

Secular trends in the Japanese labour market during the lost decades: A reply to Andrew Gordon

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RESEARCH NOTE:

Secular Trends in the Japanese Labor Market

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Abstract [132 words]

In Blind and Lottanti von Mandach (2015) we present evidence that wage gaps between men and women, as

well as between regular non-regular employees have seen an evolution toward more equity between 1988 and

2010. A recent article, "New and Enduring Dual Structures of Employment in Japan: The Rise of Non-

Regular Labor, 1980s-2010s" (Gordon 2017), attempts to replicate our earlier analysis, but reaches strongly

diverging conclusions.

We demonstrate that the evidence in Gordon's (2017) does not challenge our earlier findings and provide

explanation for the diverging results. As we show, the results of his replication attempt only apply to the

fraction of non-regular employees working fulltime, while our analysis applies to the large majority of part-

time employees. We add five years of data and show that the trends identified have persisted.

Keywords:

Gender economics; labour force and employment; wage differentials; Japan

JEL codes:

J16, J21, J31

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1. Introduction

Since the burst of the bubble, the Japanese labor market has evolved into an even more pronounced dual structure in terms of the *share* of non-regular employment. Mass media and academic appraisals of this development are overwhelmingly negative. Criticism usually extends to the strong increase in non-regular labor (considered an a priori normatively negative outcome), wage gaps between regular and non-regular employment, and between sexes (see Blind and Lottanti von Mandach 2015). We do not share such a generally negative view. In our reappraisal of the long-term labour market evolution in Japan, we have provide evidence on three central questions. First, desire not need was the *major* cause of the rise in non-regular employment. Second, regular employment has not been replaced by non-regular employment in aggregate perspective. And third, wage gaps between men and women, as well as between regular non-regular employees have narrowed significantly between 1988 and 2010 (Blind and Lottanti von Mandach 2015).

In his article "New and Enduring Dual Structures of Employment in Japan: The Rise of Non-Regular Labor, 1980s–2010s" Gordon (2017) attempts to replicate our analysis of wage developments, but reaches strongly diverging conclusions. In addition, he provides a selection of granular data that might be understood as refuting two of our earlier findings, namely that desire and not need was the main driver for the increase in non-regular employment.

These contradictory results call for clarification. For that purpose, this research note demonstrates that the evidence in Gordon (2017) does not challenge our earlier findings on labor market evolution during the 'lost decades'. Our note is structured as follows. In section 2 we provide explanation for the diverging results of Gordon's (2017) replication attempt and show that they only apply to the fraction of non-regular employees working fulltime, while ours applies to the large majority of part-time employees. By adding half a decade of recent data until 2015, we further underscore that closing wage gaps between men and women, and between full- and part-time employees do indeed represent a secular trend in the Japanese labor market. Section 3 discusses the sources that contributed to Gordon's diverging conclusion about whether need or desire has driven the increase in non-regular employment. In section 4, we clarify why we believe that the negative label of 'loss' is not warranted for describing the expansion of the non-regular employment in Japan. Section 5 summarizes.

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Obviously, aggregate findings do not rule out temporal fluctuations in the relative importance of motivational factors. For instance, the share of individuals that became non-regular employees out of need might have gained importance during the so-called "employment ice age" between 2000 and 2004, or during the first two years after the Lehman shock in 2008 and 2009.

2. Persistent or closing gaps?

"Drawing on the same Basic Survey [as Blind and Lottanti 2015]" Gordon (2017) attempts to replicate our analysis of wages, in which we find substantially narrowing gaps between regular (fulltime) and non-regular (part-time) employment for both genders (Blind and Lottanti von Mandach 2015: 79-81, Fig. 3-4). Gordon, however, reaches diverging results, namely that the gap between regular and non-regular wages has been narrowing only for "women in small firms of a limited age range" (Gordon 2017: (p. 29), and therefore claims to find a "a persistent and large wage gap" (ibid: 30).

As we infer from his Graphs 18 and 19 (Gordon 2017: 31), Gordon's analysis uses wage data for *fulltime* non-regular employees (*sei'sha'in igai* category of *ippan rōdōsha* section). This category, however, corresponds to the minor share of fulltime non-regular employees averaging but 18.7% in the 1988-2010 period analysed in our article (calculated from MHLW 2015). In contrast, in our analysis of non-regular employees (Blind and Lottanti von Mandach: 79) we have chosen to use data for hourly wages earned by part-time employees (*tanjikan rōdōsha* section) as these reflect the development faced by the 81.3% majority of individuals in non-regular employment. In contrast to Gordon's claim (Gordon 2017: 29, fn 13) we have explicitly mentioned that our calculations also include bonuses (Blind and Lottanti von Mandach 2015: 79). Now, because Gordon (2017) finds no major widening of pay gaps in *fulltime* non-regular employment, we can correspondingly amend our earlier finding: The wage gap between regular and non-regular employees has narrowed substantially, and was overwhelmingly driven by increases in hourly wages of part time employees.²

Whether the gap remaining between part-time employees and fulltime regular employees has to be considered 'large' is a matter of perspective. Gordon (2017) refers to a JIL report to point out that the fraction of 57% of wages earned by non-regular employees relative to regular employees was lower than for "major European countries" (Gordon 2017: 31). However, if one corrects the Japanese data for unpaid overtime of regular employees estimated at 30 hours per month (Ogura and Sakaguchi 2004: 26) and found

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A frequently mentioned methodological challenge to time-series analyses of Japanese labour market data is the 2006 (minor) change in definitions. However, as our analysis spans some 20 years, we generally share Lise, Sudo et al.'s (2014: 590) assessment that the "overall trends are not sensitive" to the 2006 change. Inspecting our 2015 data on fulltime employees, it includes less than 7% fulltime non-regular workers (number of contract workers relative to the total number of regular employees including executives by the 2006 definition). However, as Gordon's 2017 analysis implies that wages of fulltime non-regular employees have seen an almost perfect correlation with that of regular employees we argue that our analysis is not affected at all from the inclusion of contract workers for the post 2006 period, and negligibly only for the pre 2006 period.

stable for the 1990s and 2000s (Kuroda 2010), the adjusted ratio for Japan would figure at about 68%, which is roughly in line with Italy and the United Kingdom (JIL 2015: 177). Drawing on the same source one may also want to add that this corresponds to almost double (!) the ratio of the US (30.5%). Gordon (2017: 31, FN 15) finds values for the US "not comparable" as they are computed comparing weekly wages of fulltime non-regular employees. We do not share this view because even a substantial share of unpaid overtime in US regular employment (let us assume some 20%) would not change this figure dramatically (illustratively to 38%). It seems, to us, therefore, that the wage gap is neither persistent, nor exceptionally large in international comparison.

Our earlier analysis of wage gaps has further documented a substantial narrowing of the gender wage gap both in regular (fulltime), and in non-regular (part-time) employment (Blind and Lottanti von Mandach 2015: 76-82), aided by phenomena such as longer tenure (Abe 2013: 28) and higher educational attainment (Abe 2010: 153). This coincides with OECD statistics (OECD 2017, which document that Japan has experienced one of the largest reductions in gender pay gap of all OECD countries in the course of the 'lost decades'. In light of these findings Gordon's statement of gender as a "more prominent source of division than before" (Gordon 2017: 30) is difficult to apprehend.

Further evidence for closing wage gaps can be found in the updated version of our earlier indexed wage development graphs (see Appended Figures 1 and 2a-i). The data now covers 28 years from 1988 through 2015. Eventually, the two trends identified earlier –of closing gaps between gender and between fulltime and part-time employees— have continued during the 2011-2015 period. With the trend toward more gender equality continuing since more than two decades and toward more equality between part- and fulltime pay since over 10 years, we trust that these may indeed be labelled secular.

3. Need versus desire to work in non-regular employment

The analysis of wage gaps is not only insightful in its own right, but is also meaningful for understanding aggregate supply and demand movements in the labour market. If demand for non-regular part-time labour increases, wage hikes relative to regular employment are necessary to create the supply needed to satisfy demand, i.e., to convince more individuals to join the workforce (as seen from general employment growth). Taking this reasoning further, it becomes obvious that convincing individuals to join the work force means to instil a corresponding *desire* to earn a wage (section 2).

Gordon (2017) reaches the opposite conclusion, namely that *need* not *desire* has driven the recent surge in non-regular employment by relying on two government reports:

a 2010 MHLW report stating that 38-55% of non-regular men of prime working age would prefer to work as regular employees; and a 2012 government reporting that considerable shares of new entrants to the labour market –29% of men and 49% of women– took non-regular employment for their first post-graduation job between 2007 and 2012 (Gordon 2017: 22, fn 10).

With regard to the latter, common sense may suggest that a majority of young individuals prefers regular employment. However, as data from the 2015 Labour Force Survey reveals, only some 27.9% of non-regular employees aged 25-34 were non-regular out of *need*, i.e., through a perceived absence of regular alternatives (MHLW 2015a). Expanding the figures cited by Gordon (2017) with the respective ratios of involuntary non-regular employment by sex (40.0% for men, 19.4% for women) (MHLW 2015a), one understands that about 11.6% of young men and 9.5% of young women are possibly working in non-regular employment due to the perceived absence of a regular alternative.

For assessing the overall relevance of the numbers reported by Gordon (2017) from the 2010 MHLW report, we expand the 3.6% share of these individuals in total employment (as obtained from MHWL 2015b) by the average 46.5% (simple mean of 38 and 55%) desiring regular employment. Doing so, we find that this particular piece of evidence pertains to a mere 1.69% of employed individuals. While it is deplorable that these 1.69% of employed individuals in 2010 could not enjoy their preferred working conditions, we argue that non-regular employment is still far better than being unemployed, which would be a much likely alternative in a more rigidly regulated labor market.

4. The rise of non-regular employment: Worsening labor market conditions or employment growth?

Regardless of the fact that in a long-term, aggregate perspective, the rise of non-regular employment is neither a 'turn' (away from regular employment) nor a 'shift' (toward non-standard employment), but rather an 'expansion' of the labor market, the increase in non-regular employment is generally viewed as a negative labor market outcome³, not least because women occupy the majority of the newly-created non-regular employment positions.

normatively superior to no employment being created" (Blind and Lottanti von Mandach 2015:15).

This is also the case in Gordon (2017). While he acquiesces the aggregate *expansion* of employment beyond the 1988 labour market structure as documented in our 2015 article, he disqualifies as 'too low a standard' our criterion of "non-regular employment being

Now, if the increase in non-regular employment had been predominantly due to the need of individuals employed, such argument might be pertinent. However, as evidenced in the previous section, the status change from non-working to working as non-regular employee predominantly originates from a corresponding desire to do so, prompting some 6.9 million women to enter the labor market by 2010, who previously (1988) had not been working at all (Blind and Lottanti von Mandach 2015: 71, Tab. 3).

In our view, this development can only be qualified as a "loss" (Gordon 2017: 26), if these women had formerly been working as regular employees. If women working part-time was to represent a loss relative to not working at all, this would imply that these women had been better off not working at all. Admittedly, Gordon acquiesces the aggregate *expansion* of employment beyond the 1988 labour market structure as documented in our 2015 article, but disqualifies as 'too low a standard' our criterion of "non-regular employment being normatively superior to no employment being created" (Gordon 2017: 15).

The negative label of 'loss' is present in another instance where Gordon remarks that women in manufacturing industries have "lost far more jobs" than men (2017: 19). Such label would need to rely on evidence that women had preferred to keep these jobs. But without further evidence, the opposite is equally possible: Women may just have been more successfully adapting to structural change than men. In fact, as evidenced in MHLW 2015b) and further analyzed by Schad-Seifert (2015: 11), women are preferably hired as regular employees in growing industries such as care-giving and other service industries. This ties in well with our earlier findings that female standard employment in the age group of 15 to 34 increased markedly between 1998 and 2009 (by some 8.1pp from 30.3% to 38.4%), while male standard employment decreased (by 9.0pp from 82.2% in 1988 to 73.2% in 2009; Blind and Lottanti von Mandach: 76). Against that background the conclusion of women in manufacturing as constituting "a disposable buffer of 'non-regular regular' employees" (Gordon 2017:19) is not warranted.

5. Conclusion

In this research note, we provide explanation for the diverging results of Gordon's (2017) replication attempt of the long-term aggregate wage analysis in Blind and Lottanti von Mandach (2015). As shown in our 2015 paper and further underscored with more recent data, we confirm that the "lost decades" have seen at least three normatively positive developments. (1) Wage gaps between regular and non-regular employment have

significantly narrowed, mainly driven by strongly increasing wages in part-time employment. To this adds further evidence on a strongly narrowing gender wage gap. (2) The rise of non-regular employment was mainly driven by a desire, but not a need to work. (3) In aggregate perspective, the rise of non-regular employment originates from an expansion of employment, not a replacement of regular by non-regular jobs.

This being said, and as variously acknowledged in our 2015 article, quite some issues remain to be solved or improved in the Japanese labour market such as further efforts in bringing down the still substantial gender wage gap (Kato et al. 2013; Chiang and Ohtake 2014), alleviating gender differences in career tracks (Nemoto 2013; Chiang and Ohtake 2014), or increasing female participation in regular employment beyond birthgiving (Cooke 2010; Abe 2011; Macnaughtan 2015). Whether the increased labor market participation implies an evolution of labor market preferences in Japanese women is subject to further research, where one would need to investigate changes in wage sensitivities of labor supply.

As a final remark, we note that obtaining more detail may be helpful for developing a better understanding of aggregate developments. Against that background, the rich granular data provided by Gordon (2017) is very insightful, such as on the composition of the aggregate expansion of non-regular work as resulting from increases and decreases in particular industries (ibid: 18-22). However, when detail feeds general conclusion with relevant context being omitted they may turn into what has come to be known as 'stylized facts'. These, for their part, may become further disseminated even without giving reference; e.g., as "increasingly polarized regular-non-regular gap in wages" (North 2017: 8). While such development may be deplorable in science, it may detrimental if it impacts on public perception and agent behavior via mechanisms such as a reduced propensity to consume.

Conflict of interest statement:

On behalf of all authors, the corresponding author states that there is no conflict of interest.

References

- Abe Y. 2010. "Equal Employment Opportunity Law and the gender wage gap in Japan: A cohort analysis." *J Asian Econ* 21(2): 142-155.
- Abe Y. 2011. "The Equal Employment Opportunity Law and labor force behavior of women in Japan." J Jpn Int Econ 25(1): 39-55. Abe Y. 2013. "Long-Term Impacts of the Equal Employment Opportunity Act in Japan." *Japan Labor Review*; 10(2): 20-34.
- Blind DG, Lottanti von Mandach S. 2015. "Decades not lost, but won: increased employment, higher wages, and more equal opportunities in the Japanese labour market." *Social Science Japan Journal*; 18(1): 63-88.
- Chiang HY, Ohtake F. 2014. "Performance-pay and the gender wage gap in Japan." *J Jpn Int Econ* 34: 71-88.
- Cooke FL. 2010. "Women's participation in employment in Asia: a comparative analysis of China, India, Japan and South Korea." *The International Journal of Human Resource Management* 21(12): 2249-2270.
- Gordon A. 1993. "Contests for the Workplace." In: Gordon A, editor. *Postwar Japan as History*. Berkeley: University of California Press, pp. 373-394.
- Gordon A. 2017. New and Enduring Dual Structures of Employment in Japan: The Rise of Non-Regular Labor, 1980s–2010s. Social Science Japan Journal 20(1): 9-36.
- JIL. 2015 Databook of International Labour Statistics. Tokyo: Japan Institute for Labour Policy and Training.
- Kato T, Kawaguchi D, Owan H. Dynamics of the Gender Gap in the Workplace: An econometric case study of a large Japanese firm. Tokyo: Research Institute of Economy, Trade and Industry Discussion Paper; 2013. Available from: http://www.rieti.go.jp/jp/publications/dp/13e038.pdf.
- Kuroda, S. 2010. Do Japanese Work Shorter Hours than before? Measuring trends in market work and leisure using 1976–2006 Japanese time-use survey. *J Jpn Int Econ*, 24(4), 481-502.
- Lise J, Sudo N, Suzuki M, Yamada K, Yamada T. 2014. Wage, income and consumption inequality in Japan, 1981–2008: from boom to lost decades. Review of Economic Dynamics; 17(4): 582-612.
- Macnaughtan H. Womenomics for Japan: is the Abe policy for gendered employment viable in an era of precarity?. The Asia-Pacific Journal 2015; 13.13/1. Available from: https://apjjf.org/-Helen-Macnaughtan/4302/article.pdf.
- MHLW (Ministry of Health, Labour and Welfare). 2012. Hataraku Josei no Jōkyō [The situation of working women], Tōkyō: 2012 (cited 29 April 2015). Available from: http://www.mhlw.go.jp/bunya/koyoukintou/josei-jitsujo/dl/12b.pdf (29.04.15).
- MHLW (Ministry of Health, Labour, and Welfare). 2015a. Rōdōryoku chōsa. Shōsai shūkei. Hyō II-A-4 Nenrei kaikyū, genshoku no koyōkeitai ni tsuita omona riyū betsu hiseiki no shokuin/jūgyōin sū (Labor Force Survey. Detailed Statistics. Table II-A-4 Number of Non-Regular Employees by Age and Main Reason to Select Current Employment Form). Data file available at: http://www.e-stat.go.jp/SG1/estat/List.do?lid=000001153286 (retrieved April 11, 2017).
- MHLW (Ministry of Health, Labour and Welfare). 2015b. 'Rōdōryoku chōsa. Chōki Jikeiretsu Dēta. Hyō 9' (Labour Force Survey; Time Series Data. Table 9). Tokyo: 2015 [cited 11 April 2017]. Available from: http://www.stat.go.jp/data/roudou/longtime/zuhyou/lt51.xls.
- MHLW (Ministry of Health, Labour and Welfare). 'Chingin kōzō kihon tōkei chōsa' (Basic Survey on Wage Structure); 2016 [cited 17 April 2017]. Data provided by Japan Institute for Labour

- Policy and Training, Tokyo. CSV files available from: http://www.jil.go.jp/kokunai/statistics/dbdata/wage/index.html.
- Nemoto K. Long working hours and the corporate gender divide in Japan. Gender, Work & Organization 2013; 20(5): 512-527.
- North S. 2017. Limited regular employment and the Reform of Japan's Division of Labor. The Asia-Pacific Journal Japan Focus 2017; 12-15-1. Available from: https://apjjf.org/-Scott-North/4106/article.pdf.
- OECD. Gender Wage Gap. Paris: OECD Statistics Division; 2017 [cited 11 April 2017]. Longitudinal data available from: http://stats.oecd.org/index.aspx?quervid=54751.
- Ogura K, Sakaguchi N. Nihon no chôrôdôjikan: Fubarai rôdôjikan ni kan suru kôsatsu (Japan's long working hours: an inquiry into unpaid working hours). Tokyo: JILPT Discussion Paper No. 04-001; 2004. Available from: http://www.jil.go.jp/institute/discussion/documents/dps_04_001.pdf.
- Schad-Seifert A. 2015. Womenomics Ein Modell für eine neue Familienpolitik in Japan? In: Chiavacci D, Wieczorek I, editors. Japan 2015 Politik, Wirtschaft und Gesellschaft. München: Iudiucium, pp. 216-242.

Appendix

- **Figure 1:** Wage Fulltime Standard Versus Part-time Employment, Male Versus Female, Age 20–64 (1988–2015, 1988=100). Source: Own Calculations based on [21].
- **Figure 2a**: Fulltime Standard Versus Part-time Employment, Male Versus Female, Age 20-24 (1988–2015, 1988=100). Source: Own Calculations based on [21].
- **Figure 2b**: Fulltime Standard Versus Part-time Employment, Male Versus Female, Age 25-29 (1988–2015, 1988=100). Source: Own Calculations based on [21].
- **Figure 2c**: Fulltime Standard Versus Part-time Employment, Male Versus Female, Age 30-34 (1988–2015, 1988=100). Source: Own Calculations based on [21].
- **Figure 2d**: Fulltime Standard Versus Part-time Employment, Male Versus Female, Age 35-39 (1988–2015, 1988=100). Source: Own Calculations based on [21].
- **Figure 2e**: Fulltime Standard Versus Part-time Employment, Male Versus Female, Age 40-44 (1988–2015, 1988=100). Source: Own Calculations based on [21].
- **Figure 2f**: Fulltime Standard Versus Part-time Employment, Male Versus Female, Age 45-49 (1988–2015, 1988=100). Source: Own Calculations based on [21].
- **Figure 2g**: Fulltime Standard Versus Part-time Employment, Male Versus Female, Age 50-54 (1988–2015, 1988=100). Source: Own Calculations based on [21].
- **Figure 2h**: Fulltime Standard Versus Part-time Employment, Male Versus Female, Age 55-59 (1988–2015, 1988=100). Source: Own Calculations based on [21].
- **Figure 2i**: Fulltime Standard Versus Part-time Employment, Male Versus Female, Age 60-64 (1988–2015, 1988=100). Source: Own Calculations based on [21].

Fig. 1
Wage Fulltime Standard Versus Part-time Employment, Male Versus Female, Age 20–64.

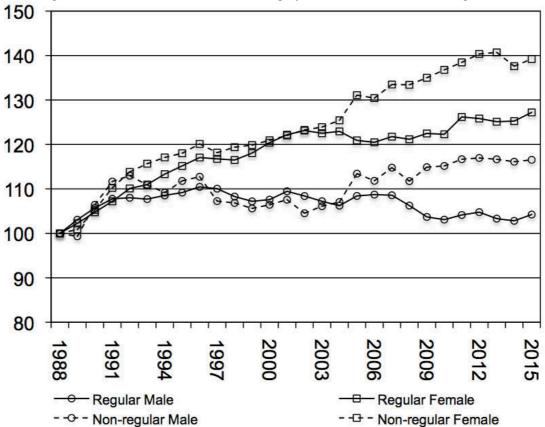


Fig. 2a-i Wage Fulltime Standard Versus Part-time Employment, Male Versus Female, By age groups.

