

## COMMENTS

### TO THE NATIONAL TAX ASSOCIATION ON RECEIPT OF THE HOLLAND MEDAL

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WHEN HARVEY GALPER CALLED ME ABOUT the Holland medal, I was both pleased and surprised. Both emotions were, I assure you, quite genuine. Today is fun too. Let's be honest, it's really great to hear nice things said about oneself. Receiving a medal named for Dan Holland, whom many of us knew, respected, and liked, is a delight. Being invited into any club of which Richard Musgrave is also an invited member is, for me, special and quite moving. My surprise when Harvey called was not feigned and I still feel it. Quite simply, thanks to the selection committee, to John Shoven, Bill Gale, and Peter Diamond (*in absentia*), and to my principal mentor, the late Joe Pechman, whose support made all of the difference for me and for many others.

Harvey told me that it is customary for the Holland medal recipient to say a few words. He put some emphasis, but not too much, on the word 'few.' I want to say "a few words" about the differences between analytical tools useful in academic research and analysis that is useful to those making national economic policy. They are not the same thing. I'm going to focus on two differences.

First, the policy world, far more than the academy, is driven by a quest for power, influence, and job security. Academics are certainly not free of these motives, as anyone who has seen or read about the movie *Inside Job* will appreciate. But they are driven, to a far greater extent than are residents of the policy world, by a desire to get things analytically right.

Second, the academic world genuinely 'grooves' on honest differences in research findings. Politicians don't handle disparate findings well. To mix metaphors mercilessly, analytic differences are the grist for publications and the rungs of the academic ladder, but they confuse, rather than inform, the policy debate.

I am going to mention three tools of public finance. Each has a respected place in public finance. All revealed or clarified previously obscured or poorly understood relationships; all quite properly brought academic credit to their

developers. None, in my view, has improved—or is likely to improve—debate on *federal* public policy. Each may have advocates in this room. The three tools are: 1) capital budgets, 2) generational accounts and, more generally, infinite-horizon projections, and 3) dynamic scoring.

Each is useful, at least in some contexts. Each, however, is subject to legitimate and irreducible academic disagreements about how they should be computed. Moreover, lay users are poorly positioned to evaluate these differences. As a result, they create analytically *valid ambiguity* where analytically *invalid clarity* would, in my view, better serve policy discussion.

The easiest case is the capital budget. Private businesses often pay for capital items over their useful lives—that is, by borrowing. They pay immediately for non-capital items. Some have argued that governments should also borrow to pay for capital items and reserve current taxes for non-capital items and debt service. This proposal goes well beyond providing data on federal capital expenditures, which is a good idea and is done now in the *Analytic Perspectives* supplement to the annual budget. The proposal is to use the capital budgeting to guide fiscal policy.

Although capital budgeting may help private businesses decide when to borrow, it is mischievous when applied to federal government budgeting. The analogy between business accounting and fiscal policy is invalid. Private capital markets quickly punish businesses that sloppily define capital outlays. But in a country with a well-functioning central bank, discipline on reckless government borrowing is loose, if not entirely absent. Furthermore, whether spending is on capital or non-capital goods is roughly orthogonal to whether budget should stimulate or restrain economic activity.

There is a second problem with capital budgeting at the federal level. Even the most imagination-starved advocate can make a decent case that almost everything the federal government does produces something of enduring value and, hence, need not be paid for by taxation. Health care and

education? Why, they both add to the stock of human capital. Defense spending? Much of it actually goes for honest-to-goodness capital goods. And all of it defends the capital stock. Q.E.D. There really isn't much federal spending that cannot be classified as adding to capital, one way or another.

Well, maybe not pensions. They do not have a multi-year useful life. So, it is ironic that pensions have been for decades financed largely by intra-governmental borrowing from payroll taxes levied on active workers to cover benefits to retirees and survivors and to people with disabilities.

In brief, the key concept on which capital budgeting rests matches poorly with the federal government's fiscal functions. And—the point I want to stress today—it is so subject to so much *irreducible* disagreement that it would do more to confuse than clarify public debate.

I believe that the same is true of generational accounts, in particular, and infinite-horizon projections, more generally. Generational accounts are a valiant effort to correct a serious shortcoming in budgets that cover only one or a few years—they do not show the long-run implications of current policies. Generational accounts purport to show the tax rate that each generation, year-by-year, must pay for expenditures under current government policy. The technique produces tax rates for each living cohort and for unborn generations taken as a whole. Authors of generational accounts draw particular attention to the tax rate facing unborn generations.

Generational accounts have recently enjoyed something of a vogue. Many governments have computed them. For several years the United States published estimates in the supplementary budget volume entitled *Analytic Perspectives*. Generational accounts have one genuine virtue—they encourage policy makers to recognize the long-term implications of current policies. But this particular cure, in my view, is worse than the disease. And there are much better cures at hand.

The central problems are that just what current policy may be is hard to specify and the spending and tax corrections that will flow from whatever current policy is defined to be is acutely sensitive to variables that are impossible to forecast reliably even moderately far into the future, to say nothing of the 'infinite future.'

The definition of 'current policy' is fraught with ambiguity for two reasons. First, many current laws expire. What should one assume regarding what

happens after they expire? That spending is a constant share of income? Proportional to population? Unchanging in nominal terms? Or in real terms? Even with respect to formula driven programs, there are ambiguities. Should one assume continuation of the law as written? Or should one build in patterns of adjustment to imbalances that have been repeatedly applied by legislatures? As anyone who has wrestled with how to project the budget impact of the alternative minimum tax can attest, one's answers to these questions are inevitably more-or-less arbitrary.

Even if one can settle what current policy really is, all long-term projections, generational accounts included, must depend on more or less arbitrary assumptions about how current spending and taxes will evolve. Spending and taxes, in turn, depend on such underlying variables as population, marital patterns, labor supply, technological change, income, and prices. None of these variables can be known with certainty, many not even approximately. But if projections are to be helpful, the values of the variables determining the projections must be chosen from a reasonably narrow probability distribution. This condition puts a limit on how far into the future projections are useful. Most variables eventually become pure guesswork if extended too far into the future. Beyond that point, projections are little more than demonstrations of the infinite capabilities of computer software.

The problem with generational accounts is precisely that they extend so far into the future that both current policy and key underlying variables are simply unknowable. Compound interest guarantees that tax rates must eventually become very large or very small if there are even modest differences between growth rates of revenues and expenditures.<sup>1</sup> Thus, the defining variable of generational accounts, the tax rate on unborn generations, is most subject to both problems—both current policy and key variables are unknowable. Modest differences in growth of spending and taxes 'cone out' into portentous gaps with huge implications. This is true even when such gaps have been, and doubtless will be, corrected. A corollary of these problems is that the estimates are hugely unstable, moving by large amounts in response to relatively minor events.

But do not take my word for it. In 1997, three pioneers in the development of generational accounts reported the following estimates. Based on conditions prevailing in 1993, generations born

after that year faced a near confiscatory tax rate of 84 percent. New estimates based on data starting in 1995 indicated that the unborn faced a tax rate of just 49 percent. What happened? Not any significant change in government policy. There was not any. Rather, the authors had reduced the assumed rate of growth of health care spending stretching into the infinite future, something that is virtually impossible to forecast (Gokhale, et al., 1997).<sup>1</sup> Down went spending for health care, the principal driver of the whole projection. All infinite-horizon projections suffer from the same hypersensitivity, which makes the projections virtually useless for considering how current policy should be changed.

It is certainly important to look more than a year or a few years into the future, but there are better ways than generational accounts to do it. The Social Security Administration and the Center for Medicare and Medicaid Services pioneered in producing long-term actuarial projections. It is hard to exaggerate the influence of these projections. As we meet, Social Security and Medicare are either in balance or running current surpluses. They have sizeable accumulated reserves. Yet analysts and policy makers are focusing on how to close deficits in these programs that, so far, exist only in projections. Without these projections these debates would not be taking place. To be sure, they are just projections, not forecasts. They are certain to be inaccurate, as they have been in the past. But they do the job that needs doing—to alert people to the need to take action before gaps become unmanageable.

Similarly, the Congressional Budget Office has, for several years, been issuing projections of the long term implications of current policy for the overall budget. My colleague, Bill Gale, and Alan Auerbach have prepared similar estimates—and, no, I am not plugging their work just because Bill said nice things and Alan was on the Holland Medal selection committee! More recently, the Center on Budget and Policy Priorities has produced similar projections stretching out to mid-century.

These projections have the great virtue of relative comparative simplicity. Projections of what will happen if current policies are continued for a few decades have powerfully and constructively influenced policy debate. The current focus on the budget gaps that will remain, even after the current downturn ends, is evidence of their power.

That said projections into the unknowable future are a distraction. CMS projections of health care

spending go out 75 years. Going so far is, in my view, worse than useless because health care spending depends principally on technological advance, about which we have not got a clue. Economist Robert Hall put the point nicely on advances in economic research: “Big leaps forward in research are inherently unforecastable, so I won’t try” (Hall, 2010, p. 18). The same is true of biomedical science; CMS, please take note.

I will turn lastly to dynamic scoring. Changes in taxes and expenditures inevitably affect economic behavior. So, one should include them in all estimates of the budgetary impact of tax or expenditure changes. Leaving them out gives the wrong answer. So, should one build them in?

Well, it depends. The answer is surely ‘yes’ if one is estimating the revenue effects of, say, a change in taxes on smoking or gasoline use. The whole point of such taxes is to alter tobacco or gasoline consumption. Much the same would hold for an expenditure program to, say, provide grants for a stated purpose to those who apply for them. It would make no sense to base expenditure estimates on the number of people—presumably zero—who applied for a grant before it was actually available.

Trying to estimate the impact of changes in taxes or expenditures on economic growth is another matter. For starters, the size and sometimes the sign of the impacts depend on behavioral elasticities about which there is considerable disagreement. Even more important, no tax or expenditure change comes in isolation. As Richard Musgrave taught decades ago, any tax or expenditure change has to be paired with something that pays for it or that it pays for. The supposedly neutral lump-sum tax exists only as a platonic ideal. A virtual infinity number of compensating policy responses can be matched to any tax or expenditure change. A VAT may raise or lower economic growth, depending on what the revenue it generates is used for. Similarly unclear are how it might change the capital/labor income share or the distribution of income.

Short of a general equilibrium model that exists only in our dreams and clairvoyance regarding what offsetting changes in other taxes or expenditures any given tax or expenditure will produce, macroeconomic consequences are impossible not only to measure but to identify conceptually.

For this reason, and to repeat myself, the most practical and useful tools for public policy decision making are generally relatively simple tools

that yield analytically *invalid clarity* rather than analytically *valid ambiguity*.

Let me be clear, I am not arguing that analysts should be intellectual Luddites, scorning insights from increasingly advanced analyses. What I am saying is simply this: policy makers need relatively sharply framed quantities on which they can make decisions together with a judgment about how much their estimates should be trusted.

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### Note

- <sup>1</sup> As an undergraduate, I was told of the sad fate of two commissions appointed to project the populations of Los Angeles County and the state of California. Working independently, they concluded that in the not too distant future, the population of Los Angeles Country would exceed that of the state of California.

### References

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