
Japanese-Style Human Resource Management and Its Historical Origins

Chiaki Moriguchi

Hitotsubashi University

This paper examines the economic rationality of Japanese-style human resource management (HRM) and provides an overview of how and in what historical context Japanese firms formed such a model, which had no precedent in the Western world. The core of the Japanese model is an employer's promise to provide human capital investment and employment security to regular employees in exchange for their dedication and skill formation, so as to achieve high productivity. However, this "exchange" is not a legally binding contract but merely an implicit one, and for it to constitute a *self-enforcing* equilibrium, complementary HRM policies—such as internal promotion and joint labor-management consultations—must also be instituted.

With this in mind, this paper defines the Japanese-style HRM model as consisting of *seven* key policies that complement one another, and traces their historical origins by making use of a wealth of preceding research. The process can be divided into four phases: the inter-war period (1914–37) during which leading firms in heavy industry explored new labor policies; the war-time period (1938–45) with heavy military intervention; the turbulent period of fierce labor-management conflict immediately after WWII (1946–55); and the first half of the period of high economic growth (1956–65) during which HRM was combined with productivity improvement.

All phases were important in shaping the Japanese HRM model, but the seven key policies did not come together to form a stable equilibrium until the final phase. During this period, Japanese-style HRM became an engine for economic growth "by the middle class for the middle class," and brought the nation a rare combination of affluence and equality. The lifetime employment became institutionalized since the end of the high growth period and continues to impact Japanese society, both positively and negatively, to this day.

I. Introduction

In 21st-century Japan, as we are accustomed to media reports of "the collapse of the lifetime employment," many of us seem to dismiss such practices as a relic of the past. However, it is worth emphasizing that the incentive mechanisms that underlie Japanese-style human resource management (HRM) are economically rational and have universal appeal. Despite journalistic and anecdotal accounts, rigorous empirical studies have shown that most large Japanese firms maintained long-term employment for their core workers over the "lost decade" of the 1990s (Shimizutani and Yokoyama 2009; Ono 2010; Kato and Kambayashi 2011; Hamaaki et al. 2012). Also, Japanese manufacturers have successfully transplanted Japanese-style HRM to overseas factories, most notably in Southeast Asia (Koike 2012). In the US, the Japanese model came to be known as "innovative" HRM practices and continues to inspire researchers and managers worldwide (Levine 1995;

Pfeffer 1998).

Although there is a large volume of case studies in the field of organizational behavior and managerial economics that suggests the importance of personnel management, it has been difficult to measure the *causal* effects of HRM practices on firm performance. Since the 1990s, however, with advances in personnel economics we have much better theoretical and empirical understanding of why and how personnel practices matter. In particular, recent studies have shown that the choice of HRM practices has a major impact on productivity (Ichniowski, Shaw, and Prenzushi 1997; Lazear 2000; Hamilton, Nickerson, and Owan 2003).

In light of these advances, this paper aims to define what constitutes Japanese-style HRM and examine its economic rationality. At the core of the Japanese model is an employer's promise to provide human capital investment and employment security to all regular employees, including both white-collar and the blue-collar workers, in exchange for their dedication and skill formation (Dore 1973; Koike 1988). However, this "exchange" is not a legally binding employment contract but merely an implicit contract. For this to form a *self-enforcing* equilibrium, an employer must institute a set of complementary policies, such as a system of internal promotion and joint labor-management consultations (Moriguchi 2003; Moriguchi and Ono 2006). With this in mind, this paper defines the Japanese-style HRM model as a set of *seven* key policies that complement one another, and provides an overview of why, when, and in what order Japanese firms developed these HRM policies. The paper concludes with a discussion of the positive and negative consequences of Japanese-style HRM and their implications.

II. Economic Rationality of the Japanese-Style HRM Model

In the 1980s, major Japanese manufacturing firms such as Toyota, Nissan, Toshiba, Hitachi, and Nippon Steel had grown highly competitive and made great inroads into US and European markets. In the US automobile industry, where the mass production system had been invented, Ford and GM were greatly surprised to discover the "flexible" mass production system developed by Toyota and the uniqueness of the underlying HRM methods. As the key to the high productivity of Japanese manufacturers, Japanese-style employment practices came to receive a great deal of attention from overseas researchers and practitioners (Cusumano 1985; Cole 1989; MacDuffie 1995; Helper and Henderson 2014).

Drawing inspiration from Japanese practices, US scholars have since advocated a set of HRM policies named "innovative HRM practices" (also known as "high performance work practices" in the literature). Let us refer to these policies as the US-style innovative HRM model, to be contrasted later with the Japanese-style HRM model. It consists of the following seven policies in the areas of hiring, training, compensation, job design, employment security, labor-management relations, and employee status (Levine 1995; Pfeffer 1998; Ichniowski et al. 1997).

The US-Style Innovative HRM Model

- (1) Selective hiring of new workers
- (2) Extensive company training
- (3) Incentive pay
- (4) Flexible job assignments and small-group activities
- (5) Non-layoff pledge
- (6) Information sharing between labor and management
- (7) Reduced status distinctions across employee levels

Many Japanese readers may wonder what is “innovative” about this model. For that we must compare and contrast these practices with the traditional HRM policies pertaining to blue-collar workers in American firms (Brown and Reich 1989; Moriguchi 2005), which can be summarized as follows.

The US-Style Traditional HRM Model

- (1) Minimal screening in hiring
- (2) Little company training
- (3) Job-based wages
- (4) Narrowly defined jobs and rigid job assignments
- (5) Frequent layoffs and limited job security based on seniority rights
- (6) Non-cooperative labor-management relations
- (7) Major status distinctions between white-collar and blue-collar employees

In other words, the traditional HRM model adopted by US manufacturing firms not only included *none* of the seven policies of the innovative HRM model, but in fact stood in stark contrast to it.¹ In this sense, the innovative model proposed in the 1990s was truly revolutionary to most US firms.

Even though the US-style innovative HRM model was inspired by the Japanese model, the two are not the same. To see how they differ, let us review the features of the Japanese model. According to the textbook description, it consists of three pillars: seniority wages, lifetime employment, and enterprise unionism. Unfortunately, this is merely a superficial description that does not convey the underlying incentive structure. At the heart of the Japanese-style HRM model lies an implicit promise of human capital investment and employment security to all regular employees, including not only white-collar but also blue-collar workers. The managerial objective is to solicit employees to accumulate firm-specific skills that enhance productivity, but to realize this goal, management on one

¹ The traditional HRM model in the US can be characterized as an explicit (and thus legally enforceable) employment contract based on mutual distrust between labor and management. See Moriguchi (2003, 2005) for a historical analysis of how HRM policies in the US and Japan diverged in the 1930s after the Great Depression.

hand must design and motivate employees' skill formation, and labor on the other hand must monitor management so it does not break its promises.

In large Japanese firms, employers hire new personnel all at once through annual recruitment of new graduates. Throughout their careers, employees receive extensive in-house training and education combined with regular job rotations. Employers institute a system of periodic pay raises, bonuses, and internal promotion, all of which is based (not only on seniority but) critically on performance evaluation by supervisors. As Koike (1988) emphasizes, these policies make not only white-collar workers, but also production workers on the shop floor accumulate a broad set of intellectual skills and take part in small-group activities to improve productivity. However, generally speaking, higher productivity leads to labor redundancy that increases managerial incentive to reduce the workforce; knowing this, workers have no incentive to cooperate in productivity improvement. As such, the promise of "lifetime employment"—to be precise, the implicit understanding between labor and management that the firm will not dismiss regular employees before they reach retirement age—is the linchpin of the Japanese-style HRM model. To enforce such an implicit and long-term employment contract, enterprise union (consisting exclusively of regular employees), information sharing, mutual monitoring, and joint consultations between labor and management play a vital role in the Japanese model.

To summarize, the Japanese-style HRM model comprises the following seven policies that are complementary to one another:

The Japanese-Style HRM Model

- (1) Selective once-a-year recruitment of new graduates
- (2) Extensive company training and education
- (3) Periodic pay raises and internal promotion based on evaluations
- (4) Flexible job assignments and small-group activities
- (5) Employment security until the age of mandatory retirement
- (6) Enterprise union and joint labor-management consultations
- (7) Unified personnel management of white-collar and blue-collar employees

When we compare the US-style innovative HRM model and the Japanese-style HRM model, it is clear that the intent of each policy is the same. They differ, however, in specific policy designs: the former is more general and loosely worded, whereas the latter is more specific, thorough, and detailed. As we shall see, such Japanese-style practices as the hiring of new graduates *en masse*, enterprise unions, and the unified management of white-collar and blue-collar employees are the products of historical conditions that were unique to Japan. In other words, we can view the US-style innovative HRM model as a simplified version and a popular edition of the Japanese model that captures its essence.

As one might expect, the rise of alternative HRM models has attracted much scholarly attention. With advances in personnel economics, there have been both theoretical and

empirical explorations of the effectiveness of a variety of personnel policies. In particular, a number of theoretical studies analyzed the incentive mechanisms that underlie the Japanese model and their economic rationales (e.g., Lazear 1979, Aoki 1986, Itoh 1991, Kandel and Lazer 1992, Carmichael and MacLeod 1993, Morita 2005, Kato and Owan 2011). They show that the strength of the Japanese model comes from the empowerment of lower-level employees on the shop and store floor and the effective use of local knowledge they possess to generate “bottom-up” innovations. Its efficiency rests critically on the importance of firm-specific human capital that cannot be readily acquired from the external labor market. The Japanese-style HRM model is therefore not an optimal choice for every Japanese firm.

Empirically, does the choice of HRM policies actually matter? Although many studies have documented correlations between personnel practices and firm performance, they fell short of identifying *causal* effects due to the problems of endogeneity and selection bias. Ichniowski, Shaw, and Prenzushi (1997) were the first to identify the effects of the innovative HRM model on productivity, using detailed micro panel data from the US steel industry. According to their results, the adoption of the seven innovative HRM policies caused a major increase in productivity, but the adoption of an individual policy in isolation had no significant effect. In other words, their study was also the first to empirically confirm the complementarity of HRM policies. Since then, a growing body of empirical research has shown the effectiveness of the innovative HRM model in a variety of industries and countries, including the US, Japan, the UK, Germany, Denmark, Spain, and Italy.²

III. Historical Origins of the Japanese-Style HRM Model

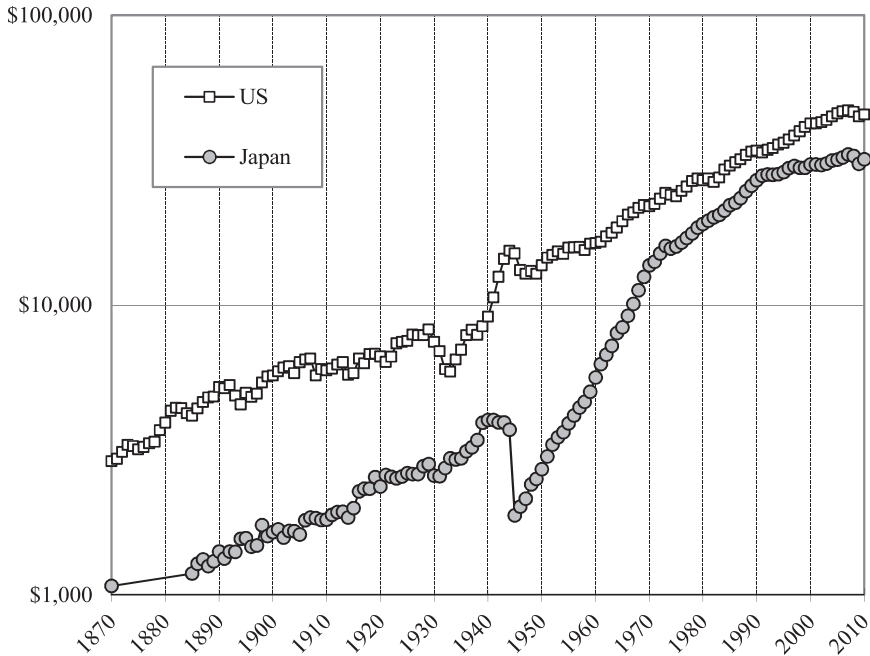
So far, we have observed that the Japanese-style HRM model is economically rational and that its key ideas have diffused internationally under the name of innovative HRM practices. Why did Japanese firms develop such a model, which had no precedent in the Western world? In what order, and under what historical circumstances, did the seven HRM practices come into existence?

Fortunately, there is a wealth of preceding research on the history of personnel management and labor relations in Japan.³ Below, to explore the historical origins of the Japanese model, I make full use of the great classic work by Andrew Gordon (1988) and the new outstanding work by Shinji Sugayama (2011), in addition to my own research.

The history of the Japanese-style HRM model can be divided into four phases: the period from World War I through the beginning of World War II (1914–1937), during which

² For example, see Jones and Kato (1995), Ohkusa and Ohtake (1997), Cappelli and Neumark (2001), Kato and Morishima (2002), Hamilton, Nickerson, and Owan (2003), Bartel (2004), Black and Lynch (2004), Zwick (2004), DeVaro (2006), and Jones and Kato (2011).

³ Excellent research includes, but is not limited to, Showa Dojinkai (1965), Hyodo (1971), Hazama (1978), Odaka (1984), Nishinarita (1988), Gordon (1988), Sugayama (2011), and Koike (2012).



Sources: US: Williamson (2014); Japan: Maddison (2003) updated to 2010.

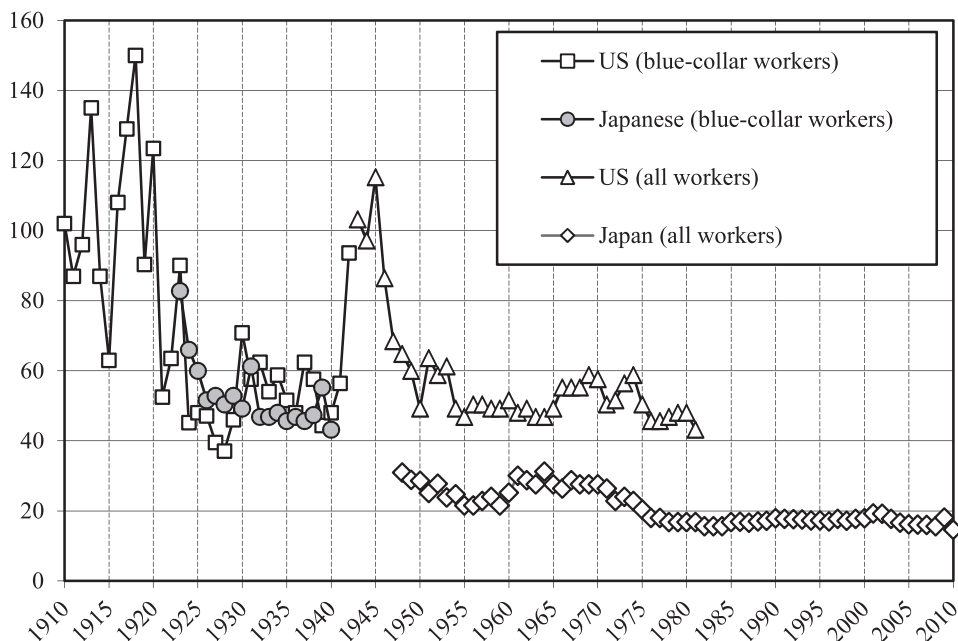
Note: GDP per capita in each country is expressed in 2000 dollars.

Figure 1. Real GDP per Capita in Japan and the US, 1870–2010

leading employers in heavy industry began experimenting with new personnel policies; the wartime period (1938–1945), during which heavy regulations were imposed on the labor market, with mixed results; the turbulent years of labor-management confrontation after WWII (1946–1955), during which status distinctions between blue-collar and white-collar workers were abolished; and the first half of the postwar period of high economic growth (1956–1965), during which HRM was combined with productivity improvement. All phases were important in shaping the Japanese model, but it was not until the high economic growth period that the seven key policies came together to form a stable and self-enforcing equilibrium.

To give a long-run overview, Figure 1 presents real GDP per capita in Japan and the US from 1870 to 2010 (expressed in 2000 US dollars). Industrialization in Japan began in earnest in the 1880s and per capita income grew from 1890 to 1937 at a rate higher than that in the US. Japanese GDP per capita fell sharply during WWII, but grew at the average annual rate of 7% between 1946 and 1973. The living standards of the Japanese continued to improve during the period of stable growth after the 1973 oil crisis and came close to the US level at the height of the bubble economy in 1992. The annual growth rate in Japan has declined to 0.5% in the subsequent two decades.

Figure 2 presents the annual turnover rate of manufacturing workers in Japan and the



Sources: US: Brissenden and Frankel (1920) for 1910–1918; Berridge (1929) for 1919–1929; US Department of Labor, *Employment, Hours, and Earnings*, for 1930–1981. Japan: Nihon Rodo Undo Shiryo Iinkai (1959) for 1923–1938; Ohara Shakai Mondai Kenkyujo (1964) for 1937–1940; Japan Ministry of Health, Labour and Welfare, *Monthly Labour Survey*, for 1948–2010.

Note: The turnover rate is defined as the number of workers who leave an establishment divided by the total number of workers in the establishment. The number and size of establishments as well as the types of workers in a survey differ across sources. For both Japan and the US, the data before 1943 cover only blue-collar workers in the manufacturing sector, whereas the data from 1943 and on cover both white-collar and blue-collar workers.

Figure 2. Annual Turnover Rates of Manufacturing Workers in Japan and the US, 1910–2010

US from 1910 to 2010, as a measure of the instability of employment relations. It represents the ratio of the number of workers who leave an establishment each year (including both voluntary resignations and involuntary dismissals) to the total number of workers in the establishment. Note that the rates are not directly comparable across countries and pre- and post-1943 periods due to differences in data definitions. According to the figure, the turnover rate of factory workers fell substantially in Japan during the 1920s. The turnover rate in the US also declined in the inter-war period, reflecting similar changes in personnel policies at major American firms that encouraged long-term employment (Moriguchi 2003). Although no data are available for Japan during WWII, according to Cohen (1949), like in the US, the turnover rate rose sharply in Japan despite mobility controls imposed by the wartime government. By the late 1940s, however, the turnover rate of Japanese workers had

fallen to a level far below that of US workers (no data for US are available after 1981). After a temporary increase in the early 1960s, the turnover rate in Japan declined to less than 20% in the 1970s and stayed low through the 1990s and 2000s. It is of great interest to investigate the formation of HRM policies that underlie this long-run trend.

1. Employment Practices during the Early Industrial Period (1880–1910)

Let us begin the historical analysis by examining employment practices at factories during the early days of industrialization in the Meiji Period (1868–1912).⁴ As Gordon (1988) vividly describes, Japanese working-class society today could not be more different from that of 1900. First, there was a highly competitive and fluid labor market. Second, there was a *de facto* class system within a firm where management drew sharp status distinctions between white-collar staff and blue-collar workers. Furthermore, in contrast to what we tend to imagine, Meiji-era factory workers were neither hardworking nor dedicated, nor were they loyal to any employer. These differences underscore the fact that Japanese-style HRM is not a continuation of traditions that date back to the early modern era, but a new system that emerged in the course of modernization.

At the turn of the 20th century, the labor market in Japan was active, fluid, and highly competitive. Employment relations in the workplace were short-lived due to both frequent resignations and dismissals, regardless of the size and ownership of the firm. Even in large state-owned factories, the average length of tenure was less than a year. It was the norm among skilled male workers to move frequently from one workplace to another to acquire new skills and earn higher wages. They were known for their self-reliance and footlooseness. At factories, the management of blue-collar workers was delegated to foremen who held much authority in hiring and firing, job assignments, and supervision. When the need arose, foremen hired workers from the external labor market, assigned several tasks in a short trial period, and determined wages according to their skill and experience. There was no wage penalty for workers who were hired mid-career. When business slowed, foremen were quick to dismiss workers. These observations suggest that during the early days of industrialization, there was little firm-specific component in the skills of blue-collar workers.

Before World War II, Japanese employers made clear distinctions between the status and treatment of white-collar and blue-collar workers. As Sugayama (2011) documents, at the end of the 19th century, not just blue-collar workers but also white-collar workers (including engineers, technicians, and managers) changed jobs frequently in the course of their career development. Early in the 20th century, to secure talented personnel for white-collar positions, large firms began to recruit new graduates of higher education institutions. To retain them and instill loyalty, management introduced such policies as periodic pay raises,

⁴ Much of the description in this subsection draws on Gordon (1988, chap. 1), and Sugayama (2011, chap. 1).

end-of-term bonuses, paid sick leave, company cafeterias, and company housing. These benefits, however, were offered exclusively to white-collar staff, as management instituted separate sets of rules and policies pertaining to white-collar and blue-collar employees.

Most notably, while the workplace rules for white-collar workers were concise and abstract, those for blue-collar workers were extremely detailed line-by-line stipulations of what to do and what not to do, complete with the prescription of punishments for the infringement of these rules. For example, blue-collar workers were made to enter and leave the workplace through different gates from white-collar staff, and were subjected to body searches by security guards. Such treatment mirrored a widely shared view among employers that production workers were “an uneducated, undisciplined, indolent, unruly, and untrustworthy lot.” It must be noted, however, that this derogatory view was not entirely unwarranted at the turn of the twentieth century. In fact, lower-level managers and engineers were regularly tormented by factory workers who arrived late, left early, or took absences without permission, were abusive if not violent in word and deed, and refused to obey supervisors’ instructions.

To summarize, during the early days of industrialization, employment practices at large firms were characterized by: (1) year-round hiring of skilled workers as needed, (2) no in-house training, (3) day-to-day job assignments by a foreman, (4) competitive wages paid according to workers’ skill and experience, (5) short employment duration due to frequent resignations and layoffs, (6) mutual distrust between workers and management, and (7) sharp distinctions in the status and treatment of blue-collar and white-collar workers. In short, not one of the constituent elements of the Japanese-style HRM model existed at the turn of the 20th century.

2. New Employment Policies during the Inter-War Period (1914–1938)

In the early decades of the 20th century, with the rise of capital-intensive industry, Japanese firms grew larger, employing hundreds of workers.⁵ Leading employers in heavy industry, such as Mitsubishi Shipbuilding, Hitachi Engineering Works, Shibaura Engineering Works (present-day Toshiba), Sumitomo Metals, and Nippon Kokan (present-day JFE Steel), began attempting to improve the discipline, morale, and efficiency of factory workers. To foster future foremen and line leaders, major firms launched an in-house apprenticeship program and carefully selected a small number of teenage boys newly graduated from school and trained them at company facilities. To encourage them to stay with the company, management also offered semiannual pay raises and prospects of internal promotion. However, even at these firms, the number of in-house apprentices was extremely small, and the vast majority of blue-collar workers were experienced factory hands hired mid-career.

⁵ The description in this subsection draws on Gordon (1988, chaps. 4–6), Odaka (1984), Sugayama (2011, chap. 3), and Moriguchi (2000).

It was World War I (1914–1918) that triggered major changes in labor management at Japanese factories. Facing unprecedented labor shortages caused by war demand, manufacturing firms sought to retain skilled and semi-skilled workers by introducing employment policies that had previously applied only to white-collar or elite blue-collar workers, including semiannual pay raises, bonuses for attendance and long service, severance pay (the amount of which was reduced in the case of voluntary resignation), and various company benefits. However, many of these policies were shortsighted responses to the wartime boom, and many employers subsequently scaled back or abolished their policies. Nonetheless, through the process of trial and error, by the late 1930s among leading heavy industrial firms, there emerged a set of HRM policies that aimed to promote diligence and long service among male factory workers.

However, as Gordon (1988) points out, even at the pioneering firms, the implementation of HRM policies during the inter-war period was arbitrary, erratic, and inconsistent. Most importantly, management encouraged long-term employment when times were good, but in a recession they made major layoffs and let go even skilled employees with long service, contradicting their own policy. For another example, periodic pay raises were by design based on performance evaluations, and were given not to all but to a selected few who demonstrated outstanding merit. Both the amount of the pay raise and the fraction of blue-collar workers receiving any raise were much smaller than those of white-collar staff. Moreover, the daily wages to which the periodic pay raise applied typically made up less than half of the take-home pay of factory workers, and the rest was paid at a piece rate. What is more, in the absence of clear criteria, supervisors held great discretion in determining who would receive a raise, to the dismay of workers. When business slowed, management could and did postpone periodic pay raises indefinitely.

These limitations notwithstanding, at leading firms, wages of blue-collar workers began to show positive correlations with their length of service for the first time during the inter-war period (Odaka 1984). There was a notable decline in the separation rate of manufacturing workers in the 1920s, especially at large establishments. These observations indicate that new HRM policies probably had some effect in reducing labor turnover of blue-collar workers.

Even though the new HRM policies in the inter-war period included some key elements of the Japanese-style HRM model, it is important to note that they did not constitute a self-enforcing equilibrium (Moriguchi 2003). The greatest problem was that management had sole discretion in implementing the policies, and that there was no mechanism for blue-collar workers to monitor management and check their opportunism. During this period, Japanese workers had no right to strike or bargain collectively, and there were no laws to protect labor unions. This is not to say that workers were entirely powerless. In fact, from the late 1910s to the mid 1920s, there was a surge in the labor movement in Japan, and the number of labor unions was on the rise. To preempt unionization, leading firms instituted factory committees (a form of employee representation), where blue-collar workers for the

first time were given the opportunity to communicate with management and voice their opinions. Most notably, when employers resorted to large-scale dismissals during the economic downturns in the 1920s, blue-collar workers in major firms *fought* against them, suggesting that these workers were beginning to value employment security. While the workers were unable to prevent the dismissals, they were often successful in reducing the number of dismissals or increasing the amount of severance pay. These oppositions were the precursor of the great anti-dismissal struggles in the early 1950s that played an important role in establishing employment security in the post-WWII era.

Another reason why the HRM policies in the inter-war period were ineffective was the deep-rooted mistrust between blue-collar workers and management. Even though management extended the application of HRM policies that encourage long-term employment to blue-collar workers, in reality, there was a huge gap in the implementation of these policies between white-collar and blue-collar workers. For example, end-of-term bonuses for white-collar workers were regularly more than 10 times those of their blue-collar counterparts. The sharp status distinctions between blue-collar and white-collar workers were firmly entrenched and made it difficult for blue-collar workers to develop any sense of corporate loyalty.

To summarize, during the inter-war period, leading employers in heavy industry instituted: (1) annual recruitment of a small number of new graduates, (2) an in-house apprenticeship program for elite blue-collar workers, (3) more systematic job assignments, and (4) periodic pay raises and bonuses pertaining to blue-collar workers. However, there continued to be (5) mass dismissals in an economic downturn, (6) mutual distrust between blue-collar workers and management despite the establishment of factory committees, and (7) large disparities between the status and treatment of white-collar and blue-collar workers.

3. Military Interventions during World War II (1938–1945)

During World War II, to maximize wartime production, the military government intervened heavily in all aspects of the Japanese economy, including the labor market, personnel management, and labor relations.⁶ While there are detailed official records of the ordinances and regulations that the government issued, there are few records that document their actual impact on the behavior of management and workers. Some historians argue that military interventions had a major impact in shaping the Japanese-style employment system, pointing to similarities between the regulations stipulated and Japanese-style practices, while others see little impact, arguing that, even with an authoritarian government, it was difficult (or even counterproductive) to coerce employers and workers to comply with the regulations that were incompatible with their incentives. The truth lies somewhere in between these two views.

⁶ The description in this subsection draws on Cohen (1949), Moriguchi (2000), Sumiya (1971), Gordon (2012, chaps. 7–8), and Sugayama (2011, chap. 3).

For example, to secure manpower, the wartime government imposed a series of mobility controls that effectively prohibited factory workers in strategic industries from changing employers. Even though the government issued a variety of measures to enforce these regulations, workers continued to find loopholes and moved among factories (Cohen 1949). Therefore, it is unlikely that wartime mobility controls had a permanent effect in reducing the turnover rate of blue-collar workers.

It is also important to note that many of the wartime labor regulations were modeled after the HRM practices developed by leading firms during the inter-war period. In the process of drafting ordinances, bureaucrats studied private-sector practices as a possible model or revised their drafts when meeting opposition from business leaders, so as not to undermine existing employment practices. In these cases, the wartime regulations did little to change the HRM policies of major firms but instead institutionalized their policies as the industry standard.

For example, to train skilled workers, the government issued an ordinance in 1939 to make it mandatory for all factories in strategic industries with 200 or more workers to establish corporate apprenticeship programs, modeled on the practice at major firms.⁷ As Sumiya (1971) documents, however, no more than 1,500 firms nationwide actually instituted a program as directed, and even at these firms, the program lost substance as the war situation deteriorated. By the end of WWII, there were only a few of the largest firms providing training to workers. These observations indicate that it is too simplistic to conclude that corporate training diffused widely among Japanese firms due to military regulations.

Let us turn to wage controls. To protect the livelihood of factory workers and boost wartime production, the government imposed a series of wage regulations starting in 1939. Among other things, the government established minimum wages according to the age and gender of workers and made periodic pay raises mandatory for all employees, which increased the seniority component in the determination of wages. Although management lost their discretion to give periodic pay raises to selected employees, the laws permitted the amount of pay raises to vary according to employee performance, preserving a critical aspect of the incentive structure. Case studies show that many firms revised their wage policies to comply with the regulations. This suggests that, unlike mobility controls, wage controls had a large effect on firm policies and standardized wage structures across firms.

However, these regulations did little to reduce the unequal treatment of white-collar and blue-collar employees, and gave it *de facto* approval by allowing management to maintain separate wage rules. The same was true of an establishment-level committee of the Patriotic Industrial Association established under government initiatives to promote la-

⁷ It is worth noting that US government also made worker training mandatory during WWII, but in contrast to the case in Japan, it took the form of industry-wide training programs. This is consistent with the observation that, in the US, company training at major firms had declined after the New Deal labor reforms of the 1930s and industrial unions had taken root before WWII (see Moriguchi 2000).

bor-management cooperation. It was the first organization that brought blue- and white-collar workers together as “equal members” of an enterprise. In reality, however, it did not produce tangible results, and elevating the status of blue-collar workers remained merely an ideal.

To summarize, under the wartime regulations, at large Japanese manufacturing firms, (1) new school graduates were allocated through public employment agencies, (2) the establishment of company apprenticeship programs became mandatory, (3) periodic pay raises were mandated to all employees, (5) strict mobility controls were imposed, (6) employee organizations consisting of blue-collar and white-collar workers were introduced, and (7) the equal status of white-collar and blue-collar workers was upheld as an ideal. However, the effectiveness of the regulations varied widely by area. In some cases, the regulations played a role in spreading HRM practices at leading firms to a wider segment of the economy.

4. Labor-Management Confrontation in the Turbulent Postwar Years (1945–1955)

Immediately after Japan’s surrender in 1945, the nation was placed under the indirect governance of the Allied powers, which launched a series of democratic reforms, including the dissolution of *zaibatsu* and the protection of labor rights.⁸ Japanese workers began organizing unions with unprecedented speed and energy. At first, white-collar and blue-collar employees spontaneously formed separate unions at their establishment. Under the slogan of “democratization of management,” however, the two unions soon merged to form what they called an employee union. Newly established unions forcefully demanded the equal treatment of all employees, and the status distinctions between white-collar and blue-collar employees were finally abolished. As Sugayama (2011) emphasizes, this was a vital and decisive step toward the “white-collarization” of blue-collar workers, which is one of the most remarkable features of the Japanese-style HRM model.

While management was paralyzed by economic disorder and political turmoil, many employee unions won extremely favorable contracts that stipulated generous wage increases, company benefits, and employment guarantees. They also won a provision that required every regular employee of a company to be a union member, and in exchange, management won a clause requiring every union member to be an employee of the company. This exclusive employee membership later became a hallmark of enterprise unionism. Labor’s initial victory, however, was soon challenged by management’s counteroffensive.

In 1949, the Allied powers adopted a drastic deflationary policy, plunging the economy into a sharp recession. Unions fiercely opposed rationalization plans, demanding complete withdrawal of proposed mass dismissals. A sense of mutual mistrust between labor and management loomed large. The most violent labor disputes in Japanese history took place in

⁸ The description in this subsection draws on Moriguchi and Ono (2006), Gordon (1988, chaps. 9–10), and Sugayama (2011, introduction, chap. 3).

1949–1954, involving major firms such as Toshiba, Hitachi, Toyota, and Nissan. In almost all major strikes, management eventually prevailed. During long disputes, radical union leaders lost support from core employees, who instead formed new and more moderate unions. Management concluded an agreement with the moderate unions, expelled the radical leaders, and carried out rationalization in consultations with the moderate unions. During the process, unions learned a hard lesson that unrestrained demands would undermine financial viability of the firms, while management learned that unilateral dismissals could provoke very costly labor disputes. The moderate unions laid the foundations for enterprise unionism that took root among large firms during the 1950s.

Contrary to popular belief, there is no statutory law that guarantees employment security in Japan, as the labor laws uphold employers' right to dismiss employees. By the 1960s, however, it was common for Japanese employers to circumvent dismissals through a variety of means, such as reduction of hours, relocation of regular employees, dismissals of temporary workers, and solicitation of voluntary retirement. In the absence of legal enforcement, what compelled management to protect employment of regular workers?

In exchange for their cooperation with management in rationalization, enterprise unions demanded employment security of their members as their first priority. No explicit contractual guarantee, however, was found in union contracts. Instead management and unions at large firms introduced joint labor-management committees in the 1950s to facilitate information sharing and prior consultations on important personnel matters. During business downturns, unions monitored managerial behavior and cooperated in transferring employees and soliciting early retirement if necessary. Enterprise unionism thus became a central internal enforcement mechanism for employment security and played an important role in establishing mutual trust between labor and management.

To summarize, during the decade following the end of WWII, three key HRM policies emerged: the equal treatment of blue-collar and white-collar employees, enterprise unions consisting exclusively of regular employees, and long-term employment. As a result, by the mid-1950s, six of the seven policies that comprise the Japanese-style HRM model were in place, forming a *self-enforcing* equilibrium for the first time. However, these HRM policies were not yet combined with small-group activities, and without this, the economic rationality of the Japanese-style HRM model remained precarious.

5. Japanese-Style HRM in the High Growth Period (1955–1973)

From 1955 to 1973, Japan experienced a sustained period of high economic growth (Figure 1). This was the period during which Japanese firms began to gain a long-term perspective and make serious investments in their employees for future returns.

The term “small-group activities” refers to a team of employees on the shop or store floor exercising direct control over everyday decision-making and problem solving to

achieve high quality.⁹ This was a key innovation and the most studied aspect of the Japanese-style HRM model. The origins of quality management can be traced to the method of statistical quality control (SQC) developed in the US, which was to be used by engineers and not by rank-and-file workers. SQC was introduced to Japan in the 1950s and, in a remarkable turn of events, transformed into a total quality control (TQC) movement that involved *all* employees in productivity improvement.

Although there were many factors behind this development, the elevated status of blue-collar workers, employment security, and cooperative labor-management relations that large Japanese firms had in place by this time were major contributing factors. In promoting small-group activities, management began to provide extensive employee training and education, especially in the form of on-the-job training (OJT) combined with regular job rotations. In the 1960s, small-group activities such as QC circles spread rapidly and OJT became common practice among Japanese manufacturing firms.

Even in the 1950s, large firms routinely hired skilled mid-career workers as temporary workers when needed, and promoted some of them to regular employees. These firms also recruited new middle school graduates for blue-collar positions, but they continued to be a minority well into the 1960s. In the late 1960s, however, a drastic rise in high school attendance led to a sharp decline in the number of middle school graduates entering the labor market, causing a severe labor shortage at a time of rapid economic growth. As leading firms began recruiting high school graduates (who had previously been hired as white-collar workers) for blue-collar positions, they curtailed the hiring of mid-career workers and started a practice of periodic recruitment of new graduates en masse.

The resulting increase in the education level of the blue-collar workforce further raised the incentive for management to provide training and promote small-group activities. With more educated blue-collar employees, major firms developed a new and more sophisticated wage system in which wages were determined according to an employee's ability to perform a job (to be distinguished from job performance itself). Both white-collar and blue-collar employees were awarded periodic pay raises and internal promotions based on their job performance ability as evaluated by their supervisors. The new wage system reduced the seniority component and increased the skill component in wage determination, giving workers greater incentive to accumulate firm-specific human capital. It also separated wages from the actual job performed and enabled more flexible job assignments and broader job rotations. The new wage system was thus complementary to company training and small-group activities.

To summarize, by the late 1960s, large manufacturing firms brought together the seven policies of the Japanese-style HRM model: (1) selective annual hiring of new graduates, (2) extensive company training and education, (3) periodic pay raises and internal

⁹ The description hereafter draws on Cole (1989), Gordon (2012, chap. 11), which was written exclusively for the Japanese edition of Gordon (1988), and Sugayama (2011, chap.5).

promotions based on job performance ability, (4) flexible job assignments and small-group activities, (5) employment security until retirement age, (6) enterprise union and joint labor-management consultations, and (7) unified personnel management of white-collar and blue-collar workers.

IV. Concluding Discussion

As we have seen, the Japanese-style HRM model was formed gradually through half a century of interactions between management and workers, at times confrontational and at other times cooperative. While the process was guided by economic rationality in principle, it was also affected by unique historical events, such as the great labor shortages during WWI, the heavy military interventions during WWII, and the far-reaching democratic reforms under the Allied occupation. Through these events, Japanese firms developed a set of elaborate and interdependent HRM policies that had no parallel in Western nations. The Japanese-style HRM model, which promises human capital investment and employment security to all regular employees to elicit bottom-up innovations and high productivity, became an engine for economic growth “by the middle class for the middle class” and brought a rare combination of affluence *and* equality to postwar Japan. This is in sharp contrast to the early years of industrialization where economic growth was accompanied by rising income inequality (Moriguchi and Saez 2008).

If this was one of the greatest fruits that Japanese-style HRM has borne, there also were costs, as it brought about other forms of social and economic inequality. Because workers in heavy industry have historically been male, the model was applied exclusively to male workers, which encouraged gender-based division of labor in Japanese society where married women were expected to stay home and support male breadwinners. The dedication and long working hours required to be a full member of a Japanese firm became a major hindrance for females to take part in the system. As human capital investment was concentrated on regular workers in large firms, it created significant wage disparities between large and small firms as well as between regular and non-regular employees within the same firm. This, in turn, created intense competition among new school graduates to secure their first jobs, creating “winners” and “losers” among job seekers, with lasting impact. As new graduates moved directly from school to firm and rarely reentered the labor market, their career paths became mono-track and standardized, leaving little room for diversity or experiment. All of these factors cast a long shadow over Japanese society to this day.

Moreover, since the oil crisis in 1973 that marked an end to the high growth period, with the formation of social norms, case laws, and government regulations, Japanese-style HRM became increasingly institutionalized and rigidified (Moriguchi and Ono 2006). Under the favorable conditions of the high growth period (1955–1973), the Japanese model had spread over the much greater segment of the economy, including smaller-sized firms and non-manufacturing firms. Japanese workers and their families began to take “lifetime

employment” for granted and society began placing high priority on employment security. Most notably, when dismissals due to deteriorating business conditions became a major issue during the oil crises in the 1970s, the Supreme Court made a decision to restrict employers’ right to dismiss employees. The courts thus provided *legal* enforcement for long-term employment to a certain degree and extended this practice to non-union firms and small-sized firms throughout the economy. In addition, the government issued various measures to protect employment of regular workers, starting with subsidies for firms to maintain their workforce. These domestic developments weakened the incentive structure embedded in the Japanese-style HRM model, just when it began to draw the world’s attention as the secret of the high productivity.

As we have observed in Section II, compared to US-style innovative HRM policies, the Japanese-style model is more elaborate, specific, and demanding. However, to implement its key ideas and achieve high productivity, it does not have to go so far as to restrict regular employment to male Japanese workers, to recruit only new graduates once a year, to standardize the career path of all regular employees, or even to guarantee lifetime employment. These quintessentially Japanese practices are not inherent to the economic logic, but are the outcomes of unique historical conditions that were subsequently institutionalized. By contrast, training and education, small-group activities, and a certain degree of employment security are central to the Japanese model.

In other words, firms have a considerable degree of freedom to design their own Japanese-style HRM model, or not to choose the Japanese model at all for that matter. Rather than adhering to inherited practices, it may be fruitful for each firm to revisit their economic rationales and experiment to find its own “innovative” HRM policies. From this standpoint, recent experiments among Japanese firms to broaden the definition of regular employees, for example to allow them to have shorter working hours or more limited range of job assignments but with equivalent provision of human capital investment and employment security, is an excellent example of creating a more diverse and flexible Japanese-style HRM model.

References

- Aoki, Masahiko. 1986. Horizontal vs. vertical information structure of the firm. *American Economic Review* 47, no. 5:571–83.
- Bartel, Ann. 2004. Human resource management and organizational performance: Evidence from retail banking. *Industrial and Labor Relations Review* 57, no. 2:181–203.
- Berridge, William. 1929. Labor turnover in American factories. *Monthly Labor Review* 29, no. 1:62–65.
- Black, Sandra, and Lisa Lynch. 2004. What’s driving the new economy? The benefits of workplace innovation. *Economic Journal* 114, no. 493: F97–F116.
- Brissenden, Paul, and Emil Frankel. 1920. Mobility of labor in American industry. *Monthly*

Labor Review 10, no. 6:1342–62.

- Brown, Clair, and Michael Reich. 1989. When does union-management cooperation work? A look at NUMMI and GM-Van Nuys. *California Management Review* 31, no. 4: 26–44.
- Cappelli, Peter, and David Neumark. 2001. Do “high-performance” work practices improve establishment-level outcomes? *Industrial and Labor Relations Review* 54, no. 4:737–75.
- Carmichael, Lorne, and Bentley MacLeod. 1993. Multiskilling, technological change and the Japanese firm. *Economic Journal* 103, no. 416:142–60.
- Cohen, Jerome. 1949. *Japan’s economy in war and reconstruction*. Minneapolis: University of Minnesota Press.
- Cole, Robert. 1989. *Strategies for learning: Small-group activities in American, Japanese, and Swedish Industry*. Berkeley: University of California Press.
- Cusumano, Michael. 1985. *The Japanese auto industry: Technology and management at Nissan and Toyota*. Cambridge, MA: Harvard University Press.
- DeVaro, Jed. 2006. Teams, autonomy, and the financial performance of firms. *Industrial Relations* 45, no. 2:217–69.
- Dore, Ronald. 1973. *British factory – Japanese factory: The origins of national diversity in industrial relations*. Berkeley: University of California Press.
- Gordon, Andrew. 1988. *The evolution of labor relations in Japan: Heavy industry, 1853–1955*. Cambridge, MA: Harvard University Press.
- . 2012. *Nihon roshi kankeishi 1853–2010* [History of labor-management relations in Japan]. Trans. Kazuo Nimura. Tokyo: Iwanami Shoten.
- Hamaaki, Junya, Masahiro Hori, Saeko Maeda, and Keiko Murata. 2012. Changes in the Japanese employment system in the two lost decades. *Industrial and Labor Relations Review* 65, no. 4:810–46.
- Hamilton, Barton, Jack Nickerson, and Hideo Owan. 2003. Team incentives and worker heterogeneity: An empirical analysis of the impact of teams on productivity and participation. *Journal of Political Economy* 111, no. 3:465–97.
- Hazama, Hiroshi. 1978. *Nihon romu kanrishi kenkyu* [Historical studies of Japanese labor management]. Tokyo: Ochanomizu Shobo.
- Helper, Suan, and Rebecca Henderson. 2014. Management practices, relational contracts, and the decline of general motors. Working Paper no. 19867, National Bureau of Economic Research, Cambridge, MA.
- Hyodo, Tsutomu. 1971. *Nihon ni okeru roshi kankei no tenkai* [The evolution of labor-capital relations in Japan]. Tokyo: University of Tokyo Press.
- Ichniowski, Casey, Kathryn Shaw, and Giovanna Prennushi. 1997. The effects of human resource management practices on productivity: A study of steel finishing lines. *American Economic Review* 87, no. 3:291–313.
- Itoh, Hideshi. 1991. Japanese human resource management from the viewpoint of incentive

- theory. *Ricerche Economiche* 45:345–76.
- Jones, Derek, and Takao Kato. 1995. The productivity effects of employee stock ownership plans and bonuses: Evidence from Japanese panel data. *American Economic Review* 85, no. 3:391–414.
- . 2011. The impact of teams on output, quality and downtime: An empirical analysis using individual panel data. *Industrial and Labor Relations Review* 64, no. 2:215–40.
- Kambayashi, Ryo, and Takao Kato. 2011. Long-term employment and job security over the last twenty-five years: A comparative study of Japan and the US. Discussion paper no. 6183, the Institute for the Study of Labor (IZA), Bonn.
- Kandel, Eugene, and Edward Lazear. 1992. Peer pressure and partnerships. *Journal of Political Economy* 100, no. 4:801–17.
- Kato, Takao, and Motohiro Morishima. 2002. The productivity effects of participatory employment practices: Evidence from new Japanese panel data. *Industrial Relations* 41 (4): 487–520.
- Kato, Takao, and Hideo Owan. 2011. Market characteristics, intra-firm coordination, and the choice of human resource management systems: Theory and evidence. *Journal of Economic Behavior & Organization* 80 (3): 375–96.
- Koike, Kazuo. 1988. *Understanding industrial relations in modern Japan*. London: MacMillan Press.
- . 2012. *Kohinshitsu Nihon no kigen* [The origins of Japan's high quality]. Tokyo: Nihon Keizai Shinbun Shuppansha.
- Lazear, Edward. 1979. Why is there mandatory retirement? *Journal of Political Economy* 87, no. 6:1261–84.
- . 2000. Performance pay and productivity. *American Economic Review* 90, no. 5:1346–61. Washington, D.C.: Brookings Institution.
- Levine, David. 1995. *Reinventing the workplace: How business and employees can both win*. Washington, D.C.: Brookings Institution.
- MacDuffie, John Paul. 1995. Human resource bundles and manufacturing performance: Organizational logic and flexible production systems in the world auto industry. *Industrial and Labor Relations Review* 48, no. 2:197–221.
- Maddison, Angus. 2003. *The world economy: Historical statistics*. Paris: OECD Publishing.
- Moriguchi, Chiaki. 2000. The evolution of employment relations in U.S. and Japanese manufacturing firms, 1900–1960: A comparative historical and institutional analysis. Working Paper no. 7939, National Bureau of Economic Research, Cambridge, MA.
- . 2003. Implicit contracts, the Great Depression, and institutional change: A comparative analysis of U.S. and Japanese employment relations, 1920–1940. *Journal of Economic History* 63, no. 3:625–65.
- . 2005. Did the American welfare capitalists breach their implicit contracts during the Great Depression?" *Industrial and Labor Relations Review* 59, no. 1:51–81.
- Moriguchi, Chiaki, and Hiroshi Ono. 2006. Japanese lifetime employment: A century's per-

- spective. In *Institutional change in Japan*, ed. Magnus Blomstrom and Sumner La Croix. London: Routledge.
- Moriguchi, Chiaki, and Emmanuel Saez. 2008. The evolution of income concentration in Japan, 1886–2005: Evidence from income tax statistics. *Review of Economics and Statistics* 90 (4): 713–34.
- Morita, Hodaka. 2005. Multi-skilling, delegation, and continuous process improvement: A comparative analysis of US-Japanese work organizations. *Economica* 72, no. 285:69–93.
- Nihon Rodo Undo Shiryo Inkai. 1959. *Nihon rodo undo shiryō, dai 10 kan* [Historical data of Japanese labor movement, vol.10]. Tokyo: University of Tokyo Press.
- Nishinarita, Yutaka. 1988. *Kindai Nihon roshi kankeishi no kenkyū* [Historical study of the modern Japanese labor-capital relations]. Tokyo: University of Tokyo Press.
- Odaka, Konosuke. 1984. *Rodo shijo bunseki* [An analysis of the labor markets in Japan]. Tokyo: Iwanami Shoten.
- Ohara Institute for Social Research. 1964. *Taiheiyo sensōka no rodōsha jotai* [Labor conditions during the Pacific War]. Tokyo: Toyo Keizai Shinposha.
- Ohkusa, Yasushi, and Fumio Ohtake. 1997. The productivity effects of information sharing, profit sharing, and ESOPs. *Journal of the Japanese and International Economies* 11 (3): 385–402.
- Ono, Hiroshi. 2010. The lifetime employment in Japan: Concepts and measurements. *Journal of the Japanese and International Economies* 24 (1): 1–27.
- Osterman, Paul. 1994. How common is workplace transformation and who adopts it? *Industrial and Labor Relations Review* 47:173–88.
- Pfeffer, Jeffrey. 1998. *The human equation: Building profits by putting people first*. Boston: Harvard Business School Press.
- Shimizutani, Satoshi and Izumi Yokoyama. 2009. Has Japan’s long-term employment practice survived? Developments since the 1990s. *Industrial and Labor Relations Review* 62, no. 3:313–26.
- Showa Dojinkai, ed. 1960. *Wagakuni chingin kozo no shiteki kosatsu* [Historical survey of Japanese wage structure]. Tokyo: Shiseido.
- Sugayama, Shinji. 2011. “*Shusha*” *shakai no tanjo* [Birth of the “company man” society]. Nagoya, Aichi: University of Nagoya Press.
- Sumiya, Mikio. 1971. *Nihon shokugyo kunren hattatsushi (ge)* [A history of the development of Japanese vocational training, vol. 2]. Tokyo: Japan Institute of Labour.
- Williamson, Samuel. 2014. *What was the U.S. GDP then?* Measuring Worth. <http://www.measuringworth.org/usgdp/>.
- Zwick, Thomas. 2004. Employee participation and productivity. *Labour Economics* 11 (6): 715–40.