

Summary of Jeffrey R. Brown and Austan Goolsbee (2002)

This paper attempts to answer whether the internet is the factor which makes market become more competitive by using evidence from the life insurance industry. Specifically, this paper provides empirical evidence on how internet comparison shopping sites affected the price of life insurance in 1990s. The method that was used to answer the question is hedonic regression which obtains data from 2 sources. The first one LIMRA International conducted annual surveys of purchases of individual life insurance in US collecting information on the policy characteristic and prices as well as demographic of individual insured in this paper the period that was used is 1992-1997. Foster provided the data about the growth of Internet Usage.

Brown and Goolsbee try to answer the question by fitting hedonic regressions for the price of life insurance based on characteristic of the policies and the individuals. Then include a measure of how likely a person might use internet overtime to have researched on insurance on-line. The authors stated the two important points which are firstly, the comparison sites of life insurance have focused on term life insurance. Secondly, the comparison sites started in 1996 therefore, growth in the internet usage before 1996 will not affect competition in term life. The authors used model from Stahl (1989) and summarized 3 keys which are directly benefit for this paper which are 1. When asymmetric search costs occur, firms will randomly draw equilibrium price therefore, we should see price dispersion in equilibrium. 2. If there is an increasing in share of completed information customer, the price distribution shifts downward. 3. The relationship between search cost and price dispersion is not monotonic. To add some point extent beyond Stahl's work which is important to this paper is the difference between the offer price and the transaction price distribution which this paper will strict on transaction price distribution.

The regression method tries to explain price paid for term policies. The dependent variable in this regression model is the log of the annual premium per \$1000 of face value of insurance. The main interest variable is on-line usage of internet. For the control variables are age dummies, nonsmoking dummies, gender dummy, marital status dummies and a dummy for whether the policy is rated. Moreover, the author also included state dummies, occupation dummies and dummies whether the policy was purchased from own agent and whether it was a participating policy, policy length dummy. (See table3, pg.494).

The result from regression showed that prices seemed to fall most at the time internet insurance sites came on-line for term policies. For whole life policies, however, prices remained constant or even slightly increased. Therefore, the regression suggested that there is a correlation between internet use and price declines.

For my perspective, the question is much interesting because nowadays internet is the important factor for living. It provides many facilities to us in this case, it enables us to search online without comparing the policy by ourselves which helps save precious thing which is time. Especially, in current situation that we are all facing Corona virus, Internet will play an important role for reducing searching cost.

As I mentioned above, the economic theory that related to this paper is search cost which this paper used regression to analyze the impact of search cost and differential information on the

distribution of market prices. The result of this paper has confirmed the search cost because as comparison shopping become easier, the average price must fall.

For my perspective, I think the method that used to conduct this paper is appropriate because they have a higher number of samples and the source of obtaining data is reliable but the point that I would like to suggest is LIMRA must include company identifiers to complete in the regression. Moreover, they should control some variable for more accurate in long term price in this case they lack of demographic and policy information. Therefore, the researcher needs to drop this variable out. Furthermore, we found the problem in the measure of the share of on-line access because of small demographic information which tend to bias the coefficient to zero. Hence, the researcher needs to obtain more sample in demographic part. The result is convincing because first of all the raw data are from the reliable organizations and the result also have the same impact of the search cost theory. Lastly, the period which was used in the research, 5 years, is not too short and the researcher also adjust the variable of internet access period therefore with all of these, it showed that the result is credible.