be developed, which may lead to different directions for tax reform and for research. The criticisms may be summed up by saying that public economics is (i) overreliant on the assumption of an Arrow–Debreu economy, (ii) has insufficiently reflected economic change, and (iii) remains too rooted in utilitarianism. Public economics needs to move on. The problem is that there are many different directions in which we could move. Opening the box may risk unleashing a confusing array of diverse prescriptions for progress. We have to decide on those that we believe to be important, and the three here are offered in that spirit.

## 5. *Leaving the Arrow–Debreu World*

Public economics has in the past gained a great deal by borrowing from other fields, such as macroeconomics (Musgrave and stabilization policy), welfare economics (Samuelson and public goods), and international trade theory (Harberger and tax incidence). In seeking to move beyond the Arrow–Debreu competitive model, we should similarly look to exploit developments in other fields. Indeed, public economics specialists (myself included) can be criticized for having too long neglected the progress that has been made elsewhere in economics.

At the same time, we have to ask—does it matter? Would our conclusions be different? I believe that they could be. Take for example the Mirrlees Review's proposal to end the zero rating of food for VAT in the United Kingdom. This immediately brings to mind the fact that food retailing in the United Kingdom is highly concentrated. The top four supermarkets in the United Kingdom have a market share of over 75 percent. These firms are unlikely to act as perfect competitors, and we have to draw on our understanding of monopolistic competition. This means that, to begin with, market structure may affect the incidence of the tax, a subject that receives surprisingly little attention in the Review. The Review assumes, although only in a footnote, that "the incidence of the VAT reform is fully on retail prices" (*Dimensions of Tax Design*, 301n), an assumption that underlies the calculations of the distributional impact of the proposals in chapter 9 of *Tax by Design*. Such an assumption is valid where there is perfect competition and constant costs of production, but ceases to be so when these conditions do not hold. A rise in the tax on food may be shifted backwards onto producers. It is also possible that oligopolistic supermarkets may raise their prices more than the tax. There may be either under- or over-shifting, and in the latter case it is possible that profits may actually increase with the tax rate, as has been shown by Seade (1985). The noneconomist reader of the Review might wonder what will happen to their grocery bills, and whether the researchers have spoken to supermarket chains to see how they might react to the extension of VAT to food.

Would the existence of imperfect competition affect the optimal design of indirect taxation? This question has been examined by, among others, one of the authors of the Mirrlees Review, Gareth Myles. As he showed (Myles 1989), the conditions for optimal indirect taxation (the first line in table 1) now include terms that depend on the degree of shifting, and how it varies across industries, and on the extent to which profits are taxed. At the time of the monopolistic competition revolution, Austin and Joan Robinson (Robinson 1933, 163n) pointed out that the tendency for imperfectly competitive firms to charge more than marginal cost creates a distortion that can be corrected by a subsidy—i.e., taxing the good less. The situation is just like that of an externality. As explained by Auerbach and Hines (2003, 15), the condition for an optimal tax on an imperfectly competitive industry "carries precisely the interpretation . . . for the [optimal] tax conditions in the presence of externalities. Intuitively, the 'externality' in the case of imperfect competition is the outcome of the oligopolistic output selection, resulting in the extra mark-up." Seen this way, externalities are much more widespread. It is not just alcohol, tobacco and petrol. In the real world, they arise, to differing degrees, across many industries. In the Mirrlees Review, the issue is mentioned only in a footnote (*Tax by Design*, 156n), to be dismissed. In my view, this is too hasty. The important conclusion is that the design of the tax structure has to take account of the industrial structure and conditions of production: "the tax rules . . . show that industrial conduct is as important as tastes in determining relative rates of taxation" (Myles 1995, 369).

The need for closer integration between public economics and industrial organization

(IO) applies in both directions. Public economics needs to draw on the developments in IO, moving beyond the Cournot-type models used in the literature just cited. IO, in turn, needs to take more account of the impact of corporation and other taxes. It is evident, for example, that taxes affect entry and exit, and hence the degree of industrial concentration (Atkinson and Stiglitz 1980, section 7-3).

Closer integration across different branches of economics would enrich our subject. I have taken IO as the illustration, but the same point could be made regarding labor economics. A few years ago, for example, Persson and Sandmo (2005) investigated optimal income taxation in a "tournament" model where wages are determined not by productivity but by one's productivity relative to other workers. They point out that the tournament model "deviates from the standard competitive model in a number of important respects. The latter insight has so far had little effects on the theory of taxation, which still relies heavily, both for positive and normative studies, on competitive assumptions" (558). As they note, such a model is particularly relevant to the salaries of top executives, and may therefore be a more suitable framework within which to examine the optimal top tax rate. The recent paper by Piketty, Saez, and Stantcheva (2011) has brought out how the interpretation of the elasticity, *e*, depends on the way in which we view the labor market. This highlights the potential importance of the footnote on page 110 of *Tax by Design* concerning the "debatable assumptions" underlying the estimation of the elasticity from the differential movement in the shares of the top 1 percent and the next 4 percent. Where the increased share of the top 1 percent has come about via increased bargaining power, at the expense of lower paid workers (or shareholders), the estimated elasticity has to be interpreted differently.

## 6. *Taxation and Societal Change*

The Mirrlees Review was established consciously as a follow-up to the Meade Report, and the Review shows a welcome sense of history. The opening chapter of *Tax by Design* contains a section on "the changing economic context," stressing that "tax systems need to be designed for the economies in which they are to operate" (8) and that "a tax system that might have been ideal in the middle of the twentieth century will not be ideal for the second decade of the twenty-first century" (2). Two aspects are highlighted: increased inequality of income/wealth, and structural change/globalization.

Both of these are important and are well reflected in the Review, but in both cases I would have given a different emphasis and, as a result, gone further. First, there is the role in taxation of the nation state. The Review is certainly fully cognizant of the fact that national tax policy has to be made within an international context: there is discussion of the international dimension of taxation, the impact of income taxation on migration, VAT fraud on exports within the European Union, cross-border shopping, the EU emissions trading scheme, and the taxation of multinationals. At the same time, I would have welcomed a more systematic analysis of the changing role in taxation of different geographical entities. The Review is firmly focused on the nation state as the taxing (and spending) authority. This reflects the current reality: "the British tax system is exceptionally centralized by international standards" (*Dimensions of Tax Design*, 1210). But more consideration should surely be given to the devolution of fiscal powers? As is noted by Chris Wales, one of the commentators, "there is a debate which is overdue in the UK about the balance between local and national taxation" (*Dimensions of Tax Design*, 1310). It is surprising that "Scotland" does not appear in the index of *Tax by Design*, and that "Wales" appears only as a surname. And the United Kingdom is not the only country in which tax powers are likely to be increasingly devolved in the years to come.

In the opposite direction, I would like to have seen more discussion in *Tax by Design* of supra-national bodies and the wider question of the world fiscal architecture. The background volume contains a rich chapter on international capital taxation by Rachel Griffith, James Hines, and Peter Birch Sørensen, which analyzes the activities of the OECD, the European Commission, and the European Court of Justice. They believe that "extensive cooperative agreements are unlikely to materialize in the near future," arguing that the potential gains from international tax coordination are likely to be rather small and noting that "national governments are jealously guarding their fiscal sovereignty vis-à-vis the OECD and the EU" (*Dimensions of Tax Design*, 915). As, however, recent events have shown, the latter may change perforce. Moreover, the gains from coordination may apply more widely, extending to the taxation of personal income and wealth. Looking, not to the near future, but to the longer-run, it would have been good had the main Report (*Tax by Design*) contained a chapter on global taxation. What, for example, do the Review team think of the idea of a World Tax Organization as proposed by the Zedillo Commission (Zedillo et al. 2001)? What is the scope for global taxes?

In treating inequality, too, I would have given a different emphasis. Rising inequality is largely discussed in the Review in terms of the labor market: "much of the change has resulted from a more dispersed distribution of wages" (*Tax by Design*, 11). The standard optimal income tax analysis is based on differences in earning capacity: there is simply one dimension along which people differ. The fanning-out of the wage distribution is certainly important, but there is a second dimension: capital. One highly significant set of changes in recent years in the United Kingdom have been the rise in the personal wealth/income ratio, the ending of the downward trend in wealth concentration, and renewed concerns about the role of inheritance as a source of inequality. When the Meade Report was published in 1978, total personal wealth in the United Kingdom was some three times personal annual disposable income; by 2010 the ratio was over six. (For the similar rise in France, see the commentary by Thomas Piketty, *Dimensions of Tax Design*, 828.) Prior to 1978, the share of the top 1 percent of wealth-holders in the United Kingdom had been falling sharply—from 32 percent in 1950 to 20 percent—but that fall has now stopped (Atkinson and Morelli 2012). When the Meade Report was published, the wealth transmitted through bequests at death had been falling, when expressed relative to national income, since the introduction of the modern U.K. estate duty in 1896. Since 1978, the ratio has been rising (for recent data, see Karagiannaki 2011). To this must be added wealth transferred earlier in life through gifts inter vivos. Inheritance has returned, not to the same extent as in France (see Piketty 2011), but to a sufficient degree to warrant more than the limp proposal (Recommendation J above) in the Review to "look to introduce" a comprehensive lifetime wealth receipts tax. I would have given a more ringing endorsement, stressing the application of the tax on a cumulative basis to all capital receipts over the lifetime, given the importance of transfers made earlier in life and their impact on inequality of opportunity (Atkinson 1972).

The role of capital income has wider implications for the analysis. First, it underlines the limitations of analyzing dynamic tax policy in models restricted to steady states. The background chapter 6 by Banks and Diamond provides an excellent review of optimal taxation in dynamic models, and I am in agreement with many of their conclusions. But it is striking how often the theoretical results on which they draw relate to long-run steady states (including my own—see Atkinson and Sandmo 1980), whereas the salient point about the United Kingdom is that the economy seems to have changed direction. Whereas the United Kingdom may have been converging up to the end of the 1970s toward a steady state with low wealth concentration and limited inheritance, convergence has ceased or been reversed. Among other obvious points, this means that issues of intergenerational equity assume greater significance.

The second implication is that we have to consider the optimal design of taxation as a multidimensional problem, as is discussed by Banks and Diamond and in the very helpful commentary by Pierre Pestieau. The optimal income tax problem has been framed in terms of people differing in earning capacity, $n$, with density $g(n)$, generating earnings $y(n)$, and the task is to determine the tax schedule $T(y)$. If we now allow people to differ in their capital endowment, $m$, with marginal density $f(m)$, generating capital income $x(m, n)$ and earnings $y(m, n)$, then we have to determine the tax schedule $T(x, y)$ in the face of the joint distribution $h(m, n)$. We have then to ask questions such as: can the optimum be attained with an income tax: $T_1(x + y)$? Can it be attained with a dual income tax: $T_2(x) + T_3(y)$? If we constrain attention to an income tax, how does the optimal degree of progressivity change if there is greater inequality in the distribution of capital income? Or, a new question, how does the optimal tax structure depend on the joint distribution of earned and capital income? If earned income and capital income become more closely aligned, should this lead to lower or higher tax rates? Addressing these challenging questions is relevant to a number of the recommendations of the Review.

## 7. *Beyond Utilitarianism*

In his *Foundations of Economic Analysis,* Samuelson wrote that "to a man like Edgeworth, steeped as he was in the Utilitarian tradition, individual utility—nay social utility—was as real as his morning jam" (1947 (1983), 206). Edgeworth, who died in 1926, would have been quite comfortable if he had lived to read the Mirrlees Review. Household behavior is largely governed by utility maximization (for example in background chapters 2, 3, 4, and 6), and social welfare is typically assessed in terms of the sum of transformed individual utilities (as set out clearly in box 2.6 of background chapter 2). It is this kind of analysis that lies behind statements such as "there is a strong case for broadening the VAT base and moving towards a uniform rate. This would [with a compensating package of transfers] increase consumers' welfare" (*Tax by Design*, 229). Our understanding of both aspects—the explanation of individual behavior, and the formulation of social objectives—has however moved on since Edgeworth. This is recognized at a number of points in the Review, and in the commentaries, but I would like to have seen a greater emphasis on the alternatives to utilitarianism. There are potentially major implications for both positive analysis and normative analysis of taxation.

The modeling of individual decision making has been questioned in the recent literature on behavioral public economics. As expressed by Diamond (2008), "in standard modelling, we assume consistent behaviour across economic environments, captured in preferences that are defined only in terms of commodities acquired (absent externalities). One of the key messages of behavioural economics is that context (also referred to as situation) matters in ways that are not recognized in standard modelling" (1859). I was reminded of this passage when reading the box 4.2 in *Tax by Design* on the measurement of work incentives, where the "effective marginal tax rate" is the combined impact of all taxes on earnings faced by employers and employees and the indirect taxes paid when the earnings are spent. All of these are clearly relevant, but the way in which they are combined assumes that context does not matter. Workers are assumed to react in the same way to the tax wedge regardless of whether it is paid by their employer, by themselves, or by some other member of their household when they do the weekly shopping. This is also a maintained assumption in the argument for the integration of personal income and social security contributions. It is not evident that this is the case. As far as behavior is concerned, recent research, such as that by Chetty, Looney, and Kroft (2009), has found that tax "salience" may lead people to respond differently to different forms of the same tax schedule.

If decision and experienced utilities are different, then we have to ask how far public policy should exploit such a difference. If people respond differently to social security contributions than to income tax, then should this be used when planning taxes, even though the Review sees the link between contributions and entitlements as "vanishingly weak" (*Tax by Design*, 127)? If distraction means that the goose does not notice the feathers being plucked, should we use this device to reduce the hissing? Or should the government seek to make taxes more apparent? This brings us to the normative basis for the Review, the last of the topics covered here, although it should perhaps have been the first.

The general approach of the Review is one that I share: arguments for tax reform typically have several strands. It is rare for there to be a single knock-down argument. Conclusions are reached after balancing different considerations, rather than as the product of a single optimization exercise. There are however several useful distinctions to be drawn and these could usefully have been made more explicit. The first is between outcomes and process. Outcomes are what appear in the social welfare function, but process often features prominently in debates about taxation. One of the major arguments made in the Review for the integration of personal income tax and social security contributions is that of transparency. This is a judgment about process. In contrast, the argument in favor of integration on grounds of administrative simplicity is an argument that would show up in terms of outcomes: the cost savings would raise social welfare.

Secondly, outcomes can be assessed in different ways. We may decide to focus on individual well-being, but this does not necessarily mean experienced utility. For many years (and most recently in Sen 2009), Amartya Sen has been arguing for consideration of alternative evaluative bases, notably individual capabilities, defined broadly as the freedom that people have to function in key dimensions. Social welfare may be a function of individual well-being, but well-being assessed in terms of capabilities may lead to different conclusions. Moreover, outcomes may also be evaluated according to other criteria. A good example is gender equality. Taxes and transfers can contribute, either manifestly or latently, to reducing gender inequality. In the case of child benefit in the United Kingdom, an express intention of the legislation was to aid women by making the benefit payable to the mother in the first instance. Latently, the within-household distribution of income may be influenced by the balance between direct and indirect taxation. Extending VAT to food and compensating families via higher income tax allowances may leave worse off those within the household who do the grocery shopping.

The Review recognizes the nonutilitarian dimensions but it would have been good to make these explicit and more prominent.

## 8. *Conclusion: Toward a More T-Shaped Public Economics*

It is not just the U.K. tax system that requires a makeover. English rugby football, after a dismal performance in the 2011 World Cup, has been the subject of much criticism. One conclusion drawn was that coaching needs to be more "T-shaped," combining not just *depth* of skill development but also *breadth* of knowledge. The same applies, in my view, to public economics. The subject has become much deeper in the third of a century since the Meade Report, as well proven by the excellent two volumes produced by the Mirrlees Review. They demonstrate the richness and vitality of the subject. At the same time, public economics has tended to become separated from other branches of economics and risks being too narrow in its approach. We have made great progress in deepening—moving the vertical further down—but have tended to lose sight of the horizontal: the wider context and important omitted considerations. This is a general criticism of economics: the subject has become overspecialized. The different branches of economics are increasing our understanding, but they are not being sufficiently integrated and we need to be more aware of developments in other fields and disciplines.

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