

Preface

Understanding what determines savings has been the main goal of my research since graduate school. This volume collects nineteen studies bearing directly or indirectly on the determinants of savings. I wrote eleven of the articles myself and the other eight with coauthors. Of the nineteen studies, four have not been published previously and eight were published in journals or books that may not be readily available or well known to students of savings.

As a group the articles consider the role in wealth accumulation of saving for retirement, saving for bequests and other intergenerational transfers, and precautionary saving. They also address the savings effects of fiscal policy, social security, and demographic change. And they examine the empirical validity of different theories of saving behavior. Several key findings in this volume are:

US wealth accumulation is primarily the consequence of intergenerational transfers as opposed to life cycle saving for retirement.

The extent of risk sharing among family members is a subtle but potentially important determinant of aggregate savings.

The precautionary saving response to a small probability of major future health expenditures can easily account for a third of total savings in life cycle economies.

Consumption decisions of altruistically linked individuals depend on collective resources, not on the distribution of resources.

Individuals can become altruistically linked simply by caring for the same person. Hence altruistically linked groups are likely to be quite large.

Structural tax changes, increases in government consumption, and intergenerational redistribution are policies that can have substantial effects on national saving.

Investment incentives are more effective than savings incentives as a means to stimulate wealth accumulation.

Investment incentives induce capital losses on existing assets. This produces a subtle but potentially major redistribution across generations and stimulates saving.

From the perspective of neoclassical economics the conventional budget deficit is an inherently arbitrary accounting construct that is wholly unreliable for assessing the effects of fiscal policy on savings.

If young and old generations implicitly bargain through the political system over their financing of government consumption, debt will be neutral (i.e., will not crowd out savings) even in the life cycle model.

Baby booms and baby busts and changes in retirement ages and life expectancy are demographic and economic events that can greatly alter wealth accumulation.

There is no evidence of systematic irrational undersaving by American households.

In contrast to at least one version of the Barro model, aggregate consumption appears to depend on the age distribution of resources.

Because of aggregation and simultaneity problems, conventional time-series consumption functions are likely to provide little or no evidence concerning the underlying nature of intertemporal preferences or the impact of fiscal policies, such as Social Security, on savings.

An analysis of contingent bequests indicates that the wealth elasticity of bequest is less than unity.

Although the essays in this book cover many of the major determinants of savings, they certainly do not cover them all. In the interest of providing a comprehensive picture of current knowledge of savings determinants, the introduction presents a brief and selective review of the savings literature. Because several of the articles collected here are themselves lengthy reviews of portions of this literature, the introduction gives shorter shrift to issues surveyed in this book.

Part I: Saving Motives

In addition to the introduction, this book has four parts. Part I, entitled "Saving Motives," contains six chapters. The first four chapters consider saving for life cycle motives and intergenerational transfers. Chapters 5

and 6 examine precautionary motives for savings. Chapter 1, coauthored with Lawrence H. Summers, suggests that intergenerational transfers rather than life cycle motives play the predominant role in US wealth accumulation. Chapter 2, surveys the recent literature on the importance of intergenerational transfers to savings, pointing out the wide variety of evidence supporting the importance of intergenerational transfers in the process of wealth accumulation.

The third chapter demonstrates that altruistic concern for one's children and their spouses implies altruistic linkages with the in-laws of one's children as well as linkages with everyone with whom such in-laws are linked. The chapter suggests that, if altruism exists, the number of individuals who are altruistically linked will be very large. Redistribution within such large altruistic clans will have no effect on savings or other economic variables.

The fourth chapter, coauthored with Avia Spivak, provides an explanation for intergenerational transfers that has nothing to do with altruism. In the absence of well-functioning annuity markets, children can help hedge the life span uncertainty of their parents by agreeing to support their parents if they live longer than expected in exchange for receiving their parents' wealth in the form of a bequest if they die sooner than expected. These arrangements need not be explicit, and they can be self-enforcing. Chapter 4 shows that the economic risk associated with life span uncertainty is remarkably important; nonaltruistic parents who do not have access to fairly priced or close to fairly priced annuity insurance have large incentives to enter into risk-sharing arrangements with their children.

Depending on the bargaining between parents and children, life span risk sharing may give rise to positive expected net transfers from parents to children. In comparison with an economy with perfect private insurance, an economy with family annuity markets and positive expected net transfers can accumulate substantially more wealth. This is one of the lessons of chapter 5, coauthored with Avia Spivak and John B. Shoven. This chapter also considers extended family longevity risk sharing in altruistic settings.

Chapters 4 and 5 compare the amounts of wealth that would be accumulated in a market setting with actuarially fair annuity insurance and a family risk-sharing setting that, because of the smaller number of participants, is less than actuarially fair. Because there is less insurance available in the family insurance setting, there is also more savings, reflecting in large part the precautionary savings motive.

Chapter 6 also examines precautionary saving motives. The risk considered here is uncertain future health expenditures. In addition to showing

a substantial precautionary demand for savings in the absence of fair insurance, this chapter points out that certain institutional substitutes for fair insurance, such as an asset-tested Medicaid program, can greatly alter (reduce in the case of Medicaid) aggregate wealth.

Part II: Fiscal Policy and Savings

Fiscal policy, the focus of part II, can greatly influence wealth accumulation. Although the saving impact of fiscal policies within static Keynesian models is widely understood, their impact in dynamic neoclassical models is not. Chapter 7 discusses the recent literature on this issue and uses the Auerbach-Kotlikoff 55-period life cycle simulation model (Auerbach and Kotlikoff 1987) to compare the saving impact of tax cuts, changes in the tax structure, and changes in government consumption. Chapter 8 and chapter 9, coauthored with Alan J. Auerbach, also use the Auerbach-Kotlikoff model but consider the savings impact of intergenerational redistribution, including deficit finance and investment incentives.

One message of chapters 7 through 9 is that a variety of fiscal policies may be structurally quite similar if not identical, yet may imply quite different time paths of government deficits. This raises the question of whether official deficits are meaningful measures of fiscal policy. Chapter 10 argues forcefully that, from the perspective of neoclassical economics, the deficit should be discarded as a measure of fiscal policy; the chapter points out that the “deficit” is a noneconomic arbitrary accounting construct that bears no necessary relationship to the fundamental stance of fiscal policy.

The last essay in part II is chapter 11. This chapter points out that the standard life cycle model’s prediction that intergenerational redistribution affects savings is based on the implicit assumption that older generations can coerce younger generations. Suppose that one drops this arbitrary assumption and instead assumes that young and old generations implicitly negotiate through the political process over the size and financing of government consumption. In this case there will be no net intergenerational redistribution. Deficit finance can arise in this model, but it has no consequences for savings.

Part III: Social Security, Demographics, and Savings

This part examines how Social Security and demographics separately and jointly affect savings. Chapter 12 is an early use of simulation methods to

study the savings effects of government policy. The study demonstrates that an unfunded Social Security system can dramatically reduce an economy's long-run stock of wealth. Chapter 13, coauthored with Alan J. Auerbach, uses the Auerbach-Kotlikoff model to study the short-run and long-run effects of unfunded Social Security, baby booms and baby busts, and unfunded Social Security in the presence of a baby boom followed by a baby bust. The results suggest that changes in fertility rates can, through time, have major effects on wealth accumulation. In addition, rapid and prolonged reductions in fertility rates can have a severe impact on Social Security finances, although they may alleviate other financial pressures on the government.

Work spans and life spans are additional demographic and economic outcomes and choices that are of major importance to wealth accumulation. Chapters 12 and 14 demonstrate within the life cycle model the sensitivity of the long-run stock of wealth to changes in the age of retirement and the age of death.

Part IV: Empirical Analyses of Savings Determinants

The five essays of this part test various saving models and thereby shed light on underlying determinants of savings. Chapter 15 uses the Parnes panel survey to study the saving response to Social Security predicted by the life cycle model. The results provide mixed support for that model. The results should, however, be viewed cautiously because of several shortcomings in the data.

Chapter 16 examines the wealth elasticity of bequests. The size of this elasticity is an important determinant of the transmission of inequality through time and the rates of growth and saving. Surprisingly the size of this important elasticity has been little studied. Chapter 16 presents a new approach to studying the wealth elasticity of bequests. The idea is simply to look at the bequest that survey respondents would leave if they died at the time of the survey. The chapter contains fairly strong evidence that the wealth elasticity of bequests is less than unity for the broad middle class.

Chapter 17, coauthored with Avia Spivak and Lawrence H. Summers, considers from a broader perspective the rationality of saving decisions. The objective in this study is to learn what fraction of the public significantly undersaves for retirement. A finding that a large fraction of the public significantly undersaves would cast doubt on neoclassical models that rely on the assumption of rational choice. The method used to assess undersaving compares the level of affordable old-age consumption with

indirect estimates of the actual level of consumption when young. A finding that affordable old-age consumption is much smaller than the level of consumption when young would suggest inadequate saving. The study's results, however, provide no *prima facie* case that a large fraction of households significantly undersaves.

Chapter 18 was coauthored with Michael J. Boskin. This chapter presents a test of an important implication of Robert Barro's (1974) model of intergenerational altruism, namely, that consumption of altruistically linked individuals depends on the sum, not the distribution, of resources. Boskin and I test this proposition using US time-series data by considering whether aggregate consumption depends on the age distribution of resources as proxied by the age distribution of income. After controlling for demographics, we find that the age distribution of income remains a significant explanatory variable, contradicting at least our specification of the Barro model.

The final chapter, chapter 19, is coauthored with Alan J. Auerbach. This paper points out some serious problems with a number of recent time-series studies of consumption and Social Security and related time-series consumption analyses that ignore issues of aggregation and simultaneity. To demonstrate these problems, Auerbach and I simulate the introduction of unfunded Social Security using our life cycle simulation model. We then use the data from this simulation to estimate the time-series consumption regressions reported in the literature. Notwithstanding the fact that our data correspond perfectly to the theory being tested, the regression analysis based on these perfect data produces coefficients that would conventionally be read as rejecting both the life cycle model and Social Security's predicted impact on the life cycle model.