LIFE INSURANCE DEMAND IN JAPAN - NOT WHAT YOU THINK

Dr. Nat Pope
Finance & Quantitative & Methods Department
Bradley University
Illinois, USA

Abstract

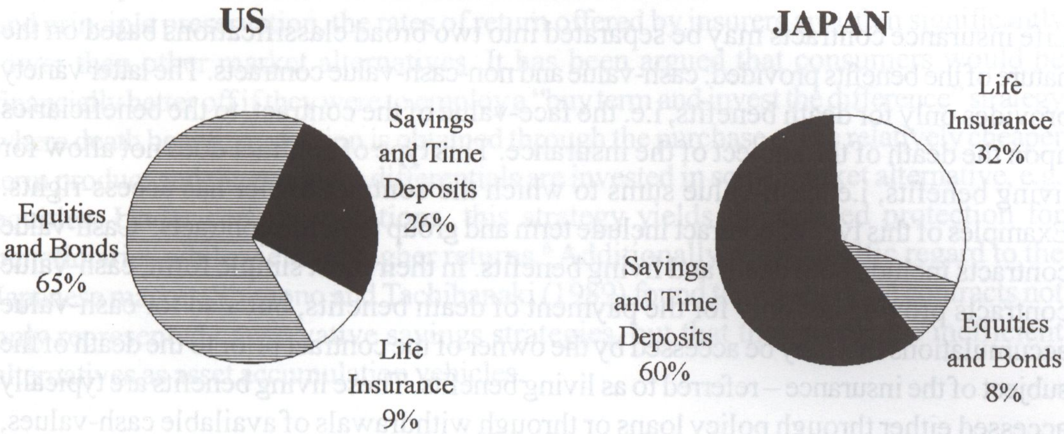
This paper compares the demand structure for life insurance in the US and Japan. It focuses on the use of cash-value forms of life insurance as investment vehicles. Recognition of a data-reporting anomaly in the Japanese data allows for a reallocation of sums-insured between cash-value and non-cash-value forms. The result is a dramatically altered Japanese profile – one that is remarkably similar to that of the US. The implications are that the Japanese, while world leaders with respect to the amount of life insurance demanded, do not rely on life insurance as an investment vehicle to the degree previously thought.

Introduction

The US and Japan represent over 50 percent of the world's demand for life insurance products (30.8 and 24.8 percent, respectively [Swiss Re, 2002]).[1] However, despite comparable market size the life insurance consumption profiles of the US and Japan differ dramatically. In particular, the households of these two nations appear to employ radically differing strategies with respect to the use of life insurance as a savings accumulation vehicle. These differences hold significant implications with respect to broader philosophies associated with the allocation of household financial assets.

While the US and Japan share a roughly similar aggregate demand for life insurance, Japan's demand far exceeds that of the US on a per capita basis (US$2,806 and US$1,602, respectively [Swiss Re, 2002]); Japan is the world leader while the US ranks sixth by this measurement. This significant demand may be at least partially reflected in the use of life insurance as a savings accumulation vehicle in Japan. As a component of an abbreviated household financial asset portfolio,[2] life insurance comprises a far larger proportion of the Japanese portfolio than it does in the US portfolio, 32 and nine percent, respectively (see Figure 1).

Figure 1. Financial Asset Portfolios



Source: Ministry of Public Management, Home Affairs, Posts and Telecommunications (Japan) and US Federal Reserve (US).

Note: Reported life insurance values are existing sums-insured associated with cash-value forms of life insurance.

While the significantly differing portfolio allocation is of interest, an in depth discussion regarding national savings behavior is beyond the scope of this paper. Instead, this analysis seeks to focus on the use of life insurance as a savings vehicle in the Japanese market, using the US as a point of comparison.

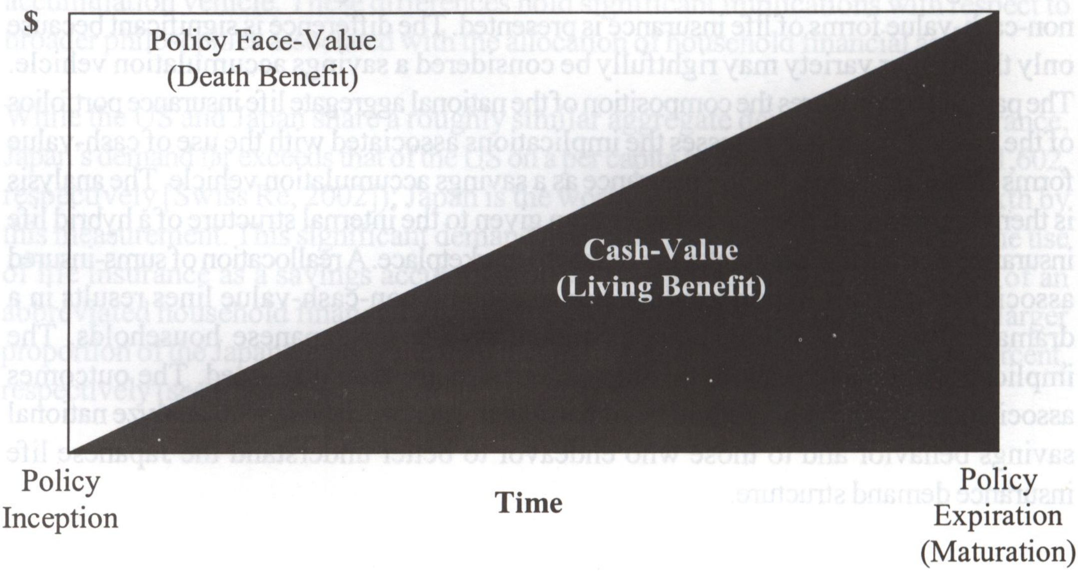
Following this introduction, a brief overview of the differing characteristics of cash and non-cash-value forms of life insurance is presented. The difference is significant because only the former variety may rightfully be considered a savings accumulation vehicle. The paper then compares the composition of the national aggregate life insurance portfolios of the US and Japan and assesses the implications associated with the use of cash-value forms of life insurance, i.e. life insurance as a savings accumulation vehicle. The analysis is then revisited with specific consideration given to the internal structure of a hybrid life insurance product that dominates the Japanese marketplace. A reallocation of sums-insured associated with this hybrid product along cash and non-cash-value lines results in a dramatically altered life insurance demand profile for Japanese households. The implications associated with this new allocation are then discussed. The outcomes associated with this analysis will be of particular interest to those who analyze national savings behavior and to those who endeavor to better understand the Japanese life insurance demand structure.

Life Insurance

Life insurance contracts may be separated into two broad classifications based on the nature of the benefits provided: cash-value and non-cash-value contracts. The latter variety provides only for death benefits, i.e. the face-value of the contract, to the beneficiaries upon the death of the subject of the insurance. This type of contract does not allow for living benefits, i.e. cash-value sums to which the contract owner has access-rights. Examples of this type of contract include term and group term life contracts.[3] Cash-value contracts include both death and living benefits. In their most simple form, cash-value contracts provide not only for the payment of death benefits, but also for cash-value accumulations that may be accessed by the owner of the contract prior to the death of the subject of the insurance – referred to as living benefits. These living benefits are typically accessed either through policy loans or through withdrawals of available cash-values, resulting in either a reduction of policy death benefits or a cancellation of the life insurance contract all together. These cash-values are the result of premium payments in excess of the premium required to fund solely the death benefit portion of the contract.

A typical cash-value contract, e.g. whole life and endowment contracts, provides for a guaranteed minimum rate of return on cash-values while assuring the preservation of principle. Over time these cash-values and interest contributions increase; policy design assures that at policy maturation the total value of the living benefits are equivalent to the policy's death benefits (see Figure 2).[4] Thus, if financial asset investments are defined to be vehicles for funds that are expected to maintain, or increase, their value and/or generate positive returns (Gitman and Joehnk, 1993, 3) then cash-value life insurance contracts clearly qualify as such a vehicle (while non-cash-value contracts do not).

Figure 2. Cash-Value Life Insurance: Benefit Structure

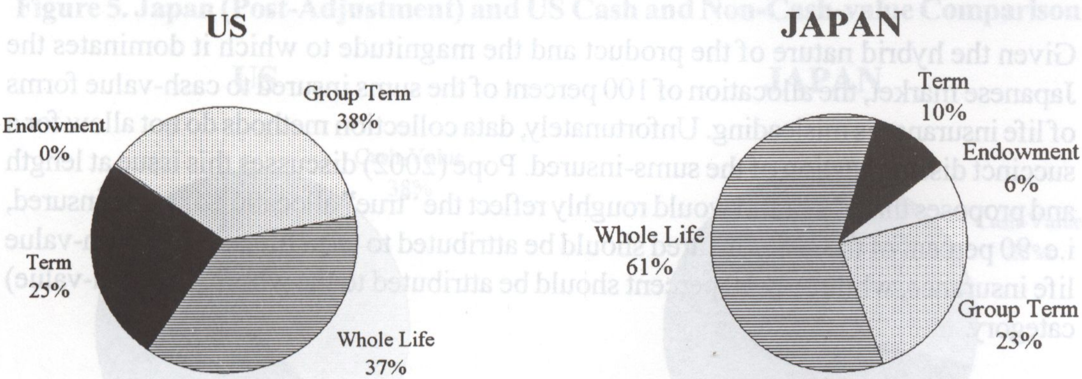


As an investment vehicle, cash-value contracts typically represent conservative strategies when compared with other market alternatives.[5] In exchange for the minimum guarantees and principle preservation, the rates of return offered by insurers are often significantly lower than other market alternatives. It has been argued that consumers would be financially better off if they were to employ a "buy term and invest the difference" strategy where death benefit protection is obtained through the purchase of the relatively cheaper term product and the premium differentials are invested in some market alternative, e.g. equities. Under certain conditions, this strategy yields the desired protection for beneficiaries while yielding higher returns.[6] Additionally, with specific regard to the Japanese market, Shimono and Tachibanaki (1989) found that cash-value contracts not only represented conservative savings strategies, but that they were also inefficient alternatives as asset accumulation vehicles.

Life Insurance Portfolios

Not only do Japanese households demand more life insurance than do their US counterparts, they also appear to have a significantly differing configuration with respect to the types of life insurance demanded. Figure 3 compares the aggregate national life insurance portfolios[7] of the US and Japan. The US portfolio suggests a pronounced preference for non-cash-value forms of life insurance as 63 percent of the portfolio can be attributed to term and group term life varieties.[8] Only 37 percent of the US portfolio can be attributed to cash-value varieties, i.e. whole life. Conversely, the Japanese portfolio displays a distinct preference for cash-value forms of life insurance (whole life and endowment varieties comprise 67 percent of the portfolio). Thus, based on cash and non-cash-value aggregations, it would appear that these two portfolios are roughly inverse reflections of one another.

Figure 3. Life Insurance Portfolio Comparison (Existing Business-in-Force)



Source: The Life Insurance Association of Japan (Japan) and the American Council of Life Insurance (US).

Given the conservative (and inefficient) character of cash-value forms of life insurance, the heavy emphasis on such forms by the Japanese households is curious. Are the Japanese more conservative investors than their US counterparts? Are they poorly educated with respect to the set of financial asset alternatives available in the marketplace? Do the rationale for the use of cash-value contracts, e.g. forced-savings plans, hold special value to the Japanese? Certainly, a number of implications emerge; however, conclusions drawn based on the data presented thus far would be premature and misleading.

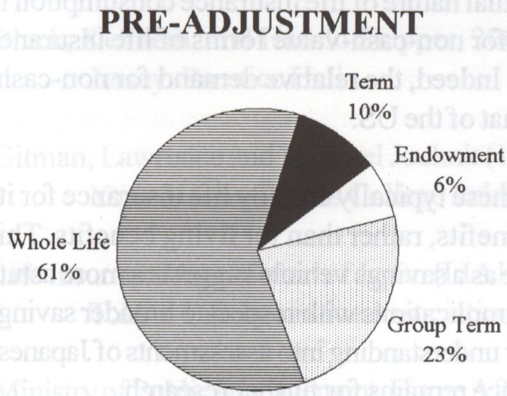
In order to fully understand the nature of the demand for life insurance in the Japanese marketplace one must look beyond mere aggregations of product lines into cash and non-cash-value classifications. A single life insurance product dominates the Japanese landscape; the whole life insurance with term (rider) (WLIT) product constitutes approximately 48 percent of the total existing business-in-force (63 percent of the individual policies and 87 percent of the cash-value classification). Prior to 1993, the sums-insured associated with this product were simply included in the whole life product classification by the Life Insurance Association of Japan (LIAJ).[9] Subsequently, specific recognition of the WLIT product was made but its sums-insured were still wholly attributed to the broader classification of whole life products, i.e. cash-value forms of life insurance. The data presented in Figure 3 employed this method of allocation.

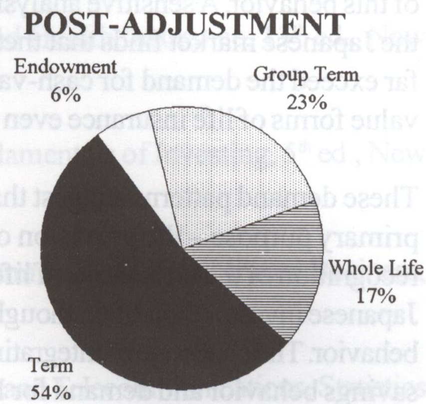
As the name suggests, the WLIT product includes both cash-value and non-cash-value components; it is a hybrid variety of life insurance. The product structure typically includes a relatively small whole life policy that becomes paid-up around the anticipated age of retirement of the policy owner. To this underlying policy is attached a significantly larger level-term life rider that expires when the whole life policy matures. Thus, the policy provides a large death benefit if the subject of the insurance dies prior to retirement. If the subject (presumably the owner of the policy) survives until retirement, however, he/she receives a significantly smaller living benefit – the face-value of the whole life policy.

Given the hybrid nature of the product and the magnitude to which it dominates the Japanese market, the allocation of 100 percent of the sums insured to cash-value forms of life insurance is misleading. Unfortunately, data collection methods do not allow for a succinct disaggregation of the sums-insured. Pope (2002) discusses this issue at length and proposes that a 9:1 ratio would roughly reflect the "true" allocation of sums-insured, i.e. 90 percent of the sums-insured should be attributed to term life, i.e. non-cash-value life insurance, while only 10 percent should be attributed to the whole life (cash-value) category.

Applying the 9:1 ratio to the sums-insured associated with the WLIT product results in a dramatically altered portfolio allocation. Figure 4 presents the pre and post-adjustment portfolios. The sums associated with term life increased from 10 to 54 percent while the whole life classification shrunk from 61 to 17 percent.

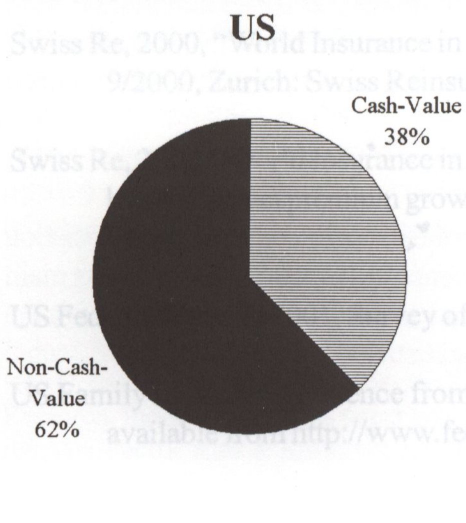
Figure 4. Japanese Life Insurance Portfolio Comparison

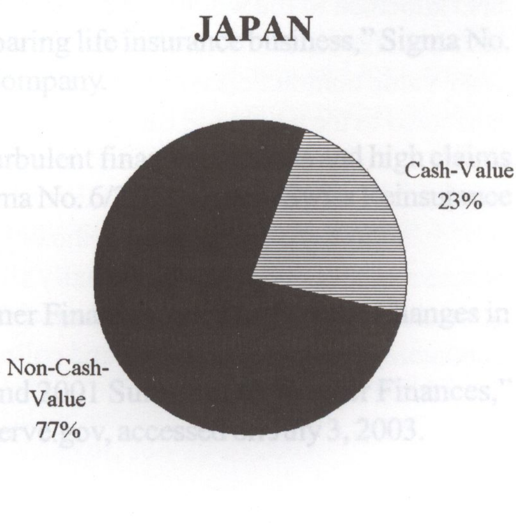




When the broad classes of life insurance are aggregated together based on the presence of cash-values (see Figure 5) it becomes apparent that US and Japanese households share a much more similar demand structure for life insurance products than was previously thought. Indeed, cash-value forms of life insurance now comprise a mere 23 percent of the Japanese life insurance portfolio, compared to 38 percent in the US. Earlier implications of a Japanese investor who apparently preferred the safety of life insurance as an asset accumulation vehicle have been turned upside-down. The lack of significant reliance on cash-value forms of life insurance by the Japanese implies an awareness of the inefficiencies of life insurance as an investment vehicle, as suggested by Shimono and Tachibanaki.

Figure 5. Japan (Post-Adjustment) and US Cash and Non-Cash-value Comparison





While the per capita demand for life insurance in Japan far exceeds that of the US, conclusions suggesting this demand to be reflective of conservative and possibly inefficient savings strategies would be incorrect. While the Japanese are prodigious savers when compared to their US counterparts, one cannot cite the demand for life insurance in support of this behavior. A sensitive analysis of the actual nature of life insurance consumption in the Japanese market finds that their demand for non-cash-value forms of life insurance far exceed the demand for cash-value forms. Indeed, the relative demand for non-cash-value forms of life insurance even exceeds that of the US.

These demand patterns suggest that the Japanese typically employ life insurance for its primary purpose – the provision of death benefits, rather than for living benefits. This recognition of the limitations of life insurance as a savings vehicle suggests a more astute Japanese investor than often thought and has implications with respect to broader savings behavior. The challenge of integrating this new understanding into assessments of Japanese savings behavior and demand for life insurance remains for further research.

REFERENCES

American Council of Life Insurers (ACLI), 2001, Life Insurers Fact Book 2001, Washington D.C.: American Council of Life Insurers.

Black, Kenneth, and Harold Skipper, 2000, Life and Health Insurance, 13th ed., New Jersey: Prentice Hall.

Gitman, Lawrence and Michael Joehnk (1993) Fundamentals of Investing, 5th ed., New York: HarperCollins College Publishers.

Life Insurance Association of Japan (LIAJ), 1999, Summary of Life Insurance Business, Tokyo: Life Insurance Association of Japan.

Ministry of Public Management, Home Affairs, Posts and Telecommunications, Statistics Bureau, 2002, Family Savings Survey, "Amounts of Savings and Liabilities Held per Household and by Percentages and by Households Holding Them by Family Composition," available at http://www.stat.go.jp, accessed on July 3, 2003.

Pope, Nat, 2002, "Japanese Consumers' Demand for Cash Value Life Insurance: A Case of Mistaken Identity," Journal of Insurance Issues, 25 (1): 85-91.

Shimono, Keiko, and Toshiaki Tachibanaki, 1989, "Demand for Insurance: Choice Between Safe Assets, Risky Assets and Insurance in Japan," Working Papers in Economics and Econometrics, No. 188, Canberra: The Australian National University Australia.

Swiss Re, 1997, "World Insurance in 1995: premium volume exceeds USD2000 billion for the first time," Sigma No. 4/1997, Zurich: Swiss Reinsurance Company.

Swiss Re, 2000, "World Insurance in 1999: soaring life insurance business," Sigma No. 9/2000, Zurich: Swiss Reinsurance Company.

Swiss Re, 2002, "World Insurance in 2001: turbulent financial markets and high claims burden impact premium growth," Sigma No. 6/2002, Zurich: Swiss Reinsurance Company.

US Federal Reserve, 2001, Survey of Consumer Finances, cited in "Recent Changes in US Family Finances: Evidence from 1998 and 2001 Survey of Consumer Finances," available from http://www.federalreserve.gov, accessed on July 3, 2003.

ENDNOTES

[1]Dr. Nat Pope, ARM, is visiting Professor of Risk and Insurance at Braadley University, Peoria, IL, USA.

[2]As recently as 1995, Japan dominated the global life insurance market with a 41 percent market share (Swiss Re, 1997).

[3]These portfolios exclude non-financial assets, i.e. other tangible assets such as properties, as well as certain other forms of financial wealth, e.g. annuities, employer pension funds, etc. Available statistics did not allow for clear and accurate comparisons. Thus, an abbreviated portfolio is presented in order to provide the reader with an approximate relationship between these three major asset categories. Life insurance values reflect the face-values associated with cash-value forms of life insurance.

[4]Group life contract may also be of the cash-value variety, although this form of group life represents a relatively minor share of total group contracts.

[5]Note that other cash-value forms of life insurance contracts exist, e.g. variable and universal life, that deviate significantly from the less complex structure of whole life and endowment policies. Most significantly, contracts such as variable and universal life often do not guarantee minimum rates of return nor guarantee preservation of principle. Discussions of these types of policies can be found in many basic life insurance texts.

[6]While rationale does exist for the purchase of cash-value forms of life insurance, such arguments are generally not based on pure economic outcomes. Rather, they typically relate to behavioral issues, such as the value of forced savings plans, etc. For a deeper discussion see, for example Black and Skipper, 2000, 95-96.

[7]See, for example Black and Skipper (2000, 85-86) for a deeper discussion of this strategy.

[8]Significant discretion with respect to classification of types of policy was necessary in order to reduce the plethora of products available in the marketplace to a simple portfolio. Note that variable and universal varieties were included under the whole life classification. Additionally, any sums-insured attributable to group *whole* life were also allocated to the whole life category. Hybrid products, i.e. those that include both cash and non-cash value features in a single contract have been attributed to the underlying cash-value contract classification, e.g. whole life insurance with term rider has been attributed to the whole life category.

[9]Endowment forms of life insurance have been rendered largely moot in the US market due to the removal of certain tax benefits.

[10]The LIAJ (http://www.seiho.or.jp/english/index.html) is an industry association whose membership includes virtually all of the licensed life insurers in Japan. Its main activities include the representation of the opinions of the life insurance industry, the conducting of surveys, research and collection of statistics.