Contributions of the life insurance industry to the US economy:

Financial protection of families, employment and household income, and long-term capital investments

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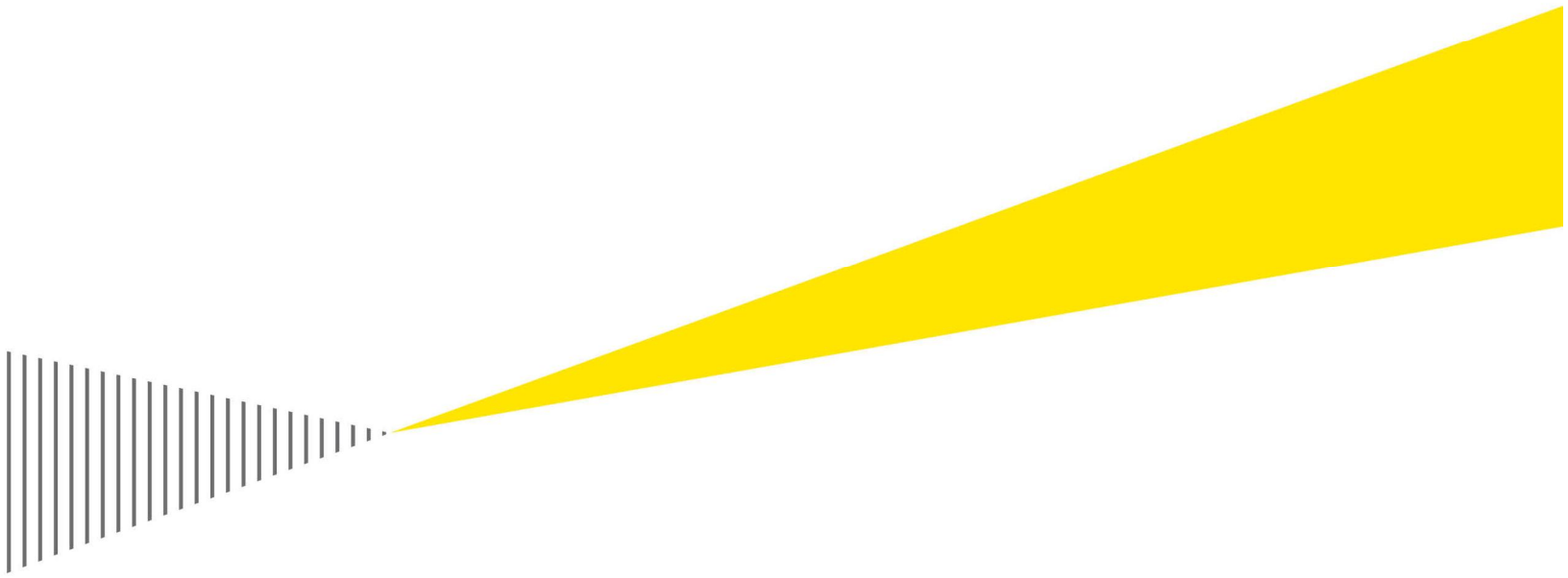

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Executive summary

The life insurance industry makes significant contributions to the US economy and the financial protection of American families. The life insurance industry provides financial protection for individuals and families against the consequences of untimely death, longevity, disability and long-term care needs. The life insurance industry also provides products to protect retirees from exhausting their financial assets. The life insurance industry contributes to the well-being of employees in the life insurance and other industries by providing a large number of well-paid insurance jobs, creating indirect employment in other industries in each state and across the nation. The life insurance industry also makes significant long-term investments in the US capital markets.

The American Council of Life Insurers asked EY to analyze the multiple contributions of the life insurance industry to the US economy and American families.

Key findings for the life insurance industry's contribution to the financial protection of American families include:

- 75 million American households have life insurance or annuity coverage through life insurance companies.

- The life insurance industry provides financial assistance to families experiencing major life events. In 2010, the industry paid $365 billion to policyholders covered by life insurance and annuity policies.

- Life insurance provides a significant cushion against the financial impact of the untimely death of an income earner. The face value of life insurance policies in 2010 totaled $18 trillion.

- Studies have shown that without life insurance, the untimely death of an income earner will significantly increase the risk of a family falling into poverty.

- Only four percent of the children in households without life insurance have financial assets equal to at least 12 months of household income, while 82 percent of the children in households with life insurance have protection through life insurance coverage equal to or greater than one year of household income, according to analysis of the Federal Reserve Board's 2007-2009 Panel Survey of Consumer Finances.

- Annuities offered by the life insurance industry are the only product to protect against outliving one's assets. Guaranteed annuity payments during retirement are an important supplement to Social Security.

- Innovations in the industry have expanded life insurance products to include accelerated death benefits and protection against disability as well as long-term care coverage.

- In 2007 the life insurance industry provided 4.1 million disability policies and 4.6 million long term care insurance policies.

- Without life insurance and annuity products more individuals and households will need to rely on other family members for financial support or the government social safety net. With life insurance and annuities, families can better maintain their standard of living and protect themselves against the financial risks of major life events.

Key findings for the life insurance industry's contribution to American families' jobs and household income include:

- The life insurance industry directly employed almost 800,000 persons as company employees or agents and created over $162 billion of economic output from this employment during 2009.

- The industry accounted for an additional $224 billion of economic output through the indirect employment of approximately 1.7 million persons in industries which support life insurance personnel.

- In total, the economic activity of the life insurance industry accounted for almost three percent of US gross domestic product, 2.5 million well-paying jobs, and nearly $387 billion of economic output in 2009.

Key findings for the life insurance industry's contribution as long-term investors in the US capital markets include:

- The life insurance industry is one of the largest investors in US capital markets with total financial assets of approximately $5 trillion at the end of 2009.

- The life insurance industry is the most significant single source of capital funding in the corporate bond market, accounting for 17 percent of total investment in 2009.

- The life insurance industry is a long-term investor with 62 percent of 2009 investment in corporate bonds having remaining maturities of 10 years or greater.

- Life insurance companies are a significant and reliable source of investment capital in the corporate equity and commercial mortgage markets accounting for 6 percent and 10 percent of investment respectively in 2009.

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Chapter 1 – Contributions of the life insurance industry to the financial protection of American families

No other industry provides financial protection against major life risks, such as the untimely death of an income earner, outliving one's assets in retirement, becoming disabled or having to pay the significant expenses of long-term care. Although the probability of these events occurring may be low for any individual family, the financial consequences of such unforeseen events can be dire.

Through the pooling of risk, the life insurance industry is able to shift the financial impact of these events away from the individual policyholder. Life insurance products are designed to provide protection against events with low probabilities but which involve significant costs if they occur. As shown below, the alternative of relying only on savings for financial protection to cushion the impact of these events is difficult, if not impossible, for most families.

The financial protection provided by the life insurance industry to American households covers all income and age groups. Table 1.1 shows that 75 million or 66 percent of American households have some form of financial protection from the life insurance industry.

Table 1.1 Proportion of households with life insurance protection and annuities by income group in 2009

Household quintile income groups		Percent with life insurance products	Number of households with life insurance products (in millions)
Lowest Quintile	Under $21,900	37%	8
Second Quintile	$21,900— $38,900	56%	13
Third Quintile	$38,900 — $62,800	68%	15
Fourth Quintile	$62,800 — $102,600	81%	18
Highest Quintile	$ 102,600 and above	89%	20
Total		66%	75

Source: 2007-2009 Panel Survey of Consumer Finances

In 2010, life insurance industry products provided over $365 billion in payments to beneficiaries. Table 1.2 shows that this total was divided between annuities (70 percent) and life insurance products (30 percent).

Table 1.2 Payments by life insurance companies to households by policy type in 2010

Product line	Total payments ($millions)	Percent of total payments
Annuities	256,922	70%
Life insurance policies	108,678	30%
Total payments to individuals	365,599	100%

Source: ACLI Fact Book, 2011

Unique financial protection products for major life risks: Life insurance

Life insurance protects against the financial loss resulting from the untimely death of an income earner or family member. The reduction in a household's financial well-being in the case of such an event can be significant. A leading academic study predicts that a surviving spouse's standard of living will fall, on average, by 44 percent without life insurance protection.[1]

Life insurance is not only for the loss due to an income-earning family member. When the unforeseen event is the loss of a homemaker it can result in higher costs of living. The wide range of previously non-pecuniary services performed for a family by a homemaker could transform into additional expenses necessary to maintain a family's standard of living. Life insurance and disability protection can provide the means to pay for the provision of such services.[2]

To protect against the financial consequences of the loss of a household member, the industry provides two basic types of life insurance: term and permanent life policies. Term life insurance policies pay a fixed amount to beneficiaries upon the death of the insured, over a term typically ranging from one year to thirty years. Term life insurance premiums increase with the age of the insured while level-term life insurance premiums remain fixed over the term of the policy. In 2010, 39 percent of life insurance policies and 68 percent of the face amount of life insurance purchased were term insurance.[3]

Permanent life insurance, such as whole life, provides protection for the life of the policyholder. The savings component builds up a cash value to pay for the higher cost of life insurance in later years. Policyholders can access the cash value if they surrender the policy or borrow against the cash value. Life insurers have made whole life policies flexible with variable premiums and alternative investment choices for the cash value to meet the needs of different policyholders. In 2010, 61 percent of policies purchased were permanent life policies, accounting for 32 percent of the face amount of life insurance purchases.[4]

[1] Bernheim et. al. (2003a, 2003b). A study by Hurd and Wise (1981) found that 37 percent of widows who were not poor when their spouse was alive became poor upon the spouse's death, and a more recent study by Lin and Grace (2007) estimated that upon a spouse's death total financial and non-financial income would be 40 percent greater with life insurance than without.
[2] Lin and Grace (2007)
[3] ACLI Fact Book, 2011
[4] ACLI Fact Book, 2011

Table 1.3 shows that the total number of life insurance policies for individual and group life insurance in the United States was 261.3 million in 2010.[5] Individual life plans insure one person underwritten on a person-by-person basis. Group life insurance covers individuals who participate in a group's insurance plan. These are underwritten on the basis of the whole group rather than on a person-by-person basis and are typically term policies that have contracts on behalf of members belonging to an organization such as an employer or union. Because coverage can be purchased directly or through employers, professional organizations or financial institutions, a person can own multiple policies. Almost two households in three, or 75 million, owned at least one life insurance policy in 2010. The total face value of life insurance outstanding was $18.3 trillion in 2010.[6]

Table 1.3 Face amount and number of US life insurance policies in 2010

	Life insurance in force		Life insurance purchases	
Type of insurance	Face amount ($trillions)	Policies (millions)	Face amount ($trillions)	Policies (millions)
Individual	$10.5	151.8	$1.7	10.1
Group	$7.8	109.5	$1.1	18.5
Total	$18.3	261.3	$2.8	28.6

Source: ACLI Fact Book, 2011

Life insurance protection for families in the face of inadequate household savings

Not all life insurance benefits come from payments to beneficiaries. Life insurance provides an inherent level of security for a family even if the contingencies that the insurance is protecting against do not occur.

Until an insurance policy is exercised, a family maintains a level of financial protection afforded by the amount of life insurance they purchased. Like police and fire protection, this protection, used or unused, is still a benefit. It can be especially important for children as their lives can be dramatically affected by the loss of an uninsured parent. In 2009, there were 89.8 million children below the age of 20 in the United States of which 57 percent (50.8 million) benefitted from the assurance provided by life insurance policies.[7]

To quantify the amount of security provided by life insurance, this report measures the number of months that life insurance proceeds could substitute for household monthly income. The net value of the policies is defined to be the face value of all term and permanent policies held by a

[5] ACLI Fact Book, 2011
[6] 2007-2009 Panel Survey of Consumer Finances, Federal Reserve Board of Governors. [See also Table 1.3]
[7] 2007-2009 Panel Survey of Consumer Finances, Federal Reserve Board of Governors.

family, net of any policy loans. A household's monthly income is the sum of income from all sources throughout the year divided by twelve.[8]

The financial protection afforded by life insurance to children (20 years and under) living in households with life insurance coverage is significantly greater than the protection afforded by financial assets held by households without life insurance.

Table 1.4 and Figure 1.1 compare the protection afforded to children in households with life insurance through the face value of their life insurance policies with the protection afforded to children in households without life insurance through financial assets. Among households with life insurance coverage, 82 percent of the children had household life insurance protection equal to or greater than the household's income for at least one year. Among households without life insurance coverage, only four percent of the children had protection through household financial assets equal to or greater than the household's income for at least one year.

Table 1.4 Length of time that life insurance or financial assets can sustain household income for children in 2009

Length of time	Percentage of children in households with life insurance, where life insurance protection[9] exceeds household income for length of time	Percentage of children in households without life insurance, where financial assets[10] exceed household income for length of time
1 month	99%	31%
2 months	98%	20%
3 months	95%	14%
4 months	94%	12%
5 months	92%	10%
6 months	91%	8%
1.0 year	82%	4%
1.5 years	74%	3%
2.0 years	66%	2%
2.5 years	59%	1%
3.0 years	51%	1%
3.5 years	44%	1%
6.0 years	21%	1%

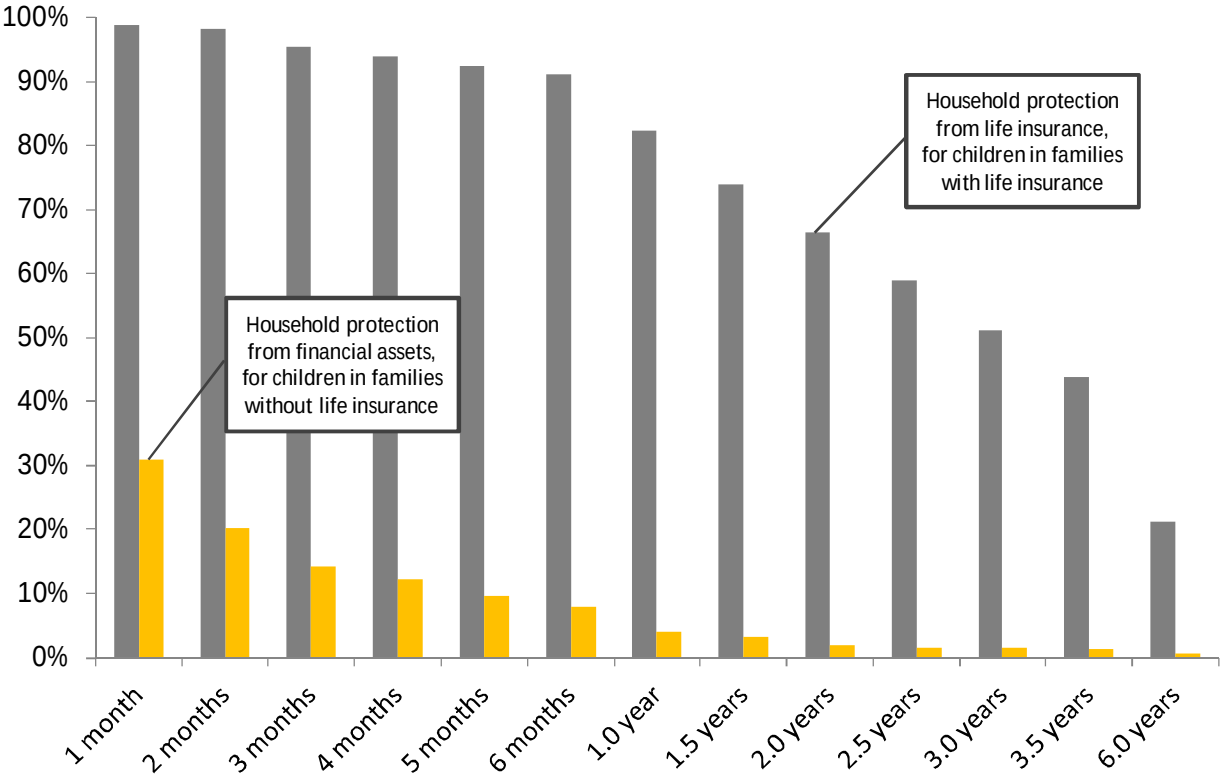
Source: EY analysis of Federal Reserve Board's 2007-2009 Panel Survey of Consumer Finances

[8] This analysis used total income as reported in the 2007 Survey of Consumer Finances as an indicator of a family's living standard. The results presented here do not change if tax return adjusted gross income was used instead.

[9] Life insurance coverage or protection is defined as the face values of all life insurance policies, net of policy loans.

[10] Financial assets consist of liquid assets, certificates of deposit, directly held pooled investment funds, stocks, bonds, quasi-liquid assets, savings bonds, cash values of whole life insurance, other managed assets, and other financial assets.

Figure 1.1 Percentage of children afforded financial protection through life insurance and financial assets by length of time in 2009



Source: 2007-2009 Panel Survey of Consumer Finances

Unique role life insurance companies play in financial protection against major life risks

Life insurance companies not only provide products that supplement households' savings, but also protect against financial risks associated with untimely death and aging. Life insurance companies are better able to protect against these risks than individual households could on their own.

While the likelihood of untimely death or outliving one's savings is highly uncertain for an individual, life insurance companies are able to predict with considerable accuracy the percentage of their policyholders that will experience these events. By pooling the risks of a large number of individuals and utilizing actuarial methods, life insurance companies can significantly reduce each individual's financial risk, and the total financial risk of individuals in the pool. The result is that insurers can provide the same level of financial protection to an individual at a lower cost than an individual can provide himself.

A simple example can illustrate this benefit provided by life insurers. Assume that a 30-year old earning $50,000 annually wants to provide $200,000 of financial protection for her family in the event that she dies prematurely during the next 20 years. To do so, she would have to save $6,715 (approximately 13.5 percent of her annual income) for the next 19 years, assuming an

annual after tax rate of return of four percent. During the intervening 19 years, the family would only be partially covered.

Alternatively, this family can be fully covered over each year with $200,000 of 20-year term life insurance for an annual premium of $300-$900, depending on age, health, and other factors.[11] With a family income of $50,000 per year, they could be insured for $200,000 to partially offset the loss of the income earner for less than 1.8 percent ($900/$50,000) of their annual income. The ability to buy life insurance enables families to reduce their precautionary savings and increase their current standard of living.

Measures of the life insurance industry's financial protection of households

Life insurance products can be a significant portion of a household's financial security. The face value of life insurance represents on average 231 percent of household annual income, as shown in Table 1.5. Even among families in the lowest twenty percent of household income, the face value of life insurance amounts, on average, to more than two years of household income.

Table 1.5 Face value of life insurance policies relative to household assets and income for families with life insurance, by income group in 2009

Household quintile income groups		Face value of life insurance policies	
		Relative to household assets	Relative to household income
Lowest Quintile	Under $21,900	75%	229%
Second Quintile	$21,900 — $38,900	115%	157%
Third Quintile	$38,900 — $62,800	105%	194%
Fourth Quintile	$62,800 — $102,600	149%	265%
Highest Quintile	$ 102,600 and above	75%	237%
Total		90%	231%

Source: 2007-2009 Panel Survey of Consumer Finances

For young households with life insurance, life insurance proceeds would be a substantial portion of their financial assets if the insured died. Table 1.6 shows that the face value of life insurance coverage is more than 256 percent of household income for households where the head of household is less than 55 years old, and between 78 and 203 percent where the head of household is 55 years old or more. As the number of dependents declines in households where the head is age 65 or greater, so does the amount of life insurance coverage, since the need for coverage is not as great.

[11] Isenberg et. al. (2006)

Table 1.6 Face value of life insurance policies relative to household assets and income by age in 2009

	Face value of life insurance	
Age of head of household	Percent of household assets	Percent of household income
Less than 35	528%	260%
Over 35, less than 45	292%	328%
Over 45, less than 55	119%	256%
Over 55, less than 65	58%	203%
Over 65, less than 75	23%	117%
75 or more	16%	78%
Total	90%	231%

Source: 2007-2009 Panel Survey of Consumer Finances

Unique financial protection products for major life risks: Annuities

Annuities can protect against a reduced standard of living that result from using up one's assets in retirement. With increasing longevity, this is becoming a more important issue. Defined benefit plans have an annuity-like component which makes them comparable to annuity vehicles in terms of lifetime income. A recent study found that 93 percent of middle-income married couples nearing retirement without coverage from a defined benefit pension plan could expect to outlive their financial assets,[12] compared to 57 percent of couples with defined benefit plans. To minimize the risk of outliving their assets, couples without a defined benefit retirement plan would need to reduce their standard of living during retirement by 51 percent of their pre-retirement level. Those with a defined benefit retirement plan could maintain a standard of living at 74 percent of their pre-retirement standard. With the decline in defined benefit pension plans, a greater number of persons could experience inadequate savings for retirement.

With life-contingent annuities, the policyholder is guaranteed payments over his or her lifetime. These annuities protect against the risk of outliving one's assets. In combination with Social Security, annuities will be an increasingly important source of financial protection as the number of persons covered by defined benefit pension plans decreases. Table 1.7 below shows that fewer than ten percent of households headed by someone under the age of 65 have some form of private annuity; for the population past retirement age, the percentage with annuities increases. Many employer-provided pension plans have an annuity component that starts when the employee reaches retirement age. More than 55 percent of those who have worked during their lifetime receive pension income from their former employers, and annuities play an important role in how pension assets provide retirement income.[13]

Life insurance companies also offer alternative types of annuities to meet the financial needs of different households. There are annuities that begin paying benefits immediately and deferred

[12] Ernst & Young LLP (2008)
[13] EBRI Notes (2007)

annuities which allow investments to accumulate before the payout period. Annuities can have a guaranteed payout amount where the life insurance company assumes some mortality risk (dying early), and assumes some investment risk with fixed payouts, or if based on the investment portfolio chosen by the annuitant with guaranteed minimum lifetime payments.

As shown in Table 1.2 above, annuity payments by life insurance companies totaled $256 billion in 2010.[14] These payments represent approximately 70 percent of payments by life insurance companies to individuals. Annuities are more likely to be held by households nearing or in retirement, where more than ten percent of households older than age 65 are covered by an annuity, as shown in Table 1.7 below.

Table 1.7 Proportion of households with life insurance protection and annuities by age in 2009

Age of head of household	Any life insurance	With annuities
Less than 35	52%	1%
Over 35, less than 45	69%	1%
Over 45, less than 55	71%	4%
Over 55, less than 65	74%	9%
Over 65, less than 75	65%	10%
75 or more	62%	17%
Total	66%	6%

Source: 2007-2009 Panel Survey of Consumer Finances

A 2004 study illustrates the potential for much higher returns from annuity payments compared to self-annuitization for a 65-year old male.[15] If an individual wanted to secure a fixed retirement income until 85, he could purchase an annuity or self-annuitize. With an investment of $100,000 in a non-annuitized account earning the market rate of interest, he would be able to consume $7,704 per year until 85 at which time there would be no money left in the account.[16] However, 30 percent of males age 65 will live beyond 85 years of age. Instead, this individual could have purchased an annuity with a $100,000 premium. A single premium immediate life annuity, for instance, would provide him with the same annual $7,704 income for the rest of his life. A life annuity is an insurance product that pools resources across a large number of annuitants; this pooling of risks operates in the same manner as under any insurance contract. Therefore a life annuity can provide a higher level of sustainable income than other financial assets.

[14] ACLI Fact Book, 2011
[15] Jeffrey Brown (2004)
[16] Jeffrey Brown (2004). The author uses an interest rate of 4.58 percent.

Unique financial protection products for major life risks: Disability insurance

Another major financial risk faced by families is the loss of income due to an unexpected disability from accident or disease. Disability can result in reduced ability to work, jeopardizing a family's income and savings as well as their standard of living. Disability insurance protects against the loss of income from an adverse event during a person's working years.

The probability of becoming disabled is more frequent than the probability of death. In 2005, eight percent of working-age Americans reported a chronic condition that affected their ability to work. Among disabled adult Americans, three out of five are unable to work, and two out of five are limited in their ability to work.[17] Disability insurance protects against these risks by typically providing between 50 and 70 percent of pre-disability income when a person becomes disabled. In 2007, the number of disability insurance policies was 4.1 million, with a total annualized premium amount of $4.7 billion.[18]

Unique financial protection products for major life risks: Long-term care insurance

Because Americans are living longer, they face an increasing risk of requiring long-term care in an assisted living or nursing care facility. Long-term care insurance protects against the financial risk from significant long-term care expenses. In 2008 this averaged $3,000 per month for assisted living care and $5,600 per month for nursing care.[19] Over the past twenty years, the life insurance industry has developed long-term care insurance products to help meet these needs. In 2007, the number of long-term care insurance policies was 4.6 million, with a total annualized premium amount of $8.1 billion.[20]

Long-term care costs can quickly exhaust what might have been considered a reasonable amount of retirement savings and contribute significantly to the risk of outliving one's assets. Purchasing long-term care insurance can protect against these two major financial risks of one's later life and reduce the amount of retirement savings that is otherwise needed.

A world without life insurance products

Households facing a sudden loss of income due to the unexpected loss of a family member without life insurance often turn to relatives and friends for additional financial support. Elderly family members facing costly long-term care needs or exhausting their assets more rapidly than expected also often rely on family members for financial support. These situations impose significant burdens on families and their support is likely to be much less than the financial protection that could be provided through life insurance products.[21]

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[17] ACLI Fact Book, 2011

[18] Isenberg (2007). In 2007, the amount of disability insurance paid out to Americans was almost as large as the amount of disability insurance in force, which may be due to disability payments being more unpredictable than other life insurance products on an annual basis.

[19] "What Does Long term Care Cost?", US Department of Health and Human Services. http://www.longtermcare.gov/LTC/Main_Site/Paying_LTC/Costs_Of_Care/Costs_Of_Care.aspx

[20] Fischerkeller (2007). In 2007, the amount of long-term insurance paid out to Americans was close to $4.9 billion.

[21] Kotlikoff and Spivak (1981)

When the resources needed are not forthcoming from family members, these situations can result in an increased reliance upon the government or charity. In a world without life insurance products, individuals and families would be at much greater financial risk when experiencing an adverse life event.

Chapter 2 – Contribution of the US life insurance industry to US employment and household income

The US life insurance industry contributes to the lives of employees in the life insurance and other industries by providing a large number of well-paid insurance jobs, creating indirect employment in other industries in each state and across the nation.

Employment in the US life insurance industry

The US life insurance industry employed nearly 800,000 people in 2009, including more than 367,000 employees of life insurance carriers and nearly 424,000 life insurance agents and brokers.[22] These life insurance employees accounted for 37 percent of the nearly 2,150,000 employees in the US insurance industry. Although life insurance employment only accounts for a portion of total US insurance industry employment, its size is significant compared to entire sectors of the US economy. As shown in Table 2.1, at 790,606 employees, the life insurance industry is roughly one-quarter the size of the information and banking sectors and more than one-half the size of the real estate sector, as measured by employment. Between 2006 and 2009, aggregate employment (all industries) fell by nearly 5 percent, while employment in the life insurance industry grew by nearly 4 percent.

Table 2.1 US employment by industry
2009

Industry	Employees (millions)
Wholesale and retail	20.6
Manufacturing	11.6
Accommodation and food services	11.4
Professional services	7.8
Information services	3.3
Banking (credit intermediation)	2.9
Insurance carriers	1.5
Life insurance carriers	0.4
Other insurance carriers	1.1
Real estate	1.4
Insurance agencies/brokerages	0.7
Life insurance agencies/brokerages	0.4
Other insurance agencies/brokerages	0.3
Total life insurance	0.8
All Industries	114.5

Source: US Census Bureau: County Business Patterns

[22] The US Census Bureau's County Business Patterns reports total insurance agent employment of 0.7 million nationally. The percent of insurance agents that sell life, accident, and health insurance is not published by the US Census Bureau. Based upon data from the New York Department of Insurance, we have estimated that approximately three-out-of-five insurance agents sell life, accident and health insurance and thus total 400,000 agents.

Total employment contribution of the US life insurance industry

The total employment contribution of the US life insurance industry extends beyond the direct employment of life insurance carriers, agencies, and brokers and includes indirect impacts on other industries' employment. The life insurance industry's indirect employment impact occurs as life insurance carriers, agents, and brokers purchase goods and services from other businesses and as earnings of industry employees drive consumption. The employment and earnings contributions can be summarized in three categories, described below.

- **Direct Impacts**: The direct impact of the life insurance industry is measured by the economic output (defined as premiums plus supplements to premiums from income earned on policyholders' reserves less expected losses), income (employee earnings), and employment connected directly to life insurance carriers, agents, and brokers.
- **Indirect Impacts**: The direct impacts described above result in purchases of goods and services from other businesses in the United States, which create a ripple or multiplier effect throughout the US economy. The indirect impact results from expenditures related to tangible property purchases, such as office supplies and equipment, contract labor, business and professional services, and other goods and services provided by US businesses to life insurance carriers, agents and brokers.
- **Induced Impacts**: The wages paid to life insurance industry employees as well as employees of indirectly impacted businesses result in induced consumer spending, which generates the third and final round of economic multiplier effects as businesses increase capacity to meet increased consumer demand. Examples of this type of impact include additional sales by retailers, restaurants, and household services, which in turn generate employment in these and other industries. To simplify the presentation of the results, these impacts are combined with the indirect impacts and presented together.

At the national level, the indirect impact of the life insurance industry includes impacts that occur in all states. For example, a life insurer based in Hartford, Connecticut may employ the services of a financial services firm in New York City. The financial services firm in New York City may purchase professional services from firms in Cleveland, St. Louis, and Atlanta. And each of these firms may purchase supplies and business services locally. As this series of transactions occurs, additional employment, income, and economic output is created at each step. The additional employment, income, and economic output accumulate with each transaction to create the indirect economic contribution. However, at each step in this chain of backward linkages with supplier industries, there is a possibility that the supplier firm may be located outside of the United States. When the supplier is located in another country, the impact is exported and the chain is broken.

The same type of backward linkages occurs as employees of life insurance carriers and agents spend income earned through their employment, creating the induced economic contribution. As employees spend their incomes on retail goods and services, the economy expands to meet the additional demand. The above average incomes earned by employees of the life insurance industry contribute to an above average induced economic contribution, which increases the overall contribution of the industry.

Table 2.2 shows the direct and indirect (including induced) contribution of the US life insurance industry. As shown in the table, the life insurance industry directly employs more than 367,000 people through life insurance carriers and nearly 424,000 life insurance agents and brokers, totaling nearly 791,000 direct employees in the United States. These direct employees earn $52 billion and generate $162 billion in economic output.

As shown in Table 2.2, the indirect impact of the life insurance industry includes nearly 953,000 indirect employees associated with the operations of life insurance carriers and nearly 721,000 indirect employees associated with the operations of life insurance agents and brokers.[23] These indirect jobs create significant income paid to US employees in other industries. The indirect income impact of life insurance carriers amounts to $45 billion while the indirect income impact of life insurance agents and brokers exceeds $28 billion, totaling $73 billion of indirect income contribution. Combining the direct and indirect income contributions of the life insurance carriers and agents, the total contribution reaches $125 billion in earnings by employees of the life insurance industry and other affected businesses. Table 2.2 shows that both economic output and income multipliers associated with the life insurance industry are about 2.4 whereas the employment multiplier associated with the life insurance industry is 3.1.

Table 2.2 US life insurance industry economic contribution 2009 ($billions)

	Direct contribution	Indirect & induced contribution	Total contribution
Life insurance carriers			
Economic output	$94	$128	$222
Employee earnings	$28	$45	$73
Employment	367,048	952,945	1,319,993
Life insurance agents/brokers			
Economic output	$69	$96	$165
Employee earnings	$24	$28	$52
Employment	423,558	720,981	1,144,539
Total life insurance industry contribution			
Economic output	$162	$224	$387
Employee earnings	$52	$73	$125
Employment	790,606	1,673,926	2,464,532

Source: EY calculations based on US Census Bureau County Business Patterns and Bureau of Economic Analysis RIMS II multipliers

As shown in Table 2.3, life insurance carriers pay an average of more than $76,000 annually to their 367,048 employees, totaling $28 billion in total employee earnings before benefits. The

[23] Estimated indirect contributions are based on direct employment and earnings obtained from US Census Bureau, County Business Patterns and US Bureau of Economic Analysis, RIMS multipliers. The largest supplier to the insurance industry is the insurance agent and broker industry. To avoid double-counting the contribution of life insurance agents that would otherwise be included in the indirect impact of the life insurance carrier industry, the direct contribution of the agent/broker industry has been subtracted from the indirect impact of the life insurance carriers.

average compensation of life insurance carrier employees exceeds the average compensation of other insurance carrier employees by almost 9 percent. The average annual earnings of life insurance carrier employees also exceeds that of information services employees (by 12 percent), banking (by 36 percent), real estate (by 85 percent), and professional services (by 13 percent).

Life insurance carrier employees, agents, and brokers, employees of the life insurance industry, earn an average of nearly $66,000 annually. Compared to employees of all US industries, life insurance employees (life insurance carriers, agents, and brokers) earn 57 percent more than the average US employee, who earns about $42,000.

Table 2.3 US average annual payroll per employee by industry 2009 ($thousands)

Industry	Average annual payroll per employee
Manufacturing	$47
Wholesale and retail	$33
Information services	$68
Banking (credit intermediation)	$56
Insurance carriers	$71
Life insurance carriers	$76
Other insurance carriers	$70
Insurance agencies/brokerages	$56
Life insurance agencies/brokerages	$56
Other insurance agencies/brokerages	$56
Real estate	$41
Professional services	$67
Accommodation and food services	$16
Life insurance carriers and agents	$66
All Industries	$42

Source: US Census Bureau: County Business Patterns

50-State employment and income contribution of the life insurance industry

The US life insurance industry impacts employment and earnings in every state and the District of Columbia. Tables 2.4 and 2.5 show the direct and indirect employment contributions of life insurance carriers, agents, and brokers in each state and the District of Columbia.[24] Based on employment and employee earnings data for each state and the District of Columbia, the indirect impact of the life insurance industry is estimated using economic multipliers from the Department of Commerce. As described in the previous section, these multipliers capture the

[24] An adjustment is made to the state level impacts to remove the indirect impact of the insurance carrier industry on insurance agents and brokers that are counted as direct employees.

indirect activity created as the life insurance industry and its employees in each state purchase goods and services from other businesses in the same state.[25]

As shown in Table 2.4, the impact of life insurance industry employment in the states is significant. The economic multiplier associated with an industry is equal to that industry's total employment impact divided by its direct impact. The multiplier for life insurance carriers ranges from 1.5 in Wyoming to 2.7 in Illinois. The multiplier for life insurance agencies ranges from 1.6 in Wyoming to 3.1 in Georgia.

Table 2.5 shows that the impact of life insurance industry income in the states is equally significant. The multiplier for life insurance carriers ranges from 1.3 in Wyoming to 2.0 in Illinois. The multiplier for life insurance agencies ranges from 1.5 in Wyoming to 2.2 in Texas.

New York, Connecticut, and Wisconsin have the largest number of direct life insurance carrier employees and account for 22 percent of total US life insurance carrier employment. Unlike the distribution of carrier employment, life insurance agent employment is roughly proportional to population in each state. California, Texas, New York, and Florida have the largest number of direct life insurance agents and brokers, accounting for nearly one-third of total US life insurance agent and broker employment.

Table 2.5 shows that the states with the highest life insurance carrier employee earnings are similar to the states with the highest carrier employment, although the relative ranking is different due to differences in the average earnings in each state. For example, the $2.5 billion in income earned by life insurance carrier employees in New Jersey means that employees in that state have higher average earnings than any other state, more than $125,000, compared to the US average of more than $76,000. District of Columbia and New York life insurance carrier employees also rank among the highest paid, earning annual salaries about $116,000 and $107,000, respectively.

California, Texas, New York, and Florida have the most life insurance agents and brokers and, as shown in Table 2.5, insurance agents in these states earn more aggregate income than those in other states. However, agents and brokers in District of Columbia and New Jersey have the highest average earnings, per employee, at more than $98,000 and $74,000, respectively, compared to more than $56,000 nationwide.

[25] The estimates for the states are slightly different than the US totals due to the way state data is totaled into national aggregates. Because state economies are smaller than the national economy, they have more economic leakage. This means that suppliers to the industry are more likely to be outside the local economy and the multiplier (the ratio of the total impact to the direct impact) is likely to be smaller. For example, a life insurer in Hartford, Connecticut that purchases services from a financial services company in New York City creates an indirect impact in New York City that is included in the US economic multiplier, but not in the state multiplier. For this reason, the sum of the indirect impacts in all 50 states and the District of Columbia is lower than the US indirect impact.

Table 2.4 Direct and indirect employment contribution of the life insurance industry 2009

	Direct employment			Indirect & induced employment			
State	Life insurance carrier	Life insurance agent	Total direct employment	Life insurance carrier	Life insurance agent	Total indirect employment	Total life insurance employment
Alabama	4,785	4,984	9,769	5,622	7,573	13,195	22,964
Alaska[1]	46	654	700	33	602	634	1,334
Arizona	4,027	6,546	10,573	5,323	9,619	14,942	25,515
Arkansas	1,000	3,490	4,490	842	3,169	4,012	8,502
California	18,086	46,368	64,454	26,711	84,357	111,068	175,522
Colorado	5,604	7,172	12,776	8,125	11,418	19,543	32,320
Connecticut[1]	29,100	5,904	35,004	40,640	9,859	50,499	85,504
Delaware	1,725	982	2,707	2,320	1,635	3,955	6,662
Florida	15,264	28,538	43,802	21,418	50,284	71,701	115,503
Georgia	12,792	12,591	25,383	18,593	26,746	45,339	70,722
Hawaii	638	1,321	1,959	585	1,710	2,295	4,254
Idaho	252	1,762	2,014	182	1,501	1,683	3,697
Illinois	11,724	20,130	31,854	20,137	39,143	59,280	91,134
Indiana	7,982	8,810	16,792	9,128	11,146	20,274	37,066
Iowa	21,370	6,955	28,325	22,684	6,860	29,544	57,869
Kansas	2,409	5,124	7,533	2,520	5,877	8,397	15,930
Kentucky[1]	1,358	5,133	6,490	1,955	6,961	8,916	15,406
Louisiana	2,442	6,404	8,846	2,832	9,275	12,107	20,953
Maine[1]	2,910	1,844	4,753	4,059	2,720	6,779	11,532
Maryland	3,909	7,857	11,766	5,652	13,292	18,943	30,709
Massachusetts	16,655	11,436	28,091	25,434	20,251	45,685	73,776
Michigan	5,764	13,719	19,483	6,911	18,760	25,671	45,153
Minnesota	11,873	9,012	20,885	20,013	14,307	34,320	55,205
Mississippi	1,737	3,019	4,756	1,503	2,929	4,432	9,188
Missouri	4,300	10,474	14,774	5,560	16,119	21,679	36,452
Montana	172	1,649	1,821	177	1,695	1,872	3,693
Nebraska	7,265	3,452	10,717	6,730	3,028	9,758	20,475
Nevada	474	2,699	3,173	498	2,900	3,397	6,571
New Hampshire	1,367	1,695	3,062	2,030	2,862	4,892	7,954
New Jersey	19,907	12,755	32,662	33,289	26,665	59,955	92,617
New Mexico	428	1,936	2,364	327	1,872	2,198	4,562
New York	27,861	28,880	56,741	37,515	46,538	84,053	140,794
North Carolina	9,306	11,052	20,358	9,995	15,515	25,510	45,868
North Dakota	1,446	1,236	2,682	900	783	1,683	4,364
Ohio	14,945	16,476	31,421	22,114	26,487	48,601	80,022
Oklahoma	2,858	4,796	7,654	2,900	5,485	8,385	16,038
Oregon	2,928	5,092	8,020	3,640	7,013	10,652	18,673
Pennsylvania	20,429	19,282	39,711	31,762	36,108	67,870	107,581
Rhode Island[1]	1,358	1,479	2,837	1,788	2,262	4,050	6,887
South Carolina	3,695	5,442	9,137	4,655	8,213	12,868	22,005
South Dakota[1]	582	1,586	2,167	449	1,107	1,556	3,724
Tennessee[1]	5,820	8,125	13,945	7,456	13,423	20,878	34,823
Texas	20,461	31,586	52,047	31,677	56,529	88,207	140,253
Utah	1,426	4,296	5,722	2,015	6,948	8,963	14,685
Vermont[1]	582	1,051	1,632	665	1,246	1,911	3,544
Virginia	6,963	9,282	16,245	7,610	13,807	21,417	37,662
Washington	4,410	8,051	12,461	5,705	11,859	17,563	30,024
West Virginia[1]	582	1,979	2,560	501	1,788	2,288	4,848
Wisconsin	23,578	8,270	31,848	29,381	11,538	40,919	72,767
Wyoming	80	700	780	41	412	454	1,234
District of Columbia	375	484	859	213	624	837	1,697

Source: US Census' County Business Patterns and Bureau of Economic Analysis RIMS II

[1]Imputed for Life Insurance Carriers

[2]Imputed for Agents and Brokerages

Table 2.5 Direct and indirect income contribution of the life insurance industry 2009 ($millions)

	Direct income			Indirect & induced income			
State	Life insurance carrier	Life insurance agent	Total direct income	Life insurance carrier	Life insurance agent	Total indirect income	Total life insurance income
Alabama	$296	$257	$554	$206	$229	$435	$988
Alaska[1]	$4	$35	$38	$1	$21	$22	$61
Arizona	$258	$307	$565	$210	$326	$536	$1,102
Arkansas	$52	$143	$195	$26	$96	$122	$317
California	$1,238	$2,964	$4,202	$1,166	$3,579	$4,745	$8,947
Colorado	$435	$371	$806	$390	$428	$818	$1,624
Connecticut[1]	$2,245	$413	$2,658	$1,865	$407	$2,272	$4,930
Delaware	$135	$53	$187	$108	$52	$160	$348
Florida	$935	$1,491	$2,426	$825	$1,687	$2,512	$4,937
Georgia	$887	$762	$1,649	$835	$919	$1,754	$3,403
Hawaii	$47	$69	$116	$29	$59	$88	$205
Idaho	$16	$62	$78	$7	$39	$46	$124
Illinois	$868	$1,237	$2,106	$875	$1,543	$2,418	$4,524
Indiana	$623	$392	$1,015	$429	$352	$781	$1,796
Iowa	$1,309	$325	$1,634	$787	$220	$1,007	$2,641
Kansas	$155	$238	$393	$103	$193	$296	$689
Kentucky	$125	$221	$345	$94	$205	$299	$644
Louisiana	$145	$317	$461	$105	$294	$399	$860
Maine[1]	$224	$90	$314	$173	$82	$255	$569
Maryland	$282	$473	$755	$234	$499	$733	$1,488
Massachusetts	$1,440	$765	$2,205	$1,318	$844	$2,162	$4,367
Michigan	$378	$666	$1,044	$275	$648	$924	$1,967
Minnesota	$921	$501	$1,422	$787	$509	$1,296	$2,718
Mississippi	$83	$135	$218	$46	$95	$141	$359
Missouri	$258	$502	$760	$219	$519	$738	$1,498
Montana	$8	$71	$78	$5	$54	$59	$137
Nebraska	$388	$146	$535	$226	$97	$323	$858
Nevada	$36	$116	$152	$22	$91	$113	$265
New Hampshire	$71	$96	$167	$58	$96	$154	$321
New Jersey	$2,506	$946	$3,452	$2,356	$1,113	$3,469	$6,921
New Mexico	$21	$78	$99	$10	$56	$66	$165
New York	$2,987	$2,112	$5,100	$2,493	$2,120	$4,613	$9,713
North Carolina	$756	$549	$1,305	$480	$490	$971	$2,276
North Dakota	$57	$51	$108	$23	$26	$49	$157
Ohio	$1,006	$788	$1,795	$848	$857	$1,705	$3,500
Oklahoma	$103	$196	$299	$68	$175	$242	$542
Oregon	$313	$230	$544	$228	$213	$442	$985
Pennsylvania	$1,431	$1,189	$2,620	$1,343	$1,373	$2,717	$5,337
Rhode Island[1]	$105	$80	$185	$85	$77	$162	$347
South Carolina	$208	$236	$444	$161	$237	$398	$842
South Dakota[1]	$45	$59	$104	$23	$33	$56	$160
Tennessee	$397	$445	$842	$350	$502	$852	$1,694
Texas	$1,317	$1,638	$2,954	$1,272	$2,047	$3,319	$6,273
Utah	$96	$196	$291	$86	$218	$304	$595
Vermont[1]	$45	$57	$102	$28	$42	$70	$171
Virginia	$463	$475	$938	$319	$448	$767	$1,705
Washington	$289	$451	$740	$214	$437	$651	$1,392
West Virginia	$25	$76	$101	$14	$53	$66	$167
Wisconsin	$1,911	$389	$2,300	$1,418	$353	$1,771	$4,070
Wyoming	$5	$25	$30	$2	$11	$13	$43
District of Columbia	$44	$48	$91	$15	$31	$46	$138

Source: US Census' County Business Patterns and Bureau of Economic Analysis RIMS II

[1] *Imputed for Life Insurance Carriers*

[2] *Imputed for Agents and Brokerages*

Chapter 3 – Contributions of the US life insurance industry to US financial markets

In addition to providing financial protection and employment to American families, the life insurance industry also makes significant long-term investments in the US capital markets.

Financial assets of the life insurance industry

The life insurance industry held financial assets totaling $4,814 billion at the end of 2009.[26] This amount was distributed across four broad asset categories with $84 billion in easily liquid assets, such as checkable deposits and money market funds; $3,023 billion in credit market instruments including government securities, mortgages, and corporate and foreign bonds; $1,349 billion in corporate equities and mutual fund shares; and $358 billion in miscellaneous assets including policy loans. These amounts and their shares of life insurance industry investments are shown in Table 3.1.

Table 3.1 Financial assets of the life insurance industry 2009 ($ billions)

	Total holdings		Current year net investment	
Financial asset type	**Amount**	**% of Total**	**Amount**	**% of Total**
Checkable deposits and money market shares	84	2%	-38	-33%
Credit market instruments	3,023	63%	140	124%
Corporate Equities and mutual fund shares	1,349	28%	33	30%
Miscellaneous	358	7%	-21	-20%
Total	4,814	100%	115	100%

Source: Flow of Funds Accounts of the United States, Flows and Outstandings First Quarter 2011
Note: Details do not sum to totals due to rounding.

During 2009, the life insurance industry made net investments of $115 billion consisting of $140 billion in credit market instruments and $33 billion in corporate equities and mutual fund shares, offset by reduced holdings of checkable deposits and money market funds of $38 billion and miscellaneous assets of $21 billion. The life insurance industry, even during the challenging financial crises of 2009, was and is a consistent net contributor to the US economy through investments in corporate equities and mutual fund shares providing a stable source of funding for these markets.

Comparison of life insurance industry to other financial institutions

Relative to other major financial institutions, total financial assets of the life insurance industry ranked third in 2009 behind commercial banks and private pension funds, but ahead of state and local government employee pension funds, Federal government employee pension funds, savings institutions, property and casualty insurance companies, and credit unions. Table 3.2

[26] Financial asset data are taken from the Flow of Funds tables produced by the Federal Reserve Board for the Life Insurance Industry.

shows a comparison of these institutions by total assets at the end of 2009.[27] The table illustrates, for example, that in terms of the assets held in each sector, Commercial Banking is three times the size of the Life Insurance Industry.

Table 3.2 Relative size of life insurance industry compared with other financial institutions by total financial assets, 2009

Financial institution	Total assets ($ billions)	Size relative to life insurance
Commercial banking	14,288	3.0
Private pension funds	5,471	1.1
Life insurance companies	4,824	1.0
Government sponsored enterprises (GSEs)	3,014	0.6
State & local government employee retirement funds	2,674	0.6
Property and casualty insurance companies	1,388	0.3
Federal government retiree funds	1,324	0.3
Savings banks	1,254	0.3
Credit unions	883	0.2

Source: Flow of Funds Accounts of the United States, Flows and Outstandings, First Quarter 2011

Table 3.3 shows a comparison of these institutions by net financial assets at the end of 2009. Relative to other major financial institutions, net financial assets[28] of the life insurance industry ranked third in 2009 behind property and casualty insurance companies and commercial banking, but ahead of savings banks, credit unions, Government sponsored GSE's, and pension funds. The difference in the relative sizes of the property and casualty insurance companies and commercial banks shown in Table 3.2 and Table 3.3 are an indication that the life insurance industry fared better during the recession in terms of net assets at the end of 2009 because they hold proportionately greater amounts of bonds and proportionately smaller amounts of equities. (See table 3.5 below.)

[27] From 2007 to 2009, Life Insurance assets declined by 1 percent ($57 Billion) while assets held by Private Pension Funds declined by 11 percent ($659 Billion) as a percentage of the assets held in 2007.
[28] Net financial assets are defined as the difference between total financial assets and total financial liabilities.

Table 3.3 Relative size of life insurance industry compared with other financial institutions by net financial assets, 2009

Financial institution	Total net assets ($ billions)	Size relative to life insurance
Property and casualty insurance companies	573	2.0
Commercial banking	513	1.8
Life insurance companies	291	1.0
Savings banks	129	0.4
Credit unions	67	0.2
Government sponsored enterprises (GSEs)	37	0.1
Federal government retiree funds	-	-
Private pension funds	(36)	(0.1)
State & local government employee retirement funds	(86)	(0.3)

Source: Flow of Funds Accounts of the United States, Flows and Outstandings, First Quarter 2011

Types if financial assets held by the life insurance industry

While the life insurance industry holds significant financial market investments, it is the long-term nature of its investments that distinguishes it from other financial institutions. Because life insurance industry products provide financial security from knowable but uncertain adverse events, the investment portfolios must produce cash flows that are coordinated with the expected frequencies and magnitudes of these events, since the income from these investments must satisfy the expected payments from these products. The majority of these payments (75 percent) were for life insurance and annuity products with long term contractual commitments made many years prior to the expected payments.[29] Matching investments to liabilities necessitates a long-term investment strategy for these obligations, providing the life insurance industry with a unique role among other financial institutions.

Table 3.4 shows the distribution of investments by the life insurance industry in relation to the size of the market for each financial instrument. The first column shows the total amount of assets in each market and the second shows the amount invested by the life insurance industry. The third column shows the percent of the asset market that is invested by the life insurance industry. For example, there were $5,352 billion in checkable deposits and money market shares of which the life insurance industry held $84 billion, or approximately 2 percent of the total. At the end of 2009 the life insurance industry held investments totaling 17 percent of the corporate and foreign bond markets and 10 percent of the commercial mortgage market.

[29] ACLI Fact Book, 2011

Table 3.4 Share of financial assets held by the life insurance industry 2009 ($ billions)

Financial asset type	US total selected assets	Assets held by life insurance companies	% of total value held by life insurance companies
1. Checkable deposits & currency and money market shares	5,352	84	2%
2. Credit market debt held by financial sectors	38,029	3,023	8%
Treasury securities	7,782	134	2%
Agency and GSE-backed securities	8,107	372	5%
Mortgages	14,320	326	2%
Home	10,862	6	0%
Multi-family	849	49	6%
Commercial	2,475	258	10%
Corporate and foreign bonds	11,434	1,915	17%
3. Corporate Equities	20,101	1,209	6%
4. Miscellaneous assets and mutual fund shares	32,362	498	2%
Totals (1+2+3+4)	95,844	4,814	5%

Source: Flow of Funds Accounts of the United States, Flows and Outstandings, First Quarter 2011
*Note: * denotes less than 5% of holdings relative to life insurance industry*

A quick glance at the last column of Table 3.4 clearly indicates that the life insurance industry invests significantly in the corporate and foreign bond market, (compared to other financial assets), where they hold nearly one fifth of the market's value. In the second most popular investment market for the industry, commercial mortgages, the percentage held by life insurance is significantly lower at 10 percent. Similarly, the life insurance industry held 8 percent of credit market debt of which approximately 16 percent was in multi-family mortgage backed and commercial asset backed securities and a 6 percent stake of the corporate equities market. Table 3.4 demonstrates that the life insurance industry is a major source of long-term capital for US corporations. Due to the long-term nature of the life insurance industry's liabilities, this relationship will be, and has been, very steady across time.

Table 3.5 shows how other financial institutions' holdings of assets in these markets compare with the life insurance industry. For example, the top row shows that private pension funds hold 30 percent more checkable deposits and money market shares than the life insurance industry holds. The life insurance industry holds large amounts of checkable deposits and money market shares because the industry provides sizeable payments each year to holders of life insurance, annuity, and other insurance products. Indeed, in 2009, payments on these products to policy holders totaled $497 billion.[30] The other financial assets that the life insurance industry holds significant investments in are corporate and foreign bonds, commercial mortgages and corporate equities, among financial institutions; the life insurance industry is a minor investor in the home mortgage market.

[30] ACLI Fact Book, 2011

Table 3.5 Financial asset holdings relative to life insurance industry asset holdings 2009

Financial asset type	Life ins.	Comm. banks	Private pensions	State & local retiree funds	GSEs	Savings banks	Prop. & casualty ins.	Fed. retiree fund	Credit union
Checkable deposits & money mkt shares	1	0.0*	1.3	0.4	1.2*	0.1*	0.7	N.A.	0.5*
Credit mkt debt held by financial sectors	1	3.0	0.4	0.3	0.9	0.4	0.3	0.0	0.2
Treasury securities	1	1.4	2.3	1.3	0.2	0.1	0.7	0.9	0.1
Agency and GSE-backed securities	1	3.5	0.7	0.8	2.5	0.5	0.3	0.0	0.3
Mortgages	1	11.7	0.0	0.0	2.2	1.9	0.0	N.A.	1.0
Home	1	403.8	0.4	0.6	79.3	80.1	N.A.	N.A.	56.8
Multi-family	1	4.4	0.1	0.1	4.2	1.2	N.A.	N.A.	N.A.
Commercial	1	5.0	0.0	0.0	N.A.	0.5	0.0	N.A.	N.A.
Corporate and foreign bonds	1	0.5	0.2	0.2	0.2	0.0	0.2	0.0	0.0
Corporate Equities	1	0.0	1.5	1.3	N.A.	0.0	0.2	0.1	N.A.

Source: Flow of Funds Accounts of the United States, Flows and Outstandings First Quarter 2011
*Note: * denotes data for money market shares not applicable*

Table 3.6 shows another perspective identifying the long term investment strategy of the industry. This table shows the vintage profile of debt instruments held by the life insurance industry in 2009 both as of the date of purchase of the instruments and as of the remaining maturity of debt instruments in 2009.

Table 3.6 Vintage profile of debt instruments held by life insurance industry 2009

Distribution of bonds held	Less than 1 year	1 to 5 years	5 to 10 years	10 to 20 years	Over 20 years	Total
Maturity at date of purchase	-	9%	30%	28%	34%	100%
Maturity remaining	10%	29%	29%	13%	19%	100%

Source: ACLI Fact Book 2011

The first row shows that less than 10 percent of life insurance industry debt purchased in 2009 had a remaining maturity of less than 5 years and that 62 percent had a remaining maturity greater than 10 years. This time profile reflects the duration of recent liabilities insured by life insurance and annuity products. The second row shows that the current remaining years of debt instruments held by the life insurance industry and matches the remaining time profile of expected payment in the current year, near term and the long-term.

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