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The Economic Study of Life Insurance Policy, Pattern for Small Number of Asian Economics and India

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ABSTRACT

This paper provides comprehensive surveys of the achievements in the investment are of life insurance policies after insurance sector reforms. During the post-1990 period, services sector in most of the Asian economies witnessed growth fuelled by substantial changes in the financial sector of these economies. The insurance industry, in most of the Asian economies, ASEAN and SAARC economies in particular, was publicly owned and remained isolated from participation of either domestic private insurers or foreign insurers or participation of both. But, regulatory reforms and policy changes in the ASEAN economies during the post-financial crisis period and the process of economic liberalization in some of the SAARC countries and China led to phenomenal changes in the growth pattern of the insurance industry in these economies. This study is divided into two parts: the first part is focused on four SAARC countries, two countries from Greater China Region and six ASEAN countries for the 11year period (1994-2004) to understand economic and other socio-political variables, which may play a significant role in explaining the life insurance consumption pattern in these economies. Secondly, an independent exercise is undertaken to re-assess whether or not the variables best explaining life insurance consumption pattern for twelve selected Asian economies in the panel are significant for India for the period 1965 to 2004.

Keywords: Life Insurance; Policies; Future Immigration Policies; Public Policies; Life Insurance Sector Reforms; Investment Policies; Pattern; Insurance Demand.

1.0 Introduction

The growth of the services sector in the Asian economies hassled to substantial changes in the financial sector. The aftermath of Asian Financial Crisis, affecting the ASEAN economies in particular, saw these economies resorting to more regulatory measures to enhance delivery of products with minimal risks and failures.

The countries surrounding the ASEAN economies also went through a phase of economic restructuring, the most no table event being the impact of China's accession to WTO. The insurance industry in most of the Asian economies were both publicly owned and operated. The Government monopoly kept this segment of the financial market isolated from domestic private or foreign participation. Barring a few exceptions the insurance market, on an average, remained underdeveloped in terms of insurance density and penetration.

Regulatory changes since mid eighties for opening up of these markets to private and foreign insurers have been luring global heavyweight insurers to enter these economies.

As more suppliers enter these markets, the issue is to re-examine the factors that probably elevate demand for insurance products. This study on four SAARC countries, two countries from Greater China Region and six ASEAN countries, deals with this particular issue.

After reviewing existing theoretical as well as empirical literature, we list out a set of variables explaining insurance consumption and categorize them as economic, demographic, legal and socio-political variables.

Following this, some of these variables were used to understand whether or not they explain insurance consumption in the twelve selected Asian economies.

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1.1 Literature survey

2.0 Theoretical Studies

The main purpose of this study is to re-assess the validity of arguments emerging from the existing theoretical and empirical research works that there are a few variables which can significantly explain the current and future demand pattern for life insurance products. To strengthen the researchable issues for the study, we will briefly discuss selected theoretical studies which had identified indicators motivating life insurance demand and consumption. Studies on life insurance consumption dates back to Heubner (1942) who postulated that human life value has certain qualitative aspects that give rise to its economic value. But his idea was normative in nature as it suggested „how much“ of life insurance was to be purchased and not“ what“ was to be purchased. However, there were no guidelines regarding the kind of life policies to be selected depending upon the consumers capacity and the amount of risk to be „insured“ in the product. Economic value judgments are made on both the normative as well as positive issues. Subsequent studies by Yaari (1965), Mossin (1968), Hakansson (1969), and Fisher (1973), Borch (1977) Pissarides (1980) Campbell (1980) Karni and Zilcha (1985 and 1986), Lewis (1989), Bernheim (1991) and others gradually incorporated these positive issues. Their studies assimilated developments in the field of risk and uncertainty following contributions from von Neumann and Morgenstern (1947), Arrow (1953), Debreu (1953), to mention a few. The economics of insurance demand became more focused on evaluating the amount of risk to be shared/distributed between the insured and the insurer rather than the questions and methods for evaluation of life or property values at risk. This was mostly due to association of risk(s) with individual life or property that called for an economic valuation of the cost of providing insurance.

The „prospect theory“ propounded by Kahneman and Tversky (1979) argued that individuals make decision with respect to a statuesque reference point and gains via purchase of insurance are considered very little against losses with respect to the reference point. The development of many more models during early nineties tried to describe individual behavior and the effects of

„framing“ on decision making (Machina, 1982 and 1987).

In short, the theoretical review yields variables like income, rate of interest, current consumption and accumulated savings in wealth form as variables influencing insurance consumption. Demographic and social variables were also incorporated in theoretical models and their potential impact on an individual's life insurance consumption decision was investigated. Life insurance consumption increases with the breadwinner's probability of death, the present level of family's consumption and the degree of risk aversion. However, there is no concrete evidence as to how many such non-economic or additional economic variables can play a role in theoretical models. In the next section, we explore selected empirical studies to highlight those variables which were significant in affecting insurance demand.

3.0 Determinants for India

We begin our analysis by testing the time-variant variables for seasonality. We next make appropriate transformations to make the estimation process free from biases arising due to seasonality of variables used. However, variables of rate value were not transformed because they are already in a preferred form as they are a measure of change. Based on this rationale, the variables of rate value form, i.e., PEN, DEN, INFR, RIR, TDR, ODR, YDR, CDR, LEXR and urban population growth rate (URBGR) were not subjected to any transformation. GDP per-capita, GDS per-capita, FIND, PRICE, and PREM of the level value form were transformed by taking the natural logarithm of their level values so that their coefficients represents elasticity.

To investigate the stationary properties of the selected regressors, we have considered two different tests: the Augmented Dickey Fuller (ADF) Test and the Kwiatkowski-Phillips-Schmidt-Shin (KPSS) Test. The results obtained are surprising and reinforces one to probe further why most of the determinants successful in determining the demand for insurance in the cross country analysis fail to explain the Indian scenario. We have considered two dependent variables (i.e., insurance penetration and density) and tried to explain the variation in these by set of economic variables (income, savings, prices of

insurance product, inflation and interest rates) and demographic variables.

4.0 Conclusion

Overall, our cross-country analysis confirms that if we exogenously consider income to be a crucial factor in explaining insurance consumption, economic variables of importance would be gross domestic savings, level of financial sector development and inflation. As specialized financial institutions turn to financial conglomerates, one important policy implication can be the strength and weaknesses of banking and other on-banking institutions which might have a positive or negative spill over effect on the insurance industry. As more banks line up for insurance service provision, the entry of the so institutions will also pushup demand? Our analysis suggests that as the savings increase they raise insurance consumption. But insurance as such is not purely savings, and hence, its purchase may smoothen the in come or wealth, over time. If savings plus life risk insurance products Ares old, it might boost insurance consumption. Although real interest rate was not significant our cross country analysis, it turned out to be significant in our time series analysis. Some variant of it may also play an important role in explaining individuals' choice between insurance and other saving instruments.

According to Liedtke (2007) insurance should be considered a key component of economic development and the best mechanism to take care of multidimensional risks in modern economies. It is necessary to clear the confusion regarding considering life insurance as a superior or luxury good among potential consumers in developing countries with comparatively low per-capita income. But as per-capita income is steadily creeping up in the selected economies¹⁵ with changes in the standard of living, the suppliers might stimulate demand and increase the availability of insurance products.

This would reduce the scarce and costly outlook of life insurance products. The study can be extended considering more variables and dummies to look for the country and time specific factors affecting demand. The results are of importance to the policy makers if they are aspiring to elevate insurance density and penetration in the economies. Most of the selected economies have undergone changes, particularly in terms of regulatory reforms

recently. It would be useful to take a much bigger sample in terms of countries and periods considered, to understand why some of the variables behaved so differently than expected.

5.0 Issues and Queries

The major issue to start with would be to re-examine the significant variables that can best fit as determinants of life insurance demand. Recently, there are a number of studies on single economies: Hwang and Gao (2003) focused on the Chinese economy; Lim and Haberman (2004) considered Malaysia; and Hwang and Greenford (2005) again on Mainland China, Hong Kong and Taiwan.

Lenten and Rulli (2006) explored the time series properties of the demand for life insurance in Australia using a novel statistical procedure that allows unobservable components to be extracted Zietz (2003) and Hussels et al. (2005) have reviewed the efforts of researchers to explain consumer behavior concerning the purchase of life insurance for almost 50 years. These reviews suggest that the bulk of empirical exercises found a positive association between increase in savings behavior, financial services industry and demand for life insurance.

Taking this forward, our first issue is to see whether or not per capita gross domestic savings and financial depth influence life insurance consumption. GDP and Per-capita GDP are often highly correlated with the proxy variables measuring insurance demand: Insurance density and penetration. We therefore ignore these two variables and assume that as income grows, it will add to insurance demand via rise in the savings component i.e., GDS.

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