Journal of Asia Pacific Studies (2010) Vol 1, No 3, 591-614

What is the Lifetime of the 'Lifetime Employment'? Empirical Research from Japan[1]

Takashi Saito, Waseda University, Japan

Balazs Vuszkun, Corvinus University, Hungary

Abstract*: This study reexamines the link between lifetime employment and the demand–supply law while illustrating it with recent data. We first show how this norm among Japanese companies played an important role in the historical development of the employment system. Recent data and studies show that LTE is still practiced in Japanese companies, although the practice is more restricted in number of employees and in career options open to them.*

To examine the demand–supply law from the employees' perspective, we conduct probit and ordered probit model analyses using data from our survey about Japanese management practices. Results show that employees with children rate LTE practices significantly more highly than those without do. For some cases, the same is true for older people. Results show that workers from some areas with higher unemployment figures have a negative image on LTE than people from Tokyo, for example. People who face difficulty tend to think that it is unlikely for a company to sustain a commitment to LTE. Job status is important factor determining the evaluation for LTE, too; independents (non-regulars: artists, entrepreneurs, etc.) appraise LTE and job security considerably more highly than regular workers do; managers and especially top managers are apparently much less favorable to ideas about job security.

Finally, we investigated a relation between collectivism or individualism and LTE. Our data here are sometimes contradictory and are too confusing to support the inference of any significant result. We found no generally applicable conclusion for this equation, but we consider the topic itself as an important one because it might strongly affect preferences related to LTE.

Keywords: *Lifetime employment, Management practice, Employee's behavior*

[1] This research was financially supported by JSPS Grants-in-Aid for Scientific Research.

Introduction

Abegglen wrote in 2006 about lifetime employment: "Its end has been announced each year since I first used the term in 1958, when I analyzed the 'lifetime commitment' which become distorted in popular parlance as 'lifetime employment'. Then, and no less now, this is the measure of the degree to which the kaisha as social organization is meeting its obligations to its members." (p.10).

When we examine the business literature on Japanese management practices, opinions are remarkably divided. In leading American business magazines and newspapers, many articles have been written about the changing attitudes of firm management, with evidence that old practices have died out already.[1] The majority of the relevant literature states however, that since the bubble burst, circumstances have not changed drastically; old practices are still found at major companies.

No doubt remains about the difficulty that mapping and evaluating business practices in a country entails. One way analysts overcome this challenge is to select famous large organizations and describe them as examples of the academic findings. We did not choose that approach.

In this paper, we present analyses of top management and corporate pattern trends from a business history perspective: we trace them to their origins, follow their evolution through data and seek feedback on their present state in the results of our questionnaire survey.

Jacoby (2007) identified national business practices as Gauss curves. Adopting his approach in our country study, we have been seeking the mean.

When the topic of 'Japanese management' pops up, we might mostly imagine lifetime employment, seniority, and company-based unions. These are the main characteristics first described by Western scholars.[2] In addition, many have emphasized the community nature of firms, collective decision-making processes, recruiting based on new graduates, or in-company (on-the-job) training. In fact, the term Japanese management is rarely defined because of the

[1] New York Times, The Economist, Wall Street Journal

[2] Earliest, popular readings are from Abegglen and Dore

complexity of the issue: even to this list above, a considerable number of extra elements might be added to explain what is specific to management in Japan.

However, we can consider the recent financial, then global crisis, as a good point of leverage to examine a controversial element of the Nippon management system specifically: so-called 'lifetime employment'. Employing people in a stable pattern presents many advantages, but at first glance it also seems expensive and perhaps inadequate to meet the needs of the IT-embedded, hyper-fast, and increasingly individualistic 21st century. However, as crises invariably increase incertitude, many people in Japan today might turn to more stable employment patterns if the possibility were given.

To elucidate the extent to which lifetime or stable employment has survived until today, and to assess its chances for continuation in the near future, we overview its characteristics and origins.

Concepts and Facts about Lifetime-Employment in Japan

Definition

A major reason for the disparate views on stable employment in Japan is probably that different ways are used by people to define it. We must mention a few points which in our understanding are misleading of the true meaning of 'lifetime employment' (LTE).

First, commentators tend to announce the end of it when they see dismissals at large 'traditional' companies (e.g. Hirakubo, 1999). In fact, LTE has never been a guarantee in any case in Japan. It has never been included in any type of contract that a person would be able to stay at the employer company forever. Even the term 'lifetime employment' is based on the early misunderstanding of Westerners that has come to be used widely now: Abegglen (1958) originally called it 'lifelong commitment', but the terms *long-term* or *stable* employment would better cover the true meaning of

this practice. It is instead a more informal philosophical approach to employment than a contract-type agreement. Fundamentally, it has an ideological message for the employees: 'The Company is honoring your effort and will look after you even if things get worse, until the last moment, we will do our best to keep you in employment.'

Second, some analysts observe that high unemployment exists in Japan: because those who want to work cannot, the system does not work anymore (Abegglen, 2006). True, the unemployment rate was greater than 5.5% in 2009 in Japan, making a second peak since 2003[1]. However, this rate is not linked directly to LTE itself. From the argument presented above, it is easy to understand that this statement does not grasp the special mutual relationship that the employer and employee share. Actually, LTE is unimportant because the result is low unemployment in Japan; LTE is important because the employees believe they can count on the company over the long term. They should plan their professional life to be spent there; their efforts will be honored from a long-term perspective.

Finally, the proportion of non-regular workers has risen considerably during the last two decades, which makes it nonsense to talk about lifetime patterns because the affected population is decreasing sharply (Los Angeles Times, 1994; www.randstad.com[2]). The Ministry of Health, Labour and Welfare disclosed in 2009 that about 34% of non-regular workers exist in the entire labor market, compared to fewer than 17% in 1984. Non-regulars have always been part of the system: during Japan's agricultural era, they played an important role in peak periods. The flexibility they can provide is necessary for the whole system, as pointed out already by Ouchi (1981). Their share did not grow because the stable patterns are over. Their numbers rose because today's economy needs greater flexibility than it had during the constant-growth period which ended with the 1990s. This phenomenon is a logical adaptation to maintain stable employment!

[1] http://www.tradingeconomics.com/Economics/Unemployment-rate.aspx?Symbol=JPY; accessed on 5th September 2010

[2] http://www.randstad.com/press-room/randstad-news/the-future-of-japans-flexible-workforce

We have emphasized, up to now, the ideological meaning of stable employment patterns in Japan. We consider that the ideological message of LTE is and will remain extremely important for Japanese companies, whatever the economic situation would or should be. Consequently, a message can be sent even without being realistic, and employees might even believe it is true. Considering the likelihood that companies will continue spending so much effort and money on preserving the stability of the labor force is another issue. It leads us to a discussion of the background motives of long-term 'promises'. Before that, however, we present a short historical overview to facilitate further understanding.

History

In the literature, we can find different versions of the birth of management practices in Japan, including the lifetime employment itself (Sullivan and Peterson, 1991). Some authors say that the practice has its roots in the merchant houses' business patterns of the Tokugawa era. In Japan indeed, many customs have a long history!

Consequently, after serious study of the Edo period, the authors of this paper concluded that in spite of some philosophical similarities between feudal enterprises and modern firms (which are also generally common in family run enterprises though), the main origin for stable employment was revealed after 1868. In the Kyoto dry goods store of the Mitsui house during 1696–1730, the management hired, in all, 239 children as apprentices. Of those 239, according to family archives, one-third (77 children) were dismissed for incompetence; there might even have been more among the unknown cases. Or in the Kōniuke house (another large merchant house of that period) during 1719–1741, there were, in all 51 people leaving the house for some reason (including death). Of them, two-thirds, 32 were dismissed by Kōniuke personally (Sakudō, 1990). To discover practices by which employers retained people without considering their performance but their loyalty, we had to look elsewhere.

We know that in preindustrial Japan, craftspeople and artisans moved freely from one job to another without necessarily staying in the same company for long time. During those years (end of 1880s to the 1890s), even recruiting general factory staff became increasingly difficult: employers were trying to substitute better wages and decent work conditions with paternalistic ideology (Hirschmeier & Yui, 1981).

Later, during the Meiji industrialization, a considerably high proportion of factory workers moved from factory to factory. Nakane (1972) provided a simple reason for that: in these early times some specific occupations were highly demanded. Evidently, this frequent changing of workplace caused great uncertainty and inconvenience for employers. They tried to retain a constant labor force. Step by step, management policy tended to keep workers for their entire working lives in the same company instead of relying on short-term contracts. Central power never hesitated in Japan to get involved into individuals' lives (Garon, 1997).

According to Nakane (1972), by the beginning of the 1900s, larger companies had already established some welfare management principles which took the form of various benefits, housing at nominal rent, commissary purchasing facilities, etc. After World War I, this trend strengthened because of labor shortages. Then came the system of taking, each spring, some fresh graduates for a simple reason: the massive introduction of new machinery from Europe. This mechanized production system demanded new competencies and company-trained competent personnel. The easiest way to get it had been recruiting young boys from schools who could be trained efficiently (even molded) to fit the company's needs. This training included both technical and moral programs. This practice was in harmony with former feudal customs but was in this case generated by the necessities of industrialization.

The forming of recruitment methods therefore paved the way for the lifetime employment system, which encouraged the already described, additional elements holding workers in the company. Companies offered seniority pay based on length of service, age, and education, in addition to important retirement benefits, etc.

Concomitantly with the late but rapid industrialization of the country, the acute labor shortage and the recruitment of young, easy-to-mold-and-keep employees, the practice of lifetime employment was apparently institutionalized at that time. Understanding this, we must also consider that (1) long-term employment makes sense when the employees are recruited young so they can spend a long productive time in the company; (2) to keep them motivated the organization must have an internal career system through which position changes are possible within the firm both vertically and horizontally; and (3) and gradual promotions must be also planned at an adequate pace because overly rapid changes would be harmful from a long-term perspective. Management in Japan has therefore been dominated by stable employment, seniority-based pay and promotion, internal career management, and recruitment of young graduates from school.

During the Tokugawa era, the merchant houses recruited employees also at a very young age, so they had already come to use a long term, gradual grading system for promotions. However, the possibilities of long-term promotion were greatly enhanced in the 1920s and 1930s by the bureaucratization of manufacturing firms: The proliferation of sections and upcoming layer of middle-managers offered finer gradations in rank (Nakane, 1972).

From the 1930s up to the end of World War II, the 'immobilization' of labor force was further emphasized. "The prohibition on movement of labor between factories was bolstered by the moral argument that it was through concentrated service to his own factory that a worker could best serve the nation. The factory was to be considered as a household or family, in which the employer would and should care for both the material and mental life of his worker and the latter's family." (Nakane, 1972, p.17).

The postwar era changed many old ways in Japan, but during the early years, dismissal might be equivalent to starvation (Gordon, 1991). Supported strongly by the union movement, lifetime employment remained as a major employment form in firms and continued until recent years, or even today. Familialism and emphasis on welfare services were also fully developed under circumstances of the war.

They were later retained as institutional patterns in the post-war era; encouraged by union activity.

'Raison d'être'

Hirschmeier and Yui (1981) made an important contribution in describing the circumstances under which stable employment has been institutionalized. Five major problems related to the labor market set the scene for the Japanese management from the Meiji era.

First, problems persisted with labor-supply: Labor-intensive Japanese agriculture was not producing the human flow from villages to cities as in the West. It was difficult for employers to secure labor for longer periods.

Second, during and after World War I, unions and labor unrest became increasingly threatening, managers needed to placate unions and find ways to foster confidence and cooperation.

Third, in industrialized production systems, work became more complex and technical. For villagers, Western technology was difficult to handle and created the need for more expensive training.

Fourth, factory workers were willing to do difficult work even for low wages, but they needed a social background similar to the village community life so they could trust each other and live in a 'community' context.

Fifth, after the support of Western ideologies weakened (from the 1920s), managers needed to "prove their own Japanese-ness" (p.204). Consequently, a strong paternalism was introduced into labor relations.

These aspects strongly bolstered the developing management practices of the 1910s and 1920s. During the depression following World War I, programs aiming to attract and retain labor forces weakened to a considerable degree.

Herein, the authors argue that the behavior of every economic actor is primarily defined by the law of supply and demand. The basic elements of survival of a company are capital, labor, and customer(s). In our rationale, the management philosophy of an average company will be defined by the market structures dictated by those three elements.

Takashi Saito, *Waseda University,*

and Balazs Vaszkun, *Corvinus University*

In the postwar era of Japan, export markets grew constantly; internal demand also rose gradually with incomes. The high saving rates of households offered cheap capital as a means to finance export and investment. The bottleneck then has been the shortage of labor as companies needed to recruit massively. It follows logically that managerial effort has been particularly addressing the maintenance of its well-trained labor and ensuring its further supply.

Until the early 1990s, as many scholars and commentators have pointed out, Japanese companies adopted an employee-centered stakeholder model of corporate governance. Actually, LTE has complementarities with components of this type of corporate governance system such as supplying of funds and monitoring by a main bank and cross-shareholding among the main bank and keiretsu companies (Aoki, 1988, 1994). Shareholders of these types did not intervene actively in the company's decision-making by managers, most of whom were promoted from within their company; their primary concern was not short-term shareholder's value, but making long-term mutual relationships. Main banks also tended not to intervene in a company's decision as long as the company achieved a reasonable level of performance.

Japanese judicial standards have supported LTE by imposing strong requirements on companies attempting to lay off their employees (Rebick, 2005).

The most important question related to the future of LTE is therefore whether this balance is shifting or not. Is capital still abundant and unlimited? Or is it true that companies must struggle for additional funding? Are internal and external markets still increasing, stable, or decreasing? Need they fight for customers, and if yes, how? Is labor demand still more important than supply?

These questions must be answered to estimate the real chances for the survival of lifetime employment.

The Post-Bubble Era: Recent Trends

Since the mid-1990s, the Japanese employment system has been confronted with difficulty attributable to Japan's prolonged economic downturn following the bubble bursting.

In particular, LTE has been regarded as an expensive and inflexible practice.

Traditional cross-shareholdings declined rapidly after 1997, when a financial crisis occurred in Japan and Southeast Asia (Jackson & Miyajima, 2007; Araki, 2009). Foreign shareholders emerged as important investors; they have put strong pressure on Japanese companies to reform.

Hamaaki et al. (2010), using 20-year microdata from the Basic Survey on the Wage Structure (conducted by the Ministry of Health, Labour and Welfare), found that the share of lifetime employees of university-graduated young workers in large firms decreased after the late 1990s and that the job retention rate for highly educated young workers also declined during the 2000s. They also pointed out that the middle-aged to older-aged workers are still protected by the traditional practice. Kambayashi and Kato (2009) showed that job stability of regular employees did not fall much during the first five years of Japan's Great Recession, but it eventually fell during the final years of this latest Great Recession, according to microeconomic data compiled by the Employment Status Survey for 1987, 92, 97, 2002 (conducted by the Ministry of Internal Affairs and Communications). Ono (2010) examined LTE in Japan comprehensively using multiple datasets and methods; the results showed that the likelihood of job separation of the core workers has remained stable, although the population of workers covered by LTE is decreasing.

Inagami and Whittaker (2005) confirmed from panel surveys conducted in 1985–1986 and 1998 by the Ministry of Labor and Research Committee on Personnel and Labour Management that employees' attitudes towards LTE have weakened somewhat. Employees who expect to be able to work for their current company until retirement fell from 42% to 32%.

However, an economic downturn can affect individual beliefs. Giuliano and Spilimbergo (2009) reported that individuals who experience a recession during their early adulthood (ages 18–25) tend to believe that success in life depends more on luck than on effort, support more government redistribution, but are less confident in public institutions. Moreover, macroeconomic shocks have a long-lasting effect on individuals' beliefs. After the crisis following

the Lehman Shock, some commentators have noted that young workers tend to think that a stable job and life is better for them. A survey conducted by Japan Management Association in 2010 showed that 50% of Japanese new graduates were willing to work for the firm until mandatory retirement age. That figure is starkly higher than the 27.2% found using an identical survey administered in 2006.

Reviewing all these studies and data, we can conclude that LTE practices persist in Japan today, but the relevant population is certainly more restricted than it was 20 years ago. As we described by defining LTE, companies seek constantly to make their employment system more flexible using an increasing proportion of non-regular workers in operations. However, they continue to provide stable employment as well, which possibly maintains the illusion that it remains as an option for everybody on the basis of meritocracy.

Nevertheless, this is just the employer side. As described in the definition, LTE is mainly psychological: this is an expectation from the employee, an attitude, a belief. Does it exist today from the employee perspective as well? We must complete our secondary data using opinions of the employees themselves. Comparing and analyzing both these two sides can illuminate stable employment and its perspectives.

Research Hypothesis

For individuals, as for the companies already, the starting point of logic was the same. The balance of supply and demand would rule the game. As an individual on the labor market, everybody might have different options for employment depending on age, education, personal network, etc. We call such options for this paper the 'job option supply'. The stronger this supply for each person, the weaker the motivation will be to find new options or secure existing ones. In addition, other elements determine job demand', such as family, presumably, which compels every person to think more about securing a future or earning more money.

In Hypothesis Nr.1, we presume that a greater need for security reinforces the need for stable employment patterns.

Higher need for security is explainable by the existence of children, by an economically hindered geographical area which is particularly suffering negative effects of a recession, for example, or by a lack of superior education which would make the individual less attractive during a job hunt.

While examining and explaining differences in security or in the equation of demand and supply, we must not forget to mention individual risk aversion (a general distortion factor), which can be a strong motivation in Japan. We suggest also that different statuses at the workplace play an important role in the evaluation of lifetime employment.

In Hypothesis Nr.2, we assume that employees with different status have different needs for long-term schemes.

Common wisdom would dictate that whereas non-regular (*baito*, *paato*, self-employed, or dispatched) workers can deny those needs, regulars probably express them. Additionally, it is likely that for top managers or executives, speaking about themselves on this topic is not so relevant. Consequently, for non-regular workers, it is pretended that they are non-regulars to avoid the burdens related to fixed employment. If we accept that they might be willing to be in LTE but not be accepted as such by recruiters, as suggested by McVeigh (2004), then the result would be the opposite, non-regulars would express a more positive attitude towards LTE than regulars—salarymen are said to be rather pessimistic anyway (Inagami & Whittaker, 2005).

Although it is assessed directly by the questionnaire, we also tried to build some relation between collectivism and LTE. By many different standards, Japan is regarded as a 'collectivist' society, compared to Anglo-American countries for example, which tend to be defined as 'individualistic cultures' (Hofstede, 2001). Logically, individualism promotes individual performance-based evaluation and promotions at the workplace, but also, from the worker's perspective, the development of individual professional skills rather than only company-related ones. Consequently, as opportunities arise, each worker might 'sell' those competences for a dearer or better work conditions at another workplace.

In Hypothesis Nr.3, we assume that a positive correlation exists between collectivism and LTE; the same correlation would be negative if individualism prevailed instead of collectivism.

Research Methodology and Data Description

We were able to see what employers can do to keep lifetime employment alive. We also stated that the share of non-regular workers is still rising in the employment system. General tenure proves that LTE is still an important principle in Japanese companies.

Of course it is insufficient to offer stable jobs if the workers do not want to stay very long at the same company. Therefore, to complete the picture and to understand the recent situation in Japan fully, a questionnaire survey was conducted among Japanese employees. The basic questions were the following: (1) Do employees believe that companies can still offer LTE? (2) Do they think that companies should offer that (do they want to make use of it)?

The core idea behind this research project had been the assumption that if most of society seems to reject stable patterns, LTE cannot last long: its days are numbered. If they think they do not need it anymore, and job hunting becomes a regular activity as it is in the West, then the tension between an employer and employees would induce change. In contrast, if they are still counting on that option and LTE seems to retain its motivational power, then the system would probably persist.

Table 1 shows questions we asked with the global average response. Data will be developed further in the next chapter. In the questionnaire, questions of two types had been answered: yes or no questions and seven-scale questions. The second, usually based on “How much do you agree…” sentences, offered seven options for respondents: strongly agree (coded as 7), mostly agree (6), slightly agree (5), neutral (4), slightly disagree (3), mostly disagree (2), and strongly disagree (1).

Our analysis is based on the responses of 623 Japanese employees, all coming from the panel of a marketing agency. To balance the demographic setting, 50% males and 50% females were questioned from all over Japan, 50.32% of

them already have a child or more. 51.76% have only high school or elementary education, 42.79% hold a bachelor's degree; 5.45% acquired further education. Their companies represent all sizes—from one or two employees up to above five thousand. According to their status, about 37% of the respondents were regular workers, 33% were non-regulars, and 30% were managers or executives (top managers). Their average tenure was above the European average: 12.57 years.

Regression Analysis

Estimation Strategy

We conducted regression analysis to identify factors that determine respondent's evaluation for lifetime employment based on the hypotheses described in the preceding chapter.

The dependent variables are as described below.

(1) Would you accept in a crisis situation reduced wages/work time to retain general job security?

(2) A company should guarantee lifelong employment for its best workers.

(3) Staying with the same company long term is not good because it blocks internal competition and limits career prospects.

(4) Lifetime (or long-term) employment is outdated: I do not want to stay in the same company for such a long time.

(5) If possible, taking risks is to be avoided when it can endanger job security.

(6) It is possible to lay off numerous employees without strong reactions (quarrel) within either the company or in the broader society.

In fact, (1) and (2) are dummy variables, they take a value of 1 if the respondent answered "yes" to the question, and 0 otherwise. A probit regression model is used as an estimation method. (3)–(6) are sequence indicators from 1 (strongly disagree) to 7 (strongly agree). Therefore, we adopt ordered probit regression model as an estimation method.

These questions are classifiable into two categories, as described in a previous chapter. In fact, (1)–(5) are related to employees' hope for LTE—"Do employees believe that companies can still offer LTE?". Question (6) reveals employees' belief in the company's capacity to maintain LTE: "Do they think that companies should offer that?" Q1, Q2, and Q5 are positive opinions for LTE whereas Q3, Q4, and Q6 are negative ones. Consequently, we expect that the estimated coefficients from the regression models using Q1, Q2, and Q5 as dependent variables have opposite sign to those from the models using Q3, Q4, and Q6.

Explanatory variables are classifiable into four groups: indicators of *RISK*, indicators of *STATUS*, indicators of *COLLECTIVISM*, and control variables.

Gender, age, marital status, existence of children, education, risk attitude, and unemployment rate are *RISK* variables. The risk attitude is captured by the following question: "It is all right and sometimes even desirable to take risks in business." The unemployment rate is calculated for each subgroup (gender, age group, region) based on the labor force survey conducted by the Ministry of Internal Affairs and Communications during April–June 2010.

STATUS is a dummy variable representing a job status such as freelancer, temporary worker (dispatched worker or contracted employee), part-time worker, manager, and senior or top manager (control group: regular full-time worker).

Our survey is not intended to measure collectivism or individualism directly, but some questions are useful as *COLLECTIVISM* variables. Our questionnaire includes loyalty to the company, performance evaluation, decision-making, and teamwork. It is possible to consider that these concepts imply collectivism or individualism. We use the following questions as COLLECTIVISM variables.

<Loyalty to company>

L1 The company should welcome a new recruit like a family member.

L2 I am grateful to my company. I express this with my hard work every day.

<Performance evaluation>

P1 The work is always a team achievement; it is never just individual performance.

P2 Individual appraisal of performance is a threat to harmony, companies should measure group performance.

<Decision-making>

D1 The best means of decision-making is to vote: it is clear and efficient.

D2 People should try harder to achieve consensus in decision making: group harmony is worth the time invested in that process.

D3 In a company, the group consensus is more important than any leader or manager: group cohesiveness is the best tool to ensure common vision and good performance.

<Teamwork>

T1 People should never work alone. Co-workers can bring help and play an important role in correcting each others' mistakes.

T2 Working in an open office is tiring; every company should try to provide individual offices for their white-collar staff.

T3 Making friends is an important thing in a company.

These variables take the values of 1 (strongly disagree), 2, 3, …, and 7 (strongly agree), except for L1, which takes the value of 1 (agree) or 0 (disagree).

Control variables are as follows: monthly income, job type, industry, and some preferences such as "If I were graduating now, I would rather go to a company with foreign management: They understand better what a young employee needs" and "There is too much stress and depression related to corporate life today: life was better 20 years ago." These two variables also take the values of 1 (strongly disagree), 2, 3, …, and 7 (strongly agree).

We can summarize our regression model according to the following equation.

Evaluation for LTE=f (*RISK*, *STATUS*, *COLLECTIVISM*, Control Variables)

The descriptive statistics of dependent variables and explanatory variables are presented in Table 1.

Results

Table 2 presents results of our probit and ordered probit regression model examining the relation between a respondent's evaluation for lifetime employment and risk, status, and collectivism, with control variables which might also affect the evaluation. Columns (1)–(6) show results of regression models using demographic variables only as explanatory variables. Columns (7)–(12) are the results of models adding subjective questions as explanatory variables.

Among *RISK* variables, the children dummy has a robust result. It has a positive and statistically significant relation to the positive evaluation for LTE, as we expected from the results of column (1), (2), (4), and (8). Education dummies (university and graduate school) also have robust results: respondents with higher education tend not to support LTE from columns (3), (5), (6), (9), (11), and (12). The results of the unemployment rate from columns (2), (6), (8), and (12) show that workers from some areas with higher unemployment figures have a more negative image of LTE than people from Tokyo, for example. This is the opposite result to what we anticipated, but it is likely that people who live in regions facing difficult economic conditions tend to think that it is unlikely for a company to sustain LTE. Results of a subjective measure of risk taking are somewhat confusing; in the case of column (7) the result shows that risk takers tend to support LTE, whereas in the case of column (12) they do not support it. The latter is consistent with our hypothesis.

Next, we check the results of *STATUS* variables. Columns (3), (5), (9), and (11) show that independents (non-regulars: artists, entrepreneurs, etc.) appraise LTE and job security significantly more highly than do regular workers, which is a sign that their status might be not chosen voluntarily. They are apparently willing to stay for a long time in the same company but it might not be an option for them. Because they live in a less-secure environment, this result reinforces our first hypothesis about the relation between security and LTE. According to the results presented in columns (2), (4), and (6), it is apparent that managers and especially top managers are much less accommodative of ideas with stable patterns than regular workers are. For them, employment

should not be associated with any guarantee. They do not want to stay in the same company for a long time anyway. Additionally, they probably feel that massive dismissals are already 'accepted' or at least tolerated by broader society as well. It is said that people disagreeing with old practices can block them—if they come to a dominant position. This is apparently actually a rather widespread opinion which no subgroup would strongly disagree with. It is likely that our second hypothesis is supported.

In the past, regular workers did not have a choice other than LTE. In particular, it is difficult for people who work for large companies to change jobs because of their high wages and rigid employment customs. Actually, workplaces such as banks do not want to hire those who are strongly applying for LTE because they are not likely to be the best employees.

The results for some *COLLECTIVISM* variables show statistical significance. Fundamentally, our third hypothesis––that people who favor collectivism over individualism tend to have a good image on LTE—is partially supported. Nevertheless, our data are sometimes contradictory and too confusing to infer any significant result because our questionnaire has not been designed for evaluation of the level of collectivism versus individualism for each respondent. This hypothesis proved to be the most difficult and controversial one.

Conclusion

The point examined in this paper has been rediscovery of the link between lifetime employment and the demand–supply law while illustrating its existence using up-to-date data. Results show that this norm among Japanese corporations used to play an important role in the historical development of the employment system. Recent data and studies prove that LTE is still practiced in Japanese companies, but its practitioners are more restricted in their numbers and career options.

From the employees' perspective, we also examined the demand–supply law and found that our 'security-hypothesis' was proven. Employees having children rate LTE practices significantly higher than those without. For some cases, the same is true for older people. Additionally, we found evidence that workers from some areas with higher unemployment

figures have a more negative image of LTE than people from Tokyo, for example. Although we do not possess similar data from periods before the 2008–2009 crises, we also assume that recent business news induced the general demand for LTE to rise somewhat.

On that point, we must reemphasize the importance of both employees' and employers' attitudes related to LTE. We can conclude that some people particularly seek more stable employment, or even that, in general, people evaluate it better than before because of the more difficult labor conditions prevailing today. However, whether companies can afford to provide it or not in the future is another issue. This paper cannot provide responses to how companies can sustain long-term employment.

Compared to regular workers, independents (non-regulars: artists, entrepreneurs, etc.) evaluate LTE and job security significantly more highly, which is a sign that their status might be not chosen voluntarily. They are apparently willing to stay for long stretches in the same company, but it might not be an option for them. Because they live in a less-secure environment, this result reinforces our first hypothesis about the relation between security and LTE.

Regarding managers, especially top managers, in comparison to regular workers, they are apparently much less favorable to ideas with stable patterns. For them, employment should not be associated with any guarantee. They do not want to stay in the same company for a long time anyway. Additionally, they feel that massive dismissals are already 'accepted' or at least tolerated by broader society as well. This opinion is apparently actually rather widely held: no subgroup would strongly disagree with it.

Once we understood the executives' own stance with LTE, the interesting question came to be whether we can extrapolate that to general employment systems of their companies or not. For themselves, they evaluate stable employment as unnecessary. Would they also block it for their workers? Answering that question will lead us to further research.

Through this study, we sought to build and prove a relation between collectivism and LTE. Because our questionnaire was not designed to evaluate the level of collectivism versus individualism for each respondent, this

hypothesis proved to be the most difficult and controversial one. Our data here are sometimes contradictory and are somewhat confusing to infer a result. We found no generally applicable conclusion aside from this equation, but we still consider the topic itself as an important one. We expect to provide more precise explanations for this topic after further inquiries.

For this paper, our general conclusion is that as long as the demand–supply law is supporting the existence of LTE, it will certainly remain in practice. Our analyses show that employees who confront difficult and unstable conditions or who need stable work conditions tend to have a positive image of LTE. In Japan, such people are apparently increasing in number because of the long-continuing recession and pessimistic expectations of the future.

References

Abegglen, J. C. (1958). *The Japanese Factory; Aspects of its Social Organization*. Glencoe, Ill.: Free Press.

Abegglen, J. C. (2006). *21st-century Japanese management: new systems, lasting values.* New York: Palgrave Macmillan.

Aoki, M. (1988). *Information, Incentives, and Bargaining in the Japanese Economy*. Cambridge: Cambridge University Press.

Aoki, M (1994). The Contingent Governance of Team Production: An analysis of Systematic Effects. *International Economic Review, 35*, 657-676.

Araki, T. (2009). *Changes in Japan's Practice-Dependent Stakeholder Model and Employee-Centered Corporate Governance.* H. Whittaker and S. Deakin (Eds.). Corporate Governance and Managerial Reform in Japan: Oxford.

Garon, S. (1997). *Molding Japanese Minds: The State in Everyday Life*. Princeton, N.J.: Princeton University Press.

Giuliano, P. & Spilimbergo, A. (2009). *Growing Up in a Recession: Beliefs and the Macroeconomy*. NBER Working Paper No. 15321.

Gordon, A. (1991). *Labor and Imperial Democracy in Prewar Japan*. Berkeley: University of California Press.

Hamaaki, J., Hori, M., Maeda, S. & Murata, K. (2010). *Is the Japanese employment system degenerating? Evidence from the Basic Survey on Wage Structure*. ESRI Discussion Paper Series No. 232.

Hirakubo, N. (1999). The end of lifetime employment in Japan: Business Horizons. *Elsevier*, *42*(6), 41-46.

Hirschmeier, J. & Yui, T. (1981). *The Development of Japanese Business: 1600-1980*. London: George Allen & Unwin.

Hofstede, G. H. (2001). *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations, Thousand Oaks, Calif*.: Sage Publications.

Inagami, T. & Whittaker, D. H. (2005). *The New Community Firm*: Cambridge: Cambridge University Press.

Jackson, G. (2007). *Employment Adjustment and Distributional Conflict in Japanese Firms*. M. Aoki, G. Jackson and H. Miyajima (Eds.). Corporate Governance in Japan. New York: Oxford Press.

Jackson, G. & Miyajima, H. (2007). *Introduction: The Diversity and Change of Corporate Governance in Japan*. M. Aoki, G. Jackson and H. Miyajima (Eds.). Corporate Governance in Japan. New York: Oxford Press.

Jacoby, S. (2007). *The Embedded Corporation: Corporate Governance and Employment Relations in Japan and the United States.* Princeton, N.J.: Princeton University Press.

Kambayashi, R. & Kato, T. (2009). *The Japanese Employment System after the Bubble Burst: New Evidence*. In Prepared for Japan's Bubble, Deflation, and Long-term Stagnation, Federal Reserve Board San Francisco.

McVeigh, B. (2004). Seeking a Career, Finding a Job: How Young People Enter and Resist the Japanese World of Work. In G. Mathews and B. White (Eds.) *Japan's Changing Generations: Are Young People Creating a New Society?* London, New York: Routledge Curzon.

Nakane, C. (1972). *Japanese Society*. Berkeley: University of California Press.

Ono, H. (2010). Lifetime employment in Japan: Concepts and measurements: *Journal of the Japanese and International Economies*, *24*, 1-27.

Ouchi, W. G. (1981). Theory Z: *How American Business Can Meet the Japanese Challenge*. Reading, Mass.: Addison-Wesley.

Rebick, M. (2005). *The Japanese Employment System*: Oxford Press.

Sakudō, Y. (1990). The management practices of family business. In C. Nakane and S. Ōishi (Eds.) *Tokugawa Japan: The Social and Economic Antecedents of Modern Japan.* Tokyo: University of Tokyo Press.

Sullivan, J. J. & Peterson, R. B. (1991). A Test of Theories Underlying the Japanese Lifetime Employment System: *Journal of International Business Studies, 22*(1), 79-97.

Table 1 Descriptive Statistics

	mean	std. dev.	min	max
Female	50.00%			
Married	54.49%			
Child	50.32%			
Age	41.77	10.70	21.00	73.00
Education				
Less than university	51.76%			
University	42.79%			
Graduate school	5.45%			
Industry				
Agriculture	0.48%			
Wholesale/retail	11.70%			
Manufacturing-high techs	12.66%			
Manufacturing-light industries	4.97%			
Manufacturing-heavy industries	4.01%			
Civil services	6.09%			
Business services	19.55%			
Consumer services	25.64%			
Other	14.90%			
Professional activity				
Manual work	21.31%			
Sales/Marketing	25.48%			
R&D/Engineering	10.42%			
HR/Logistics/Legal/Finance	19.55%			
Training/Education	3.69%			
Other	19.55%			
Tenure	12.57	9.42	1.00	42.00
Firm size				
1-10	10.58%			
11-50	13.78%			
51-300	24.52%			
301-999	12.34%			
1000-4999	17.95%			
5000-	20.83%			
Monthly income				
below ¥200,000	39.74%			
¥200,001-¥400,000	36.70%			
¥400,001-¥600,000	12.18%			
¥600,001-¥1,000,000	9.13%			
above ¥1,000,000	2.24%			
Status				
Freelancer	0.32%			
Temporary worker	7.37%			
Part-time worker	25.00%			
Regular fulltime	37.34%			
Manager	9.78%			
Senior or Top manater	20.19%			

Table 1 Descriptive Statistics (continued)

		mean	std. dev.	min	max
Dependent Variables					
Q1	Would you accept in crisis situation reduced wage/work time in order to keep general job safety?	0.841	0.366	0	1
Q2	A company should guarantee for its best workers lifelong employment.	0.558	0.497	0	1
Q3	Staying in the same company long term is not good because it blocks internal competition and limits career prospects.	3.239	1.170	1	7
Q4	Lifetime (or long-term) employment is outdated: I don't want to stay in the same company for so long time.	3.357	1.240	1	7
Q5	If possible, taking risk is to be avoided when it can endanger job security.	4.736	1.130	1	7
Q6	It is possible to lay off considerable numbers of employees without strong reactions (quarrel) within either the company or in the broader society.	4.054	1.209	1	7
Explanatory Variables (Subjective)					
RISK					
	It is all right and sometimes even desirable to take risk in business.	4.596	1.029	1	7
COLLECTIVISM					
	Loyalty to company				
	The company should welcome a new recruit like a family member.	0.657	0.475	0	1
	I am grateful for my company and I express this with my hard work every day.	4.393	1.294	1	7
	Performance evaluation				
	The work is always a team achievement, never just individual performance.	4.295	1.240	1	7
	Individual appraisal of performance is a threat to harmony, companies should measure group performance.	3.734	1.110	1	7
	Decision-making				
	The best way for decision making is to vote: it is clear and efficient.	3.816	1.129	1	7
	People should try harder to achieve consensus in decision making: group harmony is worth the time invested in that process.	4.516	0.945	1	7
	In a company the group consensus is more important than any leader or manager: group cohesiveness is the best tool to ensure common vision and good performance.	4.173	1.035	1	7
	Teamwork				
	People should never work alone, co-workers can bring help and play an important role in correcting each others' mistakes.	4.853	1.108	1	7
	Working in an open office is tiring; every company should try to give individual offices for their white-collar staff.	3.678	1.261	1	7
	Making friends is one of the most important things in a company.	4.341	1.238	1	7
	Control variables				
	If I were graduating now, I would rather go to a company with foreign management: they understand better what a young employee needs.	3.457	1.321	1	7
	There is too much stress and depression related to corporate life today: life was better 20 years ago.	4.458	1.182	1	7

Table 2: Results of Regression Models

	(1) Q1 +	(2) Q2 +	(3) Q3 -	(4) Q4 -	(5) Q5 +	(6) Q6 -	(7) Q1 +	(8) Q2 +	(9) Q3 -	(10) Q4 -	(11) Q5 +	(12) Q6 -
RISK												
Gender(Female)	0.173	-0.0878	-0.0672	-0.0469	0.149	0.00374	0.263*	-0.0727	-0.0601	-0.0524	0.153	0.0449
	(1.184)	(-0.687)	(-0.672)	(-0.434)	(1.429)	(0.0372)	(1.745)	(-0.540)	(-0.583)	(-0.470)	(1.440)	(0.447)
Age	0.0131	-0.00936	-0.00113	-0.0161**	-0.00725	0.00901	0.0139	-0.00970	-0.00641	-0.0224***	-0.00781	0.00809
	(1.185)	(-1.056)	(-0.151)	(-2.167)	(-0.984)	(1.254)	(1.247)	(-1.069)	(-0.823)	(-3.094)	(-1.097)	(1.096)
Child	0.302*	0.401***	-0.0199	-0.199*	-0.0174	-0.151	0.276	0.321**	0.0470	-0.141	-0.110	-0.140
	(1.889)	(2.833)	(-0.158)	(-1.704)	(-0.150)	(-1.354)	(1.635)	(2.195)	(0.350)	(-1.201)	(-0.895)	(-1.230)
Married	-0.286*	-0.0993	-0.132	-0.0920	0.0540	-0.0276	-0.302*	-0.00224	-0.164	-0.124	0.160	-0.0283
	(-1.801)	(-0.744)	(-1.135)	(-0.870)	(0.504)	(-0.266)	(-1.879)	(-0.0160)	(-1.386)	(-1.196)	(1.469)	(-0.272)
Education level												
University	0.0329	-0.0969	0.0990	0.0664	-0.0665	0.174*	-0.0847	-0.0442	0.162*	0.0822	-0.0652	0.184*
	(0.238)	(-0.823)	(1.082)	(0.704)	(-0.704)	(1.800)	(-0.588)	(-0.361)	(1.712)	(0.852)	(-0.665)	(1.915)
Gradate school	-0.138	0.0685	0.464**	-0.131	-0.551**	-0.144	-0.257	0.110	0.395**	-0.180	-0.457**	-0.100
	(-0.466)	(0.276)	(2.441)	(-0.589)	(-2.413)	(-0.609)	(-0.841)	(0.424)	(1.971)	(-0.814)	(-2.080)	(-0.403)
Unemployment rate	0.0424	-0.0740**	-0.00113	-0.0336	0.00178	0.0536*	0.0465	-0.0792**	-0.0204	-0.0556*	0.0114	0.0515*
	(1.046)	(-2.095)	(-0.0381)	(-1.073)	(0.0624)	(1.830)	(1.076)	(-2.143)	(-0.703)	(-1.852)	(0.426)	(1.872)
Risk attitude							0.147**	0.00888	0.0466	0.0663	0.00525	0.189***
							(2.196)	(0.159)	(0.849)	(1.205)	(0.100)	(3.878)
STATUS												
Freelancer	-1.112	-0.189	-0.625***	-0.441	0.700**	1.039	-1.363	-0.503	-0.485**	-0.472	0.452**	1.049
	(-1.167)	(-0.187)	(-2.691)	(-0.793)	(2.320)	(1.357)	(-1.481)	(-0.528)	(-2.309)	(-0.656)	(2.132)	(1.202)
Temporary worker	-0.442*	0.0109	0.0918	0.122	0.135	0.0323	-0.381	0.164	0.0817	0.109	0.250	0.0397
	(-1.911)	(0.0514)	(0.558)	(0.718)	(0.811)	(0.189)	(-1.514)	(0.784)	(0.472)	(0.625)	(1.442)	(0.245)
Part-time worker	-0.174	0.103	-0.217	-0.218	0.0627	-0.118	-0.168	0.172	-0.235*	-0.241*	0.0755	-0.158
	(-0.877)	(0.597)	(-1.567)	(-1.544)	(0.438)	(-0.870)	(-0.825)	(0.974)	(-1.682)	(-1.717)	(0.536)	(-1.145)
Manager	0.284	-0.227	-0.119	-0.0136	-0.115	0.366**	0.189	-0.115	-0.0500	0.0143	-0.0658	0.358**
	(1.078)	(-1.116)	(-0.698)	(-0.0796)	(-0.672)	(2.116)	(0.699)	(-0.541)	(-0.292)	(0.0843)	(-0.392)	(2.073)
Senior or top manater	0.375	-0.636***	0.0281	0.345***	0.0711	0.206*	0.233	-0.646***	0.0809	0.411***	0.0625	0.146
	(1.627)	(-3.774)	(0.219)	(2.584)	(0.526)	(1.661)	(1.014)	(-3.736)	(0.611)	(3.076)	(0.446)	(1.131)
COLLECTIVISM												
Loyalty to company												
The company should welcome a new recruit like a family member.							0.178	0.454***	-0.0959	-0.150	0.131	-0.317***
							(1.246)	(3.773)	(-1.013)	(-1.595)	(1.364)	(-3.303)
I am grateful for my company and I express this with my hard work every day.							0.141**	-0.00835	-0.0176	0.0174	0.0561	0.145***
							(2.509)	(-0.183)	(-0.422)	(0.423)	(1.390)	(3.456)
Performance evaluation												
The work is always a team achievement, never just individual performance.							0.119**	-0.00488	0.0133	-0.0529	-0.00599	-0.0215
							(2.134)	(-0.104)	(0.295)	(-1.302)	(-0.150)	(-0.552)
Individual appraisal of performance is a threat to harmony, companies should measure group performance.							-0.0975	0.0573	0.124**	0.0543	-0.0924**	-0.0234
							(-1.599)	(1.097)	(2.323)	(1.167)	(-1.974)	(-0.473)
Decision-making												
The best way for decision making is to vote: it is clear and efficient.							-0.0393	0.0707	-0.0113	-0.0252	0.0676*	0.0870*
							(-0.662)	(1.422)	(-0.256)	(-0.548)	(1.717)	(1.944)
People should try harder to achieve consensus in decision making: group harmony is worth the time invested in that process.							0.0644	-0.0177	-0.0830	0.00999	0.132**	-0.142***
							(0.955)	(-0.281)	(-1.417)	(0.176)	(2.356)	(-2.654)
In a company the group consensus is more important than any leader or manager: group cohesiveness is the best tool to ensure common vision and							-0.0652	0.146**	-0.0707	-0.00152	0.157***	0.146**
							(-0.972)	(2.558)	(-1.350)	(-0.0296)	(2.855)	(2.430)
Teamwork												
People should never work alone, co-workers can bring help and play an important role in correcting each others' mistakes.							-0.0875	-0.0272	-0.0839	-0.0706	0.147***	0.00462
							(-1.324)	(-0.514)	(-1.607)	(-1.415)	(3.002)	(0.0980)
Working in an open office is tiring; every company should try to give individual offices for their white-collar staff.							0.0407	0.0269	0.159***	0.197***	-0.00324	0.0577
							(0.715)	(0.608)	(3.842)	(4.754)	(-0.0814)	(1.304)
Making friends is one of the most important things in a company.							0.0388	0.0169	-0.117***	-0.111***	0.0571	-0.0207
							(0.664)	(0.363)	(-2.772)	(-2.630)	(1.407)	(-0.467)
Control Variables												
Job tenure	-0.00142	0.00858	-0.0104	-0.00869	0.00832	-0.00564	-0.00724	0.00781	-0.00237	0.000257	0.00780	-0.00235
	(-0.130)	(0.959)	(-1.441)	(-1.189)	(1.210)	(-0.831)	(-0.651)	(0.850)	(-0.317)	(0.0349)	(1.118)	(-0.336)
If I were graduating now, I would rather go to a company with foreign management: they understand better what a young employee needs.							0.0160	0.0653	0.203***	0.130***	0.0697*	0.0619
							(0.300)	(1.471)	(5.069)	(3.369)	(1.832)	(1.582)
There is too much stress and depression related to corporate life today: life was better 20 years ago.							0.0497	0.0760	-0.0445	-0.0690	0.0857*	-0.00299
							(0.860)	(1.604)	(-0.954)	(-1.531)	(1.830)	(-0.0653)
Industry dummies	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Professional activity dummies	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Firm size dummies	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Monthly income dummies	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Constant	0.0419	1.016**					-1.095	0.0815				
	(0.0734)	(2.060)					(-1.247)	(0.105)				
Observations	620	620	620	620	620	620	620	620	620	620	620	620
log likelihood	-254.5	-395.4	-933.1	-956.9	-914.0	-932.4	-240.0	-375.0	-886.2	-917.5	-871.4	-896.5
Wald chi2	43.30	59.55	74.53	84.01	44.70	99.69	75.85	96.78	231.8	174.9	209.3	153.5