

**APPENDIX Jc:**

**STRATEGIC ANALYSIS OF HHS ENTRY INTO THE  
LONG-TERM CARE INSURANCE MARKET**

# **STRATEGIC ANALYSIS OF HHS ENTRY INTO THE LONG TERM CARE INSURANCE MARKET**

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## I. Introduction

Despite the potentially catastrophic costs of long term care, fewer than 3% of Americans have long term care insurance (LTCI). In order to increase LTCI coverage, the CLASS Act authorizes the Department of Health and Human Services HHS to offer a government-sponsored long term care insurance product (henceforth, CLTCI) alongside the offerings of private insurers. A key requirement of the CLASS Act is that projected revenues from CLTCI must equal or exceed expenses; that is, the product should be designed to at least break even. A second key requirement is that CLTCI cannot medically underwrite its basic policies; instead, initial premiums can vary only according to age at enrollment. HHS may be able to offer additional plans not described by the CLASS Act; it is not clear if HHS can medically underwrite these offerings. A third key feature is that employers that participate in the CLASS plan must automatically enroll their employees, who in turn can opt out of the program.<sup>1</sup> HHS has asked us to assess whether CLTCI is likely to be financially viable and to provide recommendations that would increase the appeal and viability of CLTCI.

In short, we have been asked to determine whether CLTCI can profitably enter the LTCI market. Although it is tempting to perform such an analysis by projecting revenues and expenses, such projections often prove to be highly speculative. Instead, we perform a *strategic analysis* of the LTCI market in general and possible CLTCI designs in particular. Strategic analysis, as exemplified by Michael Porter's *Competitive Strategy* and Besanko, Dranove, et al's *Economics of Strategy*, considers whether the underlying economic conditions of a market enable the participants to prosper and, at the same time, assesses whether there are profitable opportunities for entry.

We employ three classic tools of strategic analysis:

- *Industry Mapping* provides a basic set of facts about the industry that are required to understand the nature of competition and the potential for entry.
- *Industry analysis* assesses the competitiveness of a market, whether market conditions are likely to support profitability, and how incumbent firms are likely to respond to entry.

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<sup>1</sup> Summaries are available at [www.classactprovisions.com/PDF/CRS\\_Class%20Act\\_May\\_2010.pdf](http://www.classactprovisions.com/PDF/CRS_Class%20Act_May_2010.pdf), [www.cahealthadvocates.org/advocacy/2010/class.html](http://www.cahealthadvocates.org/advocacy/2010/class.html) and [www.ncoa.org/independence-dignity/class-act-summary.html](http://www.ncoa.org/independence-dignity/class-act-summary.html).

- *Positioning analysis* of a specific firm assesses the relative strengths and weaknesses of that firm and whether it can prosper by outperforming its rivals.

## II. Industry Mapping

Despite the potential value of LTCI for many Americans, the LTCI market is very small.<sup>2</sup> Approximately 8 million Americans currently have LTCI; this corresponds to about 2.5% of the total population and 3.5% of the working-age population.<sup>3</sup> There have been many theories advanced for the relatively small size of the market, including the high cost of coverage, uncertainty about the need for LTCI, the availability of Medicaid to pay for long term care expenses, and the notion that individuals may be reluctant to forego consumption today in order to protect their estates.<sup>4</sup> We will not speculate as to the merits of these theories but will identify ways that existing LTCI products may fail to meet the needs of potential customers.

Table 1 reports total premiums collected (in \$millions) for all LTCI policies.<sup>5</sup>

**Table 1: Size of the Long Term Care Insurance Market (in \$millions)**

	All markets	Group (2008)	Individual (2009)
All policies*	\$7,065	\$1,043	\$6,022
New policies	\$924	\$187	\$737

\* Includes renewals

<sup>2</sup> Much of the information about the industry is taken from *Brokers World* magazine's 2009 survey of the individual market and 2008 survey of the group market. (These are the most recent surveys available.) Most surveyed sellers are life or health insurance companies selling LTCI as riders to health insurance or as stand-alone products. The group survey covers 6 carriers who account for approximately 80 percent of annual sales in the group market. The individual survey covers 19 carriers that account for 90 percent of sales. We account for the incompleteness of the surveys when reporting on market size and structure; our analysis of concentration assumes that firms excluded from the survey are of negligible size. We acknowledge that market share data derived from such surveys can be inaccurate. We therefore rely on these data for qualitative inferences only.

<sup>3</sup> Anne Tergesen and Leslie Scism, "Long-Term-Care Premiums Soar," *Wall Street Journal*, October 16, 2010; U.S. Census Bureau 2009 population estimates, <http://quickfacts.census.gov/qfd/states/00000.html>. See also, Paula Span, "A New Long-Term Care Insurance Program," *New York Times*, March 24, 2010.

<sup>4</sup> Jeffrey Brown and Amy Finkelstein, "Why is the market for long-term care insurance so small?" *Journal of Public Economics* 91 (2007): 1967–1991.

<sup>5</sup> It is not clear if these figures include life insurance policies that permit the beneficiary to convert some of the insurance benefit to cash to pay for long term care. At death, the beneficiaries receive the balance of the insured amount less the long term care payout. Such policies seem to have been widely publicized about ten years ago.

Annual premium revenues from new and existing products exceed \$7 billion, which represents less than 3% of overall expenditures on nursing and home health in 2008.<sup>6</sup> In contrast, premiums for traditional private health insurance represent approximately 37% of healthcare expenditures (excluding nursing and home health).<sup>7</sup> The individual market for LTCI is approximately five times larger than the group market, although the group market has gained on the individual market in terms of new sales. (Prior to the recession, the group growth rate has averaged 18 percent versus 12 percent for the individual market.) This reverses the predominant pattern in private health insurance where, due to tax subsidies and pooling to reduce adverse selection, the group market is far larger than the individual market.

#### *a. Channels*

LTCI is typically sold by life insurance companies. This reflects the idea that individuals who purchase LTCI are trying to protect the value of their estates. As seen in Table 1, the vast majority of LTCI is sold in the individual insurance market. These policies are sold by agents for life insurance companies or by independent insurance brokers. These agents and brokers invest considerable effort identifying customers who are interested in protecting their estates and offer LTCI as a natural adjunct to life insurance. LTCI in the group market is usually sold in conjunction with group life insurance.

By all accounts, insurance agents receive substantial commissions. Although we do not have specific information about LTCI, we can gain insight by considering commissions for life insurance.<sup>8</sup> While commissions vary somewhat by firm, the typical first year commission for life insurance products is 30–50% (whole life) and 90% (term life). Commissions run 5% per year thereafter.<sup>9</sup> Commissions may be higher for independent agents and lower for company

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<sup>6</sup> In 2008, nursing home expenditures were \$138.4 billion and home health care expenditures were \$64.7 billion. CMS, 2008 National Health Expenditures, Table 2.

<http://www.cms.gov/NationalHealthExpendData/downloads/tables.pdf>.

<sup>7</sup> In 2008, healthcare expenditures excluding nursing and home health care amounted to \$2.136 trillion. Total premiums for private health insurance were \$783.2 billion. CMS, 2008 National Health Expenditures, Tables 2 and 12.

<sup>8</sup> We obtained this information through a combination of Internet search and interviews with a life insurance salesperson. See <http://www.lifeinsuranceadvisorsinc.com/articles/individuals/HowToReduceCommissions.pdf>; [http://www.ehow.com/about\\_6509638\\_kind-do-insurance-agents-get\\_.html](http://www.ehow.com/about_6509638_kind-do-insurance-agents-get_.html); <http://www.insure.com/articles/generalinsurance/agent-commissions-2.html>; <http://insurance.hirby.com/what-is-the-average-life-insurance-commission/>; Interview with Barry Finkelstein, 11/4/2010.

<sup>9</sup> <http://personalinsure.about.com/od/life/f/lifefaq3.htm>. These figures do not include “expense allowances,” which companies grant to larger sellers (called “general agents” and can add 10% or more to the total commissions paid).

agents. Overall, the average commission over the lifetime of an LTCI policy appears to be in the neighborhood of 10 percent.

We are uncertain whether group LTCI commissions are different from individual LTCI commissions. Because the high cost of commissions has a crucial role to play in assessing CLASS insurance viability, and because the group market is growing relative to the individual market, it will be helpful to resolve this uncertainty.

Brokers are uncertain as to how the CLASS Act will affect their business. As might be expected from incumbent firms concerned about a potential entrant, some LTCI companies are encouraging brokers to give negative information about the act.<sup>10</sup>

### ***b. Characteristics of Policies Sold***

Agents and brokers play another important role in the LTCI market; they inform consumers about a myriad of potentially confusing features. Some of these features help protect insurers against adverse selection. These include:

- ***Pricing Structure.*** Premiums for LTCI are intended to be fixed for the duration of the policy. The amount depends largely on the enrollee's age when they first purchase coverage. Most enrollees are currently in their 50s and 60s. If coverage lapses, an individual may reenroll, but the premium is based on their age at reenrollment. Although it can be very costly for individuals to let coverage lapse, the drop-out rate is considerable and drop-outs are an important source of profits for LTCI carriers.

Notwithstanding the "fixed premium" policy design, all stock companies issuing LTCI have requested and received approval for rate increases for existing policyholders in order to cover "unexpected" increases in projected spending. Increases have ranged up to 40%. (Mutual companies have not done so.)<sup>11</sup>

- ***Maximum Daily Benefit.*** Nearly all LTCI policies reimburse caregivers up to a maximum pre-specified amount, known as the maximum daily benefit. Most private carriers offer a wide range of maximum daily benefits up to \$400 or higher. The CLASS Act requires that HHS offer an LTCI product with a minimum average daily benefit of \$50. The minimum benefit is very small relative to private sector LTCI, where the median maximum daily benefit is about \$150. Indeed, only 12% of new individual policies and 18% of new group policies have daily benefits of \$99 or less.<sup>12</sup> Approximately half of all

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<sup>10</sup> <http://blog.empowerltci.com/2010/08/17/7-facts-benefit-brokers-need-to-know-about-selling-ltci/>

<sup>11</sup> Source: Interview with Barry Finkelstein, 11/4/2010

<sup>12</sup> *Broker World* does not separately report the percentage of policies with \$50 daily benefits.

new policies offer at least \$150 in daily benefits. 70 percent of individual policies and 90 percent of group policies have some sort of inflation adjustment for benefits.

- *Elimination Period.* The number of days that the policy holder must be eligible for long term care before insurance coverage begins. Although most carriers offer a number of options for the elimination period, the typical period for nursing homes is usually 90-100 days. Some policies have a much shorter elimination period for home care. The CLASS Act does not specify any particular elimination period for CLASS insurance.
- *Benefit Period.* Benefit periods range in length; many policies will pay benefits for no more than 5 years after the initial claim. Unlike private plan, the CLASS Act does not limit the benefit period for CLASS Act insurance.

There are additional features including inflation adjustments, pricing of spouses' policies, handling of premiums upon the death of the enrollee, and future purchase options. Customers often ask brokers and agents to price out a very generous policy and then ratchet down the features until the premium fits their budget. The complexity of this process helps explain the important role of the broker/agent.

### *c. Market Structure*

Nearly all of the leading sellers of LTCI are also very active in the life insurance market.

Table 2a lists the leading carriers in the group market measured by share of premiums for new policies written in 2007. Table 2b lists the leading carriers in the individual market for 2009. The tables also indicate the year in which each company (or its corporate predecessor) was founded. We do not know when each firm entered the LTCI market.



**Table 2a: National Market Shares and Year of Founding—Group Market, 2007**

Carrier	Share	Year Company Founded
John Hancock	.327	1862
UNUM <sup>13</sup>	.195	1874
MetLife	.112	1863
CNA	.083	1897
Prudential	.071	1875
Genworth	.012	1871
"Fringe" carriers not surveyed	.200	n/a

**Table 2b: National Market Shares and Year of Founding—Individual Market, 2009**

Carrier	Share	Year Company Founded
John Hancock	.240	1862
Genworth	.222	1871
Northwestern	.076	1857
MetLife	.075	1863
Bankers Life	.055	1879
New York Life	.044	1841
Prudential	.037	1875
MassMutual	.027	1851
Mutual of Omaha	.026	1909
Berkshire <sup>14</sup>	.026	1860
State Farm	.023	1922
All other carriers combined	.149	n/a

A useful way to assess the competitiveness of a market is by computing a measure of market concentration, such as the *Herfindahl-Hirschman Index* (HHI), which is commonly used by the Department of Justice and Federal Trade Commission for antitrust enforcement.<sup>15</sup> The HHI in the group market is approximately 1700, which under current antitrust guidelines is considered “moderately concentrated”; the HHI in the individual market is approximately 1260, which represents an “unconcentrated” market.<sup>16</sup> In other words, both markets appear to

<sup>13</sup> UNUM is the result of the 1990s consolidation of Union Mutual (founded in 1874), Colonial Life, Paul Revere, and Provident Life.

<sup>14</sup> Berkshire merged with Guardian Life in 2001. Guardian was founded in 1860.

<sup>15</sup> The HHI equals 10,000 times the sum of the squared market shares of each firm. For example, if the market consists of three firms with market shares of 0.5, 0.3, and 0.2, then  $HHI = 10,000 \times (.25 + .09 + .04) = 3800$ .

<sup>16</sup> FTC and DOJ, *Horizontal Merger Guidelines*, issued August 19, 2010, § 5.3. <http://www.ftc.gov/os/2010/08/100819hmg.pdf>. Under the guidelines in effect prior to August of 2010, both the

have enough competitors to expect reasonably vigorous competition.<sup>17</sup> There are other factors besides market structure that contribute to the competitiveness of the market, and we will consider these in the Industry Analysis.

There has been considerably more market share volatility in the group market than in the individual market. In the last few years, John Hancock has remained the leader in the group market but UNUM has supplanted MetLife as the number two seller while CNA and Prudential have both enjoyed substantial market share growth. In the wake of high benefit claims, John Hancock recently decided to exit the group market.<sup>18</sup> These “share shifts” may be indicative of a competitive marketplace, or perhaps of adverse selection problems. In the individual market, John Hancock and Genworth have jockeyed for the position of market leader and Northwestern is the only carrier to enjoy a significant uptick in market share. CNA is no longer writing individual policies.

There appears to be considerable entry and exit among fringe competitors. An analysis performed in 2005 found the following:

“In the past 5 years, 18 major companies have sold out their long term care insurance business, may sell out or are gone from the market . . . Probably no one has kept track of the number of smaller companies . . . that have pulled out of the market as well. When the dust settles, if it ever does, 6 companies may represent over 80% of the market . . . .”<sup>19</sup>

Most churn occurs among fringe competitors; no firm with less than 10 years of experience in the LTCI market has more than a trivial share in the individual market.

#### *d. Pricing*

Some LTCI policies have built-in inflation protection; others do not. Policies without inflation protection must be underwritten to anticipate future utilization. Policies with inflation protection must also anticipate future price increases.

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group market and the individual market would have been deemed moderately concentrated.

<sup>17</sup> National market shares will accurately describe the competitive conditions in local markets under either of the following conditions. The first is that the market for the sale of LTCI is national, which would mean that most consumers are able to purchase policies from most LTCI insurers. The second is that, even if most of these firms do not compete in most markets, they could readily do so.

<sup>18</sup> MetLife recently announced that it would stop selling new LTCI policies, though it will continue servicing existing enrollees. Erik Holm and Anne Tergesen, “MetLife Discontinues Sales Of Long-Term Care Coverage,” *Wall Street Journal*, November 11, 2010.

<sup>19</sup> <http://www.longtermcarelink.net/a9insurance.htm#overview>.

Historically, LTCI insurers were required by state regulators (through the National Association of Insurance Commissioners, or NAIC) to have at least a 60% lifetime loss ratio (based on a comparison of the net present value of premiums and claims). This has led to pricing volatility, as expected claims costs have been volatile. In particular, differing expectations with respect to future LTC cost growth can drive differences in premiums offered today. For example, if an insurer expects LTC costs to grow at 5 percent per year, then in order to provide benefits valued at \$100 today the insurer will require \$551 in 35 years. If an insurer instead expects LTC costs to grow at 5.5 percent, providing those same benefits will require \$650 in 35 years. This 1/2 point difference in expectations of cost growth results in an 18% difference in the perceived actuarially fair premium. The observed pricing variation likely reflects variation in cost growth projections both across firms and within firms over time.

### III. Industry Analysis

Industry analysis proceeds by considering a series of economic factors that may affect the intensity of competition and thereby affect profitability. When assessing profitability, no single factor is definitive. Nor is there a formula that translates the totality of the analysis into a particular level of profits. The analysis instead provides a qualitative assessment of profitability. Industry analysis also examines trends in these factors, to facilitate a forecast of future profit trends. If several key factors trend in the same direction, then forecasts about trends in profitability are more reliable.

Industry analysis is often associated with the work of Harvard economist Michael Porter, who identified five major forces that affect profitability—Internal Rivalry, Entry, Substitutes, Buyer Power and Supplier Power. In order to organize our analysis, we follow the Template for Doing a Five Forces Analysis that appears in Besanko, Dranove, et al., *Economics of Strategy*, which slightly modifies and updates the Porter framework. This template consists of a series of factors to be considered in conjunction with each force.

#### *a. Internal Rivalry*

Degree of Seller Concentration. As reported above, the LTCI market is relatively unconcentrated. This tends to increase price competition. There has been no pronounced trend in seller concentration. Some smaller players, such as State Farm, may be seeking to gain share.

Despite the relatively large number of competitors, there is substantial heterogeneity in pricing. *Broker World* conducted an experiment in which it solicited pricing quotes on behalf

of a fictitious employer. Plan design was held constant and prices were quoted by age of enrollee and for plans with and without inflation adjustment. Five of the six survey targets responded. For plans without inflation adjustment, the ratio of maximum to minimum price quotes ranged from 116–151% ,with no discernable correlation between price dispersion and enrollee age. For plans with inflation adjustment, the ratio of maximum to minimum price quotes ranged from 121–191%, and dispersion was negatively correlated with enrollee age.<sup>20</sup>

Rate of Industry Growth. The LTCI market is currently stagnant, perhaps because of the economic downturn. This can intensify pressure on firms to lower prices in order to boost business. As the economy improves, sales of LTCI should improve as well, easing pricing pressure.

Other factors may affect industry growth. The baby boom bubble is entering the prime years for purchasing LTCI, thereby boosting demand. Strains on Medicaid budgets might limit federal and state funding for long term care, thereby increasing the demand for LTCI. Likewise, cutbacks to the Medicare Part C program (i.e., Medicare Advantage) might increase demand for LTCI. On the other hand, the movement of business to health insurance exchanges might reduce employer involvement in providing health benefits, thereby reducing demand for LTCI.

Cost Differences Among Firms. All major players have similar administrative and marketing cost structures. However, plans may have markedly different underwriting policies and selection strategies leading to different cost structures. This is reflected by the evidence on price dispersion reported in *Broker World*.

Excess Capacity. Capacity, as normally construed, is a nonissue in LTCI. However, firms may be constrained from growth if they lack financial capital. Economic recovery may provide life insurance firms with the cash required to support growth.

Product Differentiation. In one sense, the products are highly homogeneous—the value of a \$150 daily benefit is essentially the same regardless of the source of those funds. Homogeneity in certain benefit features is driven by HIPPA regulations, which specify requirements that plans must satisfy in order for premiums to be (partly) tax-deductible and benefits tax-exempt.

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<sup>20</sup> As we note above, differences in the expected growth rate of LTC costs will drive differences in the premiums firms quote today. Sellers of LTCI are likely to have more consistent projections over a shorter time horizon than a longer time horizon, which could explain why dispersion is lower for older enrollees.

LTCI requires a fairly substantial outlay and consumers likely spend considerable time evaluating the product. Thus, one might expect to see strong price sensitivity. Due to the role of the sales agent, however, consumers may be loyal to one product or another. About half of all sales occur through company agents who may already have a relationship with the client through the sale of life insurance. There has recently been a shift of sales to independent agents who may represent several LTCI sellers. If this shift continues, consumers may display less loyalty and pricing pressures may intensify.

Switching costs. Consumers who have already purchased LTCI have enormous switching costs, as the premium is based on the age of initial purchase. Thus, virtually all price competition is largely restricted to new customers.

Observability of prices. Sellers can more easily tacitly collude if they can observe and quickly react to competitor price changes. (The reason is that any effort by one firm to gain market share through a price reduction is easily and quickly mimicked by its rivals.) Pricing in the individual market is customer specific, making “copycat” price matching difficult. Pricing in the group market is also not easily observed. Observability may increase substantially if the LTCI market switches to a Geico/Progressive sales model, as we discuss below.

Use of Facilitating Practices. NAIC regulations may serve to put a floor on insurance rates, anchoring premiums and acting as a “facilitating practice” (In this context, facilitating practices are practices that, by increasing price transparency or creating focal pricing points, may make tacit coordination on pricing more likely or sustainable). NAIC regulations that act as a floor on pricing would limit each LTC insurer’s ability to gain market share by setting an aggressive premium.

Size of sales orders. Sellers price more aggressively when each sale represents a large portion of their business. With the exception of very large employer groups, most sales are a miniscule portion of total business. CLASS may shift more attention to employer-based sales, which could intensify price competition.

Exit Barriers. Price competition is reduced when firms can easily exit markets, as they are more prone to exit than endure bitter price wars. LTCI carriers could face considerable harm to their reputations in the much larger life insurance market if they exited LTCI. They would be more likely to sell their existing policies to another carrier.<sup>21</sup> Overall, we would expect LTCI carriers to defend their positions if their survival is threatened.

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<sup>21</sup> While it is discontinuing sales of new LTCI policies, MetLife is apparently planning to continue servicing

Industry Elasticity of Demand. The industry elasticity of demand is estimated to be around 0.75 which is not particularly high. Price increases, if they can be sustained, will not drive away so many customers as to drastically affect industry profits.

**Overall Assessment of Internal Rivalry.** Despite the relatively unconcentrated market, we believe that internal rivalry has been relatively muted, due to the importance of personalized sales contact. If the product were simplified to the point where consumers feel comfortable purchasing LTCI without a sales agent, then the remaining factors tend to weigh towards intense competition.

***b. Entry and Exit***

All of the major LTCI carriers have considerable experience. This section identifies barriers to entry and growth by newcomers and pays particular attention to potential lowering of entry barriers should LTCI become commoditized.

Economies of Scale and Scope. Traditional production economies associated with the spreading of facilities costs are absent. There are economies of scale and scope in marketing and selling of LTCI, as life insurance companies can efficiently identify potential LTCI customers. If LTCI is commoditized, these selling economies will become much weaker.

Importance of Reputation. As noted in Tables 1a and 1b, all of the major LTCI sellers are established life insurance companies. Ostensibly, consumers purchase from sellers with proven track records, as sellers who exit the market may be unable to fulfill their LTCI contracts. Even if the product is commoditized, consumers will still place a high value on the seller's financial stability.

Access to Distribution Channels. LTCI is currently sold through life insurance company agents and independent brokers. Distribution through the Internet will be possible if the product is commoditized.

Access to Key Inputs (Technology/Raw Materials/Know-how/Favorable Locations). These are not important entry barriers.

Experience Curve. Incumbents have the benefit of client lists that allow them to more efficiently deploy their sales forces. The actuarial models required for pricing LTCI are available from independent consultants. Still, LTCI companies have varied in the extent to

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existing enrollees. Erik Holm and Anne Tergesen, "MetLife Discontinues Sales Of Long-Term Care Coverage," *Wall Street Journal*, November 11, 2010.

which they are able to successfully model key profit drivers, such as cost growth and drop-out rates, so new entrants may be placed at a disadvantage while they accumulate LTC underwriting expertise.

Strategic Behavior of Incumbents in Response to Entry. Because there has been no major entrant in recent years, there is no evidence one way or the other as to how incumbents would respond to entry. Moreover, a government plan may be viewed as a more committed entrant (e.g., unlikely to be driven out of the market via aggressive pricing) and so would likely generate a different strategic response than a private entrant.

Exit Barriers There are substantial exit barriers. Regulators will protect covered lives, and major carriers will be reluctant to harm their reputations in the much larger life insurance market by withdrawing from the LTCI market in a way that undermines commitments made to their installed base of enrollees.

Overall Assessment of Entry and Exit. Incumbents are protected by their longstanding reputations and access to selling channels. The latter may break down if LTCI is commoditized, but the former may remain important. Consumers may be willing to purchase annual auto insurance from GEICO or Progressive, but will they be willing to purchase LTCI from upstart firms, given payout periods that may be years or decades in the future?

### *c. Substitutes and Complements*

Availability of Close Substitutes. LTCI protects future wealth. Consumers who are worried about the cost of lengthy nursing home stays are likely to have estates worth several hundred thousand dollars and are apt to purchase life insurance, which in this context can be viewed as a substitute for LTCI. This explains why the same channel is used for both insurance products. Consumers who are worried about the costs of short term nursing home stays and home care due to an acute condition are likely to have somewhat smaller estates. There are currently no good substitutes for LTCI for these individuals—we return to this point below.

Medicaid has been an important substitute for individuals of lesser means.

Price-Value Characteristics of Substitutes. Whole life insurance can replenish an estate drained by costly nursing home bills; term life may no longer be active by the time a nursing home is needed. But whole life is an imperfect substitute because the funds are not available until the patient is deceased.<sup>22</sup> Medicaid is an imperfect substitute because many long term

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<sup>22</sup> Viatical settlements can allow individuals with life insurance to access funds prior to death. However, the value of life insurance policies do not affect Medicaid eligibility whereas the income from a viatical settlement could.

care providers will not accept it and individuals must meet income thresholds to qualify. Additionally, many individuals may fear that Medicaid will be underfunded in the future, further hampering access to care for beneficiaries.

State Medicaid Partnerships. These programs, which are active in most states, are intended to encourage the middle class to purchase LTCI.<sup>23</sup> “In the Partnership model, states offer the guarantee that if benefits under a Partnership policy do not sufficiently cover the cost of care, the consumer will qualify for Medicaid under special eligibility rules that allow a pre-specified amount of assets to be disregarded . . . [t]his is generally referred to as ‘asset protection’.”<sup>24</sup> CLASS should obtain similar asset protection for its products.

Availability of Complements. The continued growth in the demand for home health care and assisted living arrangements will place greater financial strains on the elderly and increase the value of LTCI.

**Overall Assessment of Substitutes and Complements.** As fears about Medicaid’s viability intensify and alternative long term care arrangements multiply, demand for LTCI is likely to grow substantially. This trend is unlikely to be meaningfully offset by growth of the limited set of substitutes or to be hampered by a lack of complements.

*d. Buyer and Supplier Power*

Supplier power is not an issue for LTCI, as there are no essential raw materials or technology required for sales. Buyer power stems largely from the power of insurance brokers. Brokers in the individual LTCI market have power if LTCI customers have a relationship with their broker and not with the LTCI company. In this case, the broker can command a large commission or threaten to sell competitors’ products. However, about half of sales in the individual market are currently done by company agents, rather than independent brokers.

LTCI group sales rely on a different brokerage channel, but the same considerations apply. Other considerations, such as the size of brokers or their ability to integrate into LTCI sales, are nonissues.

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See, e.g., <http://www.kantrowitz.com/cancerpoints/ftcviatical.html>.

<sup>23</sup> The initial Partnership states are California, Connecticut, Indiana, and New York. Provisions in Deficit Reduction Act of 2005 allow any state to implement LTC Partnership programs and more than 30 states now offer such a program.

<sup>24</sup> Mark Meiners, “Medicaid Eligibility Issues for Long-Term Care Insurance Partnership Programs,” Center for Health Care Strategies, Inc., *Issue Brief*, March 2008.



**Overall Assessment of Buyer and Supplier Power.** Broker power is limited by several factors. First, they are not concentrated, so LTCI firms can switch brokers at will. Second, partial integration allows LTCI companies to credibly threaten to move to a fully integrated sales model should independent brokers seek too much power. In the future, commoditization of LTCI could break the power of brokers even as it fundamentally changes competition among LTCI firms.

*e. Summary of Five Forces Assessment*

The profitability of the LTCI market depends on the extent to which several factors apply:

- Consumers find it difficult to evaluate the product and rely on the advice of brokers and the reputations of established sellers (+)
- Perceived product complexity limits commoditization and entry by aggressive price cutting firms (+)
- Competition and partial integration by LTCI firms limit broker power (+)
- The viability of Medicaid as a LTCI insurer for those of limited means (-)

## IV. Positioning Analysis

Beyond certain requirements described at the outset of this analysis, the ultimate form of the CLASS plan will be determined by the Secretary of the Department of Health and Human Services. Success of the CLTCI plan will likely ultimately be judged on two dimensions. First, does the plan meet the statutory requirement that its premiums cover its costs over a 75-year horizon? Second, does the plan meaningfully expand the size of the population with long term care insurance? Success on these two dimensions will require that the government plan capitalize on the unique strengths of a federal LTCI plan while counteracting the statutory and bureaucratic weaknesses of a federal plan. The performance of LTCI will depend both on its relative strength vis-à-vis private-sector competitors, and on its choices regarding product positioning. For example, should the CLTCI plan attempt to compete directly with private LTC insurers by offering either lower costs or lower benefits? Or should the CLTCI plan avoid direct competition and instead offer a set of features that private LTC insurers are unlikely to match?

*a. Strengths*

The key strengths of the CLTCI plan are in part inherent to the federal government and in part derive from various provisions of the CLASS Act.

- *Long-term solvency.* Table 2a and Table 2b show that all of the substantial private sellers of LTCI are more than 70 years old, which indicates that when it comes to purchasing insurance against risks decades hence, consumers place a premium on the perceived stability of the insurer. The federal government should have an advantage over private insurers on this account.
- *Strategic commitment.* Once enacted, it would literally require an act of Congress to eliminate the CLTCI plan. Recognizing this, efforts by incumbents to deter entry or engage in practices to drive the government out are fairly unlikely.<sup>25</sup> This ability to commit gives the CLTCI plan a strategic advantage over other potential entrants.
- *Automatic enrollment, opt-out, and payroll deductions.* For employers that choose to participate in the CLTCI plan, employees will be automatically enrolled and premiums will be deducted from paychecks. Employees who desire to opt-out are allowed to do so. Inertia may result in fewer opt-out decisions and the opt-out structure is certain to result in higher initial enrollment than would an opt-in structure.<sup>26</sup> As we discuss in the Industry Mapping section, the group segment, while smaller in magnitude, is growing more rapidly than the individual segment (18% vs. 12%), which will increase the value of the opt-out structure over time if the trend persists.
- *Low overhead and disintermediation.* The CLASS Act restricts administrative costs of the plan to 3% of premiums in each year of the program. The interpretation of administrative costs is broad and includes advice and counseling. This will force the CLTCI program to aggressively manage expenses. If the CLASS plan can meet this mandate while still offering a product that consumers are aware of and interested in purchasing, it will have a significant cost advantage over private LTC insurers, which are dependent upon commissioned brokers.
- *Simplicity and standardization.* The CLASS plan will have a simple and easily understood design that features a vesting period of at least 5 years, no elimination period, benefits that last for as long as the enrollee requires them, and inflation-adjusted benefits. This should complement the low overhead mandate by lessening the need for intermediaries to explain the various benefit options and configurations.

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<sup>25</sup> This refers solely to actual competition. Private LTC insurers are likely to lobby Congress to change various aspects of the CLTCI plan.

<sup>26</sup> For example, consider that Medicare Part B uptake is nearly universal.

- *Access to the over-65 population.* Medicare is a popular entitlement program with frequent contact with its 45+ million beneficiaries. Were CMS to directly advertise the fact that Medicare does not cover most home health and nursing home costs, and include literature on CLASS in its annual *Medicare and You* booklet as well as information on Medicare.gov, the CLTCI program could realize a substantial boost in enrollment.<sup>27</sup> Of course, only seniors with earned incomes are permitted to purchase the product, so this strategy could generate confusion among retirees; targeting still-working seniors or those who are about to turn 65 could reduce this confusion.
- *State governments would benefit from greater CLASS enrollment.* For individuals with both CLTCI and Medicaid coverage, 95% of the CLTCI payments for institutional care and 50% of the CLTCI payments for in-home or community-based care will be directed to the state program, with the remainder retained by the CLTCI/Medicaid enrollee.<sup>28</sup> Accordingly, the states will have a direct financial incentive to promote CLTCI enrollment.<sup>29</sup>

#### *b. Weaknesses*

- *The break-even requirement.* The CLASS Act requires the CLTCI plan to set premiums to cover costs over a 75-year period and the relevant language in the ACA prohibits the use of “taxpayer funds” for payment of benefits.<sup>30</sup> If consumers expect Congress to maintain this commitment and not subsidize CLTCI coverage then the early success of CLTCI is critical to its long-term success. If early failures lead consumers to believe CLTCI will fail, then the opt-out rate is likely to be higher. This reaction will in turn undermine the success of CLTCI. Thus, there is a strong element of path dependence in the success or failure of CLTCI that implies a very large premium on a successful initial launch of the program. If, however, consumers expect Congress to offset any shortfalls, then this factor may not be as important.

<sup>27</sup> In fact, 2011 *Medicare and You* booklet includes sections titled “Plan for Long-Term Care” and “Paying for Long-Term Care.” The former section directly warns seniors: “At least 70% of people over 65 will need long-term care services at some point. **Medicare and most health insurance plans, including Medigap (Medicare Supplement Insurance) policies don’t pay for this type of care. . .**” (Emphasis in original.) See <http://www.medicare.gov/publications/pubs/pdf/10050.pdf>. The section on paying for LTC includes a “Coming soon” section that describes the CLASS program. However, LTC information does not begin until page 110.

<sup>28</sup> Medicaid funded 49% of LTC costs in 2005; while the percentage varies by state, the federal government provides half or more of state Medicaid funding. Long-Term Care Financing Project, “National Spending for Long-Term Care,” February 2007, <http://ltc.georgetown.edu/pdfs/natspendfeb07.pdf>.

<sup>29</sup> Note that this incentive is not limited to current Medicaid enrollees. Many LTC recipients end up on the Medicaid rolls because of the costs of LTC, so slowing the arrival rate of such enrollees would generate savings to the states.

<sup>30</sup> Mulvey and Colello (2010), p. 12.

- *No medical underwriting.* Any CLTCI plan can set premiums that vary according to the age of the enrollee but cannot vary the premium by health status, as is commonly done by private LTC insurers. This creates the clear possibility that the CLTCI plan will become the LTCI plan of last resort, purchased only by those that have private information that they are likely to require LTC services. This would increase premiums further and could in the limit result in the collapse of the program—a result referred to as an “adverse selection death spiral.”

Adverse selection remains the greatest threat to the long-term viability of CLTCI. CLTCI’s solvency will be highly dependent upon effective use of the tools allowed by statute for combating adverse selection. These include the 5-year vesting period; the requirement of earned income in excess of the Social Security minimum wage during 3 of the 5 years immediately following purchase; and the steepness of the age-premium curve. All else equal, a steeper curve will benefit those who enroll earlier and act as a tax on those who enroll later.

- *Premium subsidies.* Premiums will be subsidized for employed full-time students and for those with incomes below the federal poverty level. The initial premium for both groups will be \$5, an amount that will grow over time with inflation.<sup>31</sup> The subsidy expense must be covered out of the CLTCI’s premiums. This will worsen the actuarial value for higher income potential enrollees and improve the value for lower income potential enrollees. If this induces the former to opt-out and the latter to remain in, the size of the required subsidy will increase and the fracture will grow. In the limit, this could also cause the CLTCI plan to collapse. Several factors may mitigate this concern. A \$5.00 premium may be not be far from the actuarially fair premium for students; if this induces continued enrollment following graduation (or drop-out), then this subsidy may function as a loss-leader that brings in attractive customers. Similarly, to the extent that poverty is a transitory status, income-based subsidies may also act as a loss-leader that expands the pool of favorable risk enrollees.<sup>32</sup>

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<sup>31</sup> Mulvey and Colello (2010), p. 5.

<sup>32</sup> Iceland and Bauman (2004), “Income Poverty and Material Hardship: How Strong Is the Association?” *National Poverty Center Working Paper Series*, #04-17, at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=648341](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=648341). Based on a review of the literature on poverty dynamics, the authors conclude that “longitudinal data show that a majority of poor individuals in the U.S. actually remain poor for only short periods of time and relatively high proportion of people have experienced poverty at one point or another.” However, cycling in and out of poverty status is also common. Whether this is a desired property or not, such cycling could improve the solvency of the CLTCI plan if it causes disenrollment and reenrollment in the plan.

- *Other features that may draw an adversely selected risk pool.* Unlike the typical private plan design, the CLTCI plan is structured to vary the benefit level in proportion to the degree of impairment of the enrollees. Enrollees who expect to have a high degree of impairment will receive a higher level of benefits, though they will not pay more than other enrollees of the same age. Additionally, unlike most private plans, which feature maximum benefit periods, the CLASS program does not limit the duration of the benefit. This will, all else equal, attract enrollment by those who expect to have LTC needs of greater duration and cost. We expect this to expose CLTCI to adverse selection. To the extent that some consumers are attracted by this design feature and willing to pay its actuarially fair cost, private firms will find this aspect easy to replicate and will not work to the advantage of CLTCI.
- *Inability to pair LTCI with life insurance.* The need for life insurance as part of wealth protection is readily understood; LTCI covers additional, related risks that whole and term life policies do not. There are likely economies of scope from joint production, particularly with respect to marketing costs.<sup>33</sup> It is no surprise that, to date, the largest sellers of LTCI are all significant sellers of life insurance. The CLTCI plan will have no comparable targeted access to the population most interested in LTC.
- *Mistaken perceptions that Medicare covers LTC costs.* A 2006 survey by the AARP found that only 25% of respondents over the age of 45 knew that Medicare would not pay for a long-term care stay in a nursing home.<sup>34</sup> Thus, 75% of the core target market segment is, apparently, unaware that they may need LTCI. This is a challenge that the CLTCI plan will share with private LTCI companies. Those private companies keep potential customers informed through the relationships they have from life insurance sales and on networks of affiliated and independent brokers. The CLTCI plan, which is restricted to 3% overhead (advocacy and counseling are considered administrative expenses), will not be able to match that network.
- *Minimal allowances for marketing and administrative expenses.* Misperceptions about LTCI are common and brokers have historically played a central role in distributing correct information. The administrative expenses restrictions on the CLASS plan leave little room for marketing to increase consumer awareness. While,

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<sup>33</sup> JDPower.com reports that 60% of adult Americans have at least some life insurance. <http://www.jdpower.com/insurance/articles/Lack-of-Life-Insurance-Coverage/>.

<sup>34</sup> AARP, "The Costs of Long-Term Care: Public Perceptions Versus Reality in 2006," December 2006, [http://assets.aarp.org/rgcenter/health/ltc\\_costs\\_2006.pdf](http://assets.aarp.org/rgcenter/health/ltc_costs_2006.pdf), at 32.

as described above, CMS and the states may provide some degree of free marketing, this is not guaranteed.

- *Lower investment returns.* The CLASS plan is required to invest its premiums in government-issued securities and so will likely earn a lower return on the float between premiums and expenditures than private LTC insurers.

### *c. Implications*

The greatest strengths of the CLTCI plan are the automatic enrollment of employees of firms that choose to participate in the CLASS program and the associated reduction in selling expenses. The greatest threat to the success of the CLASS program is the inability to medically underwrite premiums, which does raise the real possibility of an adverse selection death spiral and insolvency. Simply put, if the CLASS plan primarily attracts those for whom private LTC insurance is a bad value, it is likely to fail. This outcome is most likely if the CLASS plan is structured to simply mimic private plans but without underwriting and to appeal to the same set of consumers (primarily, those who purchase life insurance through a broker, a higher-income group).

The CLASS plan will better leverage its strengths by developing a plan structure that (1) appeals to a different set of consumers (lower and middle income) and (2) encourages enrollment by the relatively young and healthy members of that set of consumers. In section VI, we analyze a set of products that meet these criteria.

## V. Competitor Responses to Entry: What Does the Literature Say?

CLASS insurance will represent a major new entrant into the LTCI market. It is therefore important to anticipate how incumbent sellers will respond. There is a large theoretical literature and substantially smaller empirical literature on incumbent responses to entry. Thomas (1999) reviews the literature and provides some evidence from the breakfast cereal

industry.<sup>35</sup> Simon (2005) also reviews the literature and adds evidence from magazine subscriptions.<sup>36</sup> We review both of these papers below.

*a. Thomas*

Thomas notes that early research focused on the use of price to deter entry. Incumbents could set a “limit price” below the short term profit maximizing level in order to make the market less attractive to entrants. Game theorists were skeptical of the limit pricing strategy because it assumes that the entrant is myopic and believes that the pre-entry price will prevail after entry. In fact, once entry occurs, the incumbent might accommodate the newcomer by, for example, tacitly colluding on price. Or incumbents might be better served by slashing prices after entry occurs, a strategy known as predatory pricing. This might drive out the entrant and deter future entry. But the strategy is costly in the short run and there is no guarantee that future entrants will be deterred.

Thomas identifies other entry deterring strategies, including product proliferation in differentiated goods markets to limit opportunities for entrants to fill product niches; increases in capacity, perhaps as a way to credibly threaten price reductions after entry; and advertising to build consumer loyalty to branded products.

The costs of advertising can dictate the structure of a market.<sup>37</sup> He observes that in many consumer products markets, there appear to be a small number of firms with recognizable brands, as well as several fringe “off-brand” competitors. The firms that advertise heavily attract customers who prefer to sample branded products while the fringe firms split the remainder of the market. The substantial sunk costs of creating a brand dictate the market structure. Entrants face the choice of duplicating the sunk advertising costs and splitting the branded market, or avoiding advertising costs and sharing the unbranded market. If sunk advertising costs are large relative to the market size, the number of branded firms will be limited, and entrants will be restricted to the unbranded segment.

Thomas also mentions the idea of “judo economics.” Small entrants may not attract the interest of incumbents. It may even be in the interest of entrants to try to commit to remaining small.

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<sup>35</sup> Thomas, L. (1999) “Incumbent Firms’ Response to Entry: Price, Advertising, and New Product Introduction” *International Journal of Industrial Organization* 17: 527-55.

<sup>36</sup> Simon, D. (2005), “Incumbent Pricing Responses to Entry”, *Strategic Management Journal*, 26: 1229-48.

<sup>37</sup> This theory is attributed to Sutton (1991).

Thomas finds few empirical studies of entry deterrence. Entrants report in surveys that they rarely perceive responses by incumbents. There is some observational evidence that incumbents do occasionally add capacity or advertise more heavily after entry. Thomas' own empirical research focuses on breakfast cereals. He divides the data into different category segments (e.g., bran cereals.) He finds that incumbent firms in a segment tend to increase prices after entry into their segment by other incumbents, but reduce prices after entry by newcomers. Conversely, incumbents seem to increase advertising after entry by newcomers, but they do increase advertising when an established firm enters their segment.

*b. Simon*

Simon's discussion of the theoretical literature on entry deterrence largely covers the same ground as Thomas. Simon does make the critical observation that responses to entry may depend on the characteristics of the incumbent. This is the main theme of his empirical work. He posits that an incumbent's age, corporate scope, and market structure all predict the incumbent's response. Established firms are protected by reputations and their customers are less price sensitive. Thus, established firms are less likely to cut prices than younger incumbents. Firms that operate in multiple markets can extend a "reputation for toughness" across product lines and therefore benefit more from price cutting. Finally, firms in relatively unconcentrated markets may be reluctant to take the lead in price cutting.

Simon extends Thomas' review of the prior empirical literature. He finds fairly consistent evidence that incumbents reduce prices in the face of entry. Airlines cut prices in response to entry, especially entry by low cost carriers. Supermarkets cut prices in response to entry by warehouse clubs; tire retailers cut price in response to entry; some auto makers cut prices. Drug companies, in contrast, often do not cut prices in response to entry, preferring instead to increase prices and target a price insensitive niche. Overall, Simon's research does suggest a pattern of price cutting by incumbents. It is particularly noteworthy that we see price cutting in airlines and supermarkets, as airlines traditionally have low returns on investment and supermarkets traditionally have low returns on sales. Even so, incumbents are willing to sacrifice short term profits to combat entry.

Simon's studies responses to entry in magazines. He finds that older incumbents cut prices by 1-4 percent after entry while newer incumbents cut prices by 12 percent. Multimarket contact increases price cutting by 0.7 percent per "market"; The effect is present for new entrants but not for diversifying entrants. Finally, concentration does not, by itself, seem to matter.

Taken as a whole, the literature suggests that incumbents often cut prices after entry and may increase advertising after entry by new firms. However, incumbents in the LTCI market have



several characteristics that might temper price cutting in response to CLASS entry. First, they are old and have long established reputations. Second, they are not very diversified and do not face the threat of entry in their core market of life insurance. Incumbent LTCI firms may increase advertising after CLASS entry. There is already some mention of encouraging sales agents to make negative comments about CLASS insurance.

Despite the theory and evidence of price cutting, it is not clear that LTCI sellers would also reduce prices to combat CLASS entry, for five reasons.

1. The market is already fairly competitive; there may not be much room for further price reductions.
2. State underwriting requirements require prices be set to cover expected future costs.
3. Price cutting is not likely to drive HHS from the market.
4. There is no further deterrence effect from price cutting, since other entry barriers remain high.
5. CLTCI is likely to expand enrollment rather than draw business away from established sellers.

## VI. Entry Opportunities for CLASS ACT Insurance

The CLASS Act authorizes the government to sell a traditional LTCI product with a set of rules governing product design, notably a \$50 per day minimum average benefit. Our strategic analysis suggests that entry by almost any newcomer would be difficult. The government has some advantages over other entrants, in particular it need not establish a reputation for long-term solvency and it can establish distribution channels through employers by fiat, rather than incurring the selling costs of commercial insurers. Even with access to employers, the government is unlikely to successfully compete without incurring substantial costs educating consumers about LTCI, the same kinds of costs currently incurred by commercial firms.

Rules in the CLASS Act governing enrollment put the government product at a competitive disadvantage. An actuarial forecast made on behalf of HHS suggests that the government would have to charge a premium for its \$50/day plan that is commensurate with that charged by commercial insurers for their plans offering \$150/day benefits.<sup>38</sup> (This comparison does

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<sup>38</sup> Mulvey and Colello, pp. 5–7. The CBO and CMS have both estimated the average premiums necessary to provide a \$50/day average benefit level, with the CBO estimating premiums of \$123 per month and CMS estimating \$240. The difference is attributable to more pessimistic projections of adverse selection by CMS.

not appear to account for the fact that CLASS benefits do not terminate while private plans typically pay benefits only for 3–5 years.<sup>39</sup>) Offering only this product puts CLTCI at a high risk for failure.

An important option for the government is to offer additional products that might prove to be profitable. We now consider several such products. When evaluating these alternatives, it is important to remember that CLASS has two related advantages over commercial carriers. It has the ability to introduce its products through the workplace and it does not have to pay substantial selling expenses to agents and brokers. But the value of these advantages would be greatly diminished if CLASS products were complex.

The first two options are motivated by the basic economics of insurance risk pools. In a nutshell, insurance works because low risk enrollees cross-subsidize high risk enrollees. This model is viable only if low risk enrollees are willing to participate; if the cross-subsidy is too large, low risks drop out and the pool falls apart. Commercial insurers are able to sign up low risk enrollees through medical underwriting (offering lower prices to low risk individuals), selling to employer groups where all or most employees are expected to agree to purchase coverage (more important for traditional health insurance), imposing waiting periods (so that individuals are less sure of their risks at the time they enroll) and other benefit restrictions that limit the cross-subsidy. The options we offer provide alternatives for CLASS to limit (but not eliminate) the extent of cross-subsidization, thereby encouraging low risk individuals to sign up for CLASS.

Both of the core options take advantage of CLASS' access to sales through employers. A key issue is whether CLASS should implement the "opt out" feature of selling through employers (if an employer chooses to offer the product, employees receive the product by default unless they opt out), use an "opt in" approach (employers make the product available but employees must opt in to receive it), or use an "active choice" model (employees must complete a form indicating whether they want to participate in the plan). Given that the individual market will be somewhat foreclosed to CLASS, it is essential that CLASS gets this decision right.

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<sup>39</sup> In particular, the Congressional Research Service estimates that the "monthly premium for a \$50 per day policy in the private LTC insurance market for a five-year policy would be about \$94 a month." This is \$29 per month below the CBO-estimated CLASS premium. In exchange for the additional \$29 per month, the CLASS plan offers benefits of unlimited duration. Under the CMS estimates, the additional cost is much greater, \$146 per month. *Id.*

*a. Core options to address adverse selection*

*1. Extended Vesting Period Long Term Care Insurance*

Through plan design, CLTCI can reduce the effects of adverse selection. For example, CLTCI could offer a plan design that features a lower premium and an extended vesting period of more than five years. Individuals are less likely to have private information regarding their expected LTC needs in, say, 10 years. Nevertheless, the lower premium and the ability to lock in a premium schedule would provide an incentive for the young and healthy to purchase.

However, if “traditional CLTCI”, with a five-year vesting period and no underwriting, is also available then individuals would have little incentive to purchase the extended vesting period product. They can simply wait until the need is less distant and then purchase the traditional product. Therefore, for the “long vesting period” product to be successful, the age-premium curve must be steeper than actuarial tables so that those who enroll later in life would subsidize those who buy earlier, creating an incentive to join early. For example, the premium at age 50 for a person who enrolled in an extended vesting period plan at age 40 should be below the premium for a person at age 50 who enrolled in the standard 5-year vesting period plan at age 40. Alternatively, “traditional CLTCI” can be limited to a minimum benefits package of \$50 daily, while the “vested CLTCI” can be a more generous plan. Alternatively, CLASS could combat adverse selection by limiting enrollment in all CLASS products to individuals under age 50 (in year 1).

*Advantages*

- Minimizes adverse selection, thereby offsetting a major advantage of commercial LTCI firms.
- Commercial LTCI firms are unlikely to offer a similar product and will instead rely on their strengths in medical underwriting and sales to minimize selection.
- Simple benefit design keeps education costs low
- Large potential market.

*Disadvantages*

- Product offers greatest benefit to those individuals who also benefit from commercial LTCI. Commercial insurers have made significant inroads in selling LTCI through relationships in the individual life insurance market. Some commercial insurers can also be expected to encourage selling agents in the individual market to disparage the

CLASS product. CLASS will therefore be heavily dependent on reaching new customers through employers.

- Even with a simple plan design, CLASS would need to educate consumers about future long term care needs. This may require considerable sales and marketing effort.
- Because the product will necessarily have a simple design and sales process, success by CLASS has the potential to commodify LTCI. We discuss the implications of commodification in section VI.b.4.

Among the options discussed in this section, we are very optimistic about the potential success of this product. It has broad appeal, is well-protected against adverse selection, and can exploit CLASS' access to employers.

## 2. A “Tontine” Plan for Long Term Care Insurance

Two centuries ago, many individuals invested in Tontines. The money was pooled and invested in various assets, where the money remained until all but one investor had passed away. The last surviving investor received the entire investment. This idea of rewarding individuals for remaining healthy can be used to limit adverse selection against CLTCI. Consider a “Tontine” LTCI plan that gives “rebates” each year (possibly after a fixed or age-based number of years of payment of premiums) to individuals who do not use LTC services. The rebates are paid for through increased premiums. In this way, the Tontine reverses some of the cross-subsidy inherent in insurance and encourages low risks to participate in the plan.

The Tontine plan can succeed against commercial insurers if it threads the needle in terms of pricing. Remember that CLTCI has a substantial cost advantage due to minimal selling expenses. If these savings (which are realized for all enrollees) exceed the cross-subsidy on high risk enrollees (which has been reduced by virtue of the higher premium), then CLTCI can offer low risk individuals a net price (premium less rebate) that beats anything offered in the private sector.<sup>40</sup>

While this structure may at first glance appear to be a variant on medical underwriting, there is an important distinction. With underwriting, net premiums vary only on *initial* health conditions. A Tontine structure, however, varies net premiums over the life of coverage in

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<sup>40</sup> In a recent report, Milliman recommends a structure that would have a tontine-like element: “Individuals could be encouraged to preserve their benefits by offering them a faster benefit growth rate if they do not access their benefits until a certain age.” Bob Darnell et al., “Perspectives on the Community Living Assistance Services and Support (CLASS) Act,” *Milliman Research Report*, September 2010.

accordance with *realized* health conditions. Among other distinctions, this creates an incentive at the margin—an incentive not present with underwriting—for enrollees to take measures to reduce the likelihood that they will require LTC.

### *Advantages*

- Tontine feature serves a similar role as medical underwriting: the effective premium decreases for low risks and increases for high risks.
- Tontine feature immediately communicates value to low risk enrollees.
- Commercial LTCI firms are unlikely to offer a similar product.
- Large potential market.
- Encourages positive health behaviors.

### *Disadvantages*

- Commercial insurers can still rely on relationships between selling agents and consumers to enhance medical underwriting. Thus, CLASS can never fully equal underwriting capabilities of commercial plans.
- Commercial sellers may price plans to low risks more aggressively.
- CLASS will need considerable underwriting skills and demand modeling to determine the size of rebates and implications for profitability.
- Product is more complicated than the “extended vesting period” product.
- Success by CLASS has the potential to commodify LTCI.

The Tontine product shares many of the advantages and disadvantages of the “vesting period” product. It is also likely to rely on access to enrollees through employers. We believe the rebate has strong marketing potential and will draw in low risk individuals. However, this product seems more complex than the “vesting period” product. CLASS would need to limit plan features so as to minimize the sales effort and CLASS will require more sophisticated demand modeling. To the extent that the “vesting period” product is a “belt” and the Tontine is “suspenders”, we lean toward the belt or some combination of the two.

*b. Additional Options*

*1. “Short-term” Long Term Care Insurance*

There is currently a gap in the insurance market to provide insurance for short-term assisted living at old age. Currently, Medicare does not cover non-hospital institutional care or home nursing care unless it immediately follows hospitalization. Such care can last days or weeks, at a cost of tens of thousands of dollars. Individuals with substantial assets, who are purchasing both life insurance and LTCI, may not be interested in purchasing protection against such expenses. But consumers with modest retirement savings who are not eligible for Medicaid may also be fearful of becoming impoverished by long term care spending. (The average American retires with less than \$100,000 of non-housing wealth.) There are two reasons why traditional LTCI sellers may not be serving this market. First, LTCI sellers come from the life insurance market and they are skilled at identifying individuals who wish to protect estates worth hundreds of thousands of dollars. Second, a product that offers modest, short-term protection might be seen as a cheap substitute for other LTCI products that would cannibalize more profitable lines.

Such a product could cover assisted care of all forms for a short period (30–90 days). Premiums paid by someone who enrolls early in life would be very low. The product is a hedge against needing assistance for a short period of time, not insurance for someone who will live out their days in a nursing home. This product would be require some modest vesting period so that individuals do not purchase insurance immediately upon finding out that they require care

This product has several advantages and disadvantages.

*Advantages*

- Does not compete directly against existing LTCI products.
- Current LTCI sellers are unlikely to offer their own versions of this product inasmuch as it targets a different audience.

*Disadvantages*

- Limited market size. Medicare covers “short term” long term care needs if there is a hospitalization, so this product is restricted to patients who are not hospitalized.
- Amount of coverage is much smaller than for traditional LTCI, so that the risk premium and profits are commensurately smaller as well.
- Requires educating consumers about Medicare coverage limitations.

Overall, we believe that this product is promising but unlikely to generate significant financial returns to the CLASS program.

### *2. Linkages to the Private LTCI plans*

HHS could seek to encourage the development of private sector plans that would supplement the CLASS program in a fashion similar to the way in which Medicare Supplemental plans fill in the gaps of Medicare Part A and Part B coverage. The availability of supplemental plans could increase the attractiveness of the CLASS plan. At the same time, encouraging the emergence of private supplemental products could lessen private insurers’ resistance to the CLASS plan. This could also open a channel to consumers that would impose minimal administrative costs on the CLASS plan.

However, the structure of such plans would need to be carefully considered in terms of both selection effects and marginal incentives. For example, supplemental coverage could increase the appeal of the CLASS plan to individuals with private information that their LTC needs are eventually likely to be substantial. At the margin, private supplemental coverage could make nursing homes a more attractive option relative to formal or informal home health care, with potential budgetary implications for programs such as Medicaid.

### *Advantages*

- Could increase appeal of basic CLASS coverage.
- Could induce private plans to market CLASS coverage.

### *Disadvantages*

- Adds further complexity to the market, working against strengths of the CLASS product.
- Not a short term solution to CLASS' budget problems.

### ***3. A Note on Commoditization of LTCI***

Because CLTCI will be offered through the workplace with a minimum of selling effort, it will necessarily have to have a simplified plan design. This stands in contrast with existing LTCI products that have many dimensions that a consumer only comes to understand through lengthy consultation with an agent. If CLTCI becomes successful, then the simplified design could become a template for standardized product offerings. In other words, we may see the commoditization of LTCI.

Ironically, the success of CLTCI could sow the seeds of its destruction. If LTCI is commoditized, selling agents will no longer be required and if they disappear, their commissions will disappear with them. LTCI could then be sold by companies like Progressive and Geico, which have miniscule selling expenses (other than advertising to establish brand credibility.) Such companies can continue to medically underwrite, giving them the best of both worlds so to speak: protection against selection and low costs. While this could greatly expand LTCI coverage, it might come at the expense of the viability of CLTCI.

## **VII. Summary and recommendations**

The market for traditional LTCI succeeds because of a reliance on personal sales effort and sophisticated medical underwriting. Not only do these features allow commercial carriers to avoid adverse selection, they minimize internal rivalry and raise entry barriers. But these features come at a cost; selling expenses in LTCI are considerable. The creation of the



CLASS program provides a unique opportunity to break down entry barriers. But this alone will not guarantee the success of CLTCI.

CLASS must also devise ways to avoid adverse selection. If CLASS can minimize selection and exploit access to employers to minimize entry barriers, then its considerable cost advantage could allow it to more than effectively compete in the LTCI market. We have described two products—“vesting period” and “Tontine”—that we believe can compete successfully against commercial LTCI. Of the two, the former is simpler and therefore offers a greater chance of success. Ironically, the success of either product could break down entry barriers and allow other low cost insurers to successfully compete. Even so, this would be a win-win for consumers, and should not stand in the way of CLASS’ entry into the LTCI market.

# **A REPORT ON THE ACTUARIAL, MARKETING, AND LEGAL ANALYSES OF THE CLASS PROGRAM**

*For additional information, you may visit the DALTCP home page at [http://aspe.hhs.gov/\\_/office\\_specific/daltcp.cfm](http://aspe.hhs.gov/_/office_specific/daltcp.cfm) or contact the office at HHS/ASPE/DALTCP, Room 424E, H.H. Humphrey Building, 200 Independence Avenue, SW, Washington, DC 20201. The e-mail address is: [webmaster.DALTCP@hhs.gov](mailto:webmaster.DALTCP@hhs.gov).*

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Pa: Agenda and Discussion Issues and  
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Pb: Presentation Entitled "Core Assumptions and  
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Pc: Presentation Entitled "Actuarial Research  
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Pe: Presentation Entitled "Alternative Approaches  
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APPENDIX Q: Table 2: Actuarial and Demographic Assumptions

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APPENDIX R: Figure 1: Daily Benefit Amount for Increased Benefit

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