A Comparative Economic Analysis of Japanese-Style Labor Contracts From a Shared-Growth Perspective[1]

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Abstract

This paper makes a stylized comparison of labor contracts of Japanese firms (J-Firm) and Anglo-American firms (A-Firm) in order to clarify micro-level mechanisms for the macro-level concept of shared growth (i.e., efficiency + equity). As such, the period of study will be the shared-growth era of Japan (circa 1950s to 1980s). The comparison ascribes to J-Firm labor contracts a set of stylized features which set it significantly apart from typical A-Firm labor contracts. The paper also surveys the theoretical explanations for J-Firm labor contracts, and clarifies how such explanations could also contribute to shared growth. Given that the Philippines has yet to achieve shared growth, an empirical application of the above analysis to the Philippines is presented for two cases. The first case focuses on manufacturing economic zones in the Philippines, which used data provided by the Philippine Economic Zone Authority. This analysis basically shows that stable employment practices in the economic zones, along with other J-Firm features appear to promote productivity,

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as measured by a production function analysis. An extension of this empirical application in the second case is undertaken for a Japanese-affiliated automotive firm operating in the Philippines corroborates the economic zone findings. This implies that manufacturing economic zones and the automotive industry could provide channels by which the shared-growth DNA could be transmitted to the Philippines.

Introduction: Shared-Growth Research and Advocacy

This paper constitutes part of an ongoing research and advocacy for "shared growth,"[2] which was a term used in the World Bank's East Asian Miracle (EAM) Report of 1993 to describe the peculiar type of development that the Highly Performing (East) Asian Economies (HPAEs)[3] experienced from the 1950s to the 1980s. The EAM Report is significant in many respects, with regards to the study of a country's economic development. First, it marked a deviation from the World Bank's traditionally strong market-oriented approach to development, the so-called Washington Consensus, in its admission that selective intervention by the government through contest-based mechanisms could complement market fundamentals. Second, the term "shared growth" opened up a whole field of interest in growth (efficiency) with equity, as evident in relatively more recent terms[4] such as "inclusive growth,"[5] and "pro-poor growth."[6] Third, Japan played a very crucial role in coaxing the World Bank to be more flexible in its approach, not only by directing the World Bank to developments in East Asia but by being living proof that shared growth was indeed possible during the period 1950s to 1980s.

We also know now that shared growth, if not nurtured, could be lost, as we see Japan currently struggling with lackluster growth accompanied by deteriorating income distribution in the so-called "lost decades." This is not to say that the aspiration for shared growth is now irrelevant. On the contrary, this makes shared growth even more precious, and should only serve to impress on us the importance of shared-growth research that seeks to further elaborate and understand this concept, and an advocacy that derives concrete policy implications from such research. It is in clearly understanding the vision and its mechanism that we can arrive at correct policies.

This paper fixes Japan as a reference point, to which the conventional Western perspective is compared, and in the process of comparison, derives policy implications for developing countries such as the Philippines. The conventional Western perspective is represented by the Washington Consensus and, therefore, refers largely to the US, the strongest proponent of free market economic policy.

The East Asian Miracle Report's definition of shared growth, however, primarily takes a macro perspective. The basic objective and added value of this paper lie in the clarification of the micro or corporate level features, particularly in labor contracts, which could have contributed to shared growth.

Section 2 provides the motivation for the study by comparing the shared-growth performance of the US and Japan on both national and corporate levels. Section 3 then offers some stylized explanation for the preceding comparative analysis by comparing the stylized features of firm-labor relationships in Japanese and American firms. This is followed in Section 4 by a survey of theoretical frameworks that have been used to further elaborate on the differences between US and Japanese firms. Section 4 goes further by using this theoretical framework to link these firm-labor relationships to the concept of shared growth. In Section 5, implications of the preceding analysis together with other firm stakeholder relationships, i.e., customers and parts suppliers, are applied to empirical work on Philippine manufacturing ecozones. An attempt is also made to extend this analysis to the case of a Japanese-affiliated automotive manufacturing firm operating in the Philippines. These two cases imply that there are at least two channels through which the shared-growth DNA could be transmitted to the Philippines that is in dire need of shared growth.

Comparison of the Shared-Growth Performance of the US and Japan

Figure 1. Japan's Gini Coefficient, 1963-1999
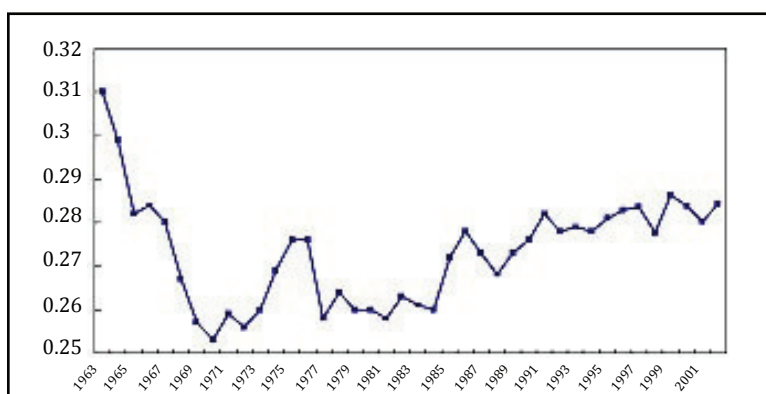
Primary Source: Household survey, prefectural data
Secondary Source: Tomioka and Ohtake (2005)

National Level. As can be seen from Figure 1, Japan's Gini coefficient data confirm the shared-growth experience of Japan after the war up to around the mid-1980s. The Gini coefficient was dropping steeply from 1963 up to around 1971. Although there was a slight rebound in the vicinity the first oil crisis of the 1970s, this was promptly corrected so that for the 1970s to the mid-1980s the Gini coefficient was at relatively low levels. There appears to be an upward trend thereafter indicating the deterioration in income distribution, in what has come to be dubbed as the "lost decades" of Japan.

In line with the primary purpose of this paper, however, the focus will be on the shared-growth era (circa 1950s to 1980s). Comparison of Gini coefficients for the US and Japan suggests that Japan has consistently exhibited a more equitable distribution of income.

Figure 2 suggests that the US also had a shared-growth phase, with the Gini coefficient exhibiting a downward trend from 1947 up to around 1968. From this point onwards, however, the trend clearly shifts upwards indicating that income distribution in the US has generally been deteriorating since the late 1960s.

Figure 2. Movement of US Gini Coefficient
(expressed as % change relative to 1967 level)
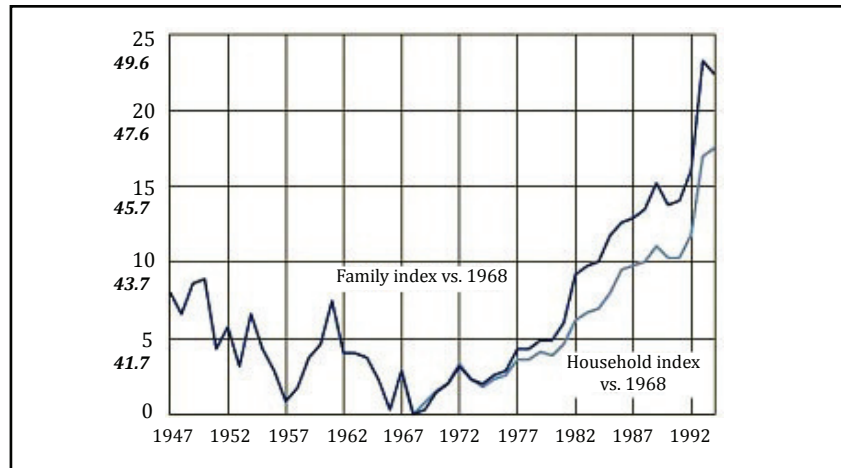
Source: Weinberg (1996), Note: 1967 Gini coefficient is given to be 39.7.
The Gini coefficient percentage equivalent of the percentage deviation
scale has been marked below the 5% intervals (shown in italics).

Comparing the two figures, we can make at least two observations related to shared-growth performance of each country, bearing in mind that both countries were experiencing long-run growth over most of the given duration. Firstly, the US Gini coefficient appears to be generally higher than that of the Japan for the given period. Secondly, the US Gini coefficient shifted to an upward trend much earlier than Japan. It is these two senses that define this paper's basic position that Japan had a better shared-growth performance during the post-war era up to the mid-1980s. During this period, Japan's growth was accompanied with a better sharing than that of the US.

Corporate Level. One could find corporate level performance that would reflect the overall level performance. It is a premise of this study that the typical corporate organizational architecture in an economy contributes to the shared-growth performance of that economy. In short, macroeconomic features derive from microeconomic features.

This study focuses on the Comparative Institutional Analysis framework proposed by Aoki and his collaborators[7] to systematically explain the difference of the Japanese Firm (J-Firm) from the Anglo-American Firm (A-Firm).[8] In this framework, the firm is considered to be a nexus of contracts, by which the firm's relationship with its various stakeholders are defined. The firm's stakeholders include its customers,

workers, parts and material suppliers, financiers, and even the government as the representative of the society at large. This paper, however, focuses on only one aspect of the institutional structure of corporate organization: the firm-labor relationship.

The compensation gap in A-Firm is legendary. There is a growing literature focusing on the larger disparity in pay scales in American vis-à-vis Japanese firms.[9] Most symbolic of such disparity is CEO compensation.

Kaplan (1994) made a comparison of executive compensation in over a hundred US and Japanese firms, which supports the popular perception of a bigger gap in A-Firm than in J-Firm. It could be seen that, on the average, a J-Firm director earns, in terms of salary and bonus, about $64,000 per year. On the other hand, A-Firm executives earned on the average $344,000 per year (expressed in 1983 prices), which is about 400% greater than that of J-Firm directors. The other gap, which is closer to our concept of corporate shared growth, could be found in comparing the executive compensation with that of the average employee. J-Firm executives are paid about 4.8 times that of the average worker. On the other hand, A-Firm executives are paid about 13.5 times that of the average worker.[10]

Moreover, Kaplan (1994) also indicates that J-Firm executives have smaller equity ownerships in their firms, compared to A-Firm executives. The president of the J-Firm owns a median of only 0.023% (average 0.24%) of his firm's stocks, compared to the median of 0.050% (average 0.68%) owned by an A-Firm CEO. An A-Firm CEO's holding increases to a median of 0.140% (average 1.011%) if stock options are included.

Stylized Comparison of J- and A-Firm Labor Contracts

In this section, a comparison of firm-labor relationships is undertaken to explain the stylized difference in shared-growth performance of J-Firm and A-Firm. There are three caveats to this stylized comparison:

Firstly, there are Anglo-American firms that are more Japanese in characteristic, as there are Japanese firms that are more Anglo-American in characteristic. At the risk of generalization, however, this study nevertheless attempts to make stylized distinctions in order to arrive at a clear understanding of shared-growth mechanisms. Ambiguity in this

case could only cause confusion, which could lead to disastrous results. Too often has economic policy been critically in error because of the lack of clear understanding of the object of its action. Ironically, Japan, which has been languishing in its "lost decades," is testament to this fundamental principle.[11] This study believes that a stylized comparison would provide a clear delineation that should be useful for a shared-growth research and advocacy.

Secondly, the difference between J- and A-Firm is one of degree. There is no such thing as a perfect J-Firm or a perfect A-Firm. Firms will actually be situated within these two extremes. One firm would have a significantly higher tendency to exhibit a certain characteristic vis-à-vis the other firm. Fortunately, the two firm types being studied appear to have significant differences sufficient to conduct a coherent comparative analysis. This is precisely the basis for the Comparative Institutional Analysis being proposed by Aoki and his collaborators.

Thirdly, the empirical data used to support the stylized comparisons will not necessarily be the most recent. This, however, does not detract from the significance of the comparison, which is to show the existence of differences that could have contributed to the shared-growth performance of Japan, and its relative absence in the US, during the period in which shared growth was observed in Japan (circa 1950s to 1980s). Since the bubble economy of the late 1980s, Japan has been undergoing significant changes in its economic structure in the wake of several reforms. The effect of these reforms on Japan's capability for shared growth has not been really positive. Since the objective of this study is the achievement of shared growth, the use of data when Japan was a premier model of shared growth does not defeat this purpose.[12]

Figure 3 and Figure 4 show the stylized features of the labor-firm relationship in J- and A-Firm, respectively. There are essentially three categories by which the two firm types are differentiated. One category is with respect to the type of skills that workers in each firm will tend to develop. General skills pertain to skills that are still considered of the same value across different firms.

Figure 3. Stylized Labor-Firm Relationship in J-Firm	Figure 4. Stylized Labor-Firm Relationship in A-Firm
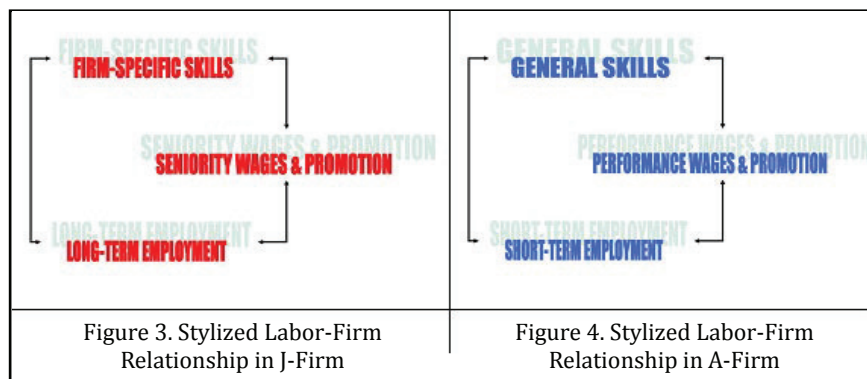
In contrast, firm-specific skills only have full value at the current firm, and substantially lose value when the worker transfers to another firm. Another category is with respect to the type of compensation the worker receives in terms of wages and promotion. Performance-based wages and promotion are typical of firms that rely to a great extent on the external labor market to supply its labor requirements. On the other hand, seniority-based wages and promotion is typical of firms that rely on the internal labor market, wherein vacancies are filled from within the existing labor complement of the firm. The last category is with respect to the worker's duration of stay in the firm, or job tenure, which could be short- or long-term.

The J-Firm is well known for inducing the development of firm-specific skills in its workers. Such skills could be learned through an intra-firm education process such as on-the-job-training and job rotation. The Japanese refer to the work ethic of monozukuri, which literally translates to "creating goods," but generally refers to a high-level of craftsmanship. Such a work ethic requires the development of firm-specific skills, and could be said to be at the heart of the competitiveness of Japanese manufacturing products. On the other hand, A-Firm is better known for its emphasis on general skills that could be largely learned in formal educational institutions. Examples of such skills would be accounting, computer programming, and financial analysis. Such skills formed the basis for the competitiveness of US service-oriented industries.

Figure 6. Steep Earnings Profile for J-Firm
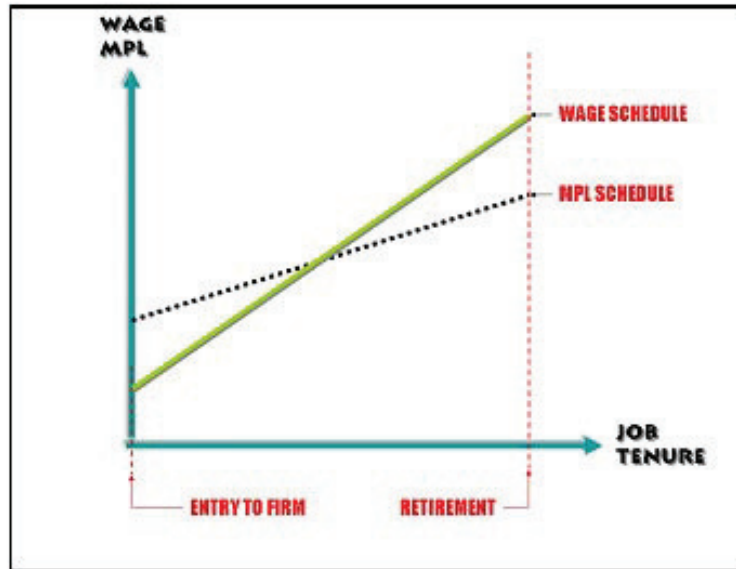
Seniority-based wages and promotion are more typical of J-Firm. In such a scheme, the wages and promotion of workers are greatly determined by the age, or more precisely, the number of years the worker has been with the same firm (job tenure). In contrast, performance-based wages and performance, which are more typical of A-Firm, could, in principle, be independent of the age factor, and largely be based on the performance of the individual worker. Studies have shown of the presence of a steeper wage profile for J-Firm.[13] Hashimoto and Raisian (1985) found that, on the average, the percentage of the peak earning compared to initial earnings is 242.8% for J-Firm, and only 109.7% for A-Firm. A schematic diagram of such a wage profile is shown in Figure 6. The MPL schedule indicates the Marginal Product of Labor schedule over a worker's career in a certain firm. It is assumed to improve over time, as the worker accumulates human capital. The real wage schedule is shown to be lower than the MPL during the early years of a worker's career, but becomes higher than the MPL during the later part of the worker's career.

In short, the real wage schedule is steeper than the MPL schedule. This constitutes the crucial feature of seniority-based wages in the J-Firm. On the other hand, A-Firm, in line with the neoclassical economic

thinking based on external (spot) labor markets, would have its real wages precisely equal to MPL.

The crucial feature of seniority-based promotion is the slower rate of promotion in the J-Firm vis-à-vis A-Firm. Tsuru (1994) reports that, in a sample of 739 Japanese companies and 687 US companies, the average length of time for promotion to the position of President is 27 years for J-Firm, and only 20 years for A-Firm. The promotion in J-Firm has been described as a marathon, while that of A-Firm as a 100-meter dash. While this metaphor might appear exaggerated, it will appear more realistic when considered in tandem with the third feature of firm-labor relationships.

J-Firm is often characterized as displaying a longer term of employment compared to A-Firm. Hashimoto and Raisian (1985), in their survey of Japanese and US firms of various sizes in terms of employment, found an overall median tenure of 8.2 years for Japanese firms and 4 years for US firms.

Another way of looking at the duration of employment is given in Table 2, which shows the level of fluctuations (standard deviation) of production, labor inputs,[14] number of workers, and working hours for Japan, the US, and two other advanced industrial countries. The rightmost column gives the relative employment instability computed as the ratio of the employment data fluctuation to the production fluctuation. As can be seen from Table 1, the ratio is consistently smaller for Japan not only compared to the US. This shows that J-Firm has a lower level of fluctuation per unit of fluctuation in production, suggesting that employment in J-Firm tends to fluctuate less with the business cycle fluctuations in production.

One important aspect of these three categories (skill type, wage/promotion type, job tenure type) is their strategic complementarity,[15] wherein the proper choice of types for each category could lead to a mutually supportive scheme. Such strategic complementarity could be seen to exist in the choices of types in J- and A-Firm, as shown in Figure 3 and Figure 4. This strategic complementarity could be more readily seen by taking the three categories in pairs. There are three such pairs:

Table 1. Comparative Production and Employment Fluctuations

Country	Data Label	1961-73	1974-93	1961-93	Relative Employment Instability[16]
Japan	Production	6.51	6.15	7.55	
	Labor inputs	3.29	2.69	3.25	0.430
	No. of workers	3.59	1.89	3.14	0.416
	Working hours	1.18	2.06	1.79	0.237
U.S.	Production	5.08	5.44	5.28	
	Labor inputs	4.32	4.66	4.62	0.875
	No. of workers	3.50	1.8	3.79	0.718
	Working hours	1.30	1.50	1.42	0.269

Primary Source: Economic Planning Agency, 1994 White Paper
Secondary Source: Tsuru (1994)

Wage/Promotion Type and Job Tenure Type. Long-term employment supports seniority-based remuneration. Long-term employment facilitates a seniority-based remuneration scheme more than a performance-based remuneration scheme.

The seniority-based remuneration assumes that the worker will be staying with the company for a long period, while a performance-based remuneration scheme does not assume this at all. Seniority-based remuneration supports long-term employment. This is some kind of hostage effect. The worker who quits the company in the middle of his career will not be able to avail of the higher-than-MPL wages that will be given to him towards the latter part of his career. In contrast, performance-based remuneration does not have this hostage effect. The worker finds it easier to quit his job anytime it pleases him.

Job Tenure Type and Skill Type. Firm-specific skills support long-term employment. Workers who have invested in learning firm-specific skills cannot just leave the firm. Their skills have maximum value in their present jobs. Hence, workers stay for a long time with the firm. In contrast, workers with universal skills will find it easier to cut their relationships with the firm, thus leading to shorter job tenures. Long-term employment

supports firm-specific skills. As was discussed above, it takes a long time to train in firm-specific skills. A worker is also more comfortable with developing such skills, as s/he is assured, to some extent, of a stable job. A worker will certainly find it very risky to invest his/her time in developing firm-specific skills in a situation where there is not so much assurance of being stably employed. In such a situation, investing in universal skills will be a more logical choice. Being able to smoothly go to another job can be considered a protection against the risk of being laid off, which happens quite frequently in a short-term employment situation.

Skill Type and Wage/Promotion Type. Seniority-based remuneration supports firm-specific skills. Seniority-based remuneration rewards more senior workers. More senior workers generally have gone through much training in firm-specific skills. Hence, seniority-based remuneration essentially means rewarding workers with more firm-specific skills. Firm-specific skills support seniority-based remuneration. Firm-specific skills are more difficult to measure than universal skills. This is due to the fact that firm-specific skills are harder to describe. Job descriptions are not as detailed in the J-firm as these are in the A-firm. Without clear job descriptions, what is expected of workers becomes also unclear. In such a situation, the seniority-based remuneration provides an unbiased measure of performance, namely, a worker's tenure in the firm. Moreover, in such kind of situation, a performance-based scheme is more difficult to apply given the absence of clear performance measures.

Strategic complementarity endows the stylized features of J- and A-Firm with an additional level of rationality. The type of each category has to be rationally chosen so that each category type complements the other two types. It also renders these two types of organizations with a higher level of stability, since it implies that an organizational reform seeking to drastically alter the organizational makeup of these two firm types has to deal with the mutually reinforcing bonds of each category.

Theoretical Explanations

This section surveys some of the analytical frameworks that could be used to provide a theoretical analysis of the above stylized explanations for the differences in shared-growth performance due to differences in firm-labor relationships. The comparative institutional analysis framework provides a very sound theoretical explanation of the stylized

features of J-Firm. The focus in such a framework, however, is to explain how seemingly imperfect markets that connect the different stakeholders of the J-Firm could be efficient. The basic objective is to arrive at a theoretical explanation expressed in terms that would be understandable to neoclassical critics of J-Firm. The focus on the development of firm-specific skills greatly contributes to the competitiveness of J-Firm in the manufacturing industries.

As could be seen from the previous section, the labor contracts of J-Firm and A-Firm tend to have opposite stylized features, which predispose these two systems to conflict. The existence of the *keiretsu,* which is a term that could be used to refer to J-Firm, has been a cause of trade friction between the US and Japan. This culminated in the often contentious talks on the Structural Impediment Initiatives of the late 1980s, which considered the keiretsu as some sort of non-tariff barrier to trade. Lawrence in Lawrence and Saxonhouse (1991) summarizes the issue by showing that the presence of *keiretsu* reduces Japan's imports and remaining unconvinced that the *keiretsu* significantly contributes to competitiveness through the enhancement of exports. It is against such thinking that the comparative institutional analysis seeks to provide a sound theoretical response, which shows that the *keiretsu* could be a source of efficiency for the Japanese economy.

Efficiency, however, plays only one part of the shared-growth phenomenon. The other equally important aspect of this phenomenon is the sharing of that growth, or equity. This section clarifies the equity aspect of the stylized features of J-Firm labor contracts.

The commonly offered theoretical explanation uses the concept of internal labor markets, wherein vacancies in a firm are filled up by promoting workers within a firm rather than hiring a worker from the external labor market.[17] The internal market is considered to clear through a rank-order tournament, whereby workers are effectively paid not by their absolute performance but by their performance relative to each other (rank order). The use of a rank-order tournament makes sense when absolute performance of individual workers can only be vaguely defined as is typical in Japanese corporate organizations.[18] Making workers compete in a tournament helps to reveal the hidden quality of workers.

Kubo (2001) makes an interesting analysis of rank-order tournaments in Japanese firms, using wage data from 1984-1998. Using regression analysis, he establishes at least two things related to the stylized facts about labor contracts: Firstly, he finds that there is an increasing

wage gap between adjacent supervisory positions in the Japanese firms he surveyed. He argues that this supports the hypothesis of a rank-hierarchy tournament in Japanese firms. Secondly, the regression analysis shows that age (job tenure) plays a significant role in wage determination in J-Firm.

In linking the rank-hierarchy tournament to the concept of shared growth, a paradox emerges. A rank-order tournament would be conducive to growth, since workers are given incentives to work hard. However, it would tend not to be a good mechanism for sharing given that it thrives on the idea of increasing the wage gap among workers.[19] Kubo (2001) also recognizes that rank-order tournaments would give rise to uncooperative behavior or individualistic competition, which is not a salient feature of Japanese corporate organizations. He offers the use of cooperative behavior evaluations as another aspect of Japanese human resource management that encourages workers to "compete to cooperate." In such evaluations, workers are graded based on factors such as cooperative attitude, willingness to help others, and ability to communicate with other team members.[20]

In the context of this study, however, such an additional aspect is considered to be ad hoc, in the sense that it does not quite utilize the inherent aspects of the core features given above to explain the differences between J- and A-firm labor practices. At least two aspects of the core features could be utilized to arrive at shared-growth mechanisms that are intrinsic to these core features.

One aspect is the long-run perspective that is inherent in the core features of J-firm. A long-run perspective is considered to be one crucial factor in game theoretic formulations explaining the emergence of cooperation between competitive players. Such formulation uses a prisoner's dilemma setting wherein cooperation can lead to larger payoffs for both players. Unfortunately, the cooperation is made difficult for rational players given the possibility that the other player could exploit the offer to cooperate. The incentive for exploitation is found in the bigger payoff that could be gained if one player chooses not to cooperate while the other player chooses to cooperate. When prisoner dilemma games are played repeatedly, however, a player could find it rational not to exploit and, therefore, cooperate instead. This is made possible particularly when players adopt a tit-for-tat strategy,[21] wherein an exploited player would refuse to play any future rounds with the exploiting player. This renders any one-time exploitation very costly for a player.

Another aspect is the investment of workers in firm-specific skills. Such investment is costly since it will require special effort on the part of the worker to learn such skills. It is also risky because the worker faces the prospect of not getting full value for his skills in the event that he for some reason leaves the firm prior to his retirement. Agency theory, as in Milgrom and Roberts (1992), treats this situation as a "hold-up problem," since the principal (employer) could take advantage of the agent (worker) by imposing less beneficial terms of employment after the worker has already invested in firm-specific skills. Anticipating such exploitation, the worker loses incentive to imbibe firm-specific skills. One solution to the hold-up problem is the common ownership of the firm-specific assets. In the case of firm-specific skills, the owners are the workers, but such skills, by definition, could produce the most value if used with the other firm-specific assets owned by the firm (stockholders).

Both of the above aspects naturally contribute to shared growth. Cooperation in a prisoner dilemma framework provides a natural basis for shared growth. The exclusion of exploitation implies that payoffs for players will not differ too greatly. This is because, by definition, exploitation gives rise to large disparities in payoffs. Exploitation entails one player having a big payoff at the expense of another player. On the other hand, giving common ownership to workers and stockholders of firm-specific skills and other firm-specific assets could be considered as another mechanism for achieving shared growth on the corporate level.

The clarification of the shared-growth mechanism of the two stylized features of J-Firm labor contracts suggests an output or production function that has a positive relationship to a shared-growth indicator. Our clarification above indicates that a shared-growth indicator would have at least one of the following characteristics: (a) reflects the long-run nature of firm-labor relationships; (b) promote the investment by workers on developing firm-specific skills. The possession of even one of these two characteristics implies the possession of the other due to the presence of strategic complementarities mentioned in the previous section. The absence of a positive relationship between output and the shared-growth indicator would tend to support the A-Firm position that an opposite indicator would lead to more efficiency.[22]

Implications for the Philippines

Need for Shared Growth. Achieving shared growth remains to this day an elusive goal for the Philippines. The Highly-Performing (East) Asian Economies studied in the World Bank's East Asian Miracle report did not include the Philippines, despite the fact that the list contains three of its Southeast Asian cohorts. The following discussion shows that there are good reasons for this exclusion:

Table 2. Poverty Incidence in Selected Asian Countries

	Years	**Annual Reduction**	**First Year**	**Last Year**
Philippines	1971-94	0.7	52	36
Indonesia	1970-90	2.0	58	19
Korea	1970-90	0.9	23	5
Malaysia	1973-87	1.6	37	14
Thailand	1962-88	1.4	59	22

Primary Sources: World Bank (1996), Philippine National Statistical Coordination Board (1996), Secondary Source: Gerson (1998)

Table 2 compares the poverty incidence of the Philippines with four other East Asian economies over largely overlapping periods. It could be seen that the Philippines, on the average, exhibited the slowest reduction in its poverty incidence. The difference in annual reduction of poverty incidence is even more noticeable between the Philippines and the other three Southeast Asian economies.

Table 3. Income Distribution in the Philippines for Selected Years (1957-94)

	1957	**1961**	**1965**	**1971**	**1985**	**1988**	**1991**	**1994**
Gini Coefficient	0.461	0.497	0.513	0.494	0.447	0.445	0.468	0.451
% of income, top 20%	48.6	56.5	56.0	54.0	52.1	51.8	53.9	51.9
% of income, bottom 20%	6.5	4.2	3.5	3.6	5.2	5.2	4.7	4.9
Ratio of incomes of top 20% to bottom 20%	7.5	13.5	16.0	15.0	10.0	10.0	11.5	10.6

Primary Sources: Deninger and Squire (1996), Philippine National Statistics Office (various years); Secondary Source: Gerson (1998)

The Gini coefficient of the Philippines shown in Table 3 shows more clearly the seriousness of such slow poverty reduction. More recent coefficients from the National Statistics and Census Bureau reveal that the Gini coefficient was 0.4881 in 1997 and 0.4814 in 2000.

Although there is a slight improvement (1.4%) between the two years, one could not really be too sanguine when taking a longer historical perspective. It should be no source of comfort to know that the average Gini coefficient of the Philippines is at par with that of the US. In the case of the Philippines, this translates to the richest 20% of the population having about half of the nation's income or about ten times that of the poorest 20% of the population. According to Balisacan (2008), in spite of historically good growth rates in income during the 1990s, the poverty incidence of the Philippines has, in fact, deteriorated. He also confirms that poverty reduction in the Philippines has lagged behind its East Asian neighbors, particularly Indonesia, Thailand, Vietnam, and even China.

Figure 6. GDP Growth Rates for Selected Southeast Asian Countries.
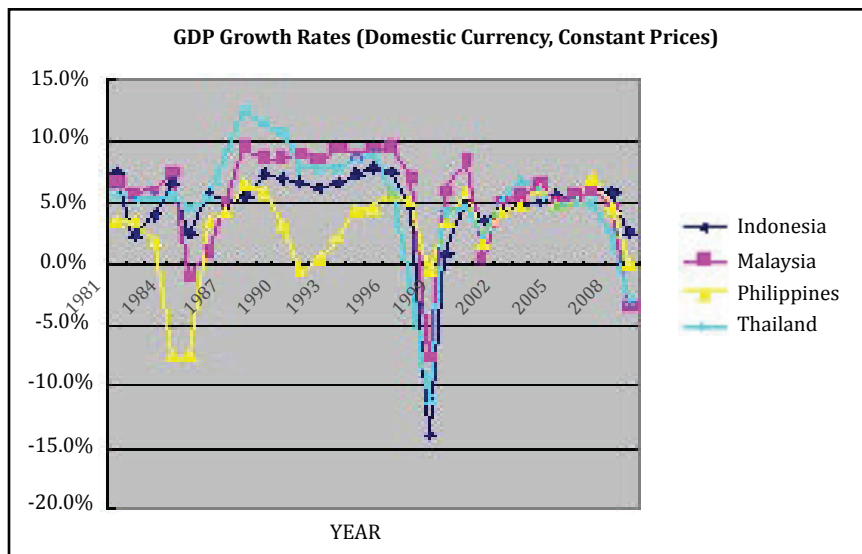
Source of Raw Data: IMF Statistics (various years). Note: 2009 growth rate is based on estimated GDP for 2009.

The country's growth has also been lackluster compared to its dynamic Southeast Asian neighbors, as can be seen in the GDP growth rates shown in Figure 6 (1981 to 2009). Although the growth rates of the Philippines appear to be fortuitously less volatile, a tribute perhaps

to its macro-economic managers, the average growth rate for this period is 2.9% in contrast to Indonesia's 4.6%, Thailand's 5.3%, and Malaysia's 5.6%. This has put the Philippines at the bottom of the income ladder compared to its cohorts, with even the next batch of Southeast Asian countries poised to overtake it soon. The urgency of achieving shared growth in the Philippines is evident from the above discussion.

There is, however, cause for hope. The rest of this section investigates production entities that could serve as catalysts for shared growth in the Philippines, i.e., manufacturing economic zones, and the automotive manufacturing industry, as represented by the case of a Japanese-affiliated automotive firm.

Catalysts for Shared Growth: The Case of Economic Zones. Maquito and Carbonel (2010) give refinements of shared growth as suggested by an analysis of manufacturing economic zones in the Philippines. Manufacturing economic zones were chosen as catalysts for shared growth due in part to their being located outside of the traditional growth centers. Moreover, the investment in Philippine manufacturing economic zones have for several decades been dominated by Japanese firms. This provides a channel by which the shared-growth DNA of Japanese firms, as discussed partly above, could be transmitted to the Philippines.

Figure 7. A Shared-Growth Analysis of Philippine Manufacturing Economic Zones
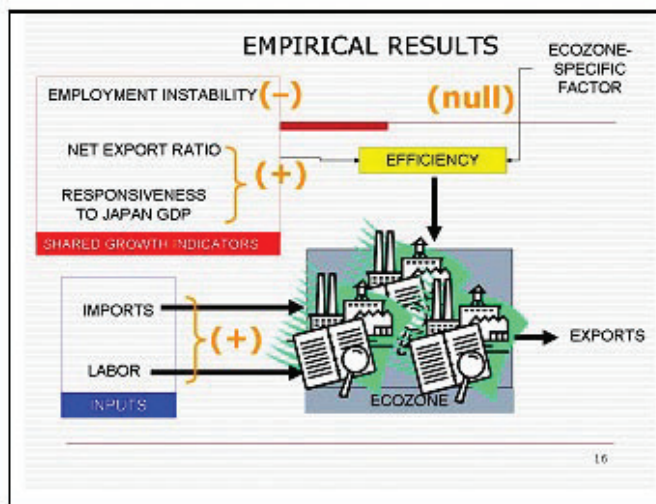
Source: Maquito (2007)

Based on economic zone-specific data collected from the Philippine Economic Zone Authority, a production relationship for economic zones, which included shared-growth indicators, was estimated.[23] Figure 7 summarizes the production analysis. The economic zone is viewed as a production entity with exports as its major output. Inputs are mainly labor and imports of parts, which conventionally are assumed to have positive effects on output. The shared-growth indicators are hypothesized to affect the productivity of the economic zones.

One shared-growth indicator is employment instability, which is postulated to have a negative impact on productivity. This hypothesis is based on the positive effect of stable employment, as suggested in the discussion of the stylized comparison of J- and A-Firm above. Employment instability is measured as the ratio of the variance in employment to the variance of output.[24] The more unstable the employment, the less able the workers are to form firm-specific skills that would have contributed to firm competitiveness.

The other two shared-growth indicators are taken from a consideration of the other aspects of J-Firm's organizational architecture. Net export ratio refers to the degree of local procurement or dependence on local parts suppliers. J-Firm is noted to be more reliant on a broad based of small- and medium-scale enterprises. For each economic zone, it is measured as the ratio of net export (export value less import value) to total trade (export value + import value). It is hypothesized to have a positive impact on economic zone productivity, just as it is a source of competitiveness for J-Firm. Lastly, responsiveness to Japan GDP is taken as a measure of the sensitivity of economic zones to its customer. This is taken to be another stylized feature of J-Firm, as symbolized by such terms as Just-In-Time or flexible manufacturing, wherein J-Firm is highly responsive to meeting customer needs. In the case of Philippine economic zones studied, Japan appears to be a major customer. Just as in J-Firm, such responsiveness is considered to be a source of productivity or competitiveness.

The empirical estimation of the production relationship shown in Figure 7 corroborates the hypothesized relationships. A dummy variable for each economic zone proved to have no effect, implying that productivity differences among economic zones are already largely accounted for in the three shared-growth indicators. In short, the analysis suggests that more productive economic zones tend to have lower employment instability, higher local procurement, and higher sensitivity to the market.

Catalysts for Shared Growth: The Case of a Japanese-Affiliated Automotive Manufacturing Firm in the Philippines. The above economic zone analysis is extended, with some modifications,[25] to the case of a Japanese-affiliated automotive firm engaged in the manufacturing of Completely Knocked-Down (CKD) vehicles for the Philippine market.[26] The production relationship is given by $Q = \gamma E^{\alpha} L^{\beta} SGI$, where Q is the firm's volume of CKD output, E = firm's quantity of electricity consumed, L = total number of workers employed by the firm, SGI = some function of shared-growth indicators, and γ, α, β are coefficients to be estimated. The best regression analysis results are given in Table 4, using quarterly data from the first quarter of 2001 to the fourth quarter of 2007. In this formulation, $SGI = I_1^{\delta} I_2^{\varepsilon}$, where I_1 = an employment stability indicator, and I_2 = a combined customer responsiveness and local procurement indicator.

Employment (L) was found to be statistically insignificant in the majority of estimation trials. This could be explained by the lack of variability in employment throughout the analyzed period, despite significant fluctuations in output. This actually conforms to the stylized fact about J-Firm exhibiting stable employment, and, therefore, is not considered to adversely affect the estimations.

Table 4. Best OLS estimation results of firm's production relationship.

Parameters	Estimates	Standard Error of Estimate
α	1.755	0.217
δ	0.828	0.437
ε	0.195	0.047

Notes: 1. All estimates are statistically significant, with signs conforming to theoretical expectations. 2. Number of observations = 28

The SGI formulation suggests the continued validity of the shared-growth indicators studied in the economic zone analysis above. The employment stability indicator corresponds, albeit inversely, to the employment instability in the economic zone analysis. On the other hand, the remaining shared-growth indicator corresponds to the net export ratio and responsiveness to Japanese GDP indicators in the economic zone analysis.

Since data on regular and temporary employment were available, the employment indicator, in this case, was measured by the ratio of regular employment to temporary employment. A higher value of this ratio would indicate a more stable employment. According to the discussion on the stylized features of J-Firm above, such a stable employment would contribute to competitiveness, and presumably productivity.

Based on the data provided by the subject firm, no distinct indicators could be devised for local procurement and responsiveness to customers. It was decided, therefore, to use only one indicator, which to some extent captures these two shared-growth aspects. This indicator was measured as the ratio of the value of CKD output to the value of (Completely Built-Up) CBU imports. This ratio would increase if CKD value increases for a given value of CBU imports, or if CBU imports value decreases for a given CKD value. The former would suggest a greater participation of local parts manufacturers. On the other hand, the latter would suggest a higher degree of displacement of CBU imports by locally manufactured CKD. This could be considered as leading to a higher level of integration of the automotive firm with the division of labor in, at least, the East Asian region. The displacement of imported CBU, especially from other East Asian countries, indicates the increasing competitiveness of locally manufactured vehicles. This constitutes another way of viewing the responsiveness to customers. This is especially important in light of the need for the Philippine automotive industry to be more integrated with the division of labor of the automotive industry in East Asia, instead of simply being an absorber for the vehicle exports of other East Asian economies. Maquito and Carbonel (2010) propose that this would be one of three ways of refining the concept of shared growth.

Table 4 indicates that the shared-growth indicators have positive effects on the productivity, and, therefore, competitiveness of the subject firm. It also serves to some extent to validate the findings in the preceding analysis of Philippine economic zones.

Concluding Remarks

The investigation of Japanese-style labor contracts in this paper holds invaluable lessons for the Philippines, which is in dire need of achieving shared growth that Japan has shown to be possible. Fortunately, the analysis above indicates that there are at least two channels by which the shared-growth DNA of Japan could be transmitted to the Philippines:

manufacturing economic zones and the automotive industry. Based on the foregoing discussion, there is reason to believe that shared-growth factors reside in the organizational architecture of J-Firm. Moreover, it is most probable that a widespread adoption of such architecture contributes to shared growth on a national level.

There is a deeper issue here that goes beyond simple transmission of corporate DNA. The world has been caught in the tsunami of globalization. In itself, globalization should be welcomed, especially as it brings countries closer together. What has proven to be problematic, however, is the tendency to misconstrue globalization as global standardization. Japan has bravely tried to be a bulwark against this neoliberal tsunami from across the Pacific. While surviving the onslaught, it has nevertheless sustained critical damage (the "lost decades"). This puts at risk the sustaining of invaluable diversity in economic organizations amidst the strong currents of a fiercely neoliberal approach that overly relies on free markets. While markets could be very good mechanisms in promoting efficiency, these have been shown to be not very adept in forming a more equitable society.

It is for these reasons that the Philippines should seriously consider encouraging the diffusion of Japanese-style labor contracts. Such features of corporate organization are believed not only to promote competitiveness and growth, but its equitable sharing as well. Differences in culture might make adoption of such practices difficult, but it should not be impossible. The Philippines has proven itself to be very much receptive to various cultures. It is perhaps part of its destiny to be a safe haven for institutional diversity, which should not preclude the shared-growth lessons from Japan.

Endnotes

[1] This paper was presented at the National Industrial Relations Conference organized by the Philippine Industrial Relations Society under the theme "The Philippine Employment Relations Initiatives: Carving a Niche in the Philippine and Asian Setting", held on August 24-25, 2011 at the SOLAIR Auditorium, Bonifacio Hall, UP Diliman, Philippines

[2] For example, see See Maquito and Carbonel (2010), Maquito and Hirakawa (2010), and SGRA in English (www.aisf.or.jp/sgrainenglish).

[3] HPAEs consist of Japan, Korea, Taiwan, HK, Thailand, Malaysia, Singapore, and Indonesia.

⁴ Shared growth appears to be a contemporary of broad-based growth, which was adopted by the USAID as a major pillar of its development programs [see Kumar (1994)]. The main difference between the two is that the latter (as well as inclusive growth) is considered to be more market-friendly or leans away from government-sponsored industrial policies [see Ianchovichina and Lundstrom (2009)].

⁵ APEC Summit held in Singapore on November 2009

⁶ Earliest reference appears to be Baulch and McCulloh (2000).

⁷ See Aoki (1988, 2001).

⁸ In this paper, J-Firm and A-Firm refer to corporate organizations that typically existed during the shared growth era of Japan (1950s to 1980s).

⁹ See Blair (1994), Kaplan (1994), Abowd and Bognanno (1995), Murphy (1999), Cheffins and Thomas (2003).

¹⁰ During the UP SOLAIR conference of August 24-25, 2011, a labor union official of a Japanese-affiliated manufacturing company operating in the Philippines kindly confirmed that this lower wage gap in J-Firm is more or less the same as in his company.

¹¹ It could be argued more extensively, but not in this paper, that the blind introduction of free-market reforms since the 1980s largely ignored the shared-growth mechanisms that actually contributed to Japan's ability to achieve shared growth. The fact that the post-bubble (from 1990s) era of Japan is marked by the absence of shared growth implies that the shared-growth mechanisms that we attempt to clarify in this paper may actually have been rendered ineffective by such reforms.

¹² For example, see Aoki (2001).

¹³ See Hashimoto and Raisian (1985), Mincer and Higuchi (1988).

¹⁴ Computed as number of workers x working hours.

¹⁵ Aoki and Dore (1994), Aoki (2001)

¹⁶ Calculated in this paper based on the data on the 1961-93 column.

¹⁷ See Tomita (1992) and Hanada (1993).

¹⁸ See Aoki (1988) (1990)

¹⁹ For the whole firm, the disparity in wages will be determined by the distribution of workers by job tenure. As in the case of the income distribution of a certain economy, the distribution of income in a firm will be improved with the presence of a large "middle-class", i.e., workers that are earning medium-level wages since they have been in the same firm for some time now. Such a middle class would be relatively absent in A-Firm where turnover are higher and, hence, job tenure tends to be shorter.

²⁰ Kubo (2001), p. 53.

²¹ See Axelrod (1984).

²² For example, if an indicator to long-term employment relations would have a negative impact on output, then this would suggest that short-term employment relations would have a positive impact on output, thus supporting the A-Firm position and weakening the J-Firm position.

²³ This research was funded by a grant from the Sekiguchi Global Research Association.

²⁴ See the discussion related to Table 2 above.

²⁵ A production function, wherein shared growth indicators explain productivity, is still used. The available data for the inputs and shared growth indicators, however, are different. Nevertheless, effort was made to devise shared growth indicators,

using the original conceptualization (i.e., responsiveness to customer, degree of local procurement, and employment instability)

[26] In the interest of privacy, the firm's anonymity is preserved.

References

Abowd, J.M. & Bognanno, M.L. (1995). International Differences in Executive and Managerial Compensation. In R.B. Freeman & L.F. Katz (Eds.), Differences and Changes in Wage Structures 67.

Aoki, M. (2001). Toward a Comparative Institutional Analysis. Massachusetts Institute of Technology.

Aoki, M. (1990). Toward an Economic Model of the Japanese Firm. Journal of Economic Literature, 28, 1-27.

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

Aoki, M. & Dore, R. (Eds.) (1994). The Japanese Firm: Sources of Competitiveness. Oxford: Clarendon Press.

Axelrod, R. (1984). The Evolution of Cooperation. BasicBooks.

Balisacan, A.M. (2008). Poverty Reduction: What we Know and Don't. University of the Philippines Centennial Lecture Series, January 31, 2008.

Baulch, Robert and Neil McCulloch (2000). Tracking pro-poor growth. ID21 insights No. 31. Sussex: Institute of Development Studies.

Blair, M.M. (1994). CEO Pay: Why Such a Contentious Issue? The Brookings Review, vol.12, no.1 (Winter, 1994), 22-27.

Cheffins, B.R. & Thomas, R.S. (2003). The Globalization (Americanization) of Executive Pay. Global Markets, Domestic Institutions. Columbia University Press, 156-57.

Gerson, Philip. (1998). Poverty and Economic Policy in the Philippines. Finance & Development, September 1998, IMF, 46-49.

Hanada, M. (1993). Nihon no Jinji Seido ni Okeru Kyousou Genri (Competition Among Workers in Japanese Human Resource Management). In H. Itami, T. Kagono, M.Ito (Eds.), Nihon no Kigyo Sisutemu [Corporate System in Japan]. Tokyo: Yuhikaku, 276-299.

Hashimoto, M. & J. Raisian (1985). Employment Tenure and Earnings Profiles in Japan and the United States. American Economic Review, 75 (September 1985), 721-35.

Ianchovichina, E. & Lundstrom, S. (2009). What is Inclusive Growth? World Bank. Retrieved October 14, 2011 from http://siteresources.worldbank.org/ INTDEBTDEPT/Resources/468980-1218567884549/WhatIsInclusiveGrowth 20081230.pdf.

Kaplan, S.N. (1994). Top Executive Rewards and Firm Performance: A Comparison of Japan and the United States. The Journal of Political Economy , vol. 102, no. 3 (June 1994), 510-546.

Kubo, Katsuyuki (2001). Ranking Hierarchy and Rank Order Tournament. Hitotsubashi Journal of Economics, 42, 51-63.

Kumar, K. (1994). Generating Broad-Based Growth Through Agribusiness Promotion. USAID Program and Operations Assessment Report. April 1995.

Lawrence, R.Z. & Saxonhouse, G.R. (1991). "Efficient or Exclusionist? The Import Behavior of Japanese Corporate Groups. Brookings Papers on Economic Activity, vol. 1991, no.1 (1991), 311-341.

Maquito, F.C. (2007). Roadmap for Shared Growth through the Philippine Auto Industry, Shared Growth Seminar #8, August 7, 2007, Manila, Philippines; sponsored by the Sekiguchi Global Research Association in collaboration with the University of Asia and the Pacific.

Maquito, F.C. & Hirakawa, H. (2010). East Asian Integration and Shared Growth: Some Preliminary Results of a Center of Buoyancy Approach. Proceedings, International Conference: Industrial Agglomeration, Regional Integration and Durable Growth in East Asia, sponsored by the Faculty of Banking and Finance, and the Faculty of International Economics of the Foreign Trade University (Hanoi, Vietnam) and the Graduate School of Economics and the Economic Research Center of Nagoya University, October 28 – 29, 2010, Hanoi, Vietnam, 250-267.

Maquito, F.C. & Carbonel, H. (2010). Rediscovering Japan's Leadership in "Shared Growth Management." Rikkyo Business Review 3, (July 2010), 20-38.

Milgrom, P. & Roberts, J. (1992). Economics, Organization, and Management. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.

Mincer, J. & Higuchi, Y. (1988). Wage Structure and Labor Turnover in the U.S. and in Japan. Journal of the Japanese and International Economies, 2.

Murphy, K.J. (1999) Executive Compensation. In O. Ashenfelter and D. Card, (Eds.), Handbook of Labor Economics, 2485, 2495-97.

Tomita, Y. (1992). Shoushin no Shikumi (The Mechanism of Promotion). In T. Tachibanaki, (Ed.), Satei, Shoshin, Chinginkettei [Rating, Promotion, and Wage Determination]. Tokyo: Yuhikaku, 49-66.

Tomioka, J. & Ohtake, F. (2005). On the Perception of "Rising Economic Inequality" in Japan. Osaka Economic Papers (in Japanese), vol. 54, no. 4, 421-436.

Tsuru, K. (1994). The Japanese Market Economy System: Its Strengths and Weaknesses. LTCB International Library Foundation.

Weinberg, D.H. (1996). A Brief Look at Postwar US Income Inequality. Current Population Reports: Household Economic Studies. US Census Bureau: June 1996.

World Bank (1993). The East Asian Miracle: Economic Growth and Public Policy. Oxford University Press.