Abstracts

The labor supply of the baby-boomer generation in their 60s

Yukiko Ito

This study analyses issues in employment of senior citizens by identifying key factors that motivate members of the baby-boom generation (born 1947 – 1949) to continue working after reaching 60 years of age. We consider the state of the job market (including associated negative issues) for the current 60+ age group as well as the job market for baby-boomers, currently in their late fifties, then examine recent changes that might affect the job market in the near future. Finally, we assess the level of motivation among the baby-boomer generation towards continued employment by analyzing the results of a questionnaire survey. The analysis considers key motivating factors in terms of a Logit model with both economic factors (salary, savings, anticipated pension payments) and non-economic factors (elderly relatives requiring care, number of children, desire to leave property).

The analysis yields three conclusions. Firstly, Japan has a high proportion of elderly persons in the workforce compared to other countries. Although many work for economic reasons, the number of elderly persons choosing to remain in work for non-economic reasons such as personal fulfillment and social interaction is steadily increasing. Impediments to finding work include supply and demand factors such as retirement age limits and age restrictions at the hiring stage, as well as the current pension system structure, which allows working annuity holders to receive reduced or no pensions. .

The second conclusion is that massive readjustments in the job market since the mid 1990s have forced down the workforce participation rate of the baby-boomer generation relative to the previous generation at the same stage (i.e., in their late fifties). Also, the ratio of employees is higher than the previous generation, which is expected to cause a further decline in the workforce participation rate. Meanwhile, a range of measures has been introduced in bid to encourage baby-boomers to work beyond 60. These include changes to the public pension system to postpone the minimum eligibility age for pension payments, and amendments to the Law for the Stabilization of Employment of the Aged to allow continued employment through to 65 years of age. The declining population of young able workers also acts as an incentive to continue working.

The final conclusion is that baby-boomers, while keen to work, are facing considerable uncertainty in the absence of guaranteed employment opportunities. The decision to continue working after 60 is influenced by a range of factors including household savings, anticipated pension payments, current

employment conditions for baby-boomers in their late fifties, number of children, desire to leave property, and level of outside hobbies and interests.

Globalization and Regional Economies
– Cultivating and Fostering Individuality –

Hiroshi Kashihara

In an era of global economics, how can regional cities or farming/fishing villages maintain their vitality and develop? For better or for worse, the waves of international competition are also washing over small and medium-sized businesses and self-employed individuals. Small businesses do not have the abundant capital strength or human resources enjoyed by corporate giants such as Sony Corporation or the Toyota Motor Corporation; thus it is extremely difficult for small businesses to expand their operations overseas on their own steam. It is also impossible for Japanese farmers to produce and supply food at low cost as can their counterparts in Thailand and China, for instance. I suggest that cultivating the appeal of the unique "Only One" features of a region or business is more important than competing over the impressiveness of facilities or inexpensiveness of products. Businesses should gain a thorough understanding of any economic environment into which they intend to plunge by studying the history and statistics of that region. From the conditions available, businesses must consider then choose and implement the methods that will most fully showcase their values. To enable community based businesses to grow, a different approach to that for corporate giants is required.

Research on Trends in the Retailing Industry and Among Retailing Companies —An Examination of the Time-Series Behavior of Basic Indices and Inter-Company Differences—

Akihiko Fujino

This paper examines the status of Japan's retailing industry by using basic indices commonly applied to all parts of the industry. The research described herein is based on the belief that structural trends in the retailing industry can be identified by analyzing trends in different sectors of the industry and among the leading companies of each sector, and examining the time-series behavior of differences among industry sectors and among companies.

Analyses were performed by tracking changes in individual indices over time and examining changes among related indices as movements of points in space. The basic indices used for analyses were comprised of number of stores, annual product sales, sales-floor area, and number of employees. Data was drawn from commercial statistics for the entire retailing industry and individual retailing sectors and from annual securities reports and other such regularly prepared reports on the performance of individual companies. Commercial statistics were examined for the period 1991-2004 and individual company performance data were examined for the period 1999-2005.

Company assessments are insufficient if they employ only basic indices that do not address profitability, as well as productivity, but examinations performed to date can be summarized as follows.

Companies generating the highest sales in the general supermarket, food market, and drugstore sectors differ greatly in terms of sales-floor area and sales productivity indices and there is no discernible convergence among companies on these measures over time. An overall trend toward greater sales-floor area has been detected in all three sectors, but not in all companies. Some companies are moving toward greater sales-floor area, while others are moving in the opposite direction. The structure of inter-company differences in terms of sales productivity appears to be hostile to drastic changes even over time and conditions point to a stable structure of inter-company differences.

If sales productivity is viewed as one part of a company's business system, it is important to promote quantitative expansion during growth periods, and even more important to promote qualitative improvement during periods of little or no growth.

A function of a cash flow statement

Tatsuya Mizogami

Over the past few decades a considerable number of studies have been made on a cash flow statement. Most of them have focused on an appropriate format of a statement as the third financial statement to be added to a balance sheet and a profit and loss statement.

On the other hand, there is an upsurge of interest in reporting performance all over the world and a statement of comprehensive income is expected to replace a profit and loss statement.

The components of the financial statements must complement each other. Therefore, in discussing a cash flow statement, relationships among financial statements should not be ignored. But only a few attempts have so far been made at analysing the relationship between a cash flow statement and a statement of comprehensive income.

In the UK, the Accounting Standards Board (ASB) originally required a statement of comprehensive income named 'Statement of Recognised Gains and Losses' in FRS3(1992). Therefore, this paper focuses on the accounting standards in the UK.

It is said that a cash flow statement in the UK is unique in relation to a scope of fund and a classification of statement. The aim of this paper is to discuss the uniqueness of a cash flow statement in relation to characteristics of a statement of comprehensive income.

Empirical Study of Options Evaluation Using the Markov Switching Model

Kiyotaka Satoyoshi and Hidetoshi Mitsui

This paper reports on an analysis of Nikkei 225 Options prices using the GARCH (Generalized Auto-Regressive Conditional Heteroskedasticity) model and the extended GARCH (Markov Switching-GARCH or MS-GARCH) model developed by Gray (1996).

The Black and Scholes (1973) model, commonly used in the analysis of European options, assumes a constant quadratic moment value for the rate of variation in base asset prices (called volatility) through to maturity. However, several empirical analyses have found that volatility fluctuates randomly over time, and the formulation of this fluctuation is therefore considered crucial to the success of the model. Engle (1982) proposed an explicit expression for volatility fluctuation in the form of the ARCH model, where volatility at any point is expressed as a linear function to the second power of the unexpected past shocks. Bollerslev (1986) then developed an expanded and more generalized version, called the GARCH model, by augmenting the volatility predictor variable with past volatility values.

Literature on volatility fluctuation models such as the ARCH model has generally afforded volatility a high degree of sustainability with respect to shocks. However, Diebold (1986) and Lamoureux and Lastrapes (1990) claimed that this sustainability may in fact be caused by structural change in volatility. Hamilton and Susmel (1994) and Cai (1994) answered this criticism with the Markov Switching ARCH (MS-ARCH) model, which incorporates structural change into the formal ARCH model expression by adding a Markov process state variable. Meanwhile, Gray (1996) has proposed the MS-GARCH model, a revised form of the GARCH model incorporating structural change, as a replacement for the ARCH model altogether. Since the GARCH (1,1) model is compatible with the ARCH (∞) model, the MS-GARCH model is considered superior to the MS-ARCH model for volatility fluctuation in empirical analysis of option prices.

This study involved an empirical analysis of option prices with volatility behavior described by the MS-GARCH model. Prices of European options such as the Nikkei 225 Options can be determined readily using the Monte Carlo simulation and assuming investor risk neutrality. Two dispersion decreasing methods, antithetic and control variates, were used to speed up convergence in the simulation. In this way, the validity of the MS-GARCH model was demonstrated for the Nikkei 225 Options market.