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*The Changing Japanese Labor Market:
 Theory and Evidence*

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I. Introduction and overall summary

The Changing Japanese Labor Market: Theory and Evidence assesses both theoretically and empirically the current state of the Japanese labor market. This book is an important contribution to the English-language literature on the Japanese economy and its labor market. Given the notable success and global influence of the Japanese economy during its heyday of rapid growth from roughly the late 1950's through the 1980's, many Western social scientists have learned about the main features of Japanese industrial relations through the well-known writings (in English) of eminent scholars such as Masahiko Aoki, Ronald Dore, Masanori Hashimoto, Kazuo Koike, and Ezra Vogel.

Since the onset of slow economic growth and relative stagnation in the early 1990's, however, the English-language literature on the Japanese economy has been rather more limited and less well known. Many Western social scientists were left wondering about how the classical Japanese labor market was faring. We would occasionally read dire journalistic accounts about its imminent demise amidst a stagnating Japanese economy.

This book is a much needed and welcomed contribution that fills a significant lacuna in the literature by bringing Western readers up-to-date on understanding the nature of the dynamics of the Japanese labor market in the contemporary period. The book convincingly analyzes and concisely reviews the major trends in the Japanese labor market since the 1990's. Rather than simply collapsing, the Japanese labor market is evolving to

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adapt to the modern era of greater uncertainty and lower growth for an economy that is still the third largest in the world.

The book has three authors including Akiomi Kitagawa, Souichi Ohta, and Hiroshi Teruyama. It consists of five chapters. As stated in the preface, the first chapter was written by Ohta and Teruyama. Chapters 2 and 3 were written by Kitagawa. Chapter 4 was written by Teruyama while Chapter 5 was written by Ohta and Teruyama.

Despite this demarcated division of labor, the chapters are well organized and smoothly integrated. After providing a general overview of the Japanese labor market in Chapter 1, Chapters 2 and 3 present theoretical models using rigorous economic analysis to explain seniority-wage profiles, long-term employment relations, labor market segmentation, and patterns of unemployment. Chapters 4 and 5 investigate survey data to assess and empirically apply the preceding theoretical models.

The authors are all obviously esteemed scholars who are affiliated with leading universities in Japan. This book is thus not surprisingly an impressive and highly informative book. It will be of interest to professional economists who emphasize detailed, causal analysis that is mathematically reasoned and rigorous. Although obviously focused on the

Japanese case, the substantive concerns considered in this analysis shed important insights on efficiency wage theories, unemployment, and segmentation by employment relations. These phenomena are significant in many modern economies beyond Japan including in the U.S. The book should therefore be of interest to labor economists beyond those who are Japan specialists.

At the same time, the empirical analyses in Chapters 1, 4, and 5 are accessible and highly readable for other social scientists. Furthermore, both Chapters 2 and 3 provide non-technical, discursive summaries of the substantive structure of the mathematic models. For these reasons, sociologists, management specialists, organizational psychologists, and business analysts would all learn valuable and relevant information from reading this book. Other researchers who are interested in other aspects of Japanese society—including for example, its demographic, cultural and political dimensions—would also likely find this book to be worthwhile reading because economic factors constitute such an important background context for the behavior of many people in any modern society.

II. Summary by chapter

Chapter 1 provides a concise overview of important empirical trends in the Japanese labor market during the last three decades. Unemployment has substantially increased since the glory years of expanding productivity and global preeminence during the 1980's. The analysis shows that unemployment has risen due to both increased job loss as well as longer spells of unemployment. Other important trends include a rising share of workers who are “non-regular” in terms of their employment relations (i.e., not in long-term employment contracts which is a critical feature of labor market segmentation in Japan); a somewhat less steep age-earnings profile for full-time male workers in regular employment; slightly reduced firm-worker attachment; and evidence of negative cohort effects for university graduates who entered the labor force during years with higher unemployment.

Overall, this depiction suggests that the Japanese

labor market still has its discernable “three sacred treasures” (i.e., long-term employment, seniority wages, and enterprise unionism) but they are slowly being attenuated and increasingly limited to a smaller portion of the labor force. For this reason, understanding the causal nature of these phenomena is all the more important. As inequality in Japan has begun rising during this period of low economic growth, the welfare consequences of long-term employment may be shifting if it is becoming more a source of monopolistic advantage and less of a mechanism for developing firm-specific skills that ultimately enhance productivity and promote economic growth.

Against this empirical and theoretical backdrop, Chapter 2 develops a formal economic model in which the key analytical factor is bankruptcy risk. While that analytic reference is admirably clear, bankruptcy risk might be more generally understood as referring to low profitability or the increased risk of becoming a corporate acquisition. In other words, the model is a more relevant depiction for firms in the current era of greater economic uncertainty, rising globalized competition, lower profits, and limited economic growth.

The model developed in Chapter 2 finds that bankruptcy risk flattens the age-earnings profile and increases the efficiency-wage component of the earnings of workers in the primary sector. A higher level of bankruptcy risk correspondingly increases those effects and leads to greater (non-price) rationing of employment in the primary sector. The welfare implications of these processes are analyzed leading to the conclusion of worsened societal economic well-being. In other words, according to this model, the monopolistic aspect of the long-term employment relations has increased in contemporary Japan.

Chapter 3 presents an economic model of long-term unemployment which, as noted above, has become more prevalent in the Japanese labor market. A key substantive issue here is “duration dependence” which is a sort of “scarring effect” (Yu 2012) whereby the longer a person is unemployed, the more prospective employers deem the person to be less productive as a potential employee. This

model relies heavily on informational frictions especially the uncertainty with which prospective employers can know the potential productivity of currently unemployed persons. Firms therefore engage in the ranking of the unemployed such that the longer a person is unemployed the lower is his or her rank. The formal model demonstrates that a Pareto-improving welfare outcome may follow from appropriate government intervention by increasing employment through the subsidizing of newly established firms.

Chapter 4 moves back to the empirical portion of the book. Investigating survey data for the Tokyo metropolitan area from 2002 to 2014, Chapter 4 empirically delineates the dual structure of the Japanese labor market (i.e., jobs with long-term employment in the primary sector versus “non-regular” employment). The major statistical tool for this chapter is the endogenous switching regression model which has been used in related prior literature (Sakamoto and Powers 1995). Multivariate probit models are estimated for workers who change employment across firms in order to assess the extent of labor market segmentation in terms of serial state dependence and first-job effects.

The empirical results in Chapter 4 generally confirm the persistence of labor market segmentation. In contrast to the fairly modest net effects of tenure in the U.S. (Altonji and Williams 2005), regular workers in the primary sector still receive higher returns to years of tenure than for general experience indicating that the traditional seniority-wage system continues to operate for this segment of the Japanese labor market. Regular employees are also the only group that clearly benefits from firm-size effects and from superior educational background premiums suggesting perhaps that these workers have adequate bargaining power to capture firm rents (Blanchflower, Oswald, Sanfey 1996) which, in the Japanese case, may derive from annual bonus payments.

By contrast, “non-regular” workers only receive returns for general work experience. Among male workers (though probably not among female workers) those returns are similar to regular workers

in the primary sector. This latter finding suggests that “non-regular” male workers are generally not characterized as being in “dead-end” jobs as was once a popular view about dual labor markets in the U.S. (Piore 1975). These findings do imply, however, the continuing significance of gender in Japanese labor market segmentation with a wide gap between female regular workers in the primary sector versus those “non-regular” employment.

Regarding mobility patterns, the empirical findings discussed in Chapter 4 confirm that regular employment is still difficult to obtain for workers who are in “non-regular” employment underscoring continued labor market segmentation. That pattern applies to both men and women. Net of current employment status, however, first-job effects appear to be small at least for this sample of job movers. In general, the empirical results from Chapter 4 appear to be mostly consistent with the theoretical analysis from Chapter 2.

Chapter 5 discusses the empirical results for bivariate probit models that are specified to investigate governmental data on unemployment from 2003 to 2012. This approach is used to control for unobserved individual heterogeneity. The findings suggest duration dependence. Consistent with the formal analysis in Chapter 3, men and women who are unemployed for a longer period of time become less likely to be hired for employment even after controlling for their individual characteristics.

III. Further discussion and suggestions for future research

One potential theme that arises from the analysis in this book is identifying the firm and industrial characteristics of regular employment in the primary sector in contemporary Japan. That sector once seemed to be generally synonymous with large manufacturing firms and government agencies. As Japan has now become more of a post-industrial economy, how salient is manufacturing in defining regular employment? What sort of medium and even small sized firms (perhaps associated with advanced technologies and knowledge-intensive research activities) pay high wages for a sizeable component

of the regular employment? Correspondingly in the U.S. as well, the wage premium for workers in large firms is declining (Bloom et al. 2018).

From a more theoretical perspective, the finding in Chapter 4 that firm-size and educational premiums persist mostly for regular workers may suggest some relevance of insider-outside theory (Lindbeck and Snower 2001). Identifying the characteristics of firms that constitute the primary sector or regular employment may be consistent with related trends in labor economics in Western countries which focus on rent-sharing theories of the firm (e.g., Card et al. 2018). In general, many labor economists in the West seem to be becoming more accepting of theoretical models in which labor market disequilibrium of some sort may be persistent (e.g., due to informational asymmetries, moral hazard, transaction costs, monopsony, oligopoly in product markets, firm-rents, unionization, government regulations on employment and wages) which is more compatible with traditional views about dual labor market segmentation in Japan.

In regard to policy, the Chapter 3 suggests subsidizing newly established firms so that they can become more capable of paying high wages to their regular employees. More broadly, however, one could furthermore suggest that marginal enhancements to the wages and living standards of workers outside of regular employment may also be economically feasible. Because this book has demonstrated that the clear majority of employees are now “non-regular,” promoting their economic outcomes—to the extent fiscally feasible and consistent with maintaining productivity—might have a wider impact on ameliorating the overall level of inequality. Although beyond the scope of this book, the pressing policy issue of an aging population and a declining fertility rate might also be partially addressed by promoting a greater level of economic security among the majority of younger people (who are not regular employees in the primary sector) so that they may increase their marriage rate and the formation of new families with children.

IV. Conclusion

The Changing Japanese Labor Market: Theory and Evidence is an important and welcomed contribution to the English-language literature on the Japanese labor market. The book brings Western readers up-to-date on the current situation in the contemporary period characterized by low growth and heightened global competition. The book demonstrates both theoretically and empirically how the Japanese labor market is adapting to this new era. The traditional practices of the Japanese labor market are still evident in attenuated form, but the classical system of long-term employment and seniority-wages is increasingly limited to a smaller portion of the overall labor force. In the modern period with increased inequality and reduced economic growth, policy makers need to reconsider the pros and cons of evolving labor market segmentation in Japan.

References

- Altonji, Joseph G., Nicholas Williams. 2005. “Do wages rise with job seniority? A reassessment.” *Industrial and Labor Relations Review* 58(3): 370–397.
- Blanchflower, David G., Andrew J. Oswald, Peter Sanfey. 1996. “Wages, profits, and rent-sharing.” *Quarterly Journal of Economics* 111(1): 227–251.
- Bloom, Nicholas, Fatih Guvenen, Benjamin S. Smith, Jae Song, Till von Wachter. 2018. “The disappearing large-firm wage premium.” *American Economic Association Papers and Proceedings* 108: 317–322.
- Card, David, Ana R. Cardoso, Joerg Heining, Patric Kline. 2018. “Firms and labor market inequality: Evidence and some theory.” *Journal of Labor Economics* 36(S1): S13–70.
- Lindbeck, Assar, Dennis J. Snower. 2001. “Insider versus outsiders.” *Journal of Economic Perspectives* 15(1): 165–188.
- Piore, Michael J. 1975. “Notes for a theory of labor market stratification.” In *Labor Market Segmentation* edited by David M Gordon, Michael Reich, and Richard C. Edwards. D.C. Heath, Lexington, MA, 125–150.
- Sakamoto, Arthur, Daniel A. Powers. 1995. “Education and the dual labor market for Japanese men.” *American Sociological Review* 60(2): 222–246.
- Yu, Wei-hsin. 2012. “Better off jobless? Scarring effects of contingent employment in Japan.” *Social Forces* 90(3): 735–768.

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