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ARTICLES

THE CURRENT LIFE INSURANCE CRISIS: HOW THE LAW SHOULD RESPOND

KYLE D. LOGUE*

Defend the Cause of the fatherless, plead the case of the widow.

Isaiah 1:17

INTRODUCTION

Imagine a household consisting of a wife and husband with two small children. One of the spouses is the "primary earner" (in the sense of being the one who earns the most income); the other spouse is either the "secondary earner" or stays at home with the children. Assume further that the family, which is wholly dependent financially on the wages of the spouses or of the single primary earner, has enough income to cover the household's current expenses and to begin saving for the couple's retirement. They even make enough to set aside a little cash each year for the children's college fund, and are slowly saving to make a down payment on a house (or maybe they recently bought a house and are just beginning to make payments on the mortgage). Things are going well. Life is good.

strikes. Then disaster The primary earner unexpectedly, either from a sudden illness or an accident. What happens to the surviving members of the family? Aside from the obvious grief and psychological trauma associated with such an event, what happens to them financially? Does their standard of living plummet, or are they able to maintain some semblance of continuity from their previous life to their The answer depends largely on whether the new one? household (typically the primary earner himself or herself) at some point had decided to buy life insurance on his or her life. If there is too little life insurance coverage, the family may be forced to change their lives drastically, abandoning the college

^{*} Professor of Law, University of Michigan. I appreciate helpful comments from participants at the 1999 Harvard Law School Seminar on Current Research in Tax Policy and the Michigan Law and Economics Workshop.

aspirations for their children and perhaps having to move to a smaller, less expensive home (or maybe giving up the hope of the newer, larger home for which they had been planning). Furthermore, the surviving spouse may be forced to take a second job or change careers or, if he or she had been a stay-athome spouse, to join the labor force and therefore alter drastically the family's plan for how the children would be raised. At the extreme, an inadequately insured household in such a situation would, despite the existence of social safety nets, be pushed into a state of profound and persistent poverty.¹

This hypothetical suggests the importance of thinking carefully about one's (and one's dependents') life insurance needs. Such thinking does not provide easy answers; rather, it only suggests more questions. Under what circumstances should a household buy life insurance? Clearly, the household described hypothetical above needs some protection, but whom else? On whose life should the policy be purchased? How much coverage is appropriate? What type of policy is best? The problem is that these are questions that most of us try to ignore most of the time. True enough, there may be a brief period in our lives when we give the idea of buying life insurance some sustained thought, such as when we get married or when we have our first child. We may even return to the topic, at least cursorily, each time we receive a cold call from a life insurance agent. Still, it seems safe to say that the vast majority of us, most of the time, try to put lifeinsurance questions out of our minds. By contrast, however, we seem to be growing increasingly obsessed with our investment portfolios, whether they be held inside or outside our 401(k) or Roth IRA plans. And on-line stock trading has become all the rage, even (and perhaps especially) for the most unsophisticated investors.

So why the reluctance to consider life insurance? The

¹See, e.g., Michael D. Hurd & David A. Wise, The Wealth and Poverty of Widows: Assets Before and After the Husband's Death, in The Economics of Aging 177 (David A. Wise ed., 1989) (discussing the high incidence of poverty among widows and exploring extent to which povert—status arises as direct result of death of husband); see also Cheryl D. Retzloff, LLIF, ACS, et. Al. 1998 Survivor Study: The Financial Impact of Death 5-18 (Judith R. Kulak, 1998) (In cases in which the pri—ar earner dies as the result of an extended illness, it appears the resulting povert—(or reduction in living standards) is a function not only of inadequate life insurance coverage but also less than full health and disability insurance).

obvious answer is that thinking about life insurance is much less enjoyable than thinking about our investments. Life insurance planning, as with all estate planning, requires us to contemplate our own mortality; whereas, in contrast, thinking about lifetime savings-the money we stow away each month in savings accounts, mutual funds, or individual stocks-enables us to daydream about the exotic locations we will visit in our retirement or the fancy colleges our children will one day attend. Or maybe the problem is that most of us hate the process by which life insurance has traditionally been marketed, with face-to-face interrogations by earnest but sometimes overeager life insurance agents, followed by a special medical examination that might include blood and urine tests. The privacy concerns raised by such medical tests, especially when conducted by or for the benefit of insurance companies, increasingly have become a source of acute anxiety for many. In any event, the following assertion seems true: we generally regard the topic of life insurance, and the process by which is it purchased, to be unpleasant and best avoided when possible.

That attitude, if pervasive, presents a profound problem. It raises the concern that those households that need life insurance most-for example, middle-income, wage-dependent households with small children-have too little coverage. More specifically, given the pervasively negative attitude towards the life insuring process, we should expect that a) too few households will buy life insurance on the lives of primary and secondary earners as well as on other members of the household, such as stay-at-home spouses, who provide substantial services; b) of those households that do buy life insurance, many will buy too little; and c) of those that buy enough coverage initially, many will fail to update their coverage to meet their changing needs. We would be right about these expectations. Recent empirical research on the subject suggests that there is widespread and substantial underconsumption of life insurance.² According to the most

Astonishingly little independent (that is, not industry- unded) research has been done on the question of 1 e-insurance adequacy. For the most comprehensive and sophisticated empirical study on the topic, see B. DOUGLAS BERNHEIM, ET AL., THE ADEQUACY OF LIFE INSURANCE: EVIDENCE FROM THE HEALTH AND RETIREMENT SURVEY (Nat'l Bureau of Econ. Research, Working Paper No. 7372, 1999). Before that paper, the leading studies were a series of articles by Alan J. Auerbach & Laurence J. Kotlikoff, see Al n J. Auerbach & L urence J. Kotlikoff, The Adaption of Life Insurance and Perchange 1.1 Fig. Instrumental Lation 215. Kotlikof, The Adequacy of Life Insurance Purchases, 1 J. Fin. Interme Iation 215

recent and most sophisticated study on the subject, fifty-five percent of households sampled were underinsured on the life of the primary earner, and twenty-one percent were underinsured on the life of the secondary earner.³ These findings are consistent with findings of prior research, what little exists. ⁴ Yet none of these studies examines the adequacy of life insurance on the lives of nonwage-earning household members, such as stay-at-home spouses. All of this evidence of insurance inadequacy comes despite the fact that, in 1998 for example, the per-household average amount of life insurance (for those households who had some type of life insurance policy) was \$165,800.⁵ That may seem like a lot of money, but it amounts to only 2.85 years worth of disposable income for the average household-not much for a young family, recently deprived of its primary or secondary earner, on which to live. ⁶

Even if true, why is this a regulatory concern? Why should the law, or the government more generally, do anything in response to this problem? The reasons are straightforward. From the perspective of one concerned with maximizing overall "social welfare," it can easily be shown that society is generally worse off when households fail to plan adequately for unexpected losses. As described in the hypothetical, underinsurance can produce involuntary reductions in standards of living, potentially below the poverty line in some cases. Note also that this concern with maximizing social welfare-and the worry that, with respect to life-insurance

^{(19 1) [}Hereafter Auerbach & Kotlikoff, Adequacy of Life Insurance]; see Alan J. Auerbach & Laurence J. Kotlikoff, Life Insurance Inadequacy-Evidence from a Sample of Older Widows (Nat'l Bureau of Econ. Research, Working Paper No. 3765, 1991). [Hereafter Auerbach & Kotlikoff, Sample of Older Widows]; see Alan J. Averbach & Laurence J. Kotlikoff, Life Insurance of the Elderly: Its Adequacy and Determinants, Work, Health, and Income among the Elderly: Qary Burtless ed., 1987). As will be discussed more fully below, all of these studies find a substantial degree of underinsurance. These studies can be contrasted with the hundreds of studies of savings behavior and adequacy that have been conducted.

³ Bernheim, et al., supra note 2, at 24.

⁴ See sources supra note 2.

⁵ AMERICAN COUNCIL OF LIFE INSURANCE, LIFE INSURANCE FACT BOOK at 12, TABLE 1.6 (1998). In 1997, Americans paid \$115 billion in premiums to life insurance companies. AMERICAN COUNCIL OF LIFE INSURANCE, LIFE INSURANCE FACT BOOK 64 (1998). By the end of 1997, the total amount of life insurance in force was roughly \$13.2 trillion. *Id.* at 2, table 1.1.

⁶ Id.

⁷ See generally Louis Kaplow & Steven Shavell, Fairness Versus Human Welfare, 114 HARV. L. REV. 961 (2000) (arguing that public policy should be made solely on the basis of effects on individual welfare).

decision making, that goal is not achieved-is almost identical with the concern that is presented by the problem of insufficient retirement savings; that is, when households put aside too little of current earnings to fund their desired postretirement standard of living. The problem of undersaving, however, has been widely acknowledged and exhaustively studied. In fact, the whole point of all the various tax breaks for retirement savings (IRAs and qualified pension plans), indeed the main reason for the Social Security system, is to deal with the problem of undersavings.8 Underconsumption of life insurance presents a similar problem.

It reasonably can be argued that the problem of underconsumption of life insurance potentially is of greater concern than the problem of inadequate retirement savings. Why so? Individuals who make retirement savings decisions are, after all, deciding not only about the financial future of their long-term dependents (and, by extension, their heirs) but also about their own financial futures. They are deciding what their standard of living will be as compared to their current standard of living 20, 30, or 40 years down the road. Although (as will be discussed further below) such a decision clearly presents myopia and over-optimism concerns, at least the decision maker is looking out for his or her own interests. With life insurance, things are different. The decision maker, typically the head of the household, is put in the position of looking out for the best interests of his or her dependents in some future, hypothetical state of the world, and one in which he or she (the insured, that is) will not be around to enjoy. Though altruism surely motivates many to make just such inter-temporal and state-dependent reallocations of resources, surely altruism for most people, in their everyday lives, still takes a backseat to self-interest. Put more concretely, when the decision is whether to allocate the next dollar to consumption today (a vacation, a new car, or a new stereo system today) or to consumption at some point in the future (a vacation, a new

⁸ JULIA LYNN CORONADO, DON FULLERTON, & THOMAS GLASS, Long Rune Effects of Social Secur ty Reform Proposals on Lifetime Progressivity (Nat'l Bureau of Econ. Research, Working Paper No. 7568), (Feb. 2000) There is, of course, a redistributive element to Social Security as well. The benefit formula is generally considered highly progressive. However, when the regressive Social Secur ty tax is taken into account, as well as intergeneral onal and within household effects, the overall Social Security system is only m ldly progressive. This fact suggests that the main reason for the system is forced savings. See id.

car, or a new stereo system some years down the road), though we are always worried about the tendency of the former to trump the latter, that tendency will be greatest when the person making the decision knows he or she will not be around to enjoy the future vacation, car, or stereo.

Given these concerns, it is no surprise that our government has already done *something* about the tendency to underpurchase life insurance. The United States government already spends a substantial amount of public money on the life-insurance problem in the form of tax subsidies⁹ as well as direct payments to widows, widowers, and orphans of deceased workers in the form of Social Security survivorship benefits.¹⁰ However, those expenditures turn out to be inadequate. That is, all of the empirical studies that have examined the question have taken into account public expenditures on life insurance, and *still* there is widespread and substantial underinsurance.

This article explores some of the issues raised by the new evidence of underinsurance. Part I explores the initial theoretical question: why do people buy life insurance? Put differently, what function does life insurance serve? Part II provides some background on the life insurance market as it currently exits. Thus, Part II summarizes the major types of life insurance that are currently offered and summarizes the main elements of the current regulatory regime for life insurance companies. Part III then provides support for the claim that households tend to drastically underconsume life insurance. Section A of that Part summarizes the existing empirical evidence, which finds substantial and widespread underinsurance. As I will point out, however, the scholars conducting those studies take pains to avoid reaching any normative conclusions based on their findings. In other words,

⁹ The Joint Committee on Taxation has estimated that in 2001 alone, approximately \$25 billion will be spent on federal income tax subsidies to encourage the private purchase of life insurance. Those subsidies consist of the income-tax exclusion for investment earnings on cash-value life insurance policies (an estimated \$23 billion tax expenditure for 2001) and the exclusion for employer-provided group-term life insurance (an estimated \$2 billion tax expenditure). STAFF OF JOINT COMM. ON TAXATION, 107th CONG., ESTIMATES OF FEDERAL TAX EXPENDITURES FOR FISCAL YEARS 2001-2005, 18 (Joint Comm. Print 2001).

 $^{^{10}}$ HOUSE COMM. ON WAYS & MEANS, 105th CONG., 1998 GREEN BOOK 15 (Comm. Print 1998) (descr bing the Old-Age, survivors, and disability Insurance (OASDI) programs) [hereinafter Green BOOK].

although they do find substantial and widespread underinsurance, (almost paradoxically) they assert that such a finding does not imply that too little insurance is being bought. There is no paradox, however. The economists are simply demonstrating their awareness of the theoretical difficulty of specifying the "right" amount of life insurance coverage. Although it is impossible to answer that question definitively, in section B, this article favors a baseline that defines adequacy as that amount of life insurance necessary to maintain the survivors' standard of living, which happens to be the baseline that the researchers used in their empirical studies. standard-of-living baseline will be controversial in some circles and, after a period of public debate, may be ultimately rejected. That outcome would be perfectly acceptable, so long as the debate takes place and households are forced to think seriously about what the right amount of life insurance is for their needs. Indeed, the main objective of this article is to start such a discussion.

However, this article seeks to push the debate one step beyond the adequacy question. Therefore, Part IV reviews a number of theoretical reasons why the economists' empirical evidence should be given a normative slant; that is, why the evidence should be interpreted as indicating a true underinsurance problem and why, therefore, further government intervention may indeed be appropriate. These "reasons to be worried" include the same sort of externality and behavioral rationales that have been offered for government intervention in other contexts.

Finally, Part IV builds on Parts II and III and assumes the reader has been persuaded sufficiently of the existence of an underinsurance problem to consider what the possible policy responses might be. For those acquainted with the standard debates regarding the funding and administration of social insurance programs, this framework will be familiar. For example, Part IV compares and contrasts the standard types of policy tools that are available to deal with this sort of problem, such as direct government provision, government mandates, or government subsidies. The purpose of Part IV, which draws heavily from the existing literature on optimal subsidy design, is not to provide a comprehensive legislative proposal, but rather to suggest avenues of further inquiry. This Part concludes that a promising approach would involve either (a) a

combination of some minimal amount of government provided term insurance (along the lines of what is currently provided through Social Security survivorship benefits, although perhaps made more widely available and with somewhat more generous benefits) and a demand-side subsidy either in the form of a deduction, a credit, or a voucher, or (b) a more generous level of government-provided or government-mandated coverage, but with the possibility for households to opt for less coverage.

Part IV also looks at the existing tax-subsidies for life insurance—the exclusion for employer-provided term insurance and the exclusion for investment earnings in cash-value life insurance policies—and discusses how those rules might be expanded to enhance the existing subsidy for life insurance purchases. The most novel and potentially controversial suggestion in this Part is that, contrary to prior scholarly analyses of the tax treatment of cash value life insurance, a case can be made that, given the nature of the underinsurance problem, those rules should be expanded rather than repealed, as previous scholars have argued.

I. THE FUNCTION OF LIFE INSURANCE

A. The Demand for Insurance Generally

Why do people buy life insurance in the first place? It is often said that the primary function of life insurance is to protect one party's pecuniary interest in the life of another, most often, to protect a family against the possibility of a breadwinner's premature death. Can more be said about this apparent need for economic security? Economists and psychologists have spent a great deal of effort over the years studying human decision-making under conditions of risk and uncertainty, and something (though not everything) can be learned from the insights their studies have produced.

According to the standard economic account of insurance, the purchase of an insurance policy by an individual is merely one manifestation of a general characteristic of human nature: namely, people seem to be "risk averse," at least with respect to

¹¹ See Kenneth Black, Jr. & Harrold D. Skipper, Jr., Life Insurance 326-27 (12th ed. 1994); and Emmett J. Vaughan & Therese Vaughan, Fundamentals of Risk and Insurance 12-13 (1999).

the possibility of large losses of the sort that insurance policies typically cover. A risk averse party is someone who would rather experience a certain loss (that is, pay an insurance premium to an insurance company) than face an uncertain prospect of equal expected value (that is, not buy the insurance policy and take his chances). 12 This observation has been formalized into the concave utility-of-income curve that is familiar to students of introductory microeconomics.¹³ The intuition underlying that concave curve is that, although individuals derive some utility from each new dollar received, they derive less utility with each succeeding dollar. In such situations, it could plausibly be argued that the relatively few dollars that go to pay the insurance premiums are "less costly"-less painful-for the individuals to lose (on a perexpected-dollar basis) than the much larger number of dollars that would be lost in the event of an uninsured catastrophic loss. In a sense, the idea of risk aversion is that not all dollars are created equal: some of the dollars that go to pay an uninsured catastrophic loss would have otherwise gone to purchase "necessities," whereas all of the dollars that go to purchase insurance come "off the top."14

In effect, then, an insurance policy can be understood as providing a means by which a risk averse individual transfers risk to an insurance company, which is assumed to be risk neutral (or at least less risk averse than the insured). When an individual purchases an insurance policy, she typically pays a certain premium (which approximates her expected loss for the period plus some loading charge) to the insurer, who agrees to

¹² Someone who is "risk preferring" would rather take the uncertain bet than the certain amount of equal expected value. The risk neutral party is indifferent between the two, caring only about the expected value of the options. For accessible discussion of risk aversion and, more generally, the economic theory of risk and insurance, see, e.g., A. MITCHELL POLINSKY, AN INTRODUCTION TO LAW AND ECONOMICS 53-58 (1989); STEVEN SHAVELL, ECONOMIC ANALYSIS OF ACCIDENT LAW 186-205 (1987).

¹³ That standard economic account is based on the expected utility theory of Von Neumman and Morgenstern. JOHN VON NEUMANN & OSKAR MORGENSTERN, THEORY OF GAMES AND ECONOMIC BEHAVIOR (1944).

¹⁴ A similar rationale is used to justify redistributive taxation; that is, the policy of progressive taxation is sometimes defended by reference to a hypothetical concave social marginal-utility-of-income curve. See, e.g., Joseph Bankman & Thomas Griffith, Social Welfare and the Rate Structure: A New Look at Progressive Taxation, 75 CALIF. L. REV. 1905, 1916-18 (1987) (explaining welfarist, utilitarian defense of progressive tax system).

cover the loss in question if it occurs.¹⁵ Why is the insurer willing to do this? Why is the insurer not also risk averse? The answer lies largely in the concept of "risk pooling." The insurer collects similar premiums from numerous insureds whose risk characteristics are essentially the same (in other words, they pose the same ex ante estimated expected loss to the pool) but whose risks are uncorrelated with one another.¹⁶ By pooling similar but independent risks in this way, the insurer benefits from the law of large numbers, which in this context says that the *estimated* loss payouts the insurer will have to make to insureds will approach the *actual* payouts as the size of the insurance pool increases.¹⁷ Thus, in effect, the sale of insurance policies by insurance companies to individual insureds has the welfare-enhancing effect of actually reducing societal risk.¹⁸

If the standard (rational actor) economic model can tell us that risk averse individuals will want to buy insurance¹⁹ and that insurance companies can, through risk pooling, satisfy that demand, what can they tell us about how much insurance

of the insurance period (typically one year). Then, at the end of the perenium is adjusted retrospectively to reflect the extent to which the loss experience of the insurance pool (of which the insured is a member) happened to diverge from what the insurer had predicted in setting the initial premium. Retrospective insurance, as with many types of coinsurance arrangement, amounts to a form of risk sharing between insured and insurer of the needed as which the members of the needed as which the needed as which the members of the needed as which the ne

¹⁶ Risk pooling does not work so well if all of the members of the pool are subject to the same risk-e.g., a hurricane insurance pool consisting entirely of houses in Key West.

¹⁷ VAUGHAN & VAUGHAN, *supra* note 11, at 15. "[B]y insuring a large number of insureds posing homogeneous and independent risks, an insurer can reduce the amount of variance in its expected losses to a very small range." Kenneth S. Abraham, Insurance Law and Regulation: Cases and Materials 2 (3 ed. 2000). ¹⁸ George L. Priest, *The Current Insurance Crisis and Modern Tort Law*, 96 Yale L.J. 1521 (1987). Because there are limitations on insurers' ability to reduce isk though pooling, especially for potentially catastrophic losses, primary insurers often will reinsure some portion of their risks with secondary or "reinsurance" companies, so that the risk pooling function can be taken to the next level. Vaughan & Vaughan, *supra* note 11, at 146.

¹⁹ This is not to say, of course, that individuals who are risk averse with respect to the possibility of large losses will be risk averse with respect to small losses. For example, many people who buy insurance of various sorts against catastrophic losses also buy lottery tickets. This observation has even been formalized. Applying the standard expected utility model, Friedman and Savage showed that a utility function which is concave at low levels of wealth and convex at high levels of wealth can explain why the same individual might buy both an insurance policy and a lottery ticket. Milton Friedman & Leonard J. Savage, *The Utility Analysis of Choices Involving Risk*, 56 J. POL. ECON. 279 (1948).

individuals will buy and what those policies will look like? That too is a question that economists have studied in depth, but no definitive answers have been reached, unless one is willing to make quite unrealistic assumptions about the state of the world. For example, according to the standard model, the purchase of "full" insurance coverage for a particular monetary loss-coverage with no deductibles or coinsurance or capswould be "rational," but only under a limited set of conditions, such as the absence of loading costs as well as moral hazard and adverse selection problems. Given, therefore, the prevalence of loading costs, moral hazard, and adverse selection, the standard models suggest that rational insurance policies would include something short of full coverage for monetary losses.²⁰

An important refinement of the standard economic analysis of insurance demand takes into account the possibility that some events cause not only monetary losses (that is, losses for which there is a ready monetary equivalent) but also nonmonetary losses (that is, losses for which there is *no* ready monetary equivalent).²¹ For example, if an individual loses an arm or a leg or, worse, a child in an accident, that individual would obviously suffer a catastrophic nonmonetary loss as well whatever monetary losses may be associated with such tragedies. Indeed, in such cases, the nonmonetary loss will constitute the majority (in some instances all) of the actual harm.²²

Whether individuals demand insurance against the

²⁰ For example, applying the standard model, it has been shown that 1) if the insurer is risk averse (and hence charges a disproportionately large loading charge), the insured would prefer a policy that includes some element of coinsurance; and 2) if the insurer is risk neutral (so that the loading charge is proportional to the actuarial value of the risk), the insured would prefer a policy with full coverage over some deductible. Kenneth J. Arrow, Essays in the Theory of Risk Bearing (19–1).

²¹ In the literature, the terms "pecuniary" and "nonpecuniary" are often used to describe what I am calling monetary and nonmonetary losses. See generally Steven P. Croley & Jon D. Hanson, The Nonpecuniary Costs of Accidents: Pain-and-Suffering Damages in Tort Law, 108 HARV. L. Rev. 1787 (1995).

²² With loss of a l mb, medical expenses and possibly lost income would qualify as monetary losses; but there clearly would be a large nonmonetary element as well. That is, assuming he could get the money, the individual certainly would be willing to pay more than the discounted present value of the future earnings associated with the limb to avoid the accident. With the loss of a child, no substantial monetary loss may in fact occur. Rather, the entire loss may be of a nonmonetary nature. Croley & Hanson, *supra* note 21, at 1884-85.

possibility of such nonmonetary harm is an interesting and difficult question. Applying a variant of the rational actor model, scholars have concluded that the answer turns on whether (and the extent to which) the event in question is expected to alter the individual's marginal utility of money.²³ On one hand, if the event is expected to have no effect on the individual's marginal-utility-of-money (that is, the next dollar in the "accident state of the world" is equal in value to the next dollar in the "no-accident state of the world"), the individual would ex ante demand full insurance against monetary losses (again, assuming no loading costs) but no insurance against nonmonetary losses. On the other hand, if the event is expected to increase the individual's marginal-utility-of-money (all else equal), she would demand more than full monetaryloss insurance coverage. Finally, to complete the picture, if the event is expected to reduce the individual's marginal-utility-ofmoney, less than full monetary-loss insurance would be demanded.24

In sum, the standard economic theory of insurance tells us that rational but risk-averse individuals will demand insurance

²³ If an individual's utility function (the marginal utility of dollars) changes as a result of a particular type of event (here, a nonmonetary loss of some sort), that individual's utility function is said to be "state dependent." Philip J. Cook & Daniel A. Graham, The Demand for Insurance and Protection: The Case of Irreplaceable Commodities, 91 Q. J. ECON. 143, 143-44 (1977).

²⁴ STEVEN SHAVELL, ECONOMIC ANALYSIS OF ACCIDENT LAW 229-30 (1987). The scholars who have studied this question often develop simple hypothetical examples to illustrate the point. For example, one scholar offers the following illustration:

Consider a business executive who runs recreationally and who loses a foot in an accident. . . . [T]he injury could increase the marginal utility of money for this consumer if it caused her to substitute travel or the symphony for running because these activities are more expensive. Here marginal utility could fall, however, if she substitutes reading for running.

Alan Schwartz, Proposals for Products Liability Reform: A Theoretical Synthesis, 97 YALE L.J. 353, 364 (1988). Thus, in the former case, the executive would ex ante demand insurance for the loss of her foot in order to shift income (via the insurance premium) from the non-injured state of the world to the injured state of the world in which travel (which is an expensive pastime compared to running) has become relatively attractive; whereas, in the latter case, she would not demand insurance for the loss of her foot, but might in fact demand some form of "disinsurance" (for example, less than full medical insurance for amputation accidents) in order to keep more of her dollars in the non-injured state of the world where they are relatively valuable. For a discussion of the concept of, and a survey of the literature on disinsurance, see generally Croley & Hanson, supra note 21, at 1800 n.47.

to cover them against a possibility of harm; and the amount of coverage (the fraction of the total potential loss that will be covered) will be difficult to predict a priori. It will depend on, among other things, whether there are severe moral hazard and adverse selection problems (which suggest the rationality of less-than-full coverage) and the effect of the potential harm on the individual's marginal utility of money (which can go either way).25

The Demand for Life Insurance В.

The foregoing survey of the theory of consumer demand for insurance can, in one sense, be applied straightforwardly to the life-insurance context. At first blush, we can analogize the purchase of life insurance to the purchase of commercial property insurance, for example. Under this analogy, the insured (the person whose death will trigger the payment of the death benefit) is viewed as an income-generating asset, whether the income is in the form of wages (for a breadwinnerinsured) or household services (for a caregiver-insured). The value of this human asset can be understood as the discounted present value of all the insured's expected future monetary and nonmonetary earnings (less the discounted present value of the insured's expected lifetime consumption expenditures on himself or herself).26 Likewise, the analogue to the purchaser of property insurance (the one seeking to shift the risk of losing the asset from him- or herself to the insurer) would be the beneficiary of the life insurance policy. This is the person presumably who has a financial stake in the insured's continuing to live his or her normal life span.²⁷ Therefore, if the

²⁵ In fact, the story is somewhat more complex than that. Recent experimental research in cognitive psychology has shown that human decision making sometimes exhibits persistent and perplexing anomalies—features that would not be predicted by expected utility theory. For an accessible and lucid summary of the literature studying these phenomena in a range of decision-making settings, see RICHARD H. THALER, THE WINNER'S CUR E: PARADOXES AND ANOMALIES OF ECONOMIC LIFE (1992). Some such anomalies have been documented in the context of insurance purchases. See, e.g., Eric C. Johnson, John Hershey, Jacqueline Meszaros, & Howard Kunreuther, Framing, Probability Distortions, and Insurance Decisions, 7 J. RISK & UNCERTAINTY 35 (1993) (summarizing anecdotal evidence and experimental studies demonstrating how various well known heuristics and biases affect insurance purchasing decisions). heuristics and biases affect insurance purchasing decisions).

²⁶ BLACK AND SKIPPER, *supra* note 11 at 83. Personal consumption would include, in the context, amounts expected to be donated to charity or any individual or institution other than the dependent beneficiaries.

²⁷ What is the precise nature of the "stake" that the dependent-beneficiary has in

beneficiary were risk averse, he or she would be willing to pay a premium to shift the risk of the insured's premature death to the insurance company.²⁸

This analogy to property insurance is almost perfect in situations involving the purchase of life insurance by one business partner on the life of another or by a company on the life of a "key employee."29 For example, the business partner who seeks to shift the risk of the other partner's premature death (and hence the loss of the valuable human capital that has been built up in that person) will purchase herself (or through the business on her behalf) the insurance policy on the other partner's life. The other partner may well return the favor.30 Perhaps a more common example of this type of life insurance is "key employee" insurance.31 With this type of life insurance, the employer seeks to protect itself against the loss of revenue (or the general disruption in business) that would result from the death of a particularly important employee, such as a top sales person or executive or, if the employer is a professional sports team, a star athlete.

However, in the vastly more frequent life-insurance scenario, the policy is purchased on the life of the breadwinner in a household (and much less often on the life of a primary caregiver as well), and the beneficiaries of the policy are the members of that household who are dependent on the breadwinner's income (or caregiver's care). There the property-insurance analogy weakens and the analysis becomes

the human capital of the insured? That is one of the difficult questions to which we will return below.

²⁸ Because everyone dies eventually and because most people stop being incomegenerating assets around age 65 when they retire, the risk in question is whether the insured will die prematurely or, more precisely, before the point at which the beneficiary is no longer dependent on the insured's income generating capacity.

²⁹ See generally Mark S. Dorfman & Saul W. Adelman, Life Insurance 438-64 (2d ed.) (1992)

³⁰ An interesting case involving life insurance purchased by business partners on each other is *Ryan v. Tickle*, 316 N.W.2d 580 (1982). There, two morticians went into the funeral home business together and took out life insurance policies on each other. When one of the partners died, the other sought to recover the proceeds of the policy. The legal issue was whether the widow of the deceased partner had standing to contest the beneficiary-partner's insurable interest. The court held that she did not. It has long been held that sole proprietors have an insurable interest in the lives of their partners.

³¹ DORFMAN & ADELMAN, *supra* note 29 at 438-64. ("A key employee is defined as any person whose death or disability would cause severe financial harm to the organization, whether it is a sole proprietorship, a partnership or a corporation.").

more complex.³² For one thing, it is the breadwinner (not the beneficiaries) who generally purchases and maintains the life insurance policy on his or her own life. Further, in households with two earners, it is usually the primary earner who actually buys the life insurance, in the sense of being the contact person with the insurance agent.³³ Of course, the biggest divergence from the property insurance analogy is that with life insurance, if the loss event occurs, the breadwinner-insured is no longer in the picture. The insured, therefore, is clearly not shifting any risk that he or she personally faces. The story is more complex than that.

Because of these misguided analogies to the propertyinsurance model, if we are to explain the breadwinner's (or primary earner's) decision to purchase life insurance (to agree to meet with the life insurance agent, have the physical exam, the blood test, and arrange to pay the premiums for the policy), we must adopt some theory of household economic decisionmaking. That is, we must answer the question: how does the household decide to insure its breadwinner(s) or caregiver(s)? If we take seriously the fact that the vast majority of policies are purchased by primary earners on their own lives, two general types of household consumption theories seem most promising. First, one could adopt an exchange theory, under which the insured agrees to purchase insurance on his or her life in exchange for something of value from the dependents in the household. Such a theory has some plausible explanatory power insofar as the primary beneficiary of the policy is the insured's spouse. However, an exchange theory would seem implausible, to the extent that the primary beneficiaries under the policy are small children. In such situations, it is difficult to imagine how the exchange would take place, because in most cases, the children will never be aware of the existence of the life insurance policy. In any event, by the time the children are in a position to offer anything of value back to the insuring parent, the policy often will have lapsed. In such cases, and to

³² Obviously there can be, and often is, more than one breadwinner within a household. Each breadwinner can be viewed as a dependent of the other breadwinner, in which case each might want insurance on the other's life, even without children in the picture. It is also true that in households with children whose primary caregiver is a stay-at-home parent (or other family member who does not charge for the services), insurance might be demanded on the life of that person even if that person is not also a breadwinner.

³³ Telephone interview with Dan Kirk, insurance agent (April 2000).

some extent for cases involving spouse-beneficiaries, an altruism theory seems more appropriate. That is, the party purchasing the insurance chooses to do so out of feelings of affection for the dependent beneficiaries. Obviously, the best explanation is probably some combination of altruism and exchange.³⁴

II. THE CURRENT LIFE INSURANCE MARKET

A. The Life Insurance Policy

To evaluate the question whether households are purchasing adequate amounts of life insurance, we first need to understand a few practical aspects of the life-insurance market, as it currently exists.³⁵ At the most basic level, a life insurance policy is a type of contract.³⁶ The simplest form of life insurance contract is the term policy. Under a term policy, the insurance company agrees to pay a predetermined amount of money-called the "face amount" or the "death benefit"-to the beneficiary named in the policy if the insured dies during the policy period, which is a period less than the insured's "whole life."³⁷ In return for this promise, the insured pays periodic

³⁴ There is voluminous economic literature on the subject of intergenerational transfers. That literature explores a number of alternative models for explaining bequests (inter vivos gifts from parents to children or from grandparents to grandchildren), including altruism theories, exchange theories, and precautionary saving theories. For a useful and recent survey of this literature, see Barbara H. Fried, Who Gets Utility from Bequests? The Distributive and Welfare Implications for a Consumption Tax, 51 STAN. L. REV. 641 (1999). As it turns out, no single theory does a good job of explaining all of the bequest-related evidence. Id. When children are the beneficiaries of life insurance policies, life insurance easily can be understood as a means by which the insured can transfer wealth (in this case, human capital) to the children. In such cases, the altruistic model seems clearly more plausible than the exchange model, because by the me the children are old enough to repay the parents for buying the insurance, the insurance typically is allowed to lapse (if it is pure term insurance).

³⁵ My discussion of the types of life insurance contracts draws heavily from KENNETH BLACK JR. & HAROLD D. SKIPPER, JR., LIFE INSURANCE (12th ed. 1994).

³⁶ For a discussion of the ways in which the informal aspects of the life insurance "relationship" between insured and insurance agent and insurer can be as important as the formal contractual aspects, see Tom Baker, Constructing the Insurance Relationship: Sales Stories, Claims Stories, and Insurance Contract Damages, 72 Tex. L. Rev. 1395 (1994).

³⁷ BLACK & SKIPPER, *supra* note 11, at 83. The "insured" is the person whose death triggers the payment of the death benefit to the beneficiary. ROBERT H. JERRY II, UNDERS ANDING INSURANCE LAW 273 (2d ed. 1996). The "policy owner" is the person with the power to designate the beneficiary under the policy and, with cash value policies, the right to receive the cash surrender value. *Id.* This paper uses the terms "insured" and "policy owner" synonymously, although they need

premiums to the insurer which the insurer invests. characteristic of term life insurance is that if the insured fails to renew or cancels his policy, the coverage will cease and any premiums that have been paid (and earned) will not be refunded. Thus, term insurance is, in one sense, temporary. The insured is covered only during the term of the policy period. When an individual purchases term life insurance, the contract typically provides for guaranteed renewal for a set number of years. Policies often provide guaranteed renewals up to age sixty-five or even seventy (but almost never beyond seventy).38 The longer the guaranteed renewal period, the greater the protection for the policyholder against the possibility that he or she might become uninsurable, for example, as a result of a serious illness. That extra security, however, comes at a cost of higher overall premiums. The alternative, which is also available, is a term policy that allows for renewal at various points but requires proof of insurability at those points. Those policies are cheaper, but they leave the insured with the risk of becoming uninsurable.

Standard renewable term insurance calls for premiums to increase each year to reflect the increased likelihood of death during the policy period as the members of the risk pool age.³⁹ Also available, however, are fixed renewable term policies that provide not only for a guaranteed renewal for a given period of time, but also for a fixed annual premium over the life of the policy. Given the increased risk of death associated with aging, fixed renewable term policies necessarily involve some degree of intra-insured cross-subsidization-that is, the insured pays higher than actuarially fair premiums in the early years, but lower than actuarially fair premiums in the later years.⁴⁰ The amount of the term premium is a function of the insured's risk factors (such as age, smoking status, medical history, and cholesterol level) and the amount of coverage purchased. In a competitive market, the premiums charged to a given insured approximate the average mortality risk of the members of the risk pool in which the insured is grouped. Most term policies

not always be the same person.

³⁸ BLACK & SKIPPER, supra note 11, at 84-85.

³⁹ Id. at 89.

⁴⁰ An intermediate type of policy that is often sold allows for level premiums for each policy period with premium increases at each renewal point (which might occur at five or ten year intervals, for example). See id.

involve increasing premiums over time and a level death benefit. Some, however, involve a decreasing death benefit.

A somewhat more complex type of life insurance contract is the "cash value" policy. On a superficial level, a cash value policy looks like a term policy. The insured-investor pays a "premium" to an insurance company that agrees, in the event of the insured's death, to pay a specified amount called the "death benefit" to the beneficiaries listed on the policy. But the two types of life insurance are in fact quite different. In effect, a cash value policy is two products bundled together: term life insurance and an investment vehicle.⁴¹ Hence, when the insured pays the premium to the insurer, that amount is both insurance premium and side-fund investment.⁴² In other

⁴¹ BLACK & SKIPPER, supra note 11, at 177.

⁴² The terminology used within the industry to describe various types of cash value policies can be confusing, and it can also be important. "Cash value life insurance" is a generic term that describes the category of life insurance contracts that provide both for a term insurance element and a savings element. The term that provide both for a term fisherance element and a savings element. The term that was traditionally used to describe this type of policy was "whole life insurance," which derived from the fact that all such policies were in theory designed to provide coverage for the "whole life" of the insured. Almost all cash value policies provide for whole life coverage. "Term life insurance," as has been mentioned, covers the insured only for the term of the policy period.

AMERICAN COUNCIL OF LIFE INSURANCE, LIFE INSURANCE FACT BOOK 5 (1998). Today, because all cash value policies are desi ned to cover the insured-investor for his or her entire life, the term "whole life insurance" has come to mean a particular type of cash value policy-one t at has fixed annual premiums, a fixed death benefit, and whose cash value is a function of, among other things, the investment earnings of the insurer but whose cash value is not, technically, kept in a separate account on behalf of the insured. BLACK & SKIPPER, supra note 11, at ch. 5. The other major classes of cash value policies are "universal life" and "variable life" policies. *Id.* at 114, 126. What distinguishes universal life insurance from traditional whole life is that universal allows variation in the amount of premiums that are paid in each policy period and in the death benefit options. In addition, universal policies tend to provide a clearer accounting of their internal cost-benefit structure, listing the mortality charge applied each year and the amount of interest credited to the insured's cash value account each year. Variable life policies are distinguished by the fact that the cash value of the policies is placed in a separate account protected from the insurers' creditors. The insurer, as the trustee of the insured, manages the account. The insured is permitted within certain limits to direct how the cash value will be invested. Variable life policies generally offer the insured an array of mutual fund options, ranging from bond funds to ag ressive growth or equity index stock funds. With variable life policies, the amount of the cash value varies with the value of the insured's cash value account, which variations can cause changes in the amount of the death benefit depending on the terms of the policy. Variable life policies, which are the fastest growing segment of the individual life market, can have elements of universal policies-namely, flexible premium payments and adjustable death benefit options. With the development of the variable life policy, it is possible to replicate virtually any side fund investment approach within a cash value policy. See generally id. at chs. 5 & 6.

words, only part of the premium goes to purchase actual life insurance coverage. (That portion is sometimes called the "mortality charge" or "actuarial charge.") The rest goes into some type of investment account that is held and managed on behalf of the insured. It is that account which is sometimes referred to as the policy's "inside buildup," because it grows as the investment earnings accumulate over time. It is also called the "cash surrender value," because it is the amount that can be withdrawn by the policyholder when she cashes in (or "surrenders") the policy. The death benefit on a cash value policy always consists of a combination of pure term insurance proceeds as well as return of investment.⁴³

B. The Regulation of Life Insurance

All insurance companies (including life insurance companies) doing business in the United States are regulated at the state level by state Departments of Insurance, headed by elected or appointed Commissioners of Insurance.⁴⁴ These state insurance regulators, among other things, monitor insurer solvency (both the assets and liabilities of the insurance companies), insurance prices (for both "reasonableness" and "adequacy"), policy terms, and agent conduct.⁴⁵ Most of this

⁴³ In the early years of a policy, the insurance element is relatively large; in the later years, assuming the cash value has increased (that is, none of the surrender value has been removed from the policy), the insurance element becomes increasingly small. *See* BLACK & SKIPPER, *supra* note 11, at 130. At some point, assuming the insured-investor lives long enough, the cash value will equal the death benefit and the proceeds will be paid out. This is called the "maturity date." *Id.* at 131.

All life insurance can be categorized either as individual or group coverage. Life Insurance Fact Book, *supra* note 5, at 1. Individual life insurance—which includes cash value and term insurance—typically is sold to individuals by agents. *Id.* at 3. This type of policy is sometimes called ordinary life insurance, although technically the latter term is a slightly narrower category. *Id.* Group insurance is a contract that provides life insurance to a group of individuals. A common example is employer-provided group insurance to all employees of the firm. *Id.* at 16. Both cash value and term policies can be purchased as group coverage, although group term policies are much more common than group cash value policies. *Id.* at 16-18. Indeed, by some measures, group term life insurance is the most prevalent type of term life insurance coverage in the U.S. today. *Id.* ⁴⁴ Jerry, *supra* note 37, at 98. State insurance regulators, on the basis of their authority under the U.S. Constitution and under the McCarran-Ferguson Act, generally require any insurance company engaged in the business of selling insurance contracts in their state to be licensed in that state. Peter M. Lencsis, Insurance Regulation in the United States: An Overview for Business and Government 25-26 (1997).

⁴⁵ JERRY, supra note 37, at 84-95.

regulation can be justified on standard consumer protection grounds.46 For example, the regulation of insurer solvency and of pricing adequacy is deemed necessary to guarantee the credibility of insurer promises, implicit in every insurance contract, that the insurer will have sufficient assets to cover the policyholder's claim if and when it is filed. The necessity of such regulation depends on the assumption that consumers, on their own, cannot judge adequately the credibility of insurers' promises to "be there" when the time comes-that is, they cannot judge whether the insurer will have sufficient assets to cover all of its liabilities. Other similar consumer protection stories are needed to explain statutorily mandated policy terms, such as incontestability clauses47 and nonforfeiture provisions.48 Although many insurers would provide such provisions in the absence of legal requirements, the fact that the mandates have been adopted presumes a need for consumer In addition, various legal doctrines have developed, such as the doctrine of reasonable expectations, that also have a consumer protection underpinning. doctrines protect insurance purchasers from their inability or unwillingness to read the fine print in their insurance policies and to investigate the companies thoroughly.49

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⁴⁶ For a general discussion of the economic rationales for various forms of insurance regulation, see SETH J. CHANDLER, INSURANCE REGULATION, ENCYCLOPEDIA OF LAW AND ECONOMICS (1999).

⁴⁷ An incontestability clause provides that after a policy has been in force for two years, the policy's validit will become "incontestable," which means that the bases on which an insurer can contest coverage or decline to pay a claim are severely limited. JERRY, supra note 37, at 703. Such clauses have long been included in life insurance contracts, as a response to the fear that insurers, after taking the policyholder's money for all those years, would turn around and refuse to pay a death claim because of some technical flaw in the application process. Id. (dating incontestability clauses to late nineteenth century). The idea behind the clauses is that insurers have two years to make sure that the policy is valid-to verify the representations made in the application, for example-and after that, the policyholder (that is, the household that will be depending on the insurance proceeds) can count on the insurance proceeds being paid if the insured dies. Many states have enacted statues requiring such provisions. Id.

⁴⁸ In the past, life insurance policies had no cash values, thus, when policies were canceled or allowed to lapse, the policyholder "forfeited" any "excess" contributions. BLACK & SKIPPER, supra note 11, at 202. Standard nonforfeiture laws govern how insurers must proceed in calculating and reporting their "nonforfeiture values" -that is, the minimum amount that a cash value policyholder will receive upon termination of the policy. Id.

⁴⁹ According to one leading treatise on insurance law, the doctrine of reasonable expectations, derived from numerous court decisions, can be summarized as follows:

A somewhat different concern motivates the requirement in every state that a party purchasing a life insurance policy have an "insurable interest" in the life of the insured. The insurable interest doctrine, which applies to all forms of insurance in every state, historically has been understood to serve two functions: a) to discourage the use of insurance contracts as a form of gambling, and b) to reduce the incentive of policyholders to cause the event that is insured against.50 The idea is that if the policyholder stands to lose something (his or her insurable interest) if the loss event occurs, then the purchase of an insurance policy is not really like gambling and, of course, the moral hazard concern is lessened. With property insurance, the question is whether the insured has some economic interest-be it a "legal interest" or a "factual expectancy interest"-in the property being insured. With life insurance, the analysis is more subtle. First, a person is presumed to have an insurable interest in his or her own life. Second, if a party wants to take out an insurance policy on another person's life, that party must demonstrate either a substantial pecuniary interest in the life of the insured or a close familial tie (which is presumed to be a proxy for a financial interest).51This article focuses on intra-household life insurance, because it is with respect to that type of life insurance that the theory and evidence, discussed below, suggest a problem of inadequate coverage.

In general, courts will protect the reasonable expectations of applicants, insureds, and intended beneficiaries regarding the coverage afforded by insurance contracts even though a careful examination of the policy provisions indicates that such expectations are contrary to the expressed intention of the insurer.

ROBERT E. KEETON & ALAN I. WIDISS, INSURANCE LAW (Student's ed. 1988). The justifications for this doctrine clearly invoke consumer protection concerns, such as the fact that insurance contracts are long and impossibly complicated and that insurer marketing practices can be misleading. *Id.* at 634-36. ⁵⁰ *Id.* at 173.

⁵¹ *ld.* at 179. (stating that "[t]he common or unifying characteristic of these two types of relationships is that in both there is a reason for the beneficiary of the life insurance to anticipate that some economic benefits either will or may result from the continuation of the [insured's] life...."). In general, an individual has an insurable interest in all of the members of his or her nuclear family, including a spouse or minor child. A minor child has an insurable interest in the life of a parent. *ld.* at 181.

III. DEFENDING THE CLAIM OF LIFE-INSURANCE INADEQUACY

A. Empirical Research on Life-Insurance Adequacy

By far the most sophisticated study of life-insurance adequacy ever completed is the most recent one, authored by B. Douglas Bernheim, Lorenzo Forni, Jagadeesh Gokhale, and Laurence J. Kotlikoff, the results of which have been made available in a working paper entitled *The Adequacy of Life Insurance: Evidence from the Health and Retirement Survey.*⁵² That article builds on a model of life-insurance adequacy developed by Alan Auerbach and Laurence Kotlikoff in a series of papers in the late 1980s and early 1990s.⁵³ According to this approach, "life insurance is defined to be adequate if the survivor's highest sustainable standard of living after the death of a spouse is equal to or greater than the couple's highest sustainable standard of living if both survive."⁵⁴ If the household's standard of living would decrease when a spouse dies, that household would be considered underinsured.

Although this basic approach is the same as the earlier studies', there are two important differences: First, the Bernheim study examines much more recent data.⁵⁵ Second, the Bernheim study adjusts for a number of important factors that prior studies did not, including liquidity constraints and changes in household composition over time (such as the presence of children). The authors make a number of assumptions to make the enterprise tractable. First, they define the "household" to include husbands and wives until their deaths and children until they reach age eighteen.⁵⁶ Second, the authors make assumptions about the household utility function that allows them to predict how the death of a

⁵² Bernheim et al., supra note 2.

⁵³ Auerbach & Kotlikoff, *Life Insurance of the Elderly, supra* note 2; and Auerbach & Kotlikoff, *Adequacy of Life Insurance, supra* note 2.

⁵⁴ BERNHEIM et al., supra note 2, at 6"[W]e consider the level of life insurance to be adequate if it allows an individual and his or her children to sustain his or her living standard upon the death of a spouse." Id at 2. By adopting a standard-of-living baseline, the authors simply have relied on their own intuitions as to the choice of a useful benchmark and have not attempted to rely on some derivation of the VNM utility function.

⁵⁵ Whereas the prior studies were based on data from the 1960s and 1970s, this study looks as data from the 1992 wave of the Health and Retirement Survey (HRS). *Id.* at 2.
56 *Id.* at 7.

breadwinner will affect household consumption patterns.⁵⁷ Along the same lines, they treat certain types of expenditures—such as housing costs, college tuition and wedding expenses for children, and funeral costs—as being fixed, by which they mean that those expenses would not be reduced or eliminated in the event of the death of an adult in the household.⁵⁸ Finally, the software package the authors use employs a sophisticated approach to measuring Social Security benefits (including survivorship benefits), income and payroll taxes, and tax-deferred retirement savings.⁵⁹

For a more detailed discussion of the study's methodology, data, and findings, the reader is encouraged to refer to the paper itself.⁶⁰ This article only summarizes some of the more noteworthy results. The most general conclusion is that underinsurance is indeed widespread-for husbands and wives, for primary earners and secondary earners, for the relatively young and the relatively old, and for high income and low income households.⁶¹ However, the prevalence and severity of underinsurance does exhibit some patterns: the problem is much more concentrated in some areas than in others. For example, a higher percentage of households are underinsured on the husband's life rather than on the wife's life.⁶² The discrepancy in adequacy is even greater as between the lives of primary earners⁶³ and those of secondary earners.⁶⁴ Also, in

⁵⁷ Id. at 8.

⁵⁸ Id. at 9.

⁵⁹ Id. at 10-11. The study also leaves out a few things. For example, it does not attempt to take account of the possibility that a surviving spouse will remarry. It justifies this assumption on the theory that "the economic well-being of a remarried individual may be determined by his or her financial status prior to remarriage, insofar as this affects bargaining power within the new marriage." Id. at 12 (citing Shelly Lundberg, Family Bargaining and Ret rement Behav or, in Henry Aaron ed.), BEHAVIORAL ECONOMICS AND RETIREMENT POLICY (forthcoming 1999).

⁶⁰ This paper can be found at http://www.nber.org/papers/w7372.

⁶¹ See Bernheim et al., supra note 2, at 24. Three categories of underinsurance were defined: If the death of a spouse would reduce a household's standard of living at all, the household was said to be merely "underinsured" with respect to that spouse. If the reduction would be between 20% and 40%, the household was "significantly underinsured." And if the reduction would be greater than 40%, the household was "severely underinsured."

⁶² In terms of mere underinsurance, fifty-one percent of households were underinsured on the husband's life, and twenty-four percent on the wife's life. With respect to severe or significant underinsurance, the numbers are thirty percent (for husbands) and twelve percent (for wives). Id.

⁶³ Fifty-five percent of households underinsured; thirty-four percent significantly or severely so. *Id.*

households with single earners, the underinsurance problem on the life of the sole earner is quite pronounced.⁶⁵ One clear message comes from all of these numbers: underinsurance, as defined in this study, is alarmingly high with respect to the lives of primary earners.⁶⁶ The authors also find that the prevalence and degree of underinsurance are greatest in relatively young households.⁶⁷ Perhaps this should be expected, given that younger households have more human capital (that is, future earnings) to protect. Also, it is not surprising that underinsurance is most pronounced in households with children.⁶⁸ Taking all of these results into account, the authors conclude that their "results point to widespread underinsurance."⁶⁹

Similar conclusions were reached in prior studies. In the late 1980s and early 1990s, Auerbach and Kotlikoff concluded that a significant minority of households that were nearing or in retirement in the late 1960s had inadequate life insurance coverage. Those studies found further that almost one-half of households "at risk" (those for whom a substantial fraction of household assets will disappear with the death of the husband or wife) had inadequate life insurance. The authors therefore

⁶⁴ Twenty-one percent of households underinsured; eight percent severely so. The reason for the greater discrepancy with respect to primary and secondary earners is, of course, that some wives are primary earners within their households. *Id.*

⁶⁵ In such households, roughly twenty-one percent are *severely* underinsured, and another fourteen percent are significantly underinsured, on the life of the primary earner. *Id.* at 26.

by the patterns emerge. For example, underinsurance tends to fall as income rises at the lower levels of income; then it levels off (that is, underinsurance tends to remain constant as income rises) at moderate levels of income. Id. at 25. However, when it comes to significant and severe underinsurance, the tendency is the reverse. Both significant and severe underinsurance tend to dec ea e with income at low levels of income and to rise with income at high levels of income. Id. What explains this result? The authors suggest that significant and severe underinsurance on the lives of primary earners in the highest-earning households is to be expected because "these households are more likely to have a single high earner, and because Social Security survivor benefits replace a much smaller fraction of income." Id.

⁶⁷ For example, in households with husbands and wives who are in their forties, seventy-one percent of households are underinsured, and forty-nine percent are significantly or severely underinsured, on primary earners. *Id.* at 27.

⁶⁸ In households without children present, for example, there was considerably less underinsurance (fifty-two percent) and significant and severe underinsurance (thirty-one percent) than in households with children present (sixty-nine percent and forty-seven percent, respectively). *Id.* at 28.
69 See generally BERNHEIM, supra note 2.

predicted that roughly one-third of the older wives in their sample would have experienced twenty-five percent or greater reduction in their living standards had their husbands died during the survey year. They predicted greater insurance shortfalls for younger widows. They predicted similar results in another study, this time of data compiled from surveys of a cross-section of U.S. households consisting of married couples with husbands between the ages of thirty-five and fifty-five. In that study they also found that a significant minority of households were underinsured with respect to the lives of the husbands. The underinsurance problem was most pronounced in the households in which women were considered "at risk" in the following sense: over half of the household's total life-contingent assets were attributable to the husband's life.

All of those findings, the authors conclude, probably understate the extent of the underinsurance problem for several reasons. First, the authors' calculations assumed no economies of scale in shared living arrangements.⁷⁴ If such economies exist, if "two can live cheaper than one," then a larger amount of insurance would be needed to maintain a given standard of living. For simplicity, they assumed no such economies. Second, the SRI surveys included little data on private pension benefits.⁷⁵ Because most private pensions at the time were defined-benefit rather than defined-contribution plans, and because such plans at the time typically did not offer joint-survivorship benefits, this omission probably caused the underinsurance problem to be understated. Third, Auerbach and Kotlikoff made no effort to take account of consumption requirements of small children Adding children to the mix almost certainly household.⁷⁶

⁷⁰ Auerbach and Kotlikoff, Sample of Older Widows, supra note 2, at 6.

^{71 [}d. at 7

⁷² Roughly twenty-five to thirty percent of the households in the survey would have suffered a reduction in standard of living of at least thirty percent, and fifteen percent would have suffered at least a reduction of fifty percent had the husbands died. Auerbach & Kotlikoff, *Adequacy of Life Insurance Purchases*, supra note 2, at 233.

⁷³ In those households, twenty percent of wives would lose fifty percent or more of their standard of living, and forty-one percent would lose thirty percent or more, if the husband were to die in the survey year. *Id.* at 234.

⁷⁴ Id. at 240.

^{75 [}d.

^{76 [}d.

would increase the amount of coverage on a breadwinner's life necessary to prevent a drop in consumption power in the event of his or her death. Fourth, when calculating the value of each spouse's human capital, Auerbach and Kotlikoff assumed zero growth in the real rate of earnings.⁷⁷ Of course, it is possible that real earnings could stay the same over time, or even decrease, but it is most likely that real earnings would increase with age, especially between the ages of thirty-five and fifty-five. Thus, an assumption of zero growth would tend to understate the underinsurance problem.⁷⁸

In sum, all of the academic studies of life-insurance adequacy have concluded that life-insurance "inadequacy" is pervasive and in some cases severe. Additional (albeit weak) support for the claim of underinsurance comes from insurance-industry lore and survey research. First, there is an industry rule of thumb that a "typical" household (one that includes two adults and two children) should have life-insurance coverage that equals between five and seven times its annual income. For whatever that rule of thumb is worth,⁷⁹ industry research indicates that many households do not come close to meeting that coverage. For example, according to one study, the average level of coverage was roughly 2.85 times the average annual household income for the sample.⁸⁰

⁷⁷ Id. at 228.

⁷⁸ Because the Bernheim study addresses all of these shortcomings-it accounts for economies of scale, it incorporates a great deal of pension information, it includes the presence of children, and it accounts for earnings growth-it is not surprising that their study finds underinsurance to be more prevalent and more severe than the Auerbach and Kotlikoff studies did. Compare Bernheim, et al., supra note 2 with Auerbach & Kotlikoff, Adequacy of Life Insurance Purchases, supra note 2. Another interesting finding in that particular Auerbach and Kotlikoff paper was that households rarely updated their coverage. Auerbach & Kotlikoff, supra note 2 at 3. That discovery is especially noteworthy because the survey was conducted during and after periods of rapid inflation, when theory would suggest that insurance coverage (which is almost never indexed for inflation) would need to be increased regularly. This failure to adjust one's coverage over time could be responsible for at least some of the underinsurance problem.

⁷⁹ Some life insurance experts contend that any life-insurance "rule of thumb" is basically worthless. JOSEPH BELTH, LIFE INSURANCE: A CONSUMER'S HANDBOOK (2d ed. 1985). The claim is that an accurate determination of life insurance need is too contingent on various factors that differ significantly from one individual to the next for any rule of thumb to be of use. Cf. BLACK & SKIPPER, supra note 11, at 326-73 (showing the detailed calculations necessary to determine life insurance adequacy).

⁸⁰ AMERICAN COUNCIL OF LIFE INSURANCE, supra note 5, at 12.

B. Reasons to Be Worried

One might be tempted to conclude that the findings of insurance inadequacy summarized above are, by themselves and with no further justification, sufficient to warrant a call for swift government intervention. That would be a mistake. Although the studies provide grounds for concern, there remains a considerable degree of uncertainty about how to interpret those results. Recall, for example, that the Bernheim study chose as its baseline of insurance adequacy the standard of living prior to the breadwinner's death.81 That is certainly a defensible benchmark, even an admirable one, but it clearly is not the only plausible one. Moreover, although the Bernheim study concludes that underinsurance is widespread, the authors nevertheless take great pains to emphasize the nonnormative nature of their study.82 They make clear that their definitions of "inadequacy" and "underinsurance" are not meant to carry any normative implication.83 For example, in the introduction the authors say:

It is important to emphasize that we do not equate adequacy with rationality. A couple might purchase relatively little life insurance for a variety of economically legitimate reasons. For example, the household's decision maker(s) may place relatively little weight on the well being of the secondary earner, or may regard life insurance as excessively expensive. Thus, the current study is not intended to shed light on the rationality of life insurance purchases.⁸⁴

At the beginning of their "Methodology" section, they state that

The adequacy of a household's life insurance is in the eyes of the beholder. Virtually any level of life insurance can be rationalized as reflecting the maximization of some intertemporal and state-specific preference function. Nevertheless, we think it possible to establish meaningful benchmarks and to evaluate the adequacy of insurance in comparison to these benchmarks. In so doing, it is important to emphasize that significant deviations from the benchmarks do not necessarily reflect irrationality. Rather, they simply indicate the extent to which actual choices either fall short of or exceed some easily interpreted target.⁸⁵

⁸¹ BERNHEIM, et al., supra note 2, at 6.

⁸² Id. at 3.

⁸³ Id. at 2-3.

⁸⁴ Id. at 2-3.

⁸⁵ Id. at 5-6.

Finally, consistent with their non-normative approach, in the conclusion of the paper, although the authors report "widespread underinsurance," they make no policy recommendations.⁸⁶

Why does the Bernheim study go to such lengths to emphasize the non-normative nature of their enterprise (despite the use of the term "adequacy" throughout their paper)? The reason is simple: identifying definitively a single "optimal" or "adequate" amount of life insurance for a given household is impossible. What seems odd, however, is the implicit assumption that such indeterminacy precludes any normative judgment whatsoever. Since when? For example, a clever scholar could come up with a model to explain virtually any pattern of consumption over time, even one that entailed almost no retirement savings. And yet countless scholars and policymakers operate under the assumption that some level of government intervention, either a tax subsidy for retirement savings or some form of compulsory retirement savings, is appropriate.⁸⁷

The reason, of course, is that we easily can envision all sorts of pathologies-ranging from standard externality stories to myopia stories-that would lead individuals to undersave for retirement. A similar set of stories as well as a few additional ones can be offered at least as persuasively in support of government intervention in the life insurance market.

Adverse Selection

For starters, consider one of the most commonly offered justifications for social insurance regimes: the problem of adverse selection. In the life-insurance context, adverse selection occurs when some individuals are more informed about their own statistical life expectancy than insurers are. In such a situation, premiums tend to be inefficiently high, as insurers will be compensating for the fact that the relatively high-risk individuals will tend to "adversely select" into the

86 *Id.* at 35. The absence of a normative element and a poic recommendation is something of a departure from the earlier Auerbach and Kotlikoff studies, which concluded with recommendations of increased survivorship benefits.

⁸⁷ See, e.g., HARVEY S. ROSEN, PUBLIC FINANCE 197 (4th ed. 1995) ("[I]t is popularly believed that in the absence of the Social Securit program, most people would not accumulate enough assets to finance an adequate level of consumption during their retirement.").

insurance pool. As a result, all other individuals will tend to purchase less than optimal life insurance coverage or perhaps even forego coverage altogether.⁸⁸

2. Negative Externalities

Next, consider how standard externality arguments might be applied to life insurance. The breadwinners in a household may anticipate that if they die leaving survivors who are destitute, the extended family and friends of the survivors as well as local charitable organizations, will step in to fill the breach. If so, an externality were created, which means a lower amount of life insurance will be purchased than would be the case if such informal sources of support were not available. This conclusion assumes of course that the extended family members, friends, and charitable organizations realistically never have an opportunity ex ante to contribute to the purchase of insurance on the life of the breadwinner in question, an assumption that seems quite plausible.⁸⁹ Likewise,

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application process for individual policies are not perfect.

89 Indeed, it is difficult to imagine grandparents, aunts, uncles, cousins, and friends approaching an individual and suggesting that if he would increase his life insurance coverage they would all bear the extra cost to spare themselves the cost, ex post, of contribu ng to the support of the survivors. Of course, one could also argue that relying on friends and family in this way is a desired form of insurance rather than a type of externality. Indeed, in one sense, reliance on family and friends is the original form of life insurance, and it may continue to be a type of life insurance that we want to encourage. That is, one might argue that society benefits-perhaps f om an increased sense of community-when extended family and friends are expected to bear some of the load of a breadwinner's death. That reasoning, if persuasive, would tend to cut against the finding of underinsurance. However, if we take that argument seriously here, we would need to do so elsewhere as well. For example, on similar reasoning, we might

⁸⁸ See generally id. at 196-97 (summarizing the adverse selection justification of social insurance). For the seminal, albeit technical, article on adverse selection, see Michael Rothschild & Joseph Stiglitz, Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Informat on, 90 Q. J. ECON. 629 (1976). Of course, insurance companies attempt to counteract adverse selection in several ways. For example, the development of employer-provided group life insurance may, in part, be attributable to the way that group underwriting (in contrast with individual underwriting) responds to the adverse-selection effect. Moreover, insurers have developed ways of comba ng the most egregious forms of adverse selection, even for life insurance policies sold to individuals. For example, in addition to the usual battery of medical-history questions that are asked of every insurance applicant, advances in medical technology such as new blood and urine tests help life insurers to segregate the high, medium, and low risk individuals into separate pools. Neither of these approaches, however, completely eliminates the problem. With group life insurance, there is still a greater tendency for high-risk individuals than for low-risk individuals to buy the group term coverage at any given price. Additionally, the blood tests and application process for individual policies are not perfect.

government-provided survivorship benefits tell a similar sort of externality story. That is, one could argue that underinsured households externalize costs to all taxpayers because of the payroll-tax-funded Social Security survivorship benefits. 91

3. Myopia or Lack of Self Control

What about the myopia argument? In the context of retirement savings, it is often argued that some type of compulsory savings or transfer system (such as the Social Security system), or at least some type of government subsidy for retirement savings (such as IRAs and 401(k) plans), is justified on the theory that young individuals do not plan adequately for the future.⁹² A number of possible reasons to suspect such myopic savings behavior exist: (a) people may lack the information necessary to judge their needs in retirement; (b) people may be unable to make effective decisions about long-term issues because they are unwilling to confront the aging process; and (c) they simply may apply an inappropriately high discount rate to the future. 93 These arguments would seem to apply with at least as much strength in the context of life insurance purchases: (a) households (or breadwinners as agents of households) really do not know what the households' financial needs will be in the event of a

want to discourage retirement savings so as to encourage reliance by aging parents on their children's resources.

⁹⁰ Cf. Lawrence H. Summers, Some Simple Economics of Mandated Benefits, 79 Am. ECON. REV., May 1989, at 177, 178 (describing similar externality in context of health insurance); John Laitner, Bequests, Gifts, and Social Security, 55 REV. ECON. STUD. 275 (1988) (describing similar externality, or rational free-riding myopia, in context of retirement savings).

⁹¹ "Families [who purchase inadequate life insurance] may choose to rely on existing government welfare programs if premature death of the family provider occurs." Treasury Report, *infra* note 176, at 40; *see also* Summers, *supra* note 90, at 178.

⁹² See, e.g., ROSEN, supra note 87, at 197; CASEY B. MULLIGAN & XAVIER SALA-I-MARTIN, Social Security in Theory and Practice (II): Efficiency Theories, Narrative Theories, and Implications for Reform at 18 (Nat'l Bureau Econ. Research, Working Paper No. 7119, May 1999) (describing "myopic prodigality" justifications of social security).

⁹³ Peter Diamond, A Framework for Social Security Analysis, 8 J. Pub. Econ. 275 (1977). For the views of one prominent economist who is sympathetic to proposition (a), see Martin Feldstein, The Optimal Level of Social Security Benefits, 100 Q. J. Econ 303 (1985). Of course, the argument can also run in the other direction—that is, that the existence of Social Security discourages retirement savings. See generally ROSEN, supra note 87, at 205-09.

breadwinner's death;⁹⁴ (b) individuals almost certainly are more averse to thinking about dying than about living long enough to retire;⁹⁵ and (c) individuals may apply an irrationally high discount rate when considering the future state of the world in which the breadwinner might be dead.

This last concern—of overweighing present needs over future ones—deserves special emphasis. It is commonly argued, for example, that smokers place an irrationally high value on the current pleasure of smoking as compared to the value they place on the harmful health effects that smoking will bring ten, twenty, or thirty years in the future. Indeed, psychological literature on this issue suggests that, where a substantial time gap exists between costs and benefits, individuals tend to use different discount rates—a higher rate for the distant cost or benefit and a lower rate for the more proximate one. The result is that, in the short run, the individual prefers the option that minimizes short-run costs or

⁹⁴ Part of the problem lies with the difficulty of determining the full value of the household human capital. Not only should it include the value of the insured's earning capacity but it should also include the value of his or her nonmonetary services to the household. Both of these values are likely to be underestimated. Indeed, all of the various empirical studies of life-insurance adequacy have ignored the present value of household services. Also, even for the portion of human capital attributable to future earnings, substantial underestimation is likely. For example, how likely is it that individuals will think to take into account future real pay increases when assessing life-insurance needs? Plus it seems almost certain that the purchasers of life insurance will underestimate the cost that the household will incur to hire someone to do all of the things that the insured used to do around the house. For example, will they know, when calculating the discounted present value of the insured's future services to the household, to take into account that buying replacement services-childcare or household chores-will come out of after-tax dollars whereas the services themselves came out of pre-tax dollars?

[&]quot;5 One of the principal difficulties that trust and estate lawyers face in dealing with their clients is getting them to contemplate and plan for various "end of life" issues. Scholars who spend most of their time studying life insurance recognize as a serious concern people's persistent unwillingness to plan for death. See BLACK & SKIPPER, supra note 11, at 338. "In many instances, individuals act as if they consider themselves immortal; they are psychologically unwilling or unable to face their own mortality." BLACK & SKIPPER, supra note 11, at 338. "It is a matter of common knowledge to persons in the state planning field that a man will devote a lifetime of energy to obtain a business or an estate and spend no time at all or little time in arranging to pass along his estate at death." Theo P. Otjen & Arthur J. Pabst, Updating Life Insurance Settlement Options: A Comparison with Wills, 27 J. INS. 75 (1960).

[%] Jon D. Hanson & Kyle D. Logue, The Costs of Cigarettes: The Economic Case for Ex Post Incentive-Based Reg lation, 107 YALE L J. 1163, 1203-05 (1998).

⁹⁷ George Loewenstein & Richard H. Thaler, Anomalies: Intertemporal Choice, 3 J. ECON. PERSP. 181, 183-84 (1989); see also Robert H. Strotz, Myopia and Inconsistency in Dynamic Utilit Maximization, 23 REV. ECON. STUD. 165 (1956).

maximizes short-run benefits (for example, forgoing the purchase of life insurance), but that, as the time draws closer for the benefit to be received (here, the insurance proceeds become more likely as the insured gets older), the individual's preferences switch. This sort of dynamic inconsistency of preferences-or "myopia"-is considered to be quite common,98 and one could easily see how such a phenomenon might affect life insurance decisions.99

Why the Market Alone Cannot Fix These Problems

Even if there are problems of myopia initially, one might expect the market (namely, insurance companies) to come to That is, if consumers have a tendency to the rescue. underestimate their life insurance needs, insurance companies would have an incentive to educate them; and that education, of course, is precisely what insurance companies try to do. The main job of the insurance agent is to convince the customers that they need income replacement (or human capital) insurance. 100 For that reason, virtually every licensed life-

98 George Ainslie, Specious Reward: A Behavioral Theory of Impulsiveness and Impulse Control, 82 PSYCHOL. BULL. 463 (1975). The whole problem of myopia, put here in terms of differing discount rates, can also be expressed in terms of "multiple" selves" models. That is, the problem can be understood as the current self (the one deciding how much present consumption to forego to fund post-retirement consumption) not adequately taking into account the interest of the future self (the one who will need to live on those savings). See, JON ELSTER, ULYSSES AND THE SIRENS (1979); Thomas C. Schelling, Self-Command in Practice, in Policy, and in a Theory of Rational Choice, 74 Am. ECON. REV. 1 (1984).

OF LIFE INSURANCE IN THE UNITED STATES 111-12 (1979) (explaining early shift in marketing life insurance toward emphasis on investment futures); see also GLEN

⁹⁹ Purchasing life insurance requires a household to forego current income in order to finance a future contingent benefit. If decision-making in this context is similar to decision-making in other contexts, it seems plausible that the household will apply a higher discount rate to the future death benefit than it household will apply a higher discount rate to the future death benefit than it will to the current insurance premium. In addition, life insurance transactions for individual policies require the applicant to go through the "hassle" of the underwriting process, which often includes giving a blood sample and a urine sample and sometimes going through a more thorough medical examination. It is unclear how much of a deterrent the life-insurance underwriting process is; however, given all of the other factors weighing against the purchase of life insurance, the process might be enough to keep many individuals from buying anything more than the group term insurance that is offered through their employers, which typically requires only that the employee sign up within a given period after first joining the company.

100 Traditionally, this has been the primary role of the insurance agent. The marketing strategy of life-insurance agents in recent years, however, has shifted from selling human-capital insurance to selling investment products that have some or no life-insurance component-products such as cash value insurance and variable annuities. VIVIANA ZELIZER, MORALS AND MARKETS: THE DEVELOPMENT OF LIFE INSURANCE IN THE UNITED STATES 111-12 (1979) (explaining early shift in

insurance agent has access to computer software that enables the agent to produce impressive and convincing "illustrations" of the customer's life-insurance needs. Such services have long been available for those individuals willing to sit down with an insurance agent. A more recent phenomenon is the proliferation of insurance-needs calculators at various web sites sponsored by insurance companies and others. 101 consumer were to take the time to visit one of those sites and enter all the relevant data (such as annual income, net worth, number of children, and the like), she could get an estimate of her life insurance needs. Many of those needs calculators will force consumers to think through just the sorts of questions posed in the earlier discussion of insurance adequacy; for example, one common question is whether the individual seeking to purchase insurance on his life wants enough coverage to pay off the mortgage on the family house, to start a college fund, or to create an emergency fund.

But even these needs calculators and agents willing to assess a person's life insurance needs are not enough by themselves; both require time and effort. If consumers are not inclined to give much thought to life insurance in the first place, it seems unlikely that many will go to the trouble to find a reliable insurance-needs calculator. What is more, consumers may be inclined to distrust any needs assessments made by life-insurance agents on the theory that those agents stand to gain (in sales commissions) by overestimating the household's life-insurance need.

This last observation suggests a more pervasive problem: the public's distrust of life insurance agents. Although there was a time when the job of being a life insurance agent was understood (certainly within the field and to a lesser extent by consumers) as a noble and worthy calling, almost akin to the ministry, 102 that view has since been superceded by a radically

REYNOLDS, THE MORTALITY MERCHANTS 4 (1968) (stating that "[t]he life insurance industry in the United States, for its own reasons, has from its early origins deemphasized the actual purpose for its existence by discouraging the sale of pure death protection."); *Id.* at 177 (stating that "Pure death protection, or term insurance, is the out ast of the life insurance industry.").

cref.org/lins/howmuch.html;

http://www.worldwidewebinc.net/family/caculator.html.

¹⁰¹ For example, consider the following insurance-need calculator articles: http://www.life-line.org/life/index.html; http://www.tiaa-

¹⁰² See, e.g., Zelizer, supra note 100, at 119-29 (describing life insurance agents as being "indispensable" and akin to "salaried missionaries").

different conception. Insurance agents have come to be viewed (at least by many consumers) as being more in a class with used car salesmen than with charity workers. 103 This more cynical view of insurance agents has been attributed to the transformation of life insurance products from pure insurance against premature death (that is, term insurance) to a type of sophisticated-and for many, quite mysterious-investment. In fact, some critics of the insurance industry and its marketing tactics have laid much of the blame for the negative views of life insurance and of life insurance agents on the development of the cash value policy.¹⁰⁴ Cash value policies are characterized by agents as the only form of "permanent" life insurance-with term insurance being given the pejorative "temporary" or "rented" insurance. The cash value policies are marketed so that the administrative costs, which are believed to be prohibitively high, are often hidden from consumers. Moreover, the rate of return on investments in cash value policies historically has been pitifully low (or at least that is the perception) and consumers have been less than fully informed (and in some cases, misled) about the nature of the products they are purchasing or the risks they are taking. 106

¹⁰³ Id. at 129-47 (recounting enduring stigma that historically has attached to life insurance agents and characterizing life-insurance sales as part of society's necessary "dirty work"). According to one insurance-industry observer, consumer advocate, and former state commissioner of insurance, many financial reporters regard the life insurance business as "legalized thievery." James H. Hunt, Life Cost Disclosure Prospects for True Reform, 13 J. INS. REG. 405, 422 (1995). 104 See, e.g., Reynolds, supra note 100, at 5-16. According to some experts, "[b]y the mid-1980s the focus on many sales presentations of life insurance seemed to be on life insurance as an investment," rather than on life-insurance as protection against the loss of human capital due to premature death. Tom Foley & Carolyn Johnson, Introduction to Symposium, 13 J. INS. REG. 398, 399 (1995). "In sales presentations death benefits are often almost an afterthought." Id. (quoting an insurer).

¹⁰⁵ REYNOLDS, *supra* note 100, at 2 (explaining the difference bet een "permanent" and "temporary" or "rented" insurance).

^{106 &}quot;The business is riddled with self-dealing, unsound investments, unsuitable policies, high-pressure selling and unbridled sales expenses. Consumers take large losses when they drop expensive coverage they shouldn't have bought and can't afford." Jane Bryant Quinn, et al., *Here They Go Again*, NEWSWEEK, Feb. 7, 1994, at 28 (citing a New York investigation of the life insurance business); see also Foley & Johnson, supra note 104, at 399-400.

The quality of information being utilized in the marketing of life insurance has deteriorated. Some of the deterioration results from an increased use of gimmickry in policy illustrations and advertising. For example, interest rates are featured prominently, but charges made to the policy owner are not... The quoted interest rates may relate neither to performance nor to any other valid basis, but may simply be picked

Furthermore, it seems to be no coincidence that agents who sell individual life insurance policies (as distinct from group policies) make most of their commissions from the sale of cash value policies. Notably, the commissions on cash value policies are easier to hide, partly due to the abundance of numbers contained in the policy. Compensation for "explaining" this complicated type of policy is easy to justify.

5. The Dynamics of Household Consumption Decisions

A final reason why life insurance may be suboptimally consumed involves the way that economic decisions are made within households. Traditionally, it has been assumed that there is joint and equal control over and consumption of household resources between spouses in a marriage. This assumption derives from the prevailing economic model of the household pioneered by Gary Becker. On this model, the household is assumed to have a single, unitary utility function; household resources are distributed by an altruistic head. More recently, however, scholars have begun to question this

out of the air(quoting Charles Rohm, In Whose Interest, 87 VEST'S REV. 14 (1986)).

It is the continuing problem of life-insurance agents' use of misleading sales presentations that motivated the National Association of Insurance Commissioners to adopt the Life Insurance Illustration Model Regulation in 1995, which was intended to clarify and standardize the type of information that insurance agents may use in their sales presentations, called "illustrations." Hunt, <code>supra</code> note 103, at 413-14. In life insurance illustrations, ypically using some sort of statistical software, the insurance agent "illustrates" for the potential customer how much her cash value will be after a given period of time under a given set of assumptions. Not surprisingly, many life-insurance purchasers interpret these illustrations to be guarantees of the policy's return on investment. For a description of the various ways in which life insurance illustrations can be misleading and a somewhat critical view of the Model Regulation, <code>see</code> Hunt, <code>supra</code> note 103, at 409-22.

supra note 103, at 409-22.

107 Although some types of cash value policies start out with relatively low agent commissions, over time agents gravitate toward those policies that pay them the highest commissions. For example, following the introduction of the "universal life" policy, although commissions were initially low, "[i]t did not take long before a kind of reverse competition set in the highest commission, least consumer-oriented contract won he loyalty of agents." Hunt, supra note 103, at 407. In more recent years, the rate of return on cash value policies has radically increased, in large part owing to market competition and the resulting development of new cash value products that allow investor/insureds to invest in a range of mutual funds. Moreover, state regulatory innovations have significantly reduced (though not eliminated) the worst of the misleading marketing practices, so that now it is harder to hide administrative costs than it once was. Still, cash value policies remain significantly more complex and difficult to evaluate than do term policies, for reasons hat are unclear.

108 See generally Gary S. Becker, A Treatise on the Family (1991).

model and have suggested alternative models.¹⁰⁹ Further, there is some evidence suggesting that household consumption decisions depend to some extent on whether the husband or the wife has the initial control over the resources. For example, consumption patterns appear to vary depending on the relative share of the household's income that is earned by each spouse. Studies show, for example, that "increases in the wife's income relative to that of the husband are associated with an increase in expenditures on restaurant meals, child care, and women's clothing, and with decreases in expenditures on alcohol and tobacco."110 How this dynamic might apply to life insurance purchases has not been studied. Still, one can tell a story along these lines that might help to explain part of the underinsurance problem. That is, for the most part, it will be the primary earner (usually the husband) in the household who ends up making the decision regarding life-insurance coverage. Why? Because insurance agents tend to focus their efforts on the primary earner; moreover, if employer-provided group insurance is purchased, it typically will be through the employer of the primary earner. In any event, the purchase of life-insurance coverage on the life of the primary earner may be a sort of household expenditure that gets neglected precisely because the primary earner exercises disproportionate control over household financial decisions. Why might this happen? For one thing, it might be easier for a primary earner to conclude that in the event of his or her death, the other spouse will be expected to remarry or to get a paying job or a higher paying job. The primary earner also could conclude that consumption needs will be reduced as the family will be expected to move to a smaller house. For now, these are just speculations; further empirical research is necessary to pin down the relationship between life-insurance adequacy and relative income within the household. However, there is one relevant finding in the Bernheim study. There, the authors found that the degree of underinsurance strongly correlated

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^{109 &}quot;What recent empirical analysis points toward is that multi-person households cannot be treated as single decision-makers and that household allocations should probably rather be considered as the outcome of some interaction between household members with different preferences." Martin Browning et al., Income and Outcomes: A Structural Model of Intrahousehold Allocation, 102 J. Pol. Econ. 1067, 169-70 (1994).

¹¹⁰ Henry E. Smith, *Intermediate Filing in Household Taxation*, 72 S. CAL. L. REV. 145, 162-63 (1998) (reviewing the empirical literature on this issue).

with the disparity between the income of the primary earner and that of the secondary earner-that is, the greater the share of income attributable to the primary earner, the greater the shortfall in the insurance on the primary earner's life.¹¹¹ This finding seems consistent with both the idea that the primary earner tends to exercise disproportionate control over the income that he or she brings into the house and the idea that the primary earner is inadequately altruistic with respect to the rest of the household's needs.

C. Summary

The theoretical arguments just reviewed in section B and the findings summarized in section A above, taken separately or together, do not amount to a definitive case for immediate implementation of some new government program designed to increase the level of life insurance coverage. Rather, the argument to this point should be sufficient to put the issue of life-insurance adequacy squarely on the policymaking agenda as well as on the agenda for future theoretical and empirical research. The argument should also be sufficient to prompt an initial, exploratory examination of possible policy responses. It is this latter project that will occupy the remainder of this article.

IV. DESIGNING THE OPTIMAL LIFE INSURANCE SUBSIDY

A. Brief Note on Choosing the Optimal Policy Design

persuaded that problem we are the underconsumption of life insurance is real and significant, the next task is to determine the appropriate government response. As mentioned above, Auerbach and Kotlikoff end their initial studies with a sentence or two calling for either an expansion of Social Security survivorship benefits or an expansion of employer-provided group term coverage. However, any such recommendations are expressly rejected in the more recent Bernheim study. 112 Therefore, no one has made any effort to elaborate on the policy implications of the underinsurance problem in the life insurance context. This Part begins to fill that gap in the literature.

¹¹¹ BERNHEIM et al., supra note 2, at 30-49 tbl. 13

¹¹² See generally BERNHEIM et. al, supra note 2.

Before launching into a discussion of the various regulatory approaches to the problem, consider first the least intrusive solution; disclosure. It may be that the principal reason people purchase insufficient life insurance is that they do not know how much is needed to sustain the household's standard of living. It may be that the market alone cannot fully correct this problem because, as argued above, people distrust the recommendations about life-insurance needs given by insurance agents. However, if these statements are true, the only policy response necessary is to develop some way of credibly informing households of their insurance needs should they want to purchase enough life insurance to maintain their household's standard of living. We could use a public service announcement, paid for with tax dollars and endorsed by some agency of the government, perhaps the Social Security Administration. It could be some joint initiative, funded by the life-insurance industry and certified by the government. One can imagine a moving television advertisement that explains the hardship a family can face if a primary earner dies and the household is inadequately insured-followed by a listing of websites that have insurance-needs calculators which have been endorsed by the federal government.

Although such a solution might be sufficient to overcome the problem, this article will focus on other regulatory alternatives. As with the problem of insufficient retirement savings, it is not enough just to remind people that they may need to set aside more money now to provide for the future. Rather, the following proposed solutions are based on the assumption that more direct (and, alas, more expensive) government involvement may be needed.

The following three categories represent a standard way of organizing the range of regulatory responses to the problem of an "underconsumed" good or service. Such a good or service can be provided by the government, mandated by the government, or subsidized by the government. Government provided life insurance would involve payments made directly by the government to the dependents after the death of the insured, and the source of funding would be either a payroll tax or income tax. (Although existing social insurance programs tend to be funded through payroll taxes, other funding regimes are possible.) With government provided insurance, government employees collect the revenue and

administer the payment of benefits. With government-mandated life insurance, on the other hand, the basic insurance functions-underwriting (or risk assessment), premium collection, and claims adjusting-would be performed by private firms, but direct regulation would be introduced in the form of compulsory coverage. The mandate could be directed either at employers (as is the case, for example, with workers' compensation insurance at the state level) or at individuals. Government subsidized life insurance is a catch-all category used to designate all other expenditures of public funds on life insurance, whether as demand-side or supply-side subsidies or whether in the form of direct expenditures or tax expenditures.¹¹³

Each of these general categories of responses-government provision, government mandate, and government subsidy-has advantages and disadvantages, which will be summarized in the sections that follow. It is worth noting in advance, however, that in this country we rarely settle for only one of these approaches. Instead, almost every area of the economy that receives public funds does so through a combination of approaches to public spending. Take health care, for example. In addition to Medicaid and Medicare, which are types of government-provided health insurance, there are a number of healthcare tax expenditures, the largest of which is the exclusion for employer provided medical care and health insurance. Likewise with education, we have a mixture of government provision and government subsidies: state and local governments directly provide public elementary and secondary education to virtually all children from kindergarten to grade twelve, and there are state-funded and state-run universities in all fifty states. Nevertheless, there are a number of government-subsidy programs primarily for higher education, some of which are tax expenditures (such as the

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¹¹³ There are, of course, many ways to draw the lines between these categories; and no particular set of definitions is correct or incorrect–just more or less useful. For example, within the general category of government subsidies, there is a subcategory known as the "voucher," which was given a clear and useful definition only recently. See DAVID F. BRADFORD & DANIEL V. SHAVIRO, THE ECONOMICS OF VOUCHERS 1-2 (Nat'l Bureau of Econ. Research, Working Paper No. 7092, 1999) (defining a voucher as a demand-side subsidy which leaves the consumer with some level of choice among competing suppliers and which tends to display a "marginal rate of reimbursement" of the subsidized activity of one hundred percent up to a given point and zero percent thereafter).

deduction for contributions to educational charities, the exclusion for qualified scholarships, and the treatment of education IRAs) and some of which are indirect expenditures (such as government guarantees for qualified student loans).

Life insurance is no different. To the extent the problem of underconsumption of life insurance has been addressed (apparently unsuccessfully), it has been through a combination of government provision and government subsidies in the form of tax expenditures. The government-provided life insurance consists of Social Security survivorship benefits that are available to the children, spouses, and dependent parents of qualified individuals. The principal tax expenditure is the deferral (and in some cases outright exemption) of taxation on the investment earnings inside of cash value life insurance. Substantially smaller in scale are the exclusions for employer-paid premiums on up to \$50,000 of group-term life insurance and the various preferential tax rules for life insurance companies, mainly consisting of special reserve deductions not available to other firms. 115

The next two sections discuss the theoretical pros and cons of these three general approaches. Section B briefly summarizes the principal strengths and weaknesses of government-provided and government-mandated insurance and contrasts the two with each other. Section C provides a separate discussion of a government-subsidy approach. The focus in that section is on the use of a demand-side price subsidy for term life-insurance premiums-either deduction or credit or perhaps a voucher for life-insurance premiums-and it highlights a few of the implementation issues that such a subsidy would present. Although there are a number of advantages to a demand-side price subsidy (when government-provided or governmentmandated insurance), a deduction or credit should not be the only response. Rather, as suggested above, probably the best response is a combination of approaches, which will be discussed in the following section.

 $^{^{114}}$ In 2000, the amount spent on this tax expenditure was estimated to be \$13.5 billion. Office of Mgmt. & Budget, Budget of the United States Government: Fiscal Year 2002, ch. 5 tbl. 5-1 (2001).

 $^{^{115}}$ In 1998 the amount spent on this tax expenditure was estimated to be \$2 billion. *Id*.

B. Government Provision versus Government Mandate

Both government-provided and government-mandated insurance have one advantage over government-subsidized insurance: they avoid the problem of adverse selection. As described in Part III.B.1. above, adverse selection occurs when relatively high-risk individuals, knowing (or at least suspecting) that they are relatively high risk, find insurance prices to be a relatively good deal, and therefore tend to self select into insurance pools. As a result, premiums rise; low risk individuals buy less insurance; and the process tends to feed on itself, resulting in some risk-averse individuals not being able to purchase coverage that would have been available in the absence of adverse selection.¹¹⁶

Adverse selection is completely eliminated, however, if the insurance coverage is provided or mandated by the government, to the extent that individual choice regarding the level of coverage is eliminated. This argument often has been used in support of various universal health insurance proposals. It could be applied to life insurance as well. That is, if the government were provided every household that had dependents with (or mandated that all of those households buy) some set level of life insurance coverage, there would be little room for adverse selection, as there would be little opportunity for individual choice.

But this reduction in choice is also at the heart of the criticisms of mandatory and government provided insurance. With government provided insurance, individuals or households would have no say in answering what might be considered highly personal and idiosyncratic questions: how much insurance is to be provided, whose life is to be insured, who are the beneficiaries of the insurance to be, how are the benefits to be paid out, how long will the coverage remain in force, and who will be the insurance provider. The only difference with mandatory insurance is that the choice among providers is preserved.¹¹⁷ Some might consider this inhibition

¹¹⁶ Theoretically, insurance pools can nravel entirely, leaving everyone uninsured.

¹¹⁷ It is possible to imagine a government-provided life insurance program that provides a range of options. A person might be allowed to select different levels of coverage, which would carry different "premiums." But such a regime would be a dramatic departure from the way in which government has always provided social insurance in this country. Likewise, it is also possible to imagine a mandatory insurance regime that left some degree of choice regarding the

of individual choice a reason itself to oppose such programs because of the conflict with basic liberal notions of consumer sovereignty and individual autonomy.

At this point, the reader understandably might ask the following question: was it not with respect to just those sorts of choices that we decided (in Part II above) that because of myopia and externality concerns, households' unsubsidized decisions are not to be trusted? If households have a tendency to purchase too little life insurance coverage, to allow those households broad discretion in choosing their level of life insurance may seem unwise. Put differently, it could be argued that the concern for preserving individual choice in insurance decision-making necessarily contradicts this article's concern for the problem of underinsurance. That conclusion, however, is both true and false. It is true that, when we say there is a tendency to purchase "too little" life insurance, the amount and duration of coverage are precisely the sorts of consumption choices we have in mind. However, to say that something is underconsumed is not to say those individuals' preferences regarding its consumption are irrelevant. emphasized throughout, determining the "right" amount of life insurance is extremely difficult as a conceptual matter. (Indeed, that was the main conclusion of Part I.) One way of incorporating a measure of policy-making humility with respect to the question would be to preserve a degree of consumer choice. Thus, although there may be reasons to encourage or even require households to purchase more life insurance than they otherwise would, we also want to preserve some element of individual or household choice in the matter.

As to the choice between mandatory insurance and government-provided insurance, a sizable literature has developed, though none of it speaks directly to the topic of life insurance. Perhaps the best-known example is the recent debate over universal health care. In the late 1980s and early 1990s, there was much talk of providing health insurance

nature of the life insurance coverage to individuals. To the extent the mandatory regime preserves consumer choice in that way, it would be more like the government subsidy regime described in the next section.

¹¹⁸ For a review of the literature and an interesting and revealing application, see Jonathan Gruber & Alan B. Krueger, *The Inc dence of Mandated Employer-Provided Insurance: Lessons from Workers' Compensation*, in 5 TAX POLICY AND THE ECONOMY 111 (1991).

coverage to all Americans. Among those pushing for universal coverage, vigorous debate existed about how to achieve that goal most effectively: government provision, in the form of a Canadian-style, single-payer regime, or government mandate, imposed on either employers or individuals.

One potential benefit of mandated insurance over government-provided insurance is the element of competition among suppliers. With mandatory insurance, whether the mandate is imposed on employers or individuals, there remains some choice among suppliers. By contrast, such competition is believed to be especially important in the context of health care. With health insurance, there are numerous dimensions with respect to which competition can occur; and health insurance policies can differ significantly in terms of what medical expenses are covered, the degree of flexibility in choosing health-care providers, and so on. However, whether flexibility and competition among suppliers are as important a concern with life insurance as it is with health insurance is unclear. With pure term insurance, the policies tend to be fairly standardized, with competition being primarily over the price rather than the terms of coverage. 119

Another reason often given for favoring employer mandates over direct provision is the claim that mandates create "fewer distortions of economic activity" than do government provided benefits funded by a payroll or income tax. 120 The best way to understand this point is to compare the effect of a mandate with the effect of a payroll tax on equilibrium wages and employment. According to standard economic analysis, the introduction of a payroll tax will result in a decrease in employment because it increases employers' costs, and will assume some elasticity in the labor supply. But this effect will be mitigated by a reduction in wages, so long as labor supply is not perfectly elastic. As it turns out, evidence suggests that labor supply, in the short run, is fairly inelastic, meaning a payroll tax theoretically could cause considerable unemployment. 121 An employer mandate, on the other hand,

¹¹⁹ Compare Single Payer System Picks Up Momentum If Health Care a la Canada Gains Grass Roots Support", USA TODAY, Thursday, April 28 (1994); with Steven Findlay, The Argument for an Employer Mandate 12 Bus. & HEALTH 58 (1994).

¹²⁰ See, e.g., Summers, supra note 90, at 181; Gruber & Krueger, supra note 118, at 115-16.

¹²¹ This whole analysis assumes, as is standard in public finance economics, that

has a different effect from a payroll tax, insofar as the employees place a value on the benefit being provided. Because they value the benefit, employees are willing to accept a decrease in wages in exchange. As a result, the reduction in employment caused by the mandate is not as severe as that caused by the payroll tax. This idea is sometimes called the theory of "compensating wage differentials." Under this theory, when employees value the mandated benefit more, fewer jobs will be lost as a result. On the other hand, when employees value the benefit less, the mandate has the effect of a pure payroll tax, thereby worsening the employment effects. 123

Government mandates also have some disadvantages when compared with government provision. First, consider a few of the standard criticisms that have special application to employer mandates. For one thing, the job-protecting effects of employer mandates disappear if there are wage rigidities, such as a binding minimum wage, that prevent wages from falling to compensate employers for providing the mandated benefit. Second, mandating that employers provide life insurance to their employees does nothing for the self-employed or the temporarily unemployed. Thus, if universally provided life insurance is seen as an important goal, perhaps government provision (or even individual mandates) would be preferable to employer mandates. Third, to the extent

unemployment caused by taxation is worse than reduced wages caused by taxation.

¹²⁵ Of course, an individual mandate would apply to nonemployees as well. In any event, whether a government mandate is imposed on employees or on individuals, if the goal is universal provision, there will be a need for some additional subsidization of low-income individuals. For a recent analysis of the comparative distributional and efficiency effects of government-mandated versus government-provided health insurance, see Charles L. Ballard & John H.

¹²² Gruber & Krueger, supra note 118, at 113.

¹²³ Summers captures the point as follows: "In terms of their allocational effects on employment, mandated benefits represent a tax at a rate equal to the *difference* between the employer's cost of providing the benefit and the employee's valuation of it, *not* at a rate equal to the cost to the employer of providing the benefit." Summers, *supra* note 90, at 180-81 (emphasis in original). ¹²⁴ Summers, *supra* note 90, at 181-182. It is possible that "wage rigidities" may be more prevalent than proponents of employer mandates would lead us to believe. Empirical research in labor economics has not been able to consistently document compensating wage differentials. Gruber & Kruger, *supra* note 118, at 113. However, the problem may be with the nature of the data and the approaches taken by the researchers. In an analysis of workers' compensation insurance data from all fifty states, Gruber and Kruger found substantial evidence of both cost shifting from employers to employees and little effect on employment. *Id*.

employer mandates provide an efficiency advantage because of the compensating wage differentials, they inhibit the government's ability to accomplish redistributive goals through the provision of the benefit. Finally, government mandates tend to be more hidden from public scrutiny and political accountability than are other ways of funding universal insurance, such as taxes.¹²⁶

An individual mandate—that is, a law that compels individuals to purchase a given level of life insurance rather requiring their employers to provide it—would avoid some of the problems just listed, but would present problems of its own. For example, a truly universal mandatory insurance regime would require that some type of cash or tax subsidy be provided to low-income households. In fact, compulsory life insurance could not exist without some degree of government subsidy as well. Finally, and perhaps most significantly, mandatory insurance, like government-provided insurance, would eliminate the element of individual choice as to the appropriate amount of life insurance.

Given the benefit of avoiding adverse selection, an argument could be made that some form of government-mandated or government-provided life insurance would be an appropriate response to the insufficient demand for life insurance. Moreover, because we already have a fairly well developed system of government-provided life insurance—that is, the survivorship program—which would be extremely costly and politically impossible to replace, it is safe to assume that a version of the survivorship program will be preserved. With that in mind, the next section briefly summarizes the level of coverage provided under the survivorship regime. Then, the article turns to a discussion of how tax subsidies might be used to supplement that regime.

C. Social Security Survivorship Benefits: The Current Regime of Government Provided Life Insurance

Although currently we have no program of government-

Goddeeris, Financing Universal Health Care in the United States: A General Equilibrium Analysis of Efficiency and Distributional Effects, 52 NAT'L TAX J. 31 (1999).

¹²⁶ Indeed, it can be argued that the principal motivation behind the push for employer mandates in the health insurance context is not the pursuit of efficience but a desire to hide the costs of healthcare reform.

mandated life insurance, we do have government-provided life insurance. The Social Security survivorship program gives a limited amount of coverage to the families of individuals who have worked and paid into the Social Security system for a sufficient period of time, provided that the beneficiaries meet certain eligibility requirements. 127 Survivorship benefits are part of the Old-Age, Survivors, and Disability Insurance (OASDI) Program contained in Title II of the Social Security Act, 128 In general, spouses and dependent parents are eligible for survivorship benefits only if the deceased worker was "fully insured," which depends on how long the worker worked and paid into the system. 129 In addition to the "fully insured requirement, surviving spouses who are not taking care of young children must meet two other requirements to qualify for benefits. First, they must be unmarried; and second, they must be either sixty years old or older, or they must be between fifty and fifty-nine and disabled throughout a fivemonth waiting period. 130 Surviving children under the age of eighteen, and surviving spouses who have not remarried and who are taking care of the breadwinner's under-age-sixteen children qualify for benefits even if the worker was not fully insured, so long as he was "currently insured," which means that he should have worked and paid into the system for one and a half years during the three years before his death. 131

Even for individuals who qualify for survivorship benefits, the actual payments are meager, especially for middle- and upper-income families. The benefits are a function of the deceased worker's "primary insurance amount" (PIA), which is the monthly benefit amount payable to the worker if he retires at full retirement age or becomes entitled to disability benefits. The PIA is based on the worker's average earnings over his or her working lifetime. The PIA itself replaces only a fraction of the insured worker's income; and the higher the worker's average career income, the smaller the replacement

¹²⁷ GREEN BOOK, supra note 10, at 5.

¹²⁸ Id.

¹²⁹ Id. at 12.

¹³⁰ Id. at 15.

¹³¹ There are also special rules for surviving children who are disabled. *Id.*

¹³³ *Id*.

ratio.¹³⁴ Thus, for a worker born in 1935 who retires in 2000 at full retirement age after a full-time career with steady earnings, the PIA would replace fifty-eight percent of his earnings if he were a low-wage earner (defined as earning forty-five percent of the Social Security average wage index), forty-three percent of his earnings if he were an average-wage earner (defined as earning the Social Security average wage index), and only twenty-five percent if he earned the maximum wage taxable for Social Security purposes (which currently is in the neighborhood of \$63,000).¹³⁵

The relationship is somewhat arbitrary between the breadwinner's PIA and the survivorship benefits that dependents receive if the breadwinner dies. The breadwinner's young children¹³⁶ and surviving spouses taking care of young children¹³⁷ each receive seventy-five percent of the deceased's PIA.¹³⁸ However, the surviving spouse's benefit will be reduced if he or she earns above a certain amount¹³⁹ and will be eliminated if he or she remarries.¹⁴⁰ The total survivorship benefit payable on account of a given worker's death, however, is capped at between one hundred fifty percent and one hundred eighty percent of the worker's PIA.¹⁴¹

The following example illustrates the annual survivorship benefits that would be received by a typical household in

¹³⁴ See id. at 26-27.

¹³⁵ Id. at 27, tbl. 1-17.

¹³⁶ To qualify for benefits, a surviv ng child must be under the age of eighteen (or, if a full-time elementary or secondary student, under the age of nineteen). *Id.* at 15. If the child is disabled before turning twenty-two, she can receive surv vorship benefits beyond the age of eighteen. *Id.*

¹³⁷ Oddly, for the spouse to qualify for these benefits, the child must be under sixteen rather than under eighteen or nineteen, the ages that determine the limits of the child's benefits. *Id.*

¹³⁸ *Id.* at 26. Surviving spouses can be eligible to receive survivorship benefits themselves–and not merely as the custodians of the worker's young ch ldren-but only if the surviving spouse is disabled or over a given age. For example, widows or widowers who are age sixty (or disabled and between f fty and fiftynine) can receive benefits equal to 71.5% of the deceased breadwinner's PIA. *Id.* 139 SOC. SEC. ADMIN., PUB. NO.05–10069, SOCIAL SECURITY: HOW WORK AFFECTS YOUR BENEFITS (1999). In general, if the surviving spouse is under the age of sixty-five, for every \$2 he or she earns in excess of \$9,600, \$1 in survivorship benefits is lost. *Id.* at 1. The first \$9,600 of earnings have no effect on the spouse's survivorship benefits. None of the spouse's earnings affects the surviving child's survivorship benefits. SOC. SEC. ADMIN., PUB. NO.05-10084, SOCIAL SECURITY: SURVIVORS BENEFITS, 6 (1998).

¹⁴⁰ GREEN BOOK, supra note 10, at 15.

¹⁴¹ SSA, *supra* note 139.

which a breadwinner has died. Assume the hypothetical breadwinner worked full time and paid into the social security system for twenty-two years before dying in 1995 at the age of forty. Assume further that a spouse and two young children survive the deceased worker. The annual survivorship benefits received by the household (so long as the children were under the age of sixteen and assuming the surviving spouse earns no more than \$9,600 per year and does not remarry) would have depended on the breadwinner's yearly income as follows: 1) If the breadwinner had yearly earnings equal to the federal minimum wage, the annual survivorship benefit would have been \$9,912; 2) if the breadwinner had yearly earnings equal to the average wage (approximately \$26,000), the survivorship benefit would have been \$16,440; and 3) if the breadwinner had yearly earnings equal to or greater than the maximum wage taken into account for Social Security taxation purposes (approximately \$63,000), the survivorship benefit would have been \$26,304.142 These household benefits would continue to be paid until the children reached the relevant age limit and would be reduced if the surviving spouse earned above the \$9.600 threshold or remarried.

Whether Social Security provides the ideal governmentprovided life-insurance program is open to question. First, the level of benefits may be inadequate. Although it makes sense to link the amount of benefits to the deceased worker's income, tying the benefits to the worker's PIA-which is based on the worker's lifetime average earnings, adjusted for inflation-may be worth reconsidering. Arguably, a more accurate measure of the financial value of the worker to the household would be some measure of the worker's income at time of death. Whereas the PIA seems an appropriate measure to use in determining a person's Social Security retirement benefit (since, in retirement, most individuals can expect their living expenses to be lower than during their younger working years), the PIA seems the wrong amount on which to base a life-insurance calculation. In cases involving relatively young families, living expenses will tend to increase rather than decrease, especially if the children expect to go to college. 143

142 Green Book, supra note 10, at tbl. 1-10.

¹⁴³ It could be argued that the survivorship program responds to this precise concern by allowing special benefits for young children of deceased workers and for surviving spouses who are taking care of those children and by awarding a

Other aspects of the survivorship program involve hidden assumptions that are certainly defensible but deserve careful For example, the program assumes that, if a surviving spouse receiving survivorship benefits remarries, the spouse's benefits will stop. 144 In addition, if the surviving spouse takes a job, his or her survivorship benefits can be reduced. These rules imply a certain austerity in the program that may be consistent with the majority's view of the optimal life insurance contract, but it may not. 145 The program also assumes that children will be self-sufficient when they reach the age of eighteen, or, if full-time students, nineteen. Some might feel that the benefits should continue until the child reaches the average age of college graduation, although the current assumption certainly is defensible. 146 And finally, that the current survivorship benefits are skewed to provide disproportionately large benefits to relatively low-income households seems consistent with this country's historical preference for progression.¹⁴⁷

Obviously, much more could be said about the merits and demerits of the current survivorship program; however, the purpose of this section is not to offer a systematic assessment of that program. Rather, the point is just to start the discussion. For the remainder of this article, however, the author will assume that some version of the current survivorship program—one that continues to provide a modest amount of income replacement for a large number of households and a significant amount of income replacement for the very lowest-income households—will continue to exist. Seeing that the existence of this regime has not eliminated the underinsurance problem thus far, I will focus on possible ways of supplementing the survivorship program with additional government subsidies for life insurance.

maximum household benefit equal to one hundred eighty percent of the deceased's PIA.

¹⁴⁴ Green Book, supra note 10, at 15.

¹⁴⁵ This also affects the surviving spouse's marginal income tax rate of the phase out of benefit for earnings over \$9600. *See supra* note 139 and accompanying text. ¹⁴⁶ Recall that the same assumption-children are part of the household until age eighteen-was also made by Bernheim study. *See supra* note 2 and accompanying text.

 $^{^{147}}$ For the same reason, the relatively regressive way in which the survivorship benefits are funded-through a payroll tax-is vulnerable to criticism.

D. Government Subsidized Life Insurance

Continuing with our assumption that life insurance tends to be underconsumed, this section explores the benefits and costs of using some sort of government subsidy to encourage households to purchase life insurance coverage on their primary earners (and perhaps on secondary earners and caregivers as well). This section begins by exploring some of the advantages and disadvantages of government subsidies generally, of which tax preferences—such as special deductions, exclusions, and credits—are only one variety. Then this section offers some thoughts about several issues of implementation: whether the price-subsidy should take the form of a tax expenditure or a direct expenditure; whether, if a tax expenditure is chosen, a deduction or a credit makes more sense; and whether and to what extent the subsidy should be targeted to achieve optimal effect.

1. The Advantages of Demand-Side Price Subsidies

Most of the advantages of government subsidy can be inferred from what was said above in criticism of governmentprovided and government-mandated insurance. The biggest comparative advantage of the subsidy approach (as compared with the government-provision or government-mandate approaches) is the preservation of consumer choice and supplier competition. How important those two factors are to the efficient workings of the life insurance market will determine whether a government-subsidy approach should be adopted. But first, let us be sure we understand what we mean by a government subsidy. For the purposes of this article, a government subsidy is a simple price subsidy; that is, the government pays part of the cost of purchasing life insurance. However, the individual or the household determines how much insurance coverage to purchase and from which insurance company.

Examples of price subsidies abound. A tax preference, such as a deduction or credit, is a species of price subsidy. If the taxpayer makes a tax-preferred expenditure, the government shares the cost by reducing taxpayer's tax liability. In the case of a deduction, the price subsidy is equal to the taxpayer's marginal tax rate (because the deduction reduces his or her tax liability by the amount of the deduction times the

applicable marginal tax rate). In the case of a tax credit, the price subsidy is equal to the credit, which typically is a given percentage (usually less than one hundred percent) of the expenditure up to some set maximum amount. Credits differ from deductions in that credits, unlike deductions, do not reduce the tax base; rather, the amount of the credit is taken directly out of the taxpayer's tax liability.¹⁴⁸ Another type of price subsidy is the voucher, which usually reimburses one hundred percent of the costs of the designated good or service up to a set amount and no more. Food stamps are the quintessential example.¹⁴⁹ A price subsidy can have both a substitution effect and an income effect.¹⁵⁰ The substitution effect is the increase in consumption of the good caused by the decrease in the relative price of the good (when compared to all non-subsidized substitute goods) due to the subsidy. The income effect is the change in the level of consumption in the good due solely to the taxpayer's increased household income. owing to the subsidy. For goods called "normal goods," increased household income leads to increased consumption. 151 Thus, if the expenditure being subsidized is a normal good or service, the two effects-substitution and income-will cut in the same direction: toward increased consumption.¹⁵²

The price-subsidy approach has a number of potential advantages over direct government provision. First, consider one final word on behalf of "consumer choice" and "supplier competition." It has been a widely held view that individuals deciding how to invest their own resources generally are better cost monitors than government bureaucrate deciding how to invest tax dollars. Thus, for example, competition among

¹⁴⁸ In theory, by use of refundable credits or something similar, this approach can be applied to households that owe no taxes. In practice, refundable tax expenditures are relatively rare.

¹⁴⁹ Bradford & Shaviro, supra note 113, at 7.

¹⁵⁰ ROSEN, supra note 87, at 28.

¹⁵¹ Id

¹⁵² It is the substitution effect (caused by the change in relative prices) that is important from the perspective of correcting the underinsurance problem, insofar as the problem derives from myopia or externalities with respect to life insurance in particular. For a discussion of the complications that arise when the deduction or credit has a cap or a floor, see Charles T. Clotfelter, Federal Tax Policy and Charitable Giving 40-46 (1985).

^{153 &}quot;The classic argument for competitive private supply, going back to Adam Smith's 'invisible hand,' is that the profit motive, when combined with the need to satisfy customers who have other options in order to get their business, is the best available goad to inducing both economizing behavior in production and

charitable organizations for tax-deductible contributions from individual and institutional donors may induce a more efficient provision of the organizations' various charitable functions than would, say, the competition for government grants, which are doled out by government employees who are spending only public money.¹⁵⁴ The same could be true in the life-insurance context. We may prefer to rely on competition among life insurance companies for individual customers as a means of inducing efficient provision of insurance benefits rather than to rely on the Social Security bureaucracy to do the job.

A second related advantage of price subsidies over direct government provision is the possibility of increased efficiency in the following peculiar sense: if we conceive of the lifeinsurance problem as an issue of distributional equity creating a need to move dollars from the pockets of the relatively wealthy (living breadwinners) and into the pockets of the relatively poor (dependents whose providers have recently died) the question becomes what is the most efficient, least distorted means of achieving that objective. Put differently, we can conceive of the life-insurance question as raising a question of generational equity, albeit intra-family generational equity. Under that conception, if a breadwinner has a price elasticity of demand for making transfers to his or her dependentbeneficiaries that is greater than one (in absolute value), a dollar of price subsidy will induce the breadwinner to purchase more than a dollar of life insurance. 155 So long as the elasticity condition holds, the government gets more bang for the buck by using a price subsidy than it would get by making the expenditure directly. 156

Price elasticities of demand have been studied extensively in the context of charitable contributions. The studies show that for middle- and upper-income individuals, the price

socially valuable innovation." BRADFORD & SHAVIRO, supra note 113, at 46. ¹⁵⁴ Id. at 29. This article will argue that a supply-side tax preference is less likely to have this beneficial monitoring effect.

¹⁵⁵ CLOTFELTER, supra note 152, at 60 (1985)

¹⁵⁶ CLOTFELTER, supra note 152, at 281; Feldstein, supra note 93, at 303. It is also possible that if the government sends a dollar of direct subsidy to the beneficiary, the breadwinner would respond by reducing his transfer to the beneficiary by a dollar (or something less than a dollar). This is the "crowding out" effect, and it can meanthat the government will have to spend more than a dollar on life insurance to get a full dollar transferred to the beneficiary.

elasticity of demand is indeed greater than one.¹⁵⁷ It is possible that the same might be true of expenditures on life insurance, in which case a price subsidy approach would be a "more efficient" means of achieving this redistributional vision of life insurance than would expanded survivorship benefits.¹⁵⁸ Given the relatively low marginal rates currently imposed on individual income, however, it might be necessary to provide either a "double" deduction or to use a relatively high credit percentage to achieve the same effect.¹⁵⁹ Before this analysis is taken too far, however, there obviously needs to be empirical research done on the elasticity of intra-family giving patterns.

Even if one believes in the general consumer-sovereignty and supplier-competition benefits of demand-side price subsidies (and perhaps the bang-for-the-buck story), there remain issues of program design. For example, to use Bradford and Shaviro's terminology, a choice has to be made regarding the "marginal reimbursement rate" [MRR], which is the "percentage of a dollar of extra expenditure for an earmarked commodity that the government, rather than the consumer, would bear." As the authors observe, the characteristic MRR for the demand-side price subsidy called a voucher is one hundred percent up to a point and then zero percent thereafter.

¹⁵⁷ See generally id, at 274 (summarizing studies, which consistently found price elasticities greater than one in absolute value for all but the lowest income groups; for low-income groups, the studies were inconclusive); Charles T. Clotfelter & C. Eugene Steuerle, Charitable Contributions, in HOW TAXES AFFECT ECONOMIC BEHAVIOR 403, 436 (1981) (finding highest price elasticities in higher income groups).

¹⁵⁸ It might be argued that shifting money from the pockets of rich breadwinners into the pockets of their slightly less rich children or spouses contradicts the principles of progression that lead us to enact a graduated income and estate-and-gift tax in the first place. That is a fair complaint. However, a partial response to the complaint would be to target the subsidy at relatively young high-income households, which will tend not to be the very wealthiest taxpayers. Still, it cannot be denied that this policy response will tend to benefit high-income individuals. However, recall that we are assuming at this point that Social Security survivorship benefits will be dealing with the underinsurance problem for the low-income households. And unless we have decided that myopia and externality justifications for government intervention only apply if the affected parties are relatively poor, then a life-insurance subsidy that tends to benefit individuals in the middle- and upper-income brackets needs no special defense, other than the sort offered in Part II.B above.

¹⁵⁹ Cf. COMM'N ON PRIVATE PHILANTHROPY AND PUB. NEEDS, 1 RESEARCH PAPERS 4 (1977) (proposing a 200 percent charitable contribution deduction for individuals with incomes less than \$15,000 and a 150 percent deduction for those with incomes between \$15,000 and \$30,000).

¹⁶⁰ Bradford & Shaviro, supra note 113, at 29-30.

By contrast, the MRR for a tax deduction, one that has no floor or ceiling, would be equal to the taxpayer's marginal tax rate; and that for a credit would be equal to the credit percentage. Which of these structures is to be preferred will depend upon the justification for the subsidy in the first place. For example, if we believe that individuals tend to undervalue life insurance by twenty percent of its cost, we might provide a twenty percent credit or, for taxpayers with marginal rates approximating twenty percent, an unlimited deduction. Alternatively, if we thought that it was irrational for a household not to have at least some minimal amount of life insurance, we might use the voucher approach and set the cutoff at the desired minimum.¹⁶¹

Another structural question is why the subsidy should be located on the demand side rather than the supply side. It is possible that the same benefits associated with price subsidies could be achieved through some sort of subsidy to life insurance companies rather than to life insurance purchasers. For example, previous versions of the Code contained what were considered substantial tax preferences for life insurance companies, mainly in the form of special reserve deductions not available to other firms. 162 Such preferences, in a competitive market, would reduce the cost of life insurance to consumers (as compared to a world without such special reserve deductions), which would have the effect of subsidizing life insurance purchases. Notice that this approach too, in its idealized form, would be consistent with consumer sovereignty and provide for supplier competition, if we think those values are worth promoting.

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¹⁶¹ Id. at 31-32 (making these points using the example of underconsumption of food). Price subsidies always present a tradeoff between encouraging consumers to make the underconsumed expenditure (the so-called merit good) and still encouraging cost consciousness on the part of consumers. Id. at 29. For example, it is often argued that the exclusion for employer provided health insurance blunts the taxpayers' awareness of the full costs of their healthcare consumption decisions and thus has contributed to the over consumption of healthcare. A common recommendation, therefore, is to cap the amount of the exclusion at some level of minimum, but decent, health insurance coverage. That recommendation might be a good idea; however, it should be noted that considerable doubt remains as to the relationship between the tax exclusion and the healthcare-overspending problem. It could be argued that skyrocketing healthcare costs were caused more by the old fee-for-service financing structure than from the tax exclusion, although both may have played a role.
¹⁶² Those preferences were apparently reduced but not eliminated by the 1984 Deficit Reduction Act.

However, it is questionable whether the effect would be the same as a demand-side price subsidy. For example, one wonders whether an individual would be motivated by a cost reduction in life insurance stemming from a supply-side subsidy in the same way that he would be motivated by an insurance deduction, credit, or voucher. Also, as compared with a demand-side subsidy, a supply-side subsidy may involve a larger oversight role on the part of government agencies, which still must decide which firms get the tax benefit. Still, if it could be shown that a supply-side subsidy would as effective, such an approach could be used instead of or in combination with a premium deduction.

2. Assorted Issues of Implementation

Even if it is decided that a demand-side price subsidy for life insurance would be a useful supplement to the existing or a revised Social Security survivorship program, many issues of implementation remain to be considered. This section highlights a few of those issues.

a. The Tax Expenditure Debate

A large literature exploring the efficiency and distributional consequences of using tax preferences to accomplish social policy already exists. Much has been written over the years on the idea of a comprehensive tax base ("CTB"), as zealous supporters of the CTB have called into question the use of "tax expenditures"¹⁶⁴ and anti-CTBers have questioned the coherence and validity of the CTB ideal;¹⁶⁵ and I will not replow all of that ground here. But a few points are worth emphasizing.

I generally tend to side with the anti-CTBers (that is, the

¹⁶³ Demand-side subsidies, however, can require substantial agency oversight as well. For example, the Treasury Department maintains some involvement (at times considerable involvement) in determining what counts as a "charitable contribution."

¹⁶⁴ See, e.g., Stanley Surrey, Tax Incentives as a Device for Implementing Government Policy: A Comparison with Direct Government Expenditures, 83 HARV. L. REV. 705 (1970); Stanley S. Surrey, Federal Income Tax Reform: The Varied Approaches Necessary to Replace Tax Expenditures with Direct Governmental Assistance, 84 HARV. L. REV. 352 (1970).

¹⁶⁵ Boris Bittker, A Comprehensive Tax Base as a Goal of Income Tax Reform, 80 HARV. L. REV. 925 (1967); Boris Bittker, Accounting for Federal "Tax Subsidies" in the National Budget, 22 NAT'L TAX J. 244 (1969); Douglas A. Kahn & Jeffrey S. Lehman, Tax Expenditure Budgets: A Critical View, 54 TAX NOTES 1661 (1992).

critics of the anti-tax-expenditure position) in two respects. First, I am skeptical of any suggestion that there is a "pure" tax base (whether it be an ideal accretion tax or an ideal consumption tax) that should be granted a presumption of superiority. Thus, I tend to agree that whether a particular tax expenditure provision is a good or bad idea turns not on issues of "correct" measurement of the tax base, but on the questions of efficiency and equity that are standard fare of public finance economists. Second, tax-expenditure critiques tend to exaggerate the disadvantages and understate or ignore the potential advantages of using tax subsidies to achieve social policy. For example, complaints that tax preferences increase the complexity of the tax laws seem to ignore the fact that some amount of complexity and administrative costs are inherent in the use of any subsidy, wherever that subsidy is located. It is not clear why those complexity costs are greater for tax expenditures than for direct expenditures.

Another criticism often made of tax subsidies is that they are overbroad. According to this argument, essentially we are throwing money away if some individuals who receive the tax subsidy would have engaged in the targeted activity anyway. While this is true enough, the over breadth complaint can be applied to any price subsidy, whether it is in the tax code or not and whether it is a deduction or a credit. Inevitably there is a tradeoff between a subsidy's accuracy (that is, the extent to which it is tailored so as to apply only to marginal consumers of the good or service in question) and the subsidy's complexity; and that tradeoff exists wherever the subsidy is located.

¹⁶⁶ More precisely, the subsidy in such a case has the effect of a purely redistributive cash tra sfer rather than a price subsidy.

¹⁶⁷ See generally BRADFORD & SHAVIRO, supra note 113, at 18-24 (explaining circumstances in which a price subsidy—in their case, a voucher—is a cash equivalent transfer).

¹⁶⁸ For more of my skeptical take on tax-exceptionalism arguments, see Kyle D. Logue, If Taxpayers Can't Be Fooled, Maybe Congress Can: Applying Public Choice Theory to Tax Transitions, 67 CHL. L. REV. 1507 (2000). Two complaints about tax expenditures that may have special application to the tax law arena and that therefore deser e close attention are the lack-of-regular-legislative-review concern because they tend to be a permanent part of the Code) and the lack-of-administrative-expertise concern because the IRS is asked to administer social policy in realms outside of its area of competence). For a discussion of ways to overcome these potential problems, see Edward A. Zelinsky, Efficiency and Income Taxes: The Rehabilitation of Tax Incentives, 64 Tex. L. Rev. 973 (1986); Edward A. Zelinsky, James Madison and Public Choice at Gucci Gulch: A Procedural Defense of

Finally, tax-expenditure critiques almost always downplay, if not ignore, the potential cost savings of using tax laws to implement social policy. The possibility of such cost savings was one of the original justifications for the use of tax expenditure provisions as subsidies, and in some cases that argument still makes sense. In the case of the life insurance subsidy, for example, clearly there would be a cost advantage to using the already existing tax system and its ability to reach a broad group of individuals rather than creating an entirely new voucher system. Nevertheless, if this administrative-cost advantage of tax subsidies proves to be false, I would certainly recommend consideration of a voucher alternative.

b. Deduction or credit?

If we decide to go with demand-side tax expenditure for life insurance, still we must decide whether to use a deduction or credit.¹⁶⁹ The basic difference between the two has already

Tax Expenditures and Tax Institutions, 102 YALE L.J. 1165 (1993); Edward A. Zelinsky, Are Tax "Benefits" Constitutionally Equivalent to Direct Expenditures?, 112 HARV. L. REV. 379 (1998).

¹⁶⁹ There is an efficiency argument that would favor using a deduction over a credit, and it is based on the welfarist model of altruistic giving. According to that model, the existence of altruism creates a type of externality that will, in the absence of a subsidy, mean that the altruistic purchase of life insurance always will always be suboptimal. As it turns out, the size of the optimal subsidy is inversely related to the degree of the giver's altruism. Thus, the more altruistic the giver is, the smaller the subsidy should be; likewise, a less altruistic giver needs a larger subsidy, relatively speaking. At the limit, the least altruistic givers—those who experience a little increase in utility because someone else's utility is increased-should get a subsidy that approaches the value of the gift itself. Although this may seem counterintuitive to the non-welfarist, it actually makes sense within the welfarist model when we remember that less altruistic givers by definition give less weight to the beneficiary's utility than do more altruistic givers; therefore, the former need more encouragement to give than do the latter. Kaplow & Shavell, supra note 7, at 970. An interesting policy implication of this analysis is that a high-income individual who makes a gift that is equal to that of a low-income individual should receive a greater subsidy because of the former's relative lack of altruism (as evidenced by the size of their gifts relative to their incomes). There are a number of possible objections that could be raised to this model from outside of the welfarist perspective. For one example, it could be argued that altruism itself is a praiseworthy characteristic and that larger degrees of altruism are more praiseworthy than smaller degrees of altruism, such that the welfare-maximizing subsidy-which offers rewards in just the opposite way-would be perverse in the extreme. Kaplow anticipates the possibility of such objections. *Id.* at 971 n.12. That is precisely what a deduction does. In a system of progressive tax rates, if two taxpayers have deductible expenses of equal size, the deduction will be more valuable to the high-bracket taxpayer than to the low-bracket taxpayer. Thus, at least on efficiency grounds, a deduction may be preferable to a credit, which does not have those characteristics. Id. at 476.

been mentioned. The value of a deduction to the household is a function of the household's marginal tax rate; whereas the value of a credit is a function of whatever credit percentage Congress sets when it enacts the credit. As a result, tax expenditures in the form of deductions are often criticized as being distributionally unfair because they disproportionately benefit households with relatively high incomes-households that, in our system of progressive tax rates, will be subject to the relatively high marginal tax rates. The argument is that if tax expenditure is to be used, a credit is the superior approach from the perspective of distributive justice. This argument has been made, for example, in connection with the charitable contribution deduction. Some commentators have complained that the charitable deduction, because it is more valuable to higher-bracket taxpayers, disproportionately benefits charities preferred by high-income individuals.¹⁷⁰ contend, however, that the force of that objection depends on who tends to benefit from the charities in question. example, it has been argued that the charities preferred by high-bracket taxpayers tend to provide more in the way of public goods to society than the charities preferred by lowerincome donors. High-income taxpayers tend to give more to educational institutions and hospitals, whereas, low-income taxpayers tend to give more to religious organizations. The argument is that educational institutions and hospitals provide more public goods per dollar received than religious organizations, which are primarily devoted to serving the interests of their donors. Thus, it has been argued that even if switching from a charitable deduction to a charitable credit could be designed to maintain the same overall level of charitable giving, such a change likely would substantially alter the distribution of gifts-a big increase for religious institutions at the expense of educational institutions and hospitals.¹⁷¹ Whether or not this defense of the charitable deduction is persuasive, it seems unlikely to move anyone as a defense of a life-insurance subsidy that disproportionately benefits the

¹⁷⁰ See, e.g., RICHARD A. MUSGRAVE & PEGGY B. MUSGRAVE, PUBLIC FINANCE IN THEORY AND PRACTICE 362 (1980); CLOTFELTER, supra note 152, at 103-04.

¹⁷¹ Martin Feldstein, The Income Tax and Charitable Contributions: Part I – Aggregate and Distributional Effects, 28 NAT'L TAX J. 81 (1975); Martin Feldstein, The Income Tax and Charitable Contributions: Part II – The Impact on Religious, Educational, and Other Organizations, 28 NAT'L TAX J. 209 (1975).

households of high-income families.

In sum, unless an argument can be made that a price subsidy skewed in favor of high-income families appropriate, a credit would seem superior to a deduction on fairness grounds. Therefore, the only possible argument in favor of the deduction would be that a different approach to the problem is being used for low-income households-namely, government-provided survivorship benefits. These benefits replace a much larger fraction of income for the lowest-income households as compared with the highest-income households. And the choice of direct government provision for low-income households with a deduction-price-subsidy for higher income households might be justified on the 'bang-for-the-buck' priceelasticity theory mentioned earlier. The best way of achieving intra-family generational equity in a relatively high-income household might be the use of a deduction, because relatively high-income individuals tend to have the higher price elasticities of giving.¹⁷² The best way of achieving intra-family generational equity within relatively low-income households therefore might be government provided survivorship benefits.173

c. Accuracy vs. Complexity

Finally, there is the lingering question of fine-tuning-that is, whether it would be worthwhile to target the subsidy by, for example, varying the amount of available deduction or credit on the basis of the number of dependents living in, and/or the net worth of, each household. For example, on the theory that net worth tends to rise with age for most people (and thus-all else equal-life insurance need tends to diminish), we might

¹⁷² Another response to the distributional concern raised by the use of a deduction would be to increase marginal tax rates on upper-income households. The rate increase would not only respond to dis ibutional concerns raised by the new deduction but would actually enhance the deduction's desired substitution effect. Of course, raising marginal rates would also exacerbate other undesired substitution effects, which would have to be weighed in the balance.

¹⁷³ Of course, with really low-income households, it is not so much intra-family generational equity that concerns us, but rather inter-family equity. That is why we have the progressive income-tax rate s ucture in the first place. Therefore, if survivorship benefits are to be retained as the principal means of dealing with the underinsurance problem in low-income households, we need to rethink the funding mechanism. Currently, survivorship benefits are funded by a highly regressive payroll tax. We should consider changing the system so that the revenue source for survivorship benefits is collected in a more progressive manner.

allow a one hundred percent premium deduction for households in which the primary taxpayer is twenty-five years or younger and then phase the deduction out gradually until it is eliminated for taxpayers who are forty-five or fifty-five or whatever age is chosen.¹⁷⁴ Similarly, the percentage of premium that is deductible could be linked to the number of dependents within the household: the more children or other dependents living within the household, the greater the insurance deduction. Some households-maybe single-person households with no dependents or households with net worth above a certain amount-would be entitled to no insurance deduction whatever. The precise details of such a rule, and whether extensive fine-tuning would be worth the cost, are beyond the scope of the current analysis.

E. Existing Tax Subsidies for Life Insurance

The analysis of this Part has led to the conclusion that, in response to the problem of inadequate life-insurance coverage in this country, some form of demand-side tax subsidy may be desirable supplement to the existing social security survivorship program. The issue to which I now turn is the extent to which the existing demand-side tax expenditures for life insurance-the exclusion for employer provided insurance and the treatment of cash value life insurance-serve this function. In one sense, the obvious answer is no, given that the empirical research indicates substantial existing underinsurance notwithstanding the existence of the existing tax subsidies. Therefore, one general recommendation, which will be expanded upon in the subsections that follow, would be to make these tax subsidies more generous than they currently are.

1. The Exclusion for \$50,000 of Employer-Provided Coverage

That suggestion would apply perhaps least controversially to the existing income tax exclusion for employer-provided group term coverage. That exclusion, which applies to the

¹⁷⁴ It is possible that a one hundred percent premium deduction might not be a sufficiently generous starting point for the phasedown. For example, depending on the elasticity of demand for life insurance, it might be that a one hundred fifty percent or two hundred percent deduction would be the appropriate starting point. See supra discussion of double-deduction proposal in charitable giving the context.

premiums paid by an employer on behalf of an employee to purchase up to \$50,000 of group term coverage on the employee's life, represents a clear (albeit small) step in the general direction suggested by the analysis of this Part. Inherent in the exclusion, of course, are implicit assumptions along the lines described above in subsection A of this Part. Except for the fact that we are using an exclusion (which ties the subsidy's MRR to the taxpayer's marginal tax rate, which in turn is tied to income level), we have chosen not to fine-tune the subsidy to target the households most likely to be underinsured. In addition, we have capped the subsidy arbitrarily at \$50,000 of coverage, presumably not because we think that all employees tend to underconsume life insurance by precisely the amount of \$50,000, but because \$50,000 is a nice round number that fits within the existing revenue constraints at the time of enactment. A reform of this rule, which the analysis of this article suggests, would be to expand the existing exclusion to cover employer-provided group term coverage up to an amount that roughly equals the amount by which most households tend to underinsure. Again, this is where additional theoretical and empirical work is needed. Nevertheless, for the sake of argument, consider the following proposal: provide an exclusion for employer-provided group term life insurance coverage up to five, seven, or ten times the employee's annual income. Then choose one of those annualincome multiples and apply the same rule to everyone, or have multiples apply to employees in different circumstances-with relatively high multiples applying to younger employees and low multiples applying to older ones. Some employers already offer such life-insurance options as benefits to their employees, and many employees take full advantage of the provision, maxing out the amount of employer-provided coverage, even though only the first \$50,000 of coverage is tax-free. But many employers do not; and where such plans are offered, many employees fail to take maximal advantage of them. Increasing the amount subject to the exclusion, along the lines just described, might be enough to encourage the desired level of insurance. Whether such a change would be worth the cost in terms of tax revenue is of question that requires further precisely the sort investigation.

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2. The Tax Treatment of Cash Value Life Insurance

The other primary tax expenditure for life insurance that can be found in current law, which again is much larger in magnitude than the group-term-insurance exclusion just discussed, is the set of rules governing the tax treatment of cash value life insurance. The following summary captures the gist of those rules. 175 If an individual purchases a cash value life insurance policy (which is a contract that combines pure term life insurance and an investment vehicle into one product), the accrued earnings in the investment side of the policy-sometimes called the "inside buildup"-are not taxed unless and until the policy is partially or wholly surrendered. And even then, those investment earnings get preferential treatment. For example, upon surrender of the policy, gains are taxed only to the extent they exceed the "total policy costs," which includes the actuarial costs and the loading charges. Also, the taxpayer is allowed to recover these costs on a first-in/first-out basis. What is more, given the availability of policy loans (under which insureds can borrow part or all of the inside buildup without causing a realization event) and the exclusion for life insurance proceeds paid out upon the death of the insured, it is possible for cash value policyholders virtually to eliminate rather than just defer taxation on investment earnings accumulated inside a cash value insurance policy.

These rules create an obvious tax preference for cash value life insurance products. More precisely, they create a preference for combining one's life insurance and one's investments into a single "bundled" product rather than separating or "unbundling" those transactions though an approach that is sometimes referred to as the "buy term and invest the rest" (BTIR). If an insured-investor uses the unbundled approach, the earnings on the investments may not get the same tax-favored treatment as they would inside a cash value policy. Thus, for those taxpayers who have the resources and the desire to insure and invest, the cash value rules can be understood as subsidizing the decisions both to insure one's life and to save for future consumption, so long as the two are done together. Indeed, these two policy objectives—the need to encourage the purchase of life insurance and the need to

¹⁷⁵ For summaries of the cash value rules, see U.S. Gen. Accounting Office, TAX POLICY: TAX TREATMENT OF LIFE INSURANCE AND ANNUITY ACCRUED INTEREST, (1990) [hereinafter GAO Report]; and Andrew D. Pike, Reflections on the Meaning of Life: An Analysis of Section 7702 and the Taxation of Cash Value Life Insurance, 42 TAX L. REV. 491 (1998).

encourage long-term savings—are offered as the only plausible justification for the cash value rules by everyone who has written on the subject, critics as well as defenders.

These rules have been the subject of several extremely critical studies. 176 All of those studies implicitly or explicitly agree with the assumption that the principal justification for the cash value rules is the problem of underinsurance. However, each of the studies either explicitly concludes or strongly implies that the cash value rules should be repealed altogether. The main reason given for that conclusion is that the cash value rules primarily, and unjustifiably, benefit high-income individuals. These studies also recommend that, at the very least, the tax treatment of inside buildup should be amended to be more consistent with the current tax treatment of other types of long-term investing. Thus, with that goal in mind, two recommendations are commonly made: 1) policy loans should give rise to taxation of inside buildup with perhaps a penalty tax to boot (as is currently done with other tax-favored retirement accounts); and 2) the first-in/first-out basis-recovery rule for cash surrenders (to be contrasted with loans) should be repealed and replaced with a rule similar to the one that applies to annuities or stocks, where basis recovery is less "accelerated."

I am no fan of the cash value rules. They are among the most complicated provisions in the tax code, and they do not seem to have made much of a dent in the underinsurance problem. Indeed, despite all of the tax advantages provided to those who adopt the bundled approach, the BTIR approach still dominates the market. Moreover, there is little doubt that the cash value rules do not create an ideal response to the underinsurance problem. Any version of the deduction, exclusion, or credit proposals mentioned in the previous sections of this Part would probably be a better approach, if for no other reason than their relative simplicity. Nevertheless, if those rules are to be retained as the principal existing tax subsidy for life insurance (as seems likely to happen),

¹⁷⁶ See, e.g., GAO Report, supra note 175; DEP'T OF THE TREASURY, REPORT TO THE CONGRESS ON THE TAXATION OF LIFE INSURANCE COMPANY PRODUCTS, (1990) [hereinafter Treasu y Report]; See also Pike, supra note 175. The influence of the Pike article can be seen throughout bo h the GAO Report and he Treasury Report.

¹⁷⁷ Cash-value policies represented 66.3 percent and term policies 33.6 percent of the total new policies sold in 1997. AMERICAN COUNCIL OF LIFE INSURANCE, LIFE INSURANCE FACT BOOK 7 (1998). When the statistic is "life insurance in force" rather than new policies issued, term insurance still dominates both in terms of policies issued and face amounts of coverage. *Id.* at 8.

consider the following tentative observations.

First, a case can be made that, contrary to the conclusions of previous studies, the cash value rules should be made more generous to taxpayers, not less. Those studies have emphasized the ways that the cash value rules tend to favor savings that are bundled within a cash value policy, thus creating a "distortion" in favor of doing one's savings through the bundled approach rather than any number of BTIR approaches. However, that is precisely the point of the bundled subsidy. It is the nature of such a subsidy that the after-tax return to savings in the bundled form will outperform the savings in the unbundled form. Otherwise, there is no subsidy. Because many other tax expenditure provisions exist that favor savings outside of cash value policies, perhaps the cash value rules should be made more generous.

Second, perhaps the most interesting aspect of the cash value subsidy is the conventional wisdom among financial advisors that it is a "bad buy," and that the unbundled approach is generally better. What is the source of the negative views of cash value insurance? It stems from beliefs about how cash value insurance works in the real world. The claim is that, although cash value insurance may be a great deal in theory, in reality the tax benefits of most policies are more than outweighed by hidden administrative costs. However, this claim presents a further puzzle: given that cash value insurance is, in theory, nothing more than two separate financial products—life insurance and

¹⁷⁸ Previous studies have universally called for cutting back on the tax advantages provided in the cash value rules. *See, e.g.,* GAO Report, *supra* note 175, at 3 and Pike, *supra* note 175, at 525-35.

¹⁷⁹ To take one example, consider the income tax treatment of state supervised pre-paid tuition plans. See I.R.C. 529. Under to se plans, taxpayers can invest for their children's college education in a highly tax-favored manner, without having to buy any life insurance watsoever. See generally www.tiaacref.org/tuition/index.llml (explaining 529 college savings plans; The 529 Solution, MONEY MAGAZINE, May 2001. The availability of that option, however, along with all the other tax-favored ways of investing, undermines the value of the cash value subsidy, because the value of that subsidy is directly related to te after-tax opportunity cost of the funds.

¹⁸⁰ For example, the various reforms enacted in the 1980s designed to reduce the amount of investment earnings that can be sheltered inside a cash value policy could be repealed or at least revised. For a summary of to se rules, see Treasury Report, supra note 175.

¹⁸¹ This view has some weak support in the scholarly insurance literature. Antony C. Cherin & Robert C. Hutchins, *The Rate of Return on Universal Life Insurance*, 55 J. RISK & INS. 691 (1988); Richard B. Corbett & Jack M. Nelson, *A Comparison of Term Insurance Rates to Protection-Related Charges in Universal Life Insurance*, 59 J. RISK & INS. 470 (1992).

investment-bundled together, why would the administrative costs be higher for the bundled approach than for the unbundled approach? Why would the difference in administrative costs be large enough to offset the tax advantages of the bundled approach? If cash value insurance is, in fact, merely a bundled version of BTIR, then in a competitive market, how could such large differences in administrative costs persist? Why would they not be competed away? Presumably, in a competitive market they would, but therein lies the problem. The failure of cash value insurance to clearly dominate its BTIR alternatives, to the extent explicable by the higher administrative costs and loading charges associated with the former, is partial evidence that the cash value market may be less than fully competitive. This should be a concern—again, only if the cash value subsidy is to be retained.

CONCLUSION

Why is the problem of underconsumption of life insurance studied so little? The problems of inadequate private savings, especially retirement savings, and inadequate health insurance coverage have been the subject of countless studies and legislative proposals. By contrast, the findings of the relatively few studies of life-insurance adequacy that many households are significantly underinsured have gone largely unnoticed by policymakers and subsequent scholars. Why is that? Granted, the magnitude of the life-insurance problem may be small in comparison with the problem of inadequate retirement savings. Most households that own term insurance policies never collect on those policies. This is because most breadwinners live long enough that the household becomes largely independent of the breadwinner's human capital. and the policies are allowed to lapse. Children grow up and move out on their own, and families eventually accumulate sufficient non-life-contingent assets-household savings plus Social Security entitlements-to provide for the financial needs of surviving spouses. After all, premature death is a rare event by definition; so we should not expect it to be a "front burner" issue for most people most of the time.

Still, the level of underinsurance documented in the Bernheim study discussed in Part II is not trivial. If underinsurance were truly as "widespread" as it suggest, one would expect more public concern about the question. Perhaps it will come as the study gets play in the academic community, but that is doubtful. As reflected

in Part I, there remains a great deal of uncertainty about the central assumption on which all of the existing empirical studies have been based: that the optimal or correct amount of life insurance entails an amount of coverage necessary to leave the dependent with the same consumption power he or she had when the breadwinner was alive. Even if we could agree on that assumption, there would remain the equally difficult and equally important question of what constitutes "maintaining the household standard of living."

Consider, for example, the response I received upon asking a friend how much life insurance a household should buy: "Enough so that the breadwinner's dependents would not be left destitute, but probably no more than that." A number of others to whom I have put this question have expressed similar opinions. colleague even went so far as to suggest that he wanted to arrange his affairs so that when he died his family would actually be a little worse off financially as a result, so that they would be sure to experience regret. In other words, he did not want them dancing on his grave. The life insurance decision is a complex one, no doubt. The living-standard-maintenance baseline may not be for everyone, even if it can be given some content in particular However, my concern is that the impossibility of identifying a single correct formula for determining life-insurance adequacy will serve to justify a lack of introspection and a lack of intra-household communication, such as between spouses, and on a regular basis, about what the household's actual life insurance needs are, problems that easily can be made worse by the sort of market failures (for lack of a better term) described in Part II.B above.

With this concern in mind, consider one other anecdote that arises out of my research for this article. In getting comments on earlier drafts, the initial reaction, especially from colleagues with economics or business backgrounds, has often been decisive and adamant: I have gotten this all wrong—exactly backwards, in fact. The life insurance market is one that should be expected to work especially well. Life insurance contracts are quite simple and easy to understand—at least that is the case with term insurance policies. Therefore, consumers should have no difficulty understanding and evaluating the various alternatives. In addition, the market seems especially competitive, given the price wars being waged over the Internet. Moreover, the laundry list of market-failure rationales described in part II.B. (adverse selection,

externalities, myopia, and intra-household agency problems) just do not ring true. Ironically, however, a few of those same critics have come back to me and, without backing down one bit from their assessment of the paper, have confessed that, upon reflection (and after discussion of the matter with their spouses), it occurs to them that personally they are in fact woefully underinsured, a fact that they admit had not occurred to them until after they had read this article. Therefore, even if this article does not lead to policy changes of the sort described in Part III, perhaps it will help to encourage more careful assessments of household insurance needs among its audience by prompting a discussion of the life insurance adequacy question.