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HK INSURANCE MARKET

Comparing the Demand for Life Insurance of Hong Kong People and Mainland Visitors

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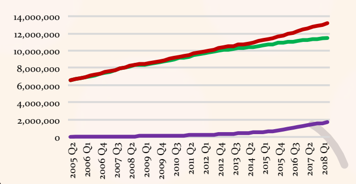

Figure 2: Yearly (Insurance Authority, 2020)

Demand of life insurance in Hong Kong generally ↑

What is Life Insurance?

- Life insurance is designed to cover the financial needs of your family or dependents in the event of your death. It pays them either a lump sum or regular payments.
- If you are the primary bread winner in your family, you should consider your need for life insurance.

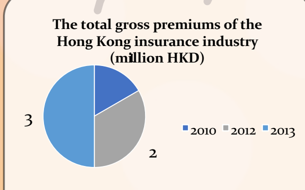

Figure 1: Business components of HK insurance market (Insurance Authority, 2020)

- In 2017, the total gross premiums of the Hong Kong insurance industry were $489.2 billion.
- Total premiums for in-force long term business were $440.9 billion in 2017.
- The Individual Life Insurance remained the dominant line of business, making up $415.1 billion or 85% of total gross premiums of the Hong Kong insurance industry.

EFFECT OF INCOME, EDUCATION & URBANIZATION

- When income ↑, life insurance become more affordable to individuals and hence↑ demand for life insurance which protects dependents in a family against potential loss of future income (Browne & Kim, 1993).
- Higher education level ↑ risk aversion and understanding of the importance insurance (Browne & Kim, 1993) and hence positively correlated
- In Hong Kong, the variation in the urbanization rate is very small and have no significant effect on the life insurance consumption
- However, rapid growth of urbanization rate in China will lead to mainlanders' greater demand for life insurance in Hong Kong and is positively correlated

EFFECT OF EXCHANGE RATE

- Under the Linked Exchange Rate System, the Hong Kong dollar has been linked to the US dollar at the rate of HK$7.8 to one US dollar and have no significant effect on life insurance.
- However, ↓ yuan to US dollar will ↑ mainlanders' demand for Hong Kong Life Insurance, as there is a strong market from mainlanders buying life policies, denominated in Hong Kong or US dollars, to hedge against their currency risk.

EFFECT OF CHILD & ELDERLY DEPENDENCY RATIO

- Decreasing child dependency ratio leads to reducing expenditure for the young dependents and increases the ability to accumulate savings funds for purchasing life insurance (Hwang & Gao, 2003).
- Moreover, a region with a high child dependency ratio implies that a large proportion of population is too young to consider saving for retirement. It leads to a drop in the demand for savings component life insurance products (Beck & Webb, 2003).
- Increasing elderly dependency ratio will increase the demand for savings component life insurance and annuity products. It conjectured that a large proportion of population in a country is retired, savings component life insurance products become more importance for the retirees (Beck & Webb, 2003). Thus, we assume that the demand for life insurance is positively related to elderly dependency ratio.

EFFECT OF LIFE EXPECTANCY, INTEREST RATE & POPULATION

- Lewis suggested that the probability of husband death is positively correlated with life insurance consumption. Life expectancy can be used as a proxy variable for the probability of death (Browne & Kim, 1993).
- Consequently, the relationship between the demand for life insurance and life expectancy is hypothesized to be negative related for both Hong Kong people or the mainland visitors.
- If the interest rate on time deposit account increase while the return of life insurance savings remain unchanged, relatively more saving will go into time deposit account rather than saving into life insurance (Babbel, 1981) with a view to maximizing their family wealth.
- This line of thinking is also matched with the relationship between family wealth and demand for life insurance under Lewis's model. Consequently, for Hong Kong people and mainland visitors, interest rate is hypothesized to be negative correlated with life insurance consumption.
- The larger the population size, more life insurance products will be sold in the market. Our hypothesis for Hong Kong people and mainland visitors is as follows: There is positive and statistically significant relationship between life insurance consumption and the population size.

HYPOTHESIS

- Time period: 2001 Q1 to 2017 Q4 for HK and 100
- *All other factors assumed constant*

Variables	Hong Kong People	Mainland Visitors
Income	Positive(+)	
Education	Positive(+)	
Urbanization	Uncertain	Positive(+)
Population	Positive(+)	
Interest rate	Negative(-)	
Child dependency ratio	Negative(-)	
Elderly dependency ratio	Positive(+)	
Life expectancy	Negative(-)	
Exchange rate	Uncertain	Negative(-)

REGRESSION RESULT

- **Regression Model:**
- *LIFEIN = Life insurance issued*
- *LIFEIN = β0 + β1 (INCOME) + β2 (EDU) + β3 (URBAN) + β4 (POPU) +*
- *β5 (INTEREST)+ β6 (CHILD) + β7 (ELDERLY) + β8 (LIFEEXP) + β8 (EXCHAN) + ε*

Variables	Hong Kong People	Mainland Visitors
Income	Positive	
Education	Positive	
Urbanization	No Relationship	Negative
Population	Positive	
Interest rate	Negative	
Child dependency ratio	Negative	
Elderly dependency ratio	Positive	
Life expectancy	Negative	
Exchange rate	Uncertain	Negative

REFERENCE

Lewis, F. D. (1989). Dependents and the demand for life insurance. The American Economic Review 79(3), 452-467.
Li, C. S., Liu, C. C., & Zhang, Y. (2017). Determinants of agricultural household demand for insurance in China from 2004 to 2007. China Agricultural Economic Review, 9(4), 660-667.
Li, D., Moshirian, F., Nguyen, P., & Wee, T. (2007). The demand for life insurance in OECD countr Journal of Risk and Insurance, 74(3), 637-652.
Mantis, G., & Farmer, R. N.