Brown and Goolsbee (2002) has the main question to answer through their study, which is "*How important the internet —and the reduction in search costs that it creates —can be for market competition*". They analysed the relationship by taking the individual policy level micro data from LIMRA International on the prices of insurance policies, various owner, and policy characteristics and matching them to micro data on the growth of the internet usage and online insurance research from Forrester by the same owner characteristics. Moreover, *the hedonic regressions* for the price of life insurance on the characteristics of the policies and the individuals. Then, included a measure of how likely the individual is to have used the internet over time or to have researched insurance online. The purpose is to analyse whether the Internet is significantly able to reduce search costs or not. They obtained the model from Stahl (1989). This model is important to this paper in term of the distinction between the offer price distribution and the transaction price distribution. The data were obtained from LIMRA International, which conducts surveys of purchases of individual life insurance contracts in the United States by collecting information on the policy characteristics and prices, as well as some demographic information on the insured individuals (i.e, age, state of residence, occupation, and income).

The type of data is "***Time Series data***" because they were collected from six Buyer Studies covering the period of 1992-1997. However, the most comprehensive and are widely used for empirical work on life insurance are from LIMRA data. Stahl (1989) model starts with 1- μ refers to customers who pay a search cost for each price quote/store visit they receive and μ is the customers who pay no search cost; when $\mu = 0$, the price distribution is degenerate at the monopoly price and when $\mu = 1$, the distribution is degenerate at the competitive price. The dependent variable (y) is the log of the annual premium per $1,000 of face value of insurance. As they do not have direct calculation of the survival probability for the individual, therefore, age dummies, a nonsmoking dummy, a gender dummy, marital status dummies, and a dummy for whether the policy is "rated" are included, which refers to the individual belongs to a special risk class because of some personal behavior. Also, state dummies and occupation dummies to account for differences in health or demographic characteristics across groups that are correlated with life expectancy as well as dummies for whether the policy was purchased from an own agent and whether it was a participating policy are included. The results from Table 2 show that "These variables explain a large fraction of the variance in policy prices. The coefficients on the explanatory variables are fully in line with expectations. Policies for men cost about 20 percent more than identical policies for women, and those for smokers cost 45 percent more than for nonsmokers. When interest rates rise (lowering the inverse interest rate term), prices are reduced." Moreover, they express that a dramatic decline in prices of term life insurance, especially toward the end of the sample. Prices seem to fall most at the time the Internet insurance comparison sites came online. In table 3, the term life hedonic regressions but compare price changes among groups, the results show that "in Column 1 gives the results for policies in California, Washington, and Virginia—the states with the fastest Internet penetration by the end of the sample (more than 40 percent in 1997), while in Column 2 in Alabama, Louisiana, Kentucky, and Arkansas—the states with the slowest penetration by the end of the sample (about 25 percent in 1997)." The results show that "prices for identical policies in states with rapid Internet adoption fell significantly faster at the end of the sample (1997 prices were 32 percent below 1992 levels) than they did in states with slow Internet adoption (1997 prices were about 13 percent below 1992 levels). When comparing policies for people in high-skill occupation codes (professionals, students, and military) with the average Internet use of about 49 percent by

1997 to policies for people in low-skill occupation codes (operatives, service workers, and farmers), which had Internet usage of 22 percent by 1997, the results show in Column 5 and 6 suggest that the price declines were also significantly larger for people under age 30 (Internet use of 46 percent by 1997) than for people over age 45 (Internet use of 34 percent by 1997).” These regressions suggest a correlation between internet use and price declines. There are more alternative explanations by adding the probability of Internet usage (obtained from the calculation of the Forrester data)to the price regressions and computing the Internet usage in each year share for age-state, age-occupation groups, age-income, and occupation-state groups. The magnitudes of the coefficients indicate that increasing the share of a demographic group that uses the Internet by 10 percentage points lowers prices for that group by about 1.5–4.5 percent, depending on the specification.

However, there is the potential error in occupation and income variables. So, they concentrate on the age-state variation instead, which provides no different findings. It indicates that the Internet usage variable seems to explain a large part of the total decline in prices over this period. For Price Dispersion and the Internet, the evidence indicates that price dispersion within groups is actually rising with the low share of people researching insurance online, vice versa. Based on results, at least for some financial products, the ability of the Internet to reduce search costs can have a significant impact on market power. I think this paper is interesting because we can know ore about the factors (i.e. demographic factors, and relationship between demographic factors) have their influence on the decline in prices when there is an increase in the internet usage. I think the internet benefits us in term of reducing the asymmetric information gap. The more people can access to the information, the more choices and welfares they can gain.

Therefore, I think the internet has played important rule positively on consumer purchasing power and negatively on sellers because it means that the sellers have to differentiate more to attract the customers. The economic theories mentioned in this paper are Nash equilibrium, Asymmetric search costs across customers (Asymmetric information), Equilibrium prices occurred from price dispersion rather than a single market price, and Economies/Diseconomies of Scale. I think the fact that internet has influenced on purchasing behaviour of consumers nowadays even supports this paper more, even though this research was conducted a long time ago when the internet was just introduced. The results from regressions are pretty convincing and the methods are pretty appropriate, despite some limitations such as the data pertain to transactions rather than offerings while their theoretical literature concerns what happens to the distribution of offered price and the data do not allow the researchers to directly disentangle the relative importance of the two effects, which are prices can shift downward. Customers facing the same offer distribution can shift to lower-priced firms or firms can lower their offer prices (or both). However, the results indicate that people with younger age and people with more internet usage or people who can access internet more can be more benefited in terms of prices decline. This also reduces monopoly power of suppliers/producers/sellers.