

Social welfare spending and its effects on growth: Another look at the Lampman analysis

by W. Lee Hansen

W. Lee Hansen is Professor of Economics and of Educational Policy Studies, University of Wisconsin-Madison.

Because Bob Lampman has a penchant for going back to basic questions that others think they have already resolved, I decided to continue in that tradition by raising several questions about his analysis of secondary consumer income (SCI) in his book *Social Welfare Spending*. These questions lead me to recast his results and to emerge with a somewhat different conclusion.

Lampman's analysis

Social Welfare Spending is concerned with the trade-off between income redistribution programs and economic growth. Interest in this topic grew rapidly in the mid-1970s as the rate of economic growth slowed. Many analysts wondered whether the rise in social welfare programs that began in the late 1960s could have accounted for this slowdown. Lampman attempts to resolve this vexing issue. To facilitate the task, he developed a new accounting framework for SCI and mobilized the data needed to fill out this framework. Then he estimated the scope and magnitude of the social benefits and costs of increased SCI spending from 1950 to 1978.

Lampman begins his analysis by specifying the four principal goals of social welfare spending: to reduce income insecurity with respect to earnings losses; to reduce insecurity with respect to irregular and extraordinary expenditures; to reduce income poverty; and to share private contributions and tax burdens fairly. He lists two additional social goals to which social welfare spending can contribute—namely, reductions in income inequality and improvement of the social and political environment. He follows this with a list of six categories of benefits and costs: production increases that can be attributed to improved education, health, and economic security of the labor force; production increases resulting from more effective macroeconomic stabilization; the cost of collection, compliance, and administration for SCI programs; labor supply effects; productivity effects; and resource reallocation effects.

The framework of Lampman's analysis is revealed in Table 1, which reproduces Table 5.9 from his book. In this table he

identifies the categories of social benefits and social costs of increased SCI spending that can be associated with his social welfare goals, separates these benefits and costs into those that cannot be quantified (lines 1–7) and those that can be quantified (lines 8–13), and finally strikes an overall balance (lines 14–15). While concluding that on balance the positive nonquantifiable benefits of SCI more than offset the negative quantifiable effects, he cautions that any final judgment depends critically on the weight readers assign to the sum of the quantifiable and the more elusive nonquantifiable benefits in line 15.

Questions leading to a reinterpretation

Now to the questions. First, how are Lampman's results affected if SCI spending is separated into what might be called SCI consumption and SCI investment spending? Lampman includes education expenditures with expenditures on health, food and housing assistance, and other welfare services, all of which he describes as directed to the goal of reducing "insecurity with respect to irregular and extraordinary expenditures" (Table 1, line 2). While the rationale for including the latter three categories of spending is apparent, educational expenditures are quite different. They are designed not to reduce "insecurity" as we normally think of it but rather as a form of investment that will enhance the knowledge and skills of future generations of adults and lead in turn to increased productivity. Lampman is aware of the investment dimensions of educational spending but opts not to follow this line of analysis in the absence of a system of national income accounts that treats education as an investment.

The second question is this: How might Lampman's results be altered if the quantifiable benefits and costs of each of the several SCI items were compared directly? Rather than presenting the quantifiable benefits and costs of SCI programs by how they were calculated (lines 8–13), they can be linked more directly to the four principal SCI goals shown in lines 1–4 and to the two ancillary goals shown in lines 5–6. Though requiring a recasting of the data, this approach permits more explicit consideration of the benefits and costs associated with the pursuit of each of the SCI goals.

The deeper underlying question is whether making allowance for these two concerns alters in any significant way Lampman's important and apparently generally accepted finding that the added benefits exceeded the added costs of the substantial increase in SCI spending during the post-World War II era. As this analysis demonstrates, the results

Table 1

**Social Benefits and Social Costs in 1978 Attributable
to 1950–1978 Changes in SCI**

Item	Added Benefit	Added Cost
Nonquantifiable items		
1. Reduction of insecurity with respect to income loss	+	
2. Reduction of insecurity with respect to irregular and extraordinary expenditure	+	
3. Reduction of income poverty	+	
4. Fair sharing of SCI taxes and contributions	0	
5. Reduction of income inequality	+	
6. Improvement of the social and political environment	+ or –	
7. Total of nonquantifiable benefits (items 1–6)	+	
Quantifiable items		
8. Production increases due to improved education, health, and economic security of the work force	4% of GNP	
9. Production increases from more effective automatic stabilization	0	
10. Collection, compliance, and administrative costs		1% of GNP
11. Loss of potential GNP due to reduction of hours at work (+4%), adjusted for positive value of extra nonmarket time (–2%)		2% of GNP
12. Loss of GNP due to reduction of productivity per hour at work from less capital per worker	0	
13. Reallocation of resources to selected goods (+4%), adjusted for positive consumer valuation of selected goods (–2%)		2% of GNP
Summary items		
14. Quantifiable benefits (items 8 and 9) and quantifiable costs (items 10–13)	4% of GNP	5% of GNP
15. Total of nonquantifiable and quantifiable benefits (items 7–9) and total costs (items 10–13)	4 + ?% GNP	5% of GNP

Source: Robert J. Lampman, *Social Welfare Spending: Accounting for Changes from 1950 to 1978* (Orlando, Fla.: 1984), p. 144.

suggest that increased SCI spending was more costly than indicated by Lampman's analysis.

Recasting the results

To deal with these concerns, Table 1 needs to be recast in two ways. One is to highlight the distinction between SCI spending for current consumption and for investment. The other is to show a closer link between the added benefits and costs for each of the broad SCI goals. Implementing these two changes requires reallocating the quantifiable costs and benefits in lines 8–13 to the nonquantifiable items in lines 1–6 and to a new line 7.

The revamped format is shown in Table 2. Here SCI spending is divided into consumption and investment. The table also makes provision for the possibility of added costs and added benefits that are quantifiable. Because of the difficulty of untangling the nonquantifiable benefits and costs, they have been left out of the table.

The new estimates in the first column reflect the necessary adjustments for SCI spending on education. First, 4.0 percentage points of added benefits from education which Lampman includes in line 8 as “production increases due to improved education, health, and economic security for the work force” must be reassigned. If the 17 percent of education spending going to the poor (Table 3.10, p. 54) can be viewed as dealing with “insecurity” in line 2, then 0.68 percentage points must be entered as an added benefit in line 2. The remaining 3.32 percentage points must be assigned to SCI investment, specifically to the “increase in productivity” in line 7.

The same approach can be followed in reallocating the rest of the aggregate estimates of added benefits and costs. The production increases in line 9 that result from automatic stabilization and whose effects Lampman estimated to be zero can be ignored. What might be called the overhead costs of SCI programs (collection, compliance, and administrative costs), which are estimated at 1.0 percentage point in line 10, are less easy to handle. Since there is no logical way of allocating these costs which belong in column 2, a third of these costs is split between lines 1–2, another third is divided between lines 3–5, and the remaining third is assigned to SCI investment in line 7.

The loss of market work that occurs because of the disincentives of taxes and income-conditioned transfers, which according to Lampman produce added costs of 2.0 percent, must be reassigned to reflect the treatment of education as an investment. Lampman provides no direct estimate of the labor supply effects associated with education spending, but if these effects are captured by the labor supply responses of people in the 16–24 age group, this effect amounts to slightly less than 10 percent of the total labor supply effect (pp. 122–131, and especially Table 5.5); a similar adjustment is assumed for the positive value of extra nonmarketed time. Thus, 0.2 percent in added costs is allocated to SCI investment in line 7 of column 2. The remaining 1.8 percent in costs is split evenly between lines 1 and 2, which reflect transfers, and between lines 3 and 5, which reflect taxes.

Lampman's conclusion that no reductions in output occur because of the possibility that increased SCI spending might reduce saving and investment, and hence decrease the amount of capital per worker, means that his entry of 0 added costs in line 12 falls out of the picture. This assumes that exclusion of education spending does not affect Lampman's conclusion that SCI spending had no measurable impact on saving and capital formation as conventionally defined.

Table 2
Social Benefits and Social Costs in 1978 Attributable
to 1950–1978 Changes in SCI:
An Alternative Allocation of the Quantitative Items

SCI Items	Quantifiable Items (% of GNP)	
	Added Benefits	Added Costs
SCI Consumption		
1. Reduction of insecurity with respect to income loss	0.00	0.62
2. Reduction of insecurity with respect to irregular and extraordinary expenditures	0.68	2.12
3. Reduction of income poverty	0.00	0.56
4. Fair sharing of SCI taxes and contributions	0.00	0.11
5. Reduction of income inequality	0.00	0.56
6. Improvement of the social and economic climate	0.00	0.00
Total	0.68	3.97
SCI Investment		
7. Increased productivity	3.32	1.03
Total	3.32	1.03

Source: See text for basis of allocation and reassignment of items from Table 1.

The added net costs associated with changes in consumption patterns, which Lampman estimates at 2.0 percent, can be allocated according to the distribution of spending shown by Lampman (p. 140). Thus, a quarter of the total can be allocated to educational investment in line 7. The remaining 1.5 percentage points are allocated to reducing insecurity in line 2.

Before turning to the results, readers need to be reminded that these suggested allocations are extremely crude. They are intended to be suggestive in helping us understand the complicated nature of the trade-off between SCI goals and SCI spending for both consumption and investment purposes. No doubt other reallocations could be made that would be equally reasonable.

The results

The effects of these reallocations are summarized in the lower portion of Table 2. The results reveal that the quantifiable benefits of increased SCI spending on consumption come to 0.68 percent of GNP while the costs amount to 3.97 percent of GNP. Meanwhile, the quantifiable benefits of increased SCI spending on investment in education, which lead to improved productivity, are substantial relative to their costs—3.32 percent versus 1.03 percent. The former result is consistent with the view that increased SCI spending for consumption-type programs has been a drag on growth; the latter result is consistent with the view that increased investment in education accelerated economic growth.

It is also interesting to note that the added costs of SCI spending in lines 1 and 2 are more than twice as large as those in lines 3–5. Equally interesting is the finding that only one of the SCI items produces quantifiable benefits. Space limitations preclude further elaborations.

Conclusion

These exploratory and illustrative adjustments to Lampman's provocative results reveal several things. One suggests the sensitivity of his findings to modifications in the definition and measurement of SCI spending. Another shows that increased SCI spending directed toward consumption resulted in quantifiable costs that exceeded quantifiable benefits; the results are exactly the opposite for SCI spending directed toward investment. How these results affect the overall balance between the quantifiable and nonquantifiable effects is left for the reader to ponder.

Debate about the trade-off between social welfare spending and economic growth will continue to be stimulated and enriched by Lampman's pathbreaking efforts. His results should help keep another generation of economists and other social scientists busy at work. ■