

Dualisation in a Decentralized Wage-Setting Regime

Within-Firm Wage Penalty for Non-Regular Workers in Japan

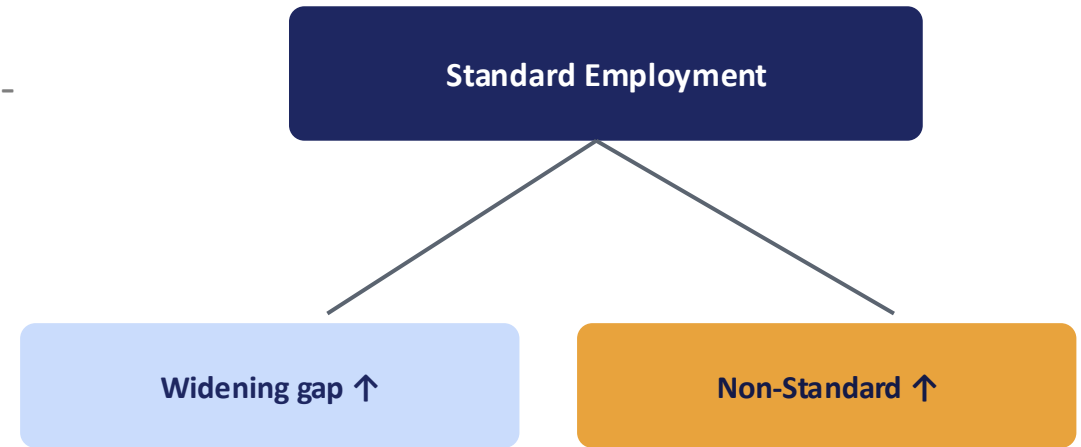
Yasutaka Fukui

Nagoya University

Dualisation Is Advancing Worldwide — But Not Uniformly

Dualisation — the widening divide between standard and non-standard employment — has progressed across many developed economies.

Yet the size of the wage gap, and the mechanism that produces it, differs with each country's employment relations and institutions.

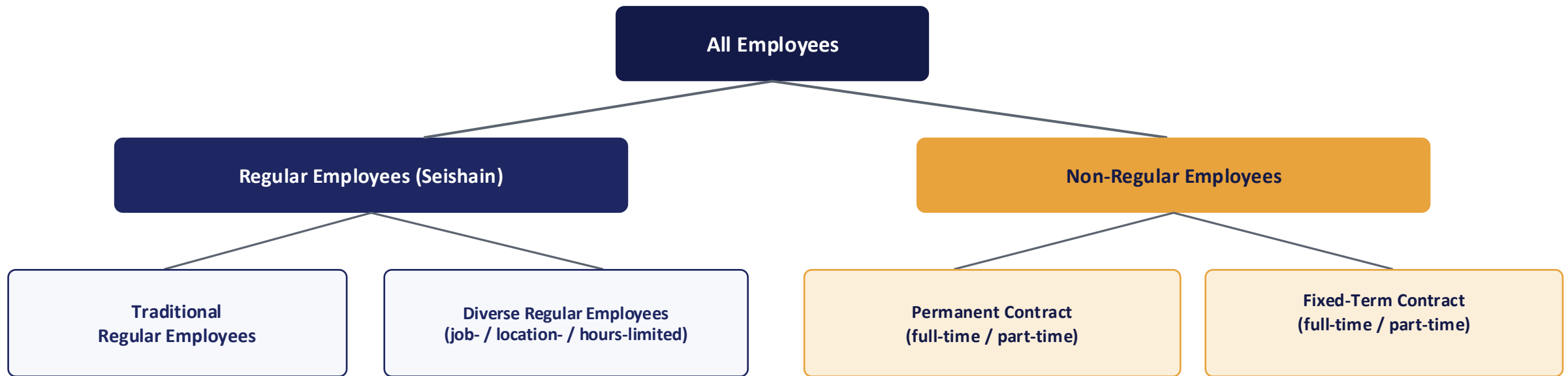


Same direction, different institutions, different magnitude — and different mechanisms.

Research setting: Japan — decentralized labor relations and firm-level internal labor markets.

Firms Redraw the Insider–Outsider Line within Organization

An increasing number of Japanese firms subdivide the traditional regular / non-regular divide into multiple in-house employment categories — each with its own pay schedule.



→ *This talk focuses on the wage gap among permanent-contract employees: traditional regular, diverse regular, and permanent non-regular employees.*

Government Reinforces the Trend



Conversion Rule

Fixed-term contracts must convert to permanent (indefinite) contracts after repeated renewal beyond five years.



Equal / Balanced Treatment Rule

Regular and non-regular employees at the same firm must be treated equitably for comparable work.

The government positively evaluates firms' diversification of regular-employee categories — viewing it as a channel that helps convert non-regular workers into some form of regular employment.

Wage Gaps Within the Firm, Within Permanent Employment

As firms multiply employment categories — and government pushes conversion plus equal treatment — a critical empirical question follows:

How large are the wage gaps between different classes of permanent-contract employees at the same firm?

**Traditional
Regular**

**Diverse
Regular**

**Permanent
Non-Regular**

What We Don't Yet Know

Sato, Sano & Hara (2003)

Typology of employment categories within firms — needs updating for today's diversified schemes.

Takahashi(2016); Kawaguchi(2008)

Wage gaps studied by contract type (fixed-term vs. regular), but not across diverse regular categories.

Yasui et al.(2018)

Wage gap between unlimited ("mugentei") and limited ("gentei") regular employees.

THE GAP

No prior study has jointly measured within-firm wage gaps among traditional regular, diverse regular, and permanent-contract non-regular employees.

Two Aims of This Study

1

Characterize the firms

Identify the HR-management characteristics of firms that use diverse regular employees and fixed-term / permanent non-regular workers.

2

Measure the wage gaps

Measure within-firm wage gaps among traditional regular, diverse regular, and permanent non-regular employees, and identify the factors behind them.

Linked Employer–Employee Survey Data

D Data

- Linked employer–employee survey, two overlapping samples:
 - Permanent-contract employee sample — **4,068 employees / 2,260 firms**
 - Same job as traditional regular sample — **2,969 employees / 1,886 firms**
- Key comparison restricted to employees doing **the same work as traditional regular employees**, isolating like-for-like wage comparisons.
- **Controls:** job rotation, transfer, overtime, and regular pay-raise scale (all binary); gender; education; age bracket; tenure (+ tenure²); job type; job grade.

M Method

- **Logit models** of firm use of each employment category (firm size, industry, staffing pressure).
- **OLS and firm fixed-effects (FE) wage models** — FE absorbs all firm traits, isolating the within-firm gap.

$$\ln(\text{wage}) = \beta \cdot \text{Employment Category} + X'\gamma + \text{Firm FE} + \varepsilon$$

Which Firms Use These Categories?

Employment Category	Large Firms	Mid-Size Firms	Associated Industries (+ / -)	Regular Staff Shortage	Regular Staff Turnover High	Non-Regular Staff Shortage	Non-Regular Staff Turnover High
Fixed-Term Part-Time	+	+	Construction-, Living-related & entertainment+, Education & learning support+, Healthcare & welfare+, Other+		+	+	
Fixed-Term Full-Time	+	+	Construction-, Wholesale & retail-, Accommodation & food service-, Education & learning support+	-		+	
Permanent Part-Time (Non-Regular)	+		Construction-, Information & communications-, Academic/professional/technical services-, Accommodation & food service+, Education & learning support+, Healthcare & welfare+	-		+	
Permanent Full-Time (Non-Regular)	+	+	Transport & postal-, Real estate & goods rental+, Other services+	-		+	+
Diverse Regular Employees	+		Wholesale & retail+, Finance & insurance+, Accommodation & food service+, Healthcare & welfare+		+		
Job-Limited Regular Employees	+		Transport & postal+, Education & learning support+, Healthcare & welfare+, Combined services+, Other+				
Location-Limited Regular Employees	+	+	Electricity & gas+, Wholesale & retail+, Finance & insurance+, Education & learning support-, Healthcare & welfare-				
Hours-Limited Regular Employees			Mining+, Accommodation & food service+, Healthcare & welfare+		+		+

Unit of analysis: firms — logit models predict which employers use each employment category, based on firm-level (employer) survey data.

- **Larger firms** are more likely to use both non-regular and diverse-regular categories.

- **Usage patterns vary by industry** — e.g. construction & healthcare for fixed-term part-time; retail & finance for diverse regular.

- **Linked to staffing pressure:** shortages or high turnover of traditional regular employees predict category use.

The Wage Gap That Persists

Within-Firm Wage Gap by Category (% , $\exp(\beta)-1$)

Sample	Model	Diverse Regular	Perm. Full-Time Non-Regular	Perm. Part-Time Non-Regular
Permanent-Contract Employee Sample	OLS	n.s.	-36%	-46%
Permanent-Contract Employee Sample	Firm FE	n.s.	-29%	-41%
Same Job as Traditional Regular Sample	OLS	n.s.	-39%	-49%
Same Job as Traditional Regular Sample	Firm FE	n.s.	-28%	-38%

With Breakdown of Diverse Regular Employee Sub-Types

Sample	Model	Job-Limited Regular	Location-Limited Regular	Hours-Limited Regular
Permanent-Contract Sample	OLS	n.s.	n.s.	n.s.
Permanent-Contract Sample	Firm FE	+31%	-13%	+27%

Percent effects = $\exp(\beta)-1$ from log-wage regression coefficients (firm FE, clustered SE). n.s. = not sig. at 5%.

n.s.
But it is not a monolithic group.
Diverse Regular vs. Traditional Regular

-28%
Full-Time Non-Regular Penalty

-38%
Part-Time Non-Regular Penalty

- **Job-limited (+31% within-firm):** no across-firm gap, but a premium over their own firm's other job types — plausibly specialists (e.g. SME experts, hospital nurses) paid well in-house, yet not necessarily more than typical regular employees generally.
- **Location-limited (-13% within-firm):** on par with traditional regular employees at other firms, but paid less than their own firm's — common among location-limited staff at large firms.

Durable Inequality — Even on a Permanent Contract

Dualisation is institutionalized inside the firm's internal labor market: the insider–outsider line is redrawn, not erased — even for workers on indefinite contracts.

The line that matters is regular vs. non-regular category — not contract duration: "diverse regular" status carries no wage penalty, while permanent-contract non-regular status still does.

Japan

Firm-level institutionalization of dualisation within decentralized industrial relations.

US / UK

Similarly decentralized labor relations— comparable insight into firm-level or establishment-level wage-setting.

Nordic / Continental Europe

Far more centralized institutional context — a contrasting benchmark.

CONCLUSION

Large, durable wage penalties persist for non-regular workers — within the same firm, even under permanent contracts.

28% / 38% full-time / part-time non-regular wage penalty, controlling for firm fixed effects

No gap between traditional and diverse regular employees

→ *Dualisation is now institutionalized within Japan's firm internal labor markets.*

References

Kawaguchi, D, 2018, "An Empirical Analysis of Wage Gaps between Employment Types," *Japan Labor Issues* 701: 4–16.

Sato, H., Sano, Y. & Hara, H. 2003, "Diversification of Employment Categories and HR Management Issues: Balanced Treatment across Categories," *Japan Labor Issues* 518: 31–46.

Takahashi, K, 2016, "Fixed-Term Employees and Within-Firm Wage Gaps," *Japan Labor Issues* 670: 75–89.

Yasui, K., Sano, S., Kume, K. & Tsuru, K, 2018, "Wage Gaps between Unlimited and Limited Regular Employees," *Japan Labor Issues* 701: 67–81.