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# The Market For Private Long-Term Care Insurance

#### Amy Finkelstein<sup>\*</sup>

#### Long-Term Care Risk

Long-term care expenditures represent one of the largest uninsured financial risks facing the elderly in the United States. Expenditures on long-term care, such as home health care and nursing homes, accounted for 8.5 percent of all health care spending in the United States, and about 1.2 percent of GDP in 2004.<sup>1</sup> These long-term care expenditures are projected to triple in real terms over the next few decades, in large part because of the aging of the population.<sup>2</sup>

Long-term care expenditures are distributed unevenly among the elderly population. Therefore they represent a significant source of financial uncertainty for elderly households. Only about one third of current 65-year-olds will never enter a nursing home. However, of those who do, 12 percent of men and 22 percent of women will spend more than three years there; one in eight women who enter a nursing home will spend more than five years there.<sup>3</sup> These stays are costly: on average, a year in a nursing home cost \$50,000 in 2002 for a semi-private room, and even more for a private room.<sup>4</sup> Standard insurance theory suggests that the random and costly nature of longterm care makes it precisely the type of risk that would make insurance valuable for risk-averse individuals.

Yet most of the expenditure risk is uninsured. Only 4 percent of long-term care expenditures are paid for by private insurance, while one third are paid for out of pocket.<sup>5</sup> By contrast, in the health sec-

\* Finkelstein is a Faculty Research Fellow in the NBER's Programs in Public Economics, Health Care, and the Economics of Aging, and an Assistant Professor in the Department of Economics at MIT. Her profile appears later in this issue tor as a whole, private insurance pays for 35 percent of expenditures and only 17 percent are paid for out of pocket.<sup>6</sup>

The limited insurance coverage for long-term care expenditures has important implications for the welfare of the elderly, and potentially for their adult children as well. These implications will only become more pronounced as the baby-boomers age and as medical costs continue to rise.

The limited private insurance market also has implications for government expenditures. Because more than one third of Medicaid expenditures are already devoted to long-term care,<sup>7</sup> policymakers are increasingly concerned about the fiscal pressure that further growth in long-term care expenditures will place on federal and state budgets in the years to come. As a result, there is growing interest in stimulating the market for private long-term care insurance.

There are a host of potential theoretical explanations for the limited size of the private long-term care insurance market.8 On the demand side, limited consumer rationality-such as difficulty understanding low-probability high-loss events 9 or misconceptions about the extent of public health insurance coverage for longterm care — may play a role. Demand also may be limited by the availability of imperfect but cheaper substitutes, such as the public insurance provided by the means-tested Medicaid program, financial transfers from children, or unpaid care provided directly by family members in lieu of formal paid care.<sup>10</sup> On the supply side, market function may be impaired by such problems as high transactions costs, imperfect competition, asymmetric information, or dynamic problems with long-term contracting.

This article briefly summarizes a rap-

idly growing body of empirical work dedicating to improving our understanding of the private long-term care insurance market in the United States, and why that market is currently so small.

## The Functioning Of Private Long-Term Care Insurance: High Prices, Limited Benefits

To understand the small size of the private long-term care insurance market, Jeff Brown and I start by examining what the available policies in this market are like.11 We find that the typical policy that is purchased covers only about one third of the expected present discounted value of long-term care expenditures. Moreover, this policy is provided at premiums that are "marked up" substantially above expected benefits. We estimate that the typical policy purchased by an average 65-year-old in the population and held until death has a load of 0.18; in other words, the buyer on average will get back only 82 cents in expected-presentdiscounted-value benefits for every dollar paid in expected-present-discountedvalue premiums. Most policies, however, are not held until death, and our estimate of the load rises substantially once we account for this. Individuals often stop paying premiums at some point after purchase, and therefore forfeit any right to future benefits. Because the premium profile of these policies is heavily frontloaded, especially relative to benefit payments, accounting for policy forfeiture raises our central estimate of the average load considerably, from 18 cents on the dollar to 51 cents on the dollar.

This 51-cent load for long-term care insurance is substantially higher than loads that have been estimated in other private insurance markets. For example, the estimated load on life annuities purchased by a typical 65-year-old in the population is about 15 to 25 cents on the dollar<sup>12</sup> and the estimated load for health insurance policies is about 6 to 10 cents on the dollar for group health insurance and 25 to 40 cents on the dollar for the (less commonly purchased) non-group acute health insurance.<sup>13</sup>

Complementing the evidence of high loads and limited benefits is growing evidence of specific market imperfections. Kathleen McGarry and I have found that individuals have private information about their long-term care utilization risk that insurance companies do not have and that individuals use this information in deciding whether to purchase long-term care insurance. Such asymmetric information makes it difficult for individuals to be able to buy private insurance at prices that are actuarially fair for them, given their (privately known) risk of long-term care use.<sup>14</sup>

There is also evidence of a number of "dynamic contracting" problems that arise because long-term care insurance involves locking in a premium payment schedule now for benefits that, if they arise, are likely to accrue about twenty years in the future.<sup>15</sup> This raises a host of issues such as the risk of bankruptcy before claims are made, the risk of dramatic growth in longterm care costs that insurance companies cannot diversify simply by pooling individual risks,<sup>16</sup> and the risk that individuals who learn over time that their health is better than expected will drop out of the insurance pool, thus raising the average risk of the pool and hence the average premium.17

## The Role Of Medicaid In Limiting Demand For Private Insurance

The evidence just reviewed suggests that the private long-term care insurance market does not appear to function efficiently. These market problems undoubtedly contribute to its small size. Yet at the same time, there is also evidence that "fixing" these supply side market failures would not by itself be sufficient to induce most elderly to buy long-term care insurance. In other words, factors limiting demand for private insurance are also very important for understanding this market's small size.

To investigate demand for private insurance, Jeff Brown and I have developed and calibrated a utility-based model of an elderly individual's demand for private insurance.<sup>18</sup> We consider demand for private insurance given the current structure of policies discussed above, and the presence of the public Medicaid program. Medicaid functions as a payer-oflast resort, covering long-term care expenditures only after the individual has met stringent asset and income tests. It is thus a highly incomplete - but "free" - substitute for private long-term care insurance. Our model is able to replicate basic stylized facts concerning the portion of elderly that buy private insurance, and insurance rates by gender or wealth.

We examine how demand would change under various counterfactual assumptions. Our most striking finding is that, even if we were to "fix" whatever supply side problems may exist — and (contrary to fact) offer comprehensive private policies at actuarially fair prices — at least two-thirds of the wealth distribution still would not want to buy comprehensive insurance given the current structure of Medicaid.

Where does this large Medicaid crowd-out effect come from? It arises because a large portion of private insurance benefits are redundant, given the benefits that Medicaid would have provided in the absence of private insurance. We refer to this as the "implicit tax" that Medicaid imposes on private insurance. We estimate that for a male (female) at the median of the wealth distribution, 60 percent (75 percent) of the benefits from a private policy duplicate the benefits that Medicaid would otherwise have paid.

The Medicaid implicit tax stems from two features of Medicaid's design, which results in private insurance reducing expected Medicaid expenditures. First, by protecting assets against negative expenditure shocks, private insurance reduces the likelihood that an individual will meet Medicaid's asset-eligibility requirement. Second, Medicaid is a secondary payer when the individual has private insurance. This secondary-payer status means that if an individual has private insurance, the private policy pays first, even if the individual's asset and income levels make him otherwise eligible for Medicaid; Medicaid then covers any expenditures not reimbursed by the private policy.

The Medicaid implicit tax explains the large crowd-out effect of Medicaid. It is important to emphasize that this large crowd-out effect comes *despite* that fact that Medicaid provides an inadequate consumption-smoothing mechanism for all but the poorest of individuals. Medicaid's income and asset spend-down requirements impose severe restrictions on an individual's ability to engage in optimal consumption smoothing across states of care and over time. We estimate that, for most of the wealth distribution, the welfare loss associated with incomplete Medicare coverage relative to full insurance coverage is substantial.

We also find that reforms within the basic structure of the current Medicaid system are unlikely to have much of an effect on Medicaid's implicit tax, and hence on its crowd-out effect. For example, even if Medicaid's asset limits were eliminated for individuals who bought private insurance — so that these individuals were immediately eligible for Medicaid — Medicaid's implicit tax would remain large because of its status as a secondary payer when individuals have private insurance.

Recent empirical work that I have done with Jeff Brown and Norma Coe is consistent with this simulation result.<sup>19</sup> We empirically examined the effect of variation in Medicaid's asset protection rules on long-term care insurance coverage. These estimates imply that, if every state in the country moved from their current Medicaid asset eligibility requirements to the most stringent Medicaid asset eligibility requirements allowed by federal law — a change that would decrease average household assets that could be kept while qualifying for Medicaid by about \$25,000 — demand for private long-term care insurance would rise by only 2.7 percentage points. While this represents about a 30 percent increase in insurance coverage relative to current ownership rates, the vast majority of households would still find it unattractive to purchase private insurance. The combination of the simulation and empirical results suggests that, without substantial reductions in Medicaid's implicit tax, the market for private long-term care insurance is likely to remain quite small.

#### Conclusions

Long-term care expenditures are a large and growing risk for elderly individuals. The private insurance market is miniscule, and the public payer of last resort provides very incomplete coverage for all but the poorest of individuals. The private market does not appear to function smoothly. Premiums are marked up substantially above expected benefits, and there is evidence of various market failures, including asymmetric information and dynamic contracting problems. Yet, the evidence suggests that even if all of these private market problems were "fixed" — so that actuarially fair comprehensive insurance were available — the private insurance market would still remain small because of the large crowd-out effect from the public Medicaid program.

<sup>1</sup> Congressional Budget Office, April 2004, "Financing Long-Term Care for the Elderly", Government Printing Office: Washington, DC.

<sup>2</sup> Congressional Budget Office,

March1999, "Projections on Expenditures for Long-Term Care Services for the Elderly", Government Printing Office: Washington, DC.

 J. R. Brown and A. Finkelstein,
 "The Interaction of Public and Private Insurance: Medicaid and the Long-Term Care Insurance Market," NBER Working Paper No. 10989, December 2004.
 MetLife Mature Market Institute,
 "MetLife Market Survey of Nursing Home and Home Care Costs 2002."
 Congressional Budget Office, 2004, ap.

<sup>5</sup> Congressional Budget Office, 2004, op. cit.

6 National Center for Health Statistics, Health, United States, 2002 With Chartbook on Trends in the Health of Americans, Hyattsville, Maryland, 2002. 7 U. S. Congress, Committee on Ways and Means, "2004 Green Book" Washington DC: GPO, 2004. 8 For a review of this literature, see E. Norton, "Long-term Care", in A.J. Culver and J.P. Newhouse, eds., Handbook of Health Economics, Vol. 1, Ch. 17, Elsevier Science, 2000. 9 H. Kunreuther, Disaster Insurance Protection: Public Policy Lessons, New York: Wiley, 1978.

<sup>10</sup> M. Pauly, "The Rational Non-purchase of Long-Term-Care Insurance", Journal of Political Economy, 98(1) 1990, pp.153–68.

<sup>11</sup> J.R. Brown and A. Finkelstein, "Supply or Demand: Why is the Market for Long-Term Care Insurance So Small?" NBER Working Paper No. 10782, September 2004. <sup>12</sup> O.S. Mitchell, J. M. Poterba, M. Warshawsky, and J. R. Brown, "New Evidence on the Money's Worth of Individual Annuities", American Economic Review, 89 (December 1999), pp.1299–318.

<sup>13</sup> *J. Newhouse,* Pricing the Priceless: A Health Care Conundrum, *MIT Press, Cambridge, MA, 2002.* 

<sup>14</sup> A. Finkelstein and K. McGarry, "Multiple dimensions of private information: evidence from the long-term care insurance market," American Economic Review, September 96(4): pp. 938–58, 2006.

<sup>15</sup> Brown and Finkelstein, op. cit., Working Paper 10989.

<sup>16</sup> D. Cutler, "Why Don't Markets Insure Long-Term Risk?" unpublished working paper, 1996, http://post.economics.harvard. edu/faculty/dcutler/papers/ltc\_rev.pdf
<sup>17</sup> A. Finkelstein, K. McGarry, and A. Sufì, "Dynamic Inefficiencies in Insurance Markets: Evidence from Long-Term Care Insurance", American Economic Review Papers and Proceedings, 95: pp. 224–28, 2005.

<sup>18</sup> J.R. Brown and A. Finkelstein, op. cit., Working Paper 10989.

<sup>19</sup> J.R. Brown, N. B. Coe, and A.Finkelstein, "Medicaid Crowd-Out of Private Long-Term Care Insurance: Evidence from the Health and Retirement Survey," NBER Working Paper No.12536, September 2006.