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From Seniority to Performance Principle - The Evolution of Pay Practices in Japanese Firms since the 1990s

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From Seniority to Performance Principle - The Evolution of Pay Practices in Japanese Firms since the 1990s

Harald Conrad¹

[Abstract] After the burst of the bubble economy at the beginning of the 1990s, pay practices in Japanese companies have undergone significant changes that are characterized by a shift towards performance-based pay. The purpose of this article is to take account of these changes through an analysis of key research and survey results, to discuss the degree of success of the new systems, and to examine some important interdependencies with changes in corporate governance and labour legislation. The success of the evolving systems in terms of increased efficiency and effectiveness remains contested, while many companies are still adjusting their understanding of performance and their assessment procedures so as to not negatively impact employees' motivation and cooperative work practices. While the influence of corporate governance on pay systems remains limited, recent changes in labour legislation are likely to strengthen the reliance on performance-oriented pay in the future.

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1. Introduction

Since the burst of the bubble economy in the early 1990s, changes in the pay practices of Japanese firms have received increased attention both in Japanese academia and the popular media. The focus of attention has been to what extent the hitherto predominantly seniority related compensation practices are being replaced by more performance-based salary systems, and what kinds of problems are associated with such changes.

Seniority-based pay (*nenkō joretsu chingin*) has often been described as one of the so-called 'three pillars of the Japanese employment system'; the two others being lifetime employment (*shūshin koyō*) and in-house company unions (*kigyōbetsu kumiai*)

¹ I would like to thank the editorial board of SSJJ and three anonymous reviewers for their careful reading and thoughtful comments regarding an earlier draft of this article.

(e.g., OECD 1977; Debroux 2003). Like many other features of the Japanese economic system, it has recently come under increased scrutiny and has been criticized for being too costly, and ill-suited to motivate and retain workers in the fast-changing business environment. One landmark paper reflecting this new sentiment was the 1995 report '*Shinjidai no Nihonteki Keiei*' (Japanese [style] Management in a New Era) in which Japan's business organization Nikkeiren promoted not only a greater reliance on fixed-term employment, but also annualized pay schemes (as one particular kind of a performance-based pay system) and job-based pay systems for highly qualified specialists (Nikkeiren 1995). In the latter half of the 1990s, more and more companies, eager to contain rising personnel costs, started to experiment with new compensation practices and sought to incorporate more performance-based pay elements as part of their overall compensation systems. During this period the term *seikashugi*, roughly translated as 'performance-ism', became a frequently heard buzzword in the Japanese media.² Although the meaning of this term is not clearly defined and varies among its users (Sasajima Yoshio and Shakai Keizai Seisansei Honbu 2002: 7-8; *Forbes Nihonban* 2004: 128; Ishida 2006; NRSKKK 2006), it became a widely held belief that *seikashugi* was indispensable to secure the long-term competitiveness of Japanese companies.

Whether these reforms have indeed been successful in terms of increased efficiency and effectiveness remains contested. In fact, many companies have experienced difficulties with their new pay systems and are still in the process of adjustment. Also, the popular media (e.g., Shūkan Asahi 2003) and a couple of bestselling books (especially Takahashi 2004 and Joh 2004; 2005) have become more and more critical of *seikashugi* and started to promote a revival of a 'Japanese-style' seniority-based system. It is thus obvious that the reform of pay systems is an on-going process. Nevertheless, it is also evident that performance factors have started to play, and are likely to continue to play, a stronger role in pay determination in the future.

² According to Sasajima (2004: 22), the four newspapers *Nikkei Shinbun*, *Nikkei Sangyō Shinbun*, *Nikkei Ryūtsū Shinbun*, and *Nikkei Kin'yū Shinbun* used this term for the first time in 1992. Abe (2007: 7) reports the following numbers of articles with headings using the phrase performance-based or achievement-based pay system on the front pages of the morning or evening editions of the above papers: 1995: 2; 1996: 5; 1997: 25; 1998: 17; 1999: 34; 2000: 32; 2001: 38; 2002: 25; 2003:56.

The purpose of this article is to take account of these changes in pay systems through an analysis of key research and survey results, to discuss the degree of success of the new systems, and to examine some important interdependencies with changes in corporate governance and labour legislation.

The remainder of this paper is structured as follows. In order to set the stage for an analysis of recent changes in pay practices, the paper first takes a brief look at the historical development of the modern pay systems and introduces some of the key explanatory factors. This is followed by an overview of the traditional pay practices in the third section and a discussion of the driving factors for reform in the fourth section. The fifth section describes and analyses recent changes, first in general terms, and then focuses on more specific issues. The article closes with a short outlook for the future.

2. Historical Development, Complementarities, and Interdependencies

During the late 19th century, wage systems in the private sector were basically characterized by a combination of day wages and payment by the job or the piece, but many companies had already begun to construct wage ladders of more or less complexity to encourage white collar workers to rise in rank and pay within the enterprise. Against the background of labour shortages and high labour mobility at the time, companies began to increase their day wages at regular intervals to encourage their workers to stay with them. However, the fact that regular ‘seniority wage increases’ became nearly universal in the heavy industry and other sectors of the economy by the end of World War II was primarily the result of government regulation and informal government pressure during the war economy of the 1930s-1940s. The authorities at the time aimed to restrict labour movement and improve industrial productivity through job security and wages that met livelihood or life-cycle needs, with age as the best single proxy for need (Gordon 1985: 43-45, 257-298).³

After World War II, employers hoped to move away from these livelihood wages. The emerging management-labour compromise saw thus the establishment of wage systems which consisted of several components reflecting mostly livelihood factors like age, educational background and gender, but also production quota and

³ For a detailed account of the history of the seniority-based wage system see also Magota 1970.

incentive pay factors (Gordon 1985: 374-386). Following the slow down of the economy at the end of the catch-up period and as a result of mounting employers' pressure in the later 1960s, the weight of living-cost and seniority elements was gradually reduced while that of work-related elements increased. At the centre of these changes was the so-called skill-grading system (*shokunō shikaku seido*) which aimed to link employees' skills to pay levels, a system that was actively promoted by Nikkeiren since the mid-1960s (NNKK 1969; Rebick 2005). Wages were thus, for the most part, no longer directly linked to age or tenure, but since employees' skills were judged to increase with longer tenure, the new systems were, as I will discuss later, in practice still very much seniority-oriented. The relationship between firm-specific tenure, as a proxy for firm-specific human capital, and the earning profiles of Japanese workers was highlighted in Hashimoto's and Raisian's seminal work (1985) as well as in a number of important follow-up studies (Clark and Ogawa 1992; Hashimoto and Raisian 1992). These studies, which had the limitation that they were based on data stemming from cross-section surveys, concluded that earnings growth rates attributable to firm-specific tenure were much greater in Japan than in the United States, but showed also that the contribution of firm-specific tenure to earnings growth tended to decline throughout the 1980s in large firms, while the results for smaller firms were less conclusive. Clark and Ogawa (1992) pointed to the diminishing magnitude of seniority pay practices as a possible cause of the flattening of the earnings profile, while Hashimoto and Raisian (1992) warned that it was yet too early to judge the relative strengths of influencing factors, including firm-size and changes in industrial composition. While Hashimoto's and Raisian's seminal work has shaped many observers' perceptions of Japan's seniority wage system, Rebick (2005: 20) points to the importance of further studies based on more reliable micro-level data (e.g., Ohtake 1998) that have subsequently shown that estimated returns to seniority or tenure are no higher in Japan than in the US.

The fact that seniority-orientated wages became widely accepted in the post-war period can not only be attributed to a political compromise or ideological factors. These practices did not only satisfy perceived societal needs, but fit well with the emerging Japanese production system. Aoki (1988, 1990, 1994), especially, has highlighted the institutional complementarities between human resource management practices and the production system of Japanese companies. He has shown how many, especially larger, Japanese production facilities have developed operation modes

where horizontal mutual coordination among operating units are of utmost importance. In this way, planning and implementing operations is not strictly hierarchically structured and rotation of employees between engineering and workshop personnel is frequently practiced. This teamwork approach, where operating units are expected to coordinate mutually their tasks, requires an incentive mode which allows individual workers to commit themselves fully to the teamwork process without fear of losing compensation. Since workers are expected to cope independently with needed changes or problems in the production process, they need autonomous problem-solving capabilities, which are nurtured by frequent job rotations. Such rotations familiarize workers with various jobs and enhance their ability to process and communicate information back into the production process. The immediate use of on-site information in quality control and production planning—such as the famous *kanban* system—has become a key explanatory factor for the competitive strength of many Japanese manufacturers.

According to Aoki, the above sketched production mode requires distinctive incentives to ensure that individual workers commit themselves to a team-based effort. Japanese companies have therefore designed incentives that are not tightly related to a specific job category, but that motivate wide-ranging job experience among employees. At the centre of their incentive schemes are rank hierarchies—with separate rank hierarchies for blue-collar workers, white-collar workers, and engineers as well as for supervisory and managerial employees. Each rank is usually associated with a certain range of pay, which consists—as will be discussed in more detail later—of several pay elements. Employees of the same educational background start their company careers with identical pay and are for some years, until they are in their 30s, promoted at an equal speed. Around their mid-30s they start to compete for promotion in rank. The central criteria for such promotions are the number of years of continuous employment and merit. According to the underlying skill-grading system merit does not so much depend on a particular job or output, but is broadly defined by problem-solving and communication skills as well as other qualifications. Thus employees are neither rewarded for achieving a given well-defined objective nor in respect of a subjective evaluation of their performance. Rather, frequent appraisals assess the potential ability based on adaptability to technical changes as well as soft skills such as loyalty and the ability to cooperate well with other workers. It is also important to note that speed of promotion does vary in an employee's later years –

with some reaching higher ranks only shortly before the mandatory company retirement age, whereas others proceed to supervisory ranks in mid-career – and that those who do not show continuous progress might be posted to minor subsidiaries or affiliated companies.

Besides the institutional complementarities between human resource management practices and the production system of Japanese companies, there are also noteworthy interdependencies with corporate governance practices and labour legislation. In particular, the long-term nature of compensation practices has been compatible with the long-term stakeholder relationships of many companies. Because long-term shareholders have traditionally not pursued short-term profit maximization strategies and stable cross-shareholdings among affiliated companies prevented hostile takeovers, firms were in a position to make long-term commitments to their employees, in the form of implicit long-term employment promises and seniority-based wages. The issue to be discussed below is how recent changes in corporate governance practices and shareholder patterns might have influenced these human resource management practices.

Finally, mandatory retirement practices are closely related to seniority-based wages. As Lazear (1979) has shown, seniority-based pay is a mechanism to bind employees and to set incentives against shirking where the effort of employees is difficult to observe or tasks are ambiguous. Firms pay wages below productivity in early periods of employment, and raise wages above productivity in later stages. Workers can only receive those wages above productivity and regain earlier losses, if they show sufficient effort and avoid getting fired. According to Lazear, once workers reach the stage where wages are above productivity they have no longer an incentive to retire voluntarily. Accordingly, the retirement age has to be fixed in advance to control labour costs. And indeed, 91.5% of Japanese companies with more than 30 employees have such a mandatory retirement system (KDKTJ 2004). The issue to be discussed below is how recent changes in labour legislation concerning mandatory retirement might impact future changes in the pay systems.

3. Overview of Traditional Pay Components

The previous section outlined the important relationship between the rank-hierarchy system and compensation practices. However, compensation is not only a function of

rank. In fact, pay systems have been and for the most part remain highly complex and take into account numerous factors. Table 1 gives an overview of typical pay components. According to the General Survey on Working Conditions, which covers establishments with more than 30 employees, total compensation can be divided into 78.9% monthly cash payments and 21.1% semi-annual bonuses. Base pay makes up the largest portion of total compensation, at 67.6%. Furthermore, various allowances for the family, commuting, housing, etc. make up another 5% of total compensation (Rebick 2005: 45).

Base pay closely reflects the position of employees in the rank-hierarchy and is a function of ability/skills (*shokunōkyū*), age (*nenreikyū*) and performance (*seisekikyū*). However, the latter has so far played only a marginal role, whereas ability/skills and age have been the most important determinants.⁴ Most companies used to have a pay component which was explicitly and directly linked to age, but ability/skills as criteria for the evaluation in the skill-grading system have in principal been the most important factors for base pay.

Table 1: Typical Pay Components in Japanese Companies

Standard pay (<i>kijunnai chingin</i>)	Base pay (<i>kihonkyū</i>) <ul style="list-style-type: none"> • Age pay (<i>nenreikyū</i>) • Ability/Skill pay (<i>shokunōkyū</i>) • Performance pay (<i>seisekikyū</i>)
	Family pay (<i>kazokukyū</i>)
	Work-site allowance (<i>gengyōteate</i>)
Non-standard pay (<i>kijungai chingin</i>)	Overtime pay (<i>jikangai waramashikin</i>)
	Allowances (<i>teate</i>)

Source: The author.

Bonuses have traditionally been paid bi-annually. Although they might appear to have been a kind of profit-sharing scheme, academic opinion on this issue has been divided, with some stressing the profit-sharing aspect (e.g., Freeman and Weitzman 1987), but most others downplaying it (e.g., Ohashi 1989; Brunello 1991; Morishima 2002). Bonus payments have usually been negotiated twice a year between employers and labour unions, and the latter have, at least until recently, considered bonuses as

⁴ For a detailed example of a traditional pay system see Shibata (2000).

part of regular pay, which should not be linked to company profits. Kato and Morishima (2003) confirm that only about one in four publicly traded firms use profit sharing plans (PSP), where the total amount of bonuses is linked to a measure of firm performance, such as profit.⁵

4. Pressures for Change

During the latter half of the 1990s the above described pay practices came under increasing critique. Underlying this critique are various challenges that I will briefly review in this section.

Probably the single most important challenge is the aging of Japanese society and the resulting increase in the number of older employees. The ratio of persons 55 and older of the total Japanese labour force has increased from 18% in 1985 to 26.8% in 2006 (Sōmuchō Tōkeikyoku · Tōkei Kenkyūjo 2008). Given the age-related compensation and promotion practices, this has led to a quasi-automatic increase in labour costs and a need to create more managerial positions, although a worsening business climate and a general trend towards organizational structures with less managerial layers and flatter hierarchies would, rather, demand steps in the opposite direction. Since the mid-1990s companies have therefore striven to reduce overall personnel expenditures and to turn fixed expenditures into variable costs (Ogoshi 2006).

However, as Abe (2007) points out, rising labour management costs alone cannot explain the shift to the new salary systems, because there were also periods in the past, especially in the 1970s and early 1980s, during which labour costs surpassed company income, but which did not lead to any fundamental changes. Technological innovations seem to have also played an important role behind recent reforms. Innovation in information and communications technology has led to a mismatch between the skills of many older white-collar workers and the sort of skills that are actually required. The new pay systems try to address this problem with a new incentive structure (Abe 2007).

Overall, the fast-changing business environment and the use of IT have made it harder to rely on continuous long-term technological progress and generalist skills,

⁵ The productivity effects of bonuses and employee stock-ownership plans have been confirmed by Jones and Kato (1995), Ohkusa and Ohtake (1997) and Kato and Morishima (2003).

which have so far been comparative strengths of Japanese companies (Miyamoto and Higuchi 2007). Related to this point is the problem that the skill-grading system assumes a constant accumulation of skills and, in principle, does not take into account whether certain skills may have become obsolete due to technological changes.

In 2000 the Japan Productivity Center for Socio-Economic Development conducted a survey among 2,398 stock-listed companies (with a response rate of 13.2%) in which human resource managers were asked to indicate three major problems with the skill-grading system. The results, depicted in Table 2, illustrate well some of the above-mentioned problems.

Most notably, many of the surveyed companies stressed that skill-grading systems had in fact turned into seniority-based systems, that they do not allow demotion according to actual performance and that the concentration of workers in higher ranks causes problems with increasing labour costs.

Table 2: Problems of the Skill-grading System

	Percentage of all companies	Percentage of companies which plan to abolish ability pay
The system turns in practice toward a seniority-based system	72.2	84
The system does not allow promotion and demotion based on actual performance	52.1	44
The concentration of employees in high ranks causes an increase in labor costs	39.7	60
The maintenance of the grid with necessary skills takes much time	38.5	28
Ability/skill standards no longer fit actual conditions	26.8	32
Skill grades are not understood by the external labor market	24	20
Skill grades cannot be used in the training of specialists	21.5	24
Other	2.5	4
No answer	3.2	0

Notes: N=317, Up to three possible answers

Source: Shakai Keizai Seisan Honbu 2000: 45.

5. Empirical Evidence of Changes and Their Analysis

As a result of the described pressures, a growing number of Japanese companies have started a search for new incentive tools. In this section I will analyse how companies have reacted and how these changes can be interpreted. First, I will provide a general

overview of recent changes and highlight some major characteristics, and follow with a discussion of more specific issues.

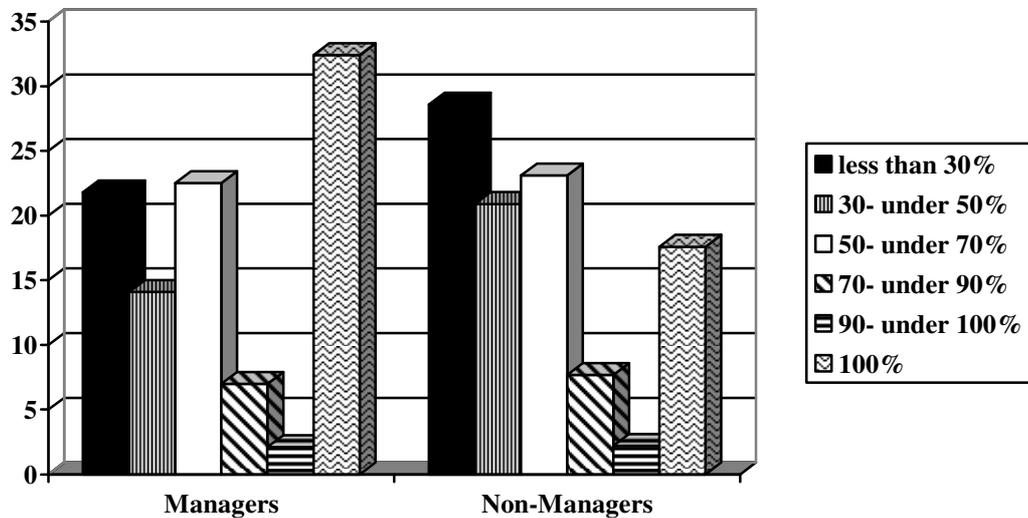
5.1 The General Direction of Pay System Reforms

Due to the growing diversity of pay systems across and within companies, generic features are nowadays much harder to condense than in the past, when companies often followed similar models. Nevertheless, we might try to summarize the general trend of the pay system reforms as far as they relate to the core labour force (excluding the growing ranks of part-time workers) as follows (based on Ishida 2006, Nakamura 2006, NRSKKK 2006): the pay systems of managers (section or department managers and above) show the greatest changes, whereas changes for rank-and-file employees remain more limited but are also significant. Generally, the number of pay components is decreasing. More and more companies are eliminating or at least reducing age-based pay (*nenreikyū*) as well as the different allowances (for good examples see the cases discussed by Shibata 2000 and Nakajima, Matsushige and Umezaki 2004). For management positions, ability/skill pay (*shokunōkyū*) is often abolished, whereas it continues to play an important but also diminishing role for rank-and-file employees. Accordingly, the surveys of the Japan Productivity Center for Socio-Economic Development indicate that between 2000 and 2005 the percentage of companies that claimed to have ability/skill pay declined from 82.4% to 57.5% for managers, and from 87% to 70.1% for non-managers (Shakai Keizai Seisansei Honbu 2006: 19).⁶

For workers in managerial positions, regular pay rises which formed the core of the seniority-based wage system have more or less been abolished. For these workers, ability/skill pay is often replaced with a pay component that reflects a particular job class or hierarchical role that an employee fulfils in an organization (*yakuwarikyū*). There are, however, also companies like Mitsubishi Motors that have introduced *yakuwarikyū* for their manufacturing workers (Mitsubishi Motors 2003). As can be seen in figure 1, in over 30% of companies, role/job pay for manager-class workers makes up 100% of base pay.

⁶ However, it should be noted that the numbers from the different surveys are not directly comparable because the responding firms are not necessarily identical. The surveys, conducted yearly from 2000 to 2005 among 2,300—2,700 stock-listed firms, have had response rates varying between 9.2%—13.3%.

Figure 1: Weight of the Role/Job Pay Component (*yakuwarikyū*) in Base Pay in Percent



Source: Shakai Keizai Seisansei Honbu 2006: 13.

Frequently, this job or role pay component consists of a fixed amount and a performance-related part, resulting in a monthly salary range. Managers within each class receive thus different and fluctuating salaries, depending on the assessment of their performance.

Although role/job pay also plays an increasingly important role for non-managerial workers, the overall weight of this component, and consequently the significance of performance for pay determination, remain limited. Table 3 indicates how the weight of the different pay components might change over an employee's career course.

Table 3: Model of the Relative Importance of Different Wage Components over the Career Course

	Non-managerial workers 20s	Lower managers 30s	Section chief 40s	Department chief 50s
Age pay (<i>nenreikyū</i>) <i>Seikatsushugi</i>	OO	O	-	-
Ability/Skill pay (<i>shokunōkyū</i>) <i>Nōryōkushugi</i>	O	OO	OO	O
Role/job pay	-	-	O	OO

(yakuwarikyū) Seikashugi				
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Source: Shakai Keizai Seisansei Honbu 2002: 17.

Table 4 summarizes the direction of the current pay reforms for the most important pay components.

What is being evaluated as performance varies among companies and is commonly a combination of individual and/or team performance. In regard to the performance appraisals, it is important to note that performance is only rarely assessed in terms of simple quantitative results such as sales, profits or cost reductions, etc. Such an approach might possibly work for sales personnel (where sales commissions are commonly found as a top-up for a fixed minimum pay), but in general it is not regarded to be suitable, because it neglects various factors which are beyond the influence of individual sales people. For example, one might point to the general business climate, the behaviour of other workers, or the assigned products which have a large impact on sales outcome but are beyond the control of individual sales people. For this reason, the new performance systems focus generally on what Nakamura (2006; 2007) calls process-oriented performance-based salary systems (*purosesu jūjigata seika shugi*).

Table 4: Common Changes in Pay Systems in Companies that Have Introduced Performance-based Pay

	Past	Present/Future	Type of Workers Affected
Base pay	-A function of age pay (<i>nenreikyū</i>), ability/skill pay (<i>shokunōkyū</i>) and performance pay (<i>seisekikyū</i>) with different weightings depending on the career stage	-Greater weight attached to the performance pay component, while ability/skill pay and age pay components are reduced or eliminated -In some cases base pay is transferred to annualized pay schemes where the part of the annual salary that is comparable to the old base pay remains more or less unchanged, while the part comparable to the semi-annual bonus depends on individual and/or firm performance	-All types of regular workers, while the performance-orientation is strongest for managerial workers -Annualized schemes are usually limited to managerial and specialist workers
Allowances	-Various livelihood allowances reflecting the idea of 'living wage' based on the different stages of life	-Livelihood allowances are often transferred to base pay	-All types of regular workers -Especially workers in upper management positions and specialists that are being paid by an annual salary scheme
Bonuses	-Usually paid semi-annually as a defined number of months worth of base pay with little consideration of firm or employees' performance	-More and more companies split their bonuses into various components including a fixed amount and a flexible amount linked to firm, individual and/or group performance	-All types of regular workers, although bonuses of managerial workers tend to have a larger performance-based component

Retirement lump-sum payments	-Benefits depending on age, tenure and final salary with progressively rising benefits	-Lump-sum payments reflect changes in base pay through the benefit formula -Some companies have introduced options for pre-payment as part of the regular salary -Some companies link benefits to employees' performance through merit point systems	- All types of regular workers (non-regular workers are typically not eligible for those benefits)
Company pensions	-Predominantly defined benefit plans tied to seniority	-Many companies have partially replaced defined benefit schemes by defined contribution plans -Some companies link benefits to employees' performance through merit point systems	-All types of regular workers (non-regular workers are typically not eligible for those benefits)
Employees' appraisal	-Focus on latent skills with strong seniority orientation	-Stronger focus on proven and relevant skills with less seniority orientation -Many companies have introduced management-by-objective-schemes and use concept of competency (behavioural assessment)	-All types of regular workers

Note: This table highlights some stylized facts about those companies that have introduced performance-based pay. It needs to be kept in mind that there are major differences in the way how companies introduce and mix the different measures. Source: the author based on Sasajima Yoshio and Shakai Keizai Seisansei Honbu 2000, 2002, 2003, 2004, 2007; Rebick 2005; JILPT 2009.

Here, performance is evaluated not only in terms of the degree of success in achieving quantitative goals, but also in terms of the process of achieving those goals. In a survey conducted by the Japan Productivity Center for Socio-Economic Development with 254 responding stock-listed firms in 2005, 90.6% responded that they consider processes in their appraisal systems and 89% claimed that an individual's contribution to the team or institution is an important factor in such appraisals (Shakai Keizai Seisansei Honbu 2006: 120).

Although performance has thus gained in importance as a determining variable for pay, skill factors have not been abolished and skill-grading systems still play a large role, at least for rank-and-file employees. This is confirmed by a survey of the 199 largest employers on the Tokyo Stock Exchange, which found that only 23.9 per cent of employers that use employee performance to determine employee wages plan to discontinue the skill grading system (Morishima 2002). However, whereas companies used to operate with an all-embracing concept of skills, which included personal attributes such as educational background and age (with a focus on 'capable of doing'), the evolving systems focus more on work-related useable skills and performance (with a focus on 'doing'), with much less emphasis on the age factor. In line with this transformation, the rather vague assessment of skills in the past has been replaced with more objective 'management by objectives' appraisal systems. Despite the continuation of skill-based pay systems for rank-and-file employees, this change

in skill assessment has in principal capped age-related wage increases as they were found in the past.

Probably the most visible change affecting all types of worker can be witnessed in the handling of bonus payments. Bonuses used to be paid as a certain number of months' worth of base pay, usually not strongly reflecting personal or company performance. Although there are still differences in arrangements for manager-class and rank-and-file employees, the new bonus systems are commonly split into at least two parts. One part is still paid as a certain multiple of base pay (which, as already described, now depends more on individual performance in the case of managers, whereas it is still very much skill-based for rank-and-file employees). The other part depends on employees' performance, with a stronger accent on end results for managers and more emphasis on proven abilities for rank-and-file workers. Furthermore, some companies add a bonus payment component that is explicitly linked to company performance over the past year.

How common are these new performance-based salary systems? In terms of the statistical definitions, companies are assumed to have introduced pay for performance systems if they assess and reflect an individual's performance in his/her wage, regardless of how much weight is attached to the performance-related part and how performance is measured. Based on such a broad definition the General Survey on Working Conditions (KDKTJ 2005), covering 5,300 companies with more than 30 employees and a response rate of 78.5%, reports that 53.2% of companies have introduced performance-based wage systems. However, as Nakamura (2006: 16) points out, it makes little sense to consider companies that allegedly 'reflect individual performance in pay' but do not 'have a performance evaluation system'. If we therefore follow Nakamura and multiply the percentages of companies which 'reflect individual performance in pay' with the percentages of those that 'have a performance evaluation system' we arrive at a more realistic introduction rate of 33.4%. There are also marked differences varying by company size. Whereas 72.4% of companies with more than 1,000 employees have opted for such systems, only 25.6% of companies with 30-99 employees have done so. The respective numbers for companies with 300-999 employees and 100-299 employees are 61.0% and 46.1%

(KDKTJ 2005, Nakamura 2006).⁷ Another large scale 2004 Rengō-Rials survey among 1,205 labour unions, with a response rate of 57.1%, shows that 46% of companies with less than 300 employees continue to use a traditional seniority-based wage system, while the respective percentages for much larger companies with 3,000-9,999 employees and more than 10,000 employees are 17.8%, and 19.7% (Rengō Sōgō Seikatsu Kaihatsu Kenkyūjo 2005: 134-137). Another survey among 11,850 companies with more than 200 employees (response rate 10.8%) reports a 57.8% overall introduction rate of performance-based pay (NRSKKK 2006: 36).

5.2. Specific Aspects of Pay System Reforms

I will now turn to a discussion of some more specific issues, such as: How successful are the reformed systems? How have changes in corporate governance influenced those systems? What is the relationship with recent changes in labour legislation?

How successful are the reformed systems?

In general, performance-related pay systems are introduced with the expectation of increased performance. The most common explanation, stemming from agency theory in personnel economics, is that such systems can improve employee motivation, which in turn can increase productivity and profits. Other factors that can influence productivity include effects on the willingness to collaborate in groups, to increase competence, or to focus on strategic tasks (see, e.g., Prendergast 1999 for a comprehensive review of the theoretical issues).

Unfortunately, cross-sectional statistical analyses on the effects of the new pay for performance systems on labour productivity and labour costs are rare and have rather limited validity because they are not entirely based on firm-level data. However, one recent study by Miyamoto and Higuchi (2007), which compares firm-level data on the introduction of pay for performance systems with industrial-level data on labour costs in 481 firms, highlights some interesting issues. Their regression analysis reveals that labour productivity and firm performance (measured as return on sales) has increased only in firms where the introduction of the new pay systems was

⁷ All numbers are multiplications of the percentages of companies which 'reflect individual performance in pay' by the percentages of those who 'have a performance evaluation system'.

accompanied by suitable measures of procedural fairness. Only companies which disclosed their appraisal standards and results to their employees, which had a grievance system for employees to express their unhappiness, and which had appropriate communication in the decision-making process, showed a statistically significant, though weak, improvement in terms of labour productivity and firm performance after the introduction of pay for performance systems. In other words, the introduction of pay for performance systems *per se* does not seem to have improved firm performance if these systems are not operated in a fair manner, an issue I will come back to below (Miyamoto and Higuchi 2007).

Another study by the Japan Management Association, conducted in 2004 with a comparatively small sample of only 142 firms, showed similarly limited effects. Only 48.3% of companies which had implemented a pay for performance system for more than 4 years stated improvements in terms of competitiveness and productivity (JMA 2005 and Nakamura 2006: 18). With regards to labour costs, Miyamoto and Higuchi's study seems to confirm that pay is indeed lower in industries with a high percentage of firms introducing pay for performance systems (Miyamoto and Higuchi 2007).

An indirect way to consider labour cost effects is to look at the development of age-earnings and tenure-earnings profiles. For the 1970s and 1980s, Clark and Ogawa (1992) as well as Ohtake (1998) and Genda (1998) established that the age-earnings profile remained stable, while the slope of the tenure-earnings profile dropped more than 50%. Rebick (2005: 47-50) extended this work into the 1990s and estimated the changes between 1985 and 2003. He found a roughly 20% decline in the effect of tenure on earnings over this period, and, more relevant for the discussion here, a 20% decline in the effect of experience (measured as age) on earnings.

Yet another way to ascertain the effects of the new systems is to analyze whether they have contributed to an increased dispersion of wages over time. Rebick (2005: 51-52), looking at data from the Japanese wage census, comments that there has been remarkably little increase in the dispersion of wages between 1980 and 2003 with the exception of university-educated men, where the dispersion is most pronounced for middle-aged men in medium and large firms. He argues convincingly that this group is likely to coincide with the managerial class, where, as we have seen above, the changes in terms of performance-based pay are most pronounced. This view might also, at least indirectly, be supported by recent findings from Kambayashi,

Kawaguchi and Yokoyama (2008), whose study of wage distribution between 1989-2003 shows that in-group wage inequality among male workers expanded after 1997, while disparities among workers with different degrees of educational attainment or years of service declined over the studied period.

Shibata (2000), studying the case of one large manufacturing company, finds that wage differentials increased after the introduction of a new, performance-oriented, wage and appraisal system, but stresses that these differentials are due to small and gradual differences appearing over many years. Nakajima, Matsushige, and Umezaki (2004), on the other hand, discuss the case of a manufacturing company where a performance-based system was introduced, but where uniform evaluations led to a decrease rather than an increase in wage differentials and a strengthening of the age-earnings profile.

According to the General Survey on Working Conditions (KDKTJ 2001)⁸ 65% of surveyed companies with more than 30 employees based at least some part of their wages on individual performance, while the percentage increased to 82.3% in companies with more than 1,000 employees. As Table 5 indicates, the wage decreases of bottom performers and increases of top performers remained rather limited, although managerial pay was more strongly affected than non-managerial pay.

Table 5: Average Wage Increase/Decrease for Those Performing at the Top and Bottom (Percent of Employers Falling in Each Cell)

		Wage Decrease 10-20%	Wage Decrease 5-10%	Wage Decrease Under 5%	Wage Increase Under 5%	Wage Increase 5-10%	Wage Increase 10-20%
Managerial Position	Top Performer	--	--	--	31.1%	28.3%	21.2%
	Bottom Performer	18.3%	25.1%	38.0%	--	--	--
Non- Managerial Position	Top Performer	--	--	--	40.8%	31.2%	12.0%
	Bottom Performer	8.1%	27.4%	48.9%	--	--	--

Note: Companies with more than 1000 employees which link employee performance to pay.

Source: KDKTJ 2001

Overall, these effects seem to indicate that actual wage effects have not been as radical as the term '*seika shugi*' might suggest. One factor contributing to this

⁸ The 2001 survey was the last one to look at these effects.

finding is probably that companies are still in the process of adjusting their pay practices after initial changes had often negative repercussions on organizational effectiveness, an issue that I will address now in more detail.⁹

A survey by the Institute of Labour Administration (Rōmu Gyōsei Kenkyūjo 2005) among 1,487 human resource managers (responses 97) and 886 union officials (responses 122) of companies listed on the first section of the Tokyo Stock Exchange from December 2004-January 2005 shows that opinions on the overall functioning of the systems are split. 70.6% of managers said that the performance-oriented systems were ‘functioning’ or ‘functioning quite well’, 22% claimed ‘neither’ and 7.4% said ‘not functioning well’ or ‘not functioning’. The labour union representatives, on the other hand, had more negative assessments: ‘functioning’: 0%; ‘functioning quite well’: 41.3%; ‘neither’: 42.5%; ‘not functioning well’: 13.8%; ‘not functioning’: 2.5%. As for the areas that were deemed to have been negatively affected, both management and unions named ‘fostering of subordinates’, ‘collaboration in groups’, and ‘latitude in regard to work’. As can be seen from Table 6, the problems that are most dominant with regards to the performance-oriented systems concern ‘evaluation and objectives’.

This finding is echoed by the much more comprehensive General Survey on Working Conditions from 2007 (KDKTJ 2007), in which 87.7% of companies with personnel evaluation systems reported some sort of problem with these systems. Asked to report up to three possible problems, 57.9% of companies reported difficulties adjusting evaluation standards among departments, 46.4% said that they couldn’t train the evaluators sufficiently, and 35.6% mentioned that it was difficult to ascertain differences among employees, with the result that ‘average’ evaluation results increased, an issue that was also confirmed by Nakajima, Matsushige, and Umezaki (2004).

These sorts of problems are also at the heart of the criticism voiced in popular books on the topic, such as Joh (2004) and Takahashi (2004). Joh (2004) identified a number of problems at Fujitsu, one of the forerunners in the introduction of performance-based pay, that Meyer-Ohle’s (2009) analysis of employees’ internet blog entrees showed not to be restricted to Fujitsu: a decline in morale due to grouping in pre-determined performance bands; a split in the workforce and a decline in productivity due to the setting of contradictory objectives; a focus on narrow

⁹ In the case discussed by Shibata (2000), management agreed to labour union demands that low performers not receive lower wages under the new wage system for the first three years.

objectives, to the effect that irregular but important or strategic tasks are neglected; and increase in un-paid overtime.

Table 6: Problems Concerning Performance-based Pay Systems (Multiple Answers in %)

	Management	Union representatives
Evaluation and objectives	93.3	94.7
Motivation	46.7	54.7
Development and rotation	31.7	42.7
Salary and bonuses	28.3	30.7
Ranking and qualifications	28.3	24.0
Working hours	15.0	24.0
Pensions and retirement allowances	10.0	8.0
Other	-	2.7

Source: Rōmu Gyōsei Kenkyūjo 2005

Many companies had to concede that they opted prematurely for an increase in performance-based pay without establishing clearly the criteria for what was relevant to performance, and without institutionalizing the evaluation processes which trained managers and allowed them to discuss evaluation results with subordinates. Morishima (1997), Fujimura (1998) and Tsuru (2001) have stressed the importance of fairness in adjustments of employee evaluation systems and clarity in evaluation in order to ensure that employees accept the new performance-based systems, while Genda, Kambayashi and Shinozaki (2001) have shown that combining such systems with education and training programmes increases employees' motivation.

Numerous companies are thus still fine-tuning their reward and appraisal systems to meet such challenges. Finding clear criteria for individual performance is, however, not always easy, because job descriptions in operational types of work are usually not very clear and the lines between individual job and team activities are frequently blurred. For this reason a number of companies focus not only on individual but also on team performance. One strategy to limit negative repercussions on team performance can, for example, be seen at Nissan where individual performance measures include factors like 'willingness to share knowledge' and 'ability to work as a team member' (Author's interview with the human resource department of Nissan in April 2009).

What has been the influence of corporate governance?

Since the mid-1990s Japanese firms have experienced some substantial changes in their corporate governance practices. As was pointed out already, the long-term orientation of corporate finance and governance has so far shown some important complementarities with long-term oriented employment practices. However, with a rapid dissolution of cross-shareholdings from around 18% in the early 1990s to less than 8% in 2003 among Tokyo-listed companies (Abe and Hoshi 2007: 260), a rapid increase in foreign ownership of Japanese companies from 4.2% in 1990 to 16.5% in 2002 (Ahmadjian 2007: 126), and a growing importance of Japanese institutional investors, Japanese firms have recently been exposed to greater financial pressures to produce returns for their shareholders (Schaefer 2008: 110). This move toward more shareholder-oriented corporate governance might provoke conflicts with employees over a variety of human resource management issues (Jackson 2007). With regard to pay practices we might expect shareholder pressure for the introduction of compensation systems that link employee performance with business unit performance. Studies in Germany show, for example, that the introduction of performance-pay there was associated with changes in corporate governance (Jackson, Hoepner and Kurdelbusch 2005).

Empirical analyses for Japan have not conclusively confirmed such effects. A study by Abe and Hoshi (2007), analysing differences between companies that maintain a traditional main bank relationship and companies that have a foreign ownership structure, found no statistically significant differences in terms of the existence of annual salary systems—as one particular example of a pay for performance system—and the existence of achievement-linked bonuses. Another study by Jackson (2007: 294) came to a similar conclusion: ‘corporate governance factors had no significant influence on adopting merit pay elements based on individual performance, firm performance, business unit performance, or competitors’ wages’. On the other hand, Abe (2007), based on a regression analysis of data from 451 stock-listed Japanese companies, found a positive correlation between the share possession rate of foreign shareholders and the introduction of performance-based reward systems.

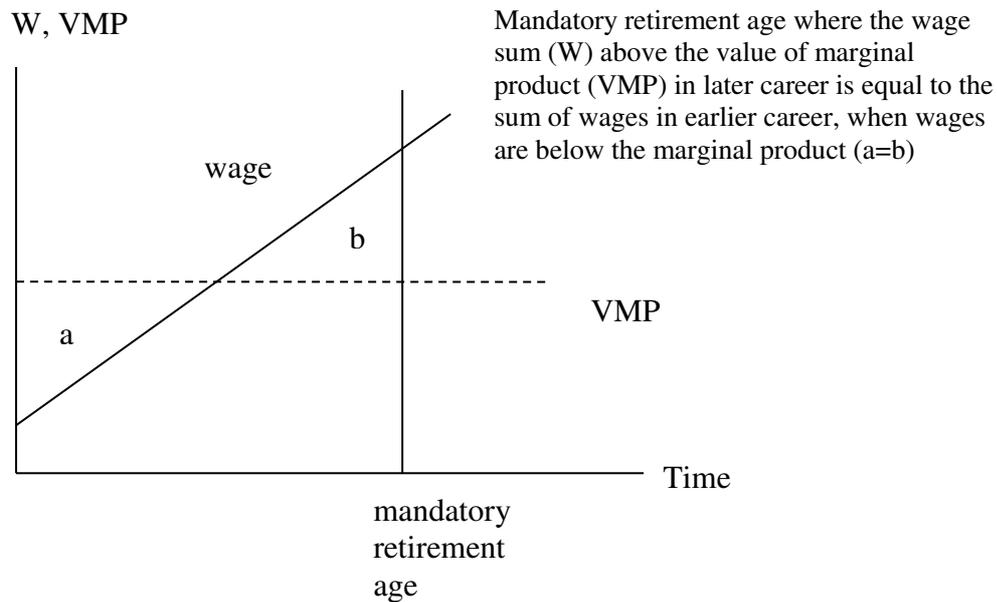
These contradicting results might indicate that the linkages between the finance domain and employment practices are in reality more loosely related than what the theoretical model suggests. Yet, such a conclusion seems premature. In fact, the existing statistical analyses have all one major problem which severely limits their

usefulness, and that is the poverty of the underlying data which focus solely on the presence or absence of a pay for performance system. A more meaningful analysis of the relationship between corporate governance factors and pay reform would require detailed information on how these systems are implemented in practice and what particular meaning a company attaches to the term '*seika shugi*'. However, because the understanding of pay for performance varies substantially among companies, the available regression analyses do not really give us a thorough understanding of the relationship at this point.

What is the relationship between recent changes in labour legislation and pay system reform?

The relationship between mandatory retirement and seniority-based pay is a classic example of a symbiotic relationship between factors that increase one another's effectiveness. Lazear (1979) has shown theoretically that mandatory retirement is a rational practice used in combination with a seniority-based compensation system, because workers in their later careers receive wages which surpass their individual productivity in order to make up for earlier wage losses. In such a setting, workers cannot be expected to retire voluntarily, so firms will try to cap increasing wage costs by fixing a mandatory retirement age. If the retirement age is set 'correctly', the wage sum over time equals exactly the marginal product. In Figure 2 the 'correct' mandatory retirement age would be at the point where the areas of a and b are of equal size.

Figure 2: Lazear's Model of Delayed Payment Contracts



Source: The author, based on Hutchens 1989: 55.

Mandatory retirement has been very common in Japan. For example, in the mid-1970s almost 50% of companies had a mandatory retirement age of 55 years or less (SCKKT 1997: 76). Although this practice has its rationality in the seniority-based pay system and has therefore been favoured by Japanese employers, it has also always posed challenges for labour unions and policy makers who have continuously sought to close the gap between company retirement and eligibility for public old-age pension benefits through an increase in the legal minimum age for mandatory retirement (Shintani 2008).

The legal regulations concerning the minimum mandatory retirement age are laid down in the Law Concerning the Stabilization of Employment of Older Persons (*Kōnenreisha nado Shokugyō Antei Taisaku Kihon*) which was enacted in 1986.¹⁰ This legislation and its various revisions have aimed at the gradual extension of the mandatory retirement age to 60, a target which was finally made compulsory in 1998. Once this target was reached, another revision in 2000 encouraged employers to make efforts to ensure stable employment up to the age of 65. These demands were finally strengthened through yet another revision in June 2004. According to this latest

¹⁰ See Yamashita 2007 and OECD 1995 for more details concerning this law.

regulation, mandatory retirement at age 60 is still legal. However, the law obliges companies to take one of the following steps to enable workers to work beyond this age: they can (a) adopt a continuing employment scheme while leaving the mandatory retirement age at 60, (b) raise the mandatory retirement age, or (c) abolish the mandatory retirement age as such. Continuing employment will, in principle, be available for all workers who wish to continue working, but firms can use labour-management agreements to limit the range of eligible workers. For example, the agreements might contain abstract terms such as ‘cooperative person’ or ‘person of good work behavior’ (Yamashita 2007). Furthermore, until 2009, temporary measures made it possible for companies with more than 300 employees to limit the workers eligible for continued employment by stipulating conditions in working rules. Companies with less than 300 workers have an even longer grace period, until 2011.

How these legal changes will impact employment and recruiting practices in the long run remains to be seen, but a survey by the Japan Institute for Labour Policy and Training among 5,000 companies with more than 300 employees (response rate 22.1%) from October 2006 showed that 43.6% of companies reacted by introducing a reemployment system, whereas 32.7% adjusted their existing reemployment systems. Furthermore, 49.3% of companies answered that they planned to increase or had already increased their mandatory retirement age. Among those, 63.9% planned to raise the mandatory retirement age step-by-step with the increase of the age of eligibility for public pension insurance, whereas 32.8% answered that they had already raised their mandatory retirement age to 65 (NRSKKK 2007).

From a company perspective, the described extension of the mandatory retirement age over time and the latest provisions to establish continued employment programs obviously have cost implications under a seniority-based compensation system. Companies are thus facing a social dilemma and a reputational problem: when today’s older workers entered their careers, they subscribed to implicit contracts according to which their wages would be set below their productivity in their earlier careers, but would rise above their productivity in their later careers. Older workers are therefore likely to resent the introduction of performance-based pay and insist instead on the fulfilment of their implicit contracts. The companies, on the other hand, have not only been facing demographically induced increases in their wage costs, but are now also gradually losing their mandatory retirement options. From their perspective, the introduction of performance-based pay is therefore an attractive

option to lessen cost pressures in the short-term, even though such pay systems might not necessarily be most compatible with other practices in the companies.

6. Conclusion

This article has sought to shed light on the ongoing transformation of Japanese pay practices. It is clear that many companies are currently experimenting with new compensation practices and that performance-related pay components are becoming increasingly popular. However, these changes do not affect workers on all hierarchical levels in the same way and tend to apply more to managerial than non-managerial workers. Moreover, the particular understanding of what performance-based pay means, how to measure performance, and whether and to what degree to focus on individual and/or group performance, varies across firms.

The success of the reformed pay systems in terms of improved profitability or labour cost containment remains mixed. More firm-level studies are needed to establish under which specific conditions such systems have improved employees' motivation without negatively impacting cooperative behaviour and strategic long-term planning.

The influence of changes in corporate governance on pay systems appears to be limited. However, the fundamental problem to conclusively test this relationship lies in the poverty of the underlying statistical data which indicate only the existence or absence of a performance-based pay system, not taking into account how individual firms understand performance and how they implement performance-based systems.

Recent changes in labour legislation in terms of the extension of the mandatory retirement age and the latest provisions to establish continued employment programs are likely to encourage firms to find ways to further flatten their age-earnings profiles. It is therefore possible that more and more companies might not only consolidate their pay-for-performance systems for managerial workers, but that they will also aim to include more pay-for-performance factors into the pay systems of non-managerial workers. In any case, against the backdrop of the discussed demographic pressures and the need for incentive systems that are compatible with the requirements of more specialist workers, we are unlikely to see a major revival of the hitherto seniority-oriented wage systems.

References

- Abe, Masahiro. 2007. 'Why Companies in Japan are Introducing Performance-based Treatment and Reward Systems – the Background, Merits and Demerits.' *Japan Labor Review* 4 (2): 7-36.
- Abe, Masahiro and Takeo Hoshi. 2007. 'Corporate Finance and Human Resource Management in Japan.' In *Corporate Governance in Japan*, eds. Masahiko Aoki, Gregory Jackson and Hideaki Miyajima. Oxford: Oxford University Press: 257-281.
- Ahmadjian, Christina. 2007. 'Foreign Investors and Corporate Governance in Japan.' In *Corporate Governance in Japan*, eds. Masahiko Aoki, Gregory Jackson and Hideaki Miyajima. Oxford: Oxford University Press: 125-150.
- Aoki, Masahiko. 1988. *Information, Incentives and Bargaining in the Japanese Economy*. Cambridge: Cambridge University Press.
- . 1990. 'Toward an Economic Model of the Japanese Firm.' *Journal of Economic Literature* 28 (1): 1-27.
- . 1994. 'The Japanese Firm as a System of Attributes: A Survey and Research Agenda.' In *The Japanese Firm: The Sources of Competitive Strength*, eds. Masahiko Aoki and Ronald Dore. Oxford: Oxford University Press: 11-40.
- Brunello, Giorgio. 1991. 'Bonuses, Wages and Performances in Japan: Evidence from Micro Data.' *Ricerche Economiche* 45 (2-3): 377-396.
- Clark, Robert L. and Naohiro Ogawa. 1992. 'Employment Tenure and Earnings Profiles in Japan and the United States.' *The American Economic Review* 82 (1): 336-345.
- Debroux, Philippe. 2003. *Human Resource Management in Japan: Changes and Uncertainties*. Hampshire: Ashgate.
- Forbes – Nihonban*. 2004. 'Karakuri suru "Seikashugi".' (Resorting to Tricks 'Seikashugi'). In *Forbes–Nihonban*, November: 128-137.
- Freeman, Richard B. and Martin L. Weitzman. 1987. 'Bonuses and Employment in Japan.' *Journal of the Japanese and International Economy* 1 (2): 168-194.
- Fujimura Hiroyuki. 1998. 'Kanrishoku ni yoru Hyōka Seido no Unyō – Sa wo Tsukeru Jinji Seido ha Kanō ka.' (The Operation of an Appraisal System by Managers – Is a Personnel System Seeking Disparity Possible?). *Nihon Rōdō Kenkyū Zasshi* 460: 17-27.
- Genda Yuji. 1998. 'Japan: Wage Differentials and Changes since the 1980s.' In *Wage Differentials: An International Comparison*, ed. Toshiaki Tachibanaki. London: MacMillan: 35-71.

Genda Yuji, Kambayashi Ryo, and Shinozaki Takehisa. 2001. 'Seikashugi to Nōryoku Kaihatsu: Kekka toshite no Rōdō Iyoku.' (Performance-related Pay and Skill Development: The Resulting Motivation to Work). *Soshiki Kagaku* 34 (3): 18-31.

Gordon, Andrew. 1985. *The Evolution of Labor Relations in Japan: Heavy Industry, 1853-1955*. Cambridge, MA: Harvard University Press.

Hashimoto, Masanori and John Raisian. 1985. 'Employment Tenure and Earnings Profiles in Japan and the United States.' *The American Economic Review* 75 (4): 721-735.

———. 1992. 'Employment Tenure and Earnings Profiles in Japan and the United States: Reply.' *The American Economic Review* 82 (1): 346-354.

Hutchens, Robert M. 1989. 'Seniority, Wages and Productivity: A Turbulent Decade.' *Journal of Economic Perspectives* 3 (4): 49-64.

Ishida Mitsuo. 2006. 'Chingin Seido Kaikaku to Rōshi Kankei.' (Wage System Reform and Industrial Relations). In *Chingin Seido to Rōdō Kumiai no Torikumi ni kan suru Chōsa Kenkyū Hōkokusho*. Tokyo: Rengō Sōgō Seikatsu Kaihatsu Kenkyūjo: 11-49.

Jackson, Gregory, Martin Hoepner and Antje Kurldelbusch. 2005. 'Corporate Governance and Employees in Germany: Changing Linkages, Complementarities, and Tensions.' In *Corporate Governance and Labour Management: An International Comparison*, eds. Howard Gospel and Andrew Pendleton. Oxford: Oxford University Press: 84-121.

Jackson, Gregory. 2007. 'Employment Adjustment and Distributional Conflict.' In *Corporate Governance in Japan*, eds. Masahiko Aoki, Gregory Jackson and Hideaki Miyajima. Oxford: Oxford University Press: 282-309.

JILPT (Japan Institute for Labour Policy and Training). *Labor Situation in Japan and Analysis: Detailed Exposition 2009/2010*. Tokyo: JILPT.

JMA (Japan Management Association). 2005. 'Seika Shugi Jinji ni kan suru Kenkyū.' (Research Concerning Performance-based Pay). Available online at http://www.jma.or.jp/keikakusin/2005/20050316_murahashi.pdf (accessed 21 September 2009).

Joh Shigeyuki. 2004. *Uchigawa kara Mita Fujitsu – 'Seika Shugi' no Hōkai* (An Inside Look of Fujitsu – The Collapse of the Performance-based Pay System). Tokyo: Kōbunsha.

———. 2005. *Nihon-gata Seika Shugi no Kanōsei* (The Possibility of a Japanese-style Performance System). Tokyo: Tōyōkeizai Shinpōsha.

Jones, Derek C. and Takao Kato. 1995. 'The Productivity Effects of Employee Stock-Ownership Plans and Bonuses: Evidence from Japanese Panel Data.' *The American Economic Review* 85 (3): 391-414.

Kambayashi, Ryo, Daiji Kawaguchi, and Izumi Yokoyama. 2008. 'Wage Distribution in Japan, 1989-2003.' *Canadian Journal of Economics* 41 (4): 1329-1350.

Kato, Takao and Motohiro Morishima. 2003. 'The Nature, Scope and Effects of Profit Sharing in Japan: Evidence from New Survey Data.' *The International Journal of Human Resource Management* 14 (6): 942-955.

Kōnenreisha nado Koyō Antei nado ni Kansuru Hōritsu (Law Concerning the Stabilization of Employment of Older Persons), (Law No. 68 of May 25, 1971). English translation by the Japan Institute for Labour Policy and Training. Available online at http://www.jil.go.jp/english/laborinfo/library/documents/llj_law16.pdf (accessed 21 September 2009).

Kōseirōdōshō Daijin Kanbō Tōkei Jōhōbu (KDKTJ). 2001. *Heisei 13-Nenpan Shūrō Jōken Sōgō Chōsa* (2001 General Survey on Working Conditions). Tokyo: Rōdō Kōsei Kenkyūjo.

———. 2004. *Heisei 16-Nenpan Koyō Kanri Chōsa* (2004 Survey on Employment Management). Available online at <http://www.mhlw.go.jp/toukei/itiran/roudou/koyou/kanri/kanri04/07.html> (accessed 1 August 2009).

———. 2005. *Heisei 16-Nenpan Shūrō Jōken Sōgō Chōsa* (2005 General Survey on Working Conditions). Available online at <http://www.mhlw.go.jp/toukei/itiran/roudou/jikan/syurou/04/4-2.html> (accessed 1 August 2009).

———. 2007. *Heisei 19-Nenpan Shūrō Jōken Sōgō Chōsa* (2007 General Survey on Working Conditions). Available online at <http://www.e-stat.go.jp/SG1/estat/List.do?bid=000001012726&cycode=0> (accessed 1 August 2009).

Lazear, Edward P. 1979. 'Why is there Mandatory Retirement?' *The Journal of Political Economy* 81(6): 1261-1284.

Magota Ryōhei. 1970. *Nenkō Chingin no Ayumi to Mirai: Chingin Taikei 100-Nenshi*. (The Development of Seniority-oriented Pay and its Future: a 100-year History of Wages). Tokyo: Sangyō Rōdō Kenkyūjo.

Meyer-Ohle, Hendrik. 2009. *Japanese Workplaces in Transition – Employee Perceptions*. Basingstoke: Palgrave Macmillan.

Mitsubishi Motors. 2003. *Kumiaiin Shain no Jinji Seido Kaisei Keikaku ni tsuite*. (Reform of the New Human Resource Management System for Union Members). Tokyo: Mitsubishi Motors.

Miyamoto, Dai and Junpei Higuchi. 2007. 'Paying for Success: Performance-Related Pay Systems and its Effects on Firm Performance in Japan.' *Asian Business and Management* 6: 9-31.

Morishima Motohiro. 1997. 'Kigyōnai Chingin Kakusa no Soshikironteki Inpurikēshon.' (Organizational Implications of Firm-level Wage Disparities). *Nihon Rōdō Kenkyū Zasshi* 449: 27-36.

———. 2002. 'Pay Practices in Japanese Organizations: Changes and Non-changes.' *Japan Labor Bulletin*, April 1: 8-13.

Nakajima Tetsuo, Matsushige Hisakazu, and Umezaki Osamu. 2004. 'Chingin to Satei ni Mirareru Seika Shugi Dōnyū no Kōka: Kigyōnai Maikurodēta ni yoru Bunseki.' (The Effect of the Introduction of Performance-based Pay on Wages and Assessment: An Analysis Based on Firm-level Data). *Nihon Keizai Kenkyū* 48: 18-33.

Nakamura Keisuke. 2006. *Seika Shugi no Jijitsu* (The Truth about Performance-based Pay). Tokyo: Tōyō Keizai Shinpōsha.

———. 2007. 'Seika Shugi to Jinji Kaikaku.' (The Performance-based Salary System and Personnel Management Reforms in Japan). *Nihon Rōdō Zasshi* 560: 43-47.

Nikkeiren. 1995. *Nihonteki Keiei no Shinjidai* (A New Era of Japanese-style Management). Tokyo: Nihon Keidanren.

Nikkeiren Nōryōkushugi Kanri Kenkyūkai (NNKK) 1969. *Nōryōku shugi kanri: sono riron to jissen* (Administration of Skill-based Pay – Theory and Practice). Tokyo: Nihon Keieisha Dantai Renmei Kōhōbu.

Nihon Rōdō Seisaku Kenkyū Kenshū Kikō (NRSKKK). 2006. 'Gendai Nihon Kigyō no Jinzai Manējimento' (The Contemporary Management of Japanese Companies). *Rōdō Seisaku Kenkyū Hōkokusho No. 61*.

———. 2007. *Kōnenreisha no Keizoku Koyō no Jittai ni kan suru Chōsa - Heisei 19 Nen 4 Gatsu* (Survey on the Employment of Older Workers, April 2007). Available online at <http://www.jil.go.jp/press/documents/20070402.pdf> (accessed 1 August 2009).

Organization for Economic Cooperation and Development (OECD). 1977. *The Development of Industrial Systems: Some Implications of the Japanese Experience*. Paris: OECD.

———. 1995. *The Labour Market and Older Workers*. Paris: OECD.

Ogoshi, Yonosuke. 2006. 'Current Japanese Employment Practices and Industrial Relations: The Transformation of Permanent Employment and the Seniority-Based Wage System.' *Asian Business and Management* 5: 469-485.

Ohashi, Isao. 1989. 'On the Determinants of Bonuses and Basic Wages in Large Japanese Firms.' *Journal of the Japanese and International Economy* 3 (4): 451-479.

Ohkusa, Yasushi and Fumio Ohtake. 1997. 'The Productivity Effects of Information Sharing, Profit Sharing, and ESOPs.' *Journal of the Japanese and International Economies* 14 (6): 385-402.

Ohtake, Fumio. 1998. 'The United States.' In *Wage Differentials: An International Comparison*, ed. Toshiaki Tachibanaki. London: MacMillan: 108-144.

Prendergast, Canice. 1999. 'The Provision of Incentives in Firms.' *Journal of Economic Literature* 37 (1): 7-63.

Rebick, Marcus. 2005. *The Japanese Employment System – Adapting to a New Economic Environment*. Oxford: Oxford University Press.

Rengō Sōgō Seikatsu Kaihatsu Kenkyūjo. 2005. *Chingin Seido to Rōdō Kumiai no Torikumi ni kan suru Chōsa Kenkyū Chūkan Hōkokusho* (Intermediate Report on a Survey About the Wage System and Labour Union Response). Tokyo: Rengō Sōgō Seikatsu Kaihatsu Kenkyūjo.

Rōmu Gyōsei Kenkyūjo. 2005. *Seika Shugi Jinji Seido no Dōnyū Kōka to Mondaiten*. (The Results and Problems in the Introduction of Performance-based Pay Systems). Tokyo: Rōmu Gyōsei Kenkyūjo.

Sasajima Yoshio. 2004. Sōkatsu – Jinji Kanri no Kōzō Kaikaku to Seika Shugi Chingin no Ishiki/Katsuyō/Kadai (Summary: Structural Reform of Personnel Management and Consciousness, Practical Use and Problems Related to Performance-based Pay). In *Seika Shugi Jinji/Chingin VII: Senshin 5 Sha no Jitsurei Kenkyū*, ed. Shakai Keizai Seisansei Honbu Seisansei Rōdō Jōhō Sentā. Tokyo: Shakai Keizai Seisansei Honbu Seisansei Rōdō Jōhō Sentā.

Sasajima Yoshio and Shakai Keizai Seisansei Honbu. 2000, 2002, 2003, 2004, 2007. *Seika shugi jinji · chingin IV, V, VI, VII, IX* (Performance-based Pay – Examples from Various Companies). Tokyo: Shakai Keizai Seisansei Honbu Seisansei Rōdō Jōhō Sentā.

Schaede, Ulrike. 2008. *Choose and Focus – Japanese Business Strategies for the 21st Century*. Ithaca and London: Cornell University Press.

Shakai Keizai Seisansei Honbu. 2000, 2002, 2006. *Nihonteki jinji seido no genjō to kadai* (Actual State and Issues of the Japanese Human Resource Management System). Tokyo: Shakai Keizai Seisansei Honbu Seisansei Rōdō Jōhō Sentā.

Shibata, Hiromichi. 2000. 'The Transformation of the Wage and Performance Appraisal System in a Japanese Firm.' *The International Journal of Human Resource Management* 11 (2): 294-313.

Shintani, Nobuyuki. 2008. 'Towards "Ageless" Employment Policies: A Union's Experience of the Extension of the Mandatory Retirement Age.' In *Human Resource*

Management in Ageing Societies, eds. Harald Conrad, Viktoria Heindorf and Franz Waldenberger. Basingstoke: Palgrave Macmillan: 187-202.

Shūkan Asahi. 2003. 'Seika Shugi no Hōkai' (The Collapse of Performance-based Pay). August 29: 22-26.

Sōmuchō Chōkan Kankyoku Kōreishakai Taisakushitsu (SCKKT). 1997. *Sūji de Miru Kōrei Shakai* (The Aging Society in Numbers). Tokyo: Ōkuroshō Insatsukyoku.

Sōmuchō Tōkeikyoku/Tōkei Kenkyūjo. 2008. *Heisei 20 Nen Nihon Tōkei Nenpō* (Japan Statistical Yearbook 2008). Tokyo: Sōmushō Tōkeikyoku.

Takahashi Nobuo. 2004. *Kyomō no seika shugi - Nihon-gata nenkosei fukkatsu no susume* (The Delusion of the Performance-based pay System – the Revival of the Japanese-style Seniority-based System). Tokyo: Nikkei BP.

Tsuru Tsuyoshi. 2001. 'Jinji Hyōka to Chingin Kakusa ni tai suru Jugyōingawa no Hannō: Aru Seizōgyō Kigyō no Jirei Bunseki' (The Response of Employees to Personnel Appraisal and Wage Disparity: Analysis from a Manufacturing Company). *Keizai Kenkyū* 52(2): 143-156.

Yamashita, Noboru. 2007. 'Act Concerning Stabilization of Employment of Older Persons.' *Japan Labour Review* 4 (3): 71-93.