The shrinkage of middle classes in Japan?

The growing labour market flexibility and its consequences for the class structure

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Paper prepared for the conference of ‘Decline of the middle classes around the world?’ held at Segovia, Spain, Sept. 28th – 30th 2014.

How did middle classes decline recently?

- The decline of middle classes?
- How did it occur?
- Post-industrialisation

Income distribution has been polarised.

Shrinkage of middle strata

- Globalisation

Growing flexibility of labour market, Increasing uncertainty

Middle classes also faced its difficulty?

Cross-national variations in changing middle classes

- The US: Significant change in class structure results from industrial transformations and globalisation.
- European countries: The similar change did not occur.
- Institutional arrangements play a role in shaping the effect of market forces on labour market outcomes.

Why we see middle classes in Japan?

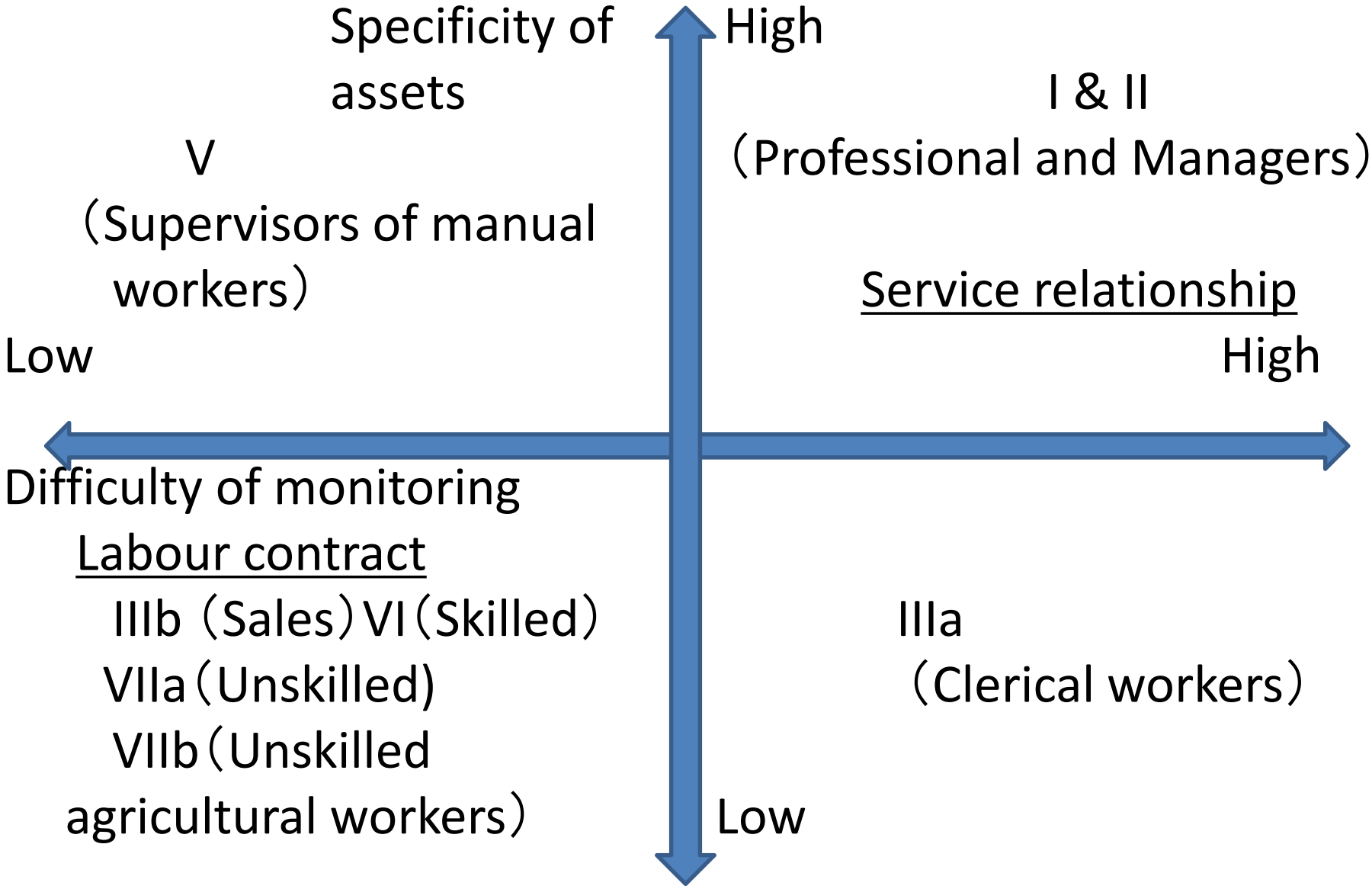
- Japan has distinctive institutional structures as compared with those of US and Europe.
- Japan experienced a long-term economic recession during the period from late 1990s to early 2000s: A lost decade.
- This recession might lead to a change in class structure in Japan. How this occurs depends on institutional arrangements in Japan.
- I highlight the role of institutions in shaping the changing class structure and middle classes in Japan.

How we evaluate the decline of middle classes in Japan

- Globalisation increased the labour market flexibility.
- The growth of non-standard employment
- Goldthorpe's class schema: Employment relationship
- Employment relations between employers and employees
- Service relationship and labour contract
- Specificity of assets (human capital) and difficulty of monitoring

Social class and employment relationship

(Goldthorpe 2008)



Competing hypotheses: The debates of increasing uncertainty

- The risk hypothesis: Ulrich Beck (1992)

The growing uncertainty occurred regardless of class structure. Class structure may be eroded.

- The class hypothesis: Richard Breen (1997)

The growth of uncertainty differs by social class.

Class structure would persist. Otherwise, class inequality would rise.

The context of inequality in Japan

- The post-war economic growth and the myth of all middle class society
- The lifetime employment and seniority earnings
- Companies are in charge with protecting workers' lives.
- The difference between the UK and Japan

In the UK, service relationship has been applied to professionals and managers.

In Japan, service relationship was extended to manual workers.

- Japanese middle classes included manual workers.

The recent economic change and class structure in Japan

- Higher level of employment protection for regular workers
- This hinders firms from adjusting the number of workers in response to economic changes.
- Numerical flexibility
- The growth of non-standard employment
- Higher employment protection for regular workers has been maintained in Japan
- The concentration of bad job characteristics into non-standard employment

Gender, class and uncertainty

- Gender inequality has been embedded in the Japanese employment practices.
- Japanese women have been incorporated into middle classes, but as housewives.
- More female non-regular workers than men
- The growth of nonstandard employment may lead to the rising gender inequality.

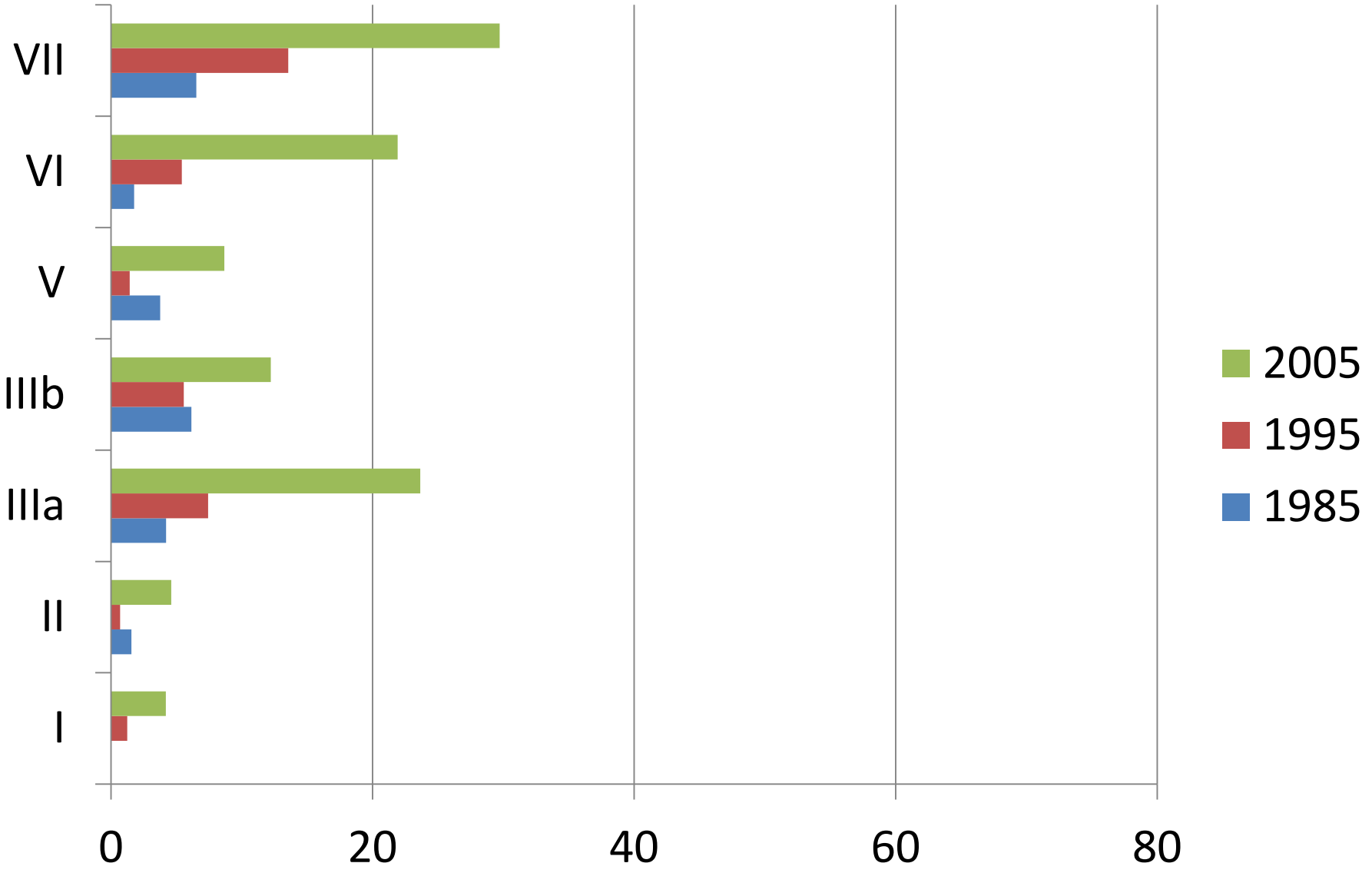
Research question

- How class position is associated with employment relationship.
- Standard employment and non-standard employment
- Non-standard employment: part-time employment, fixed-term employment and dispatched employment

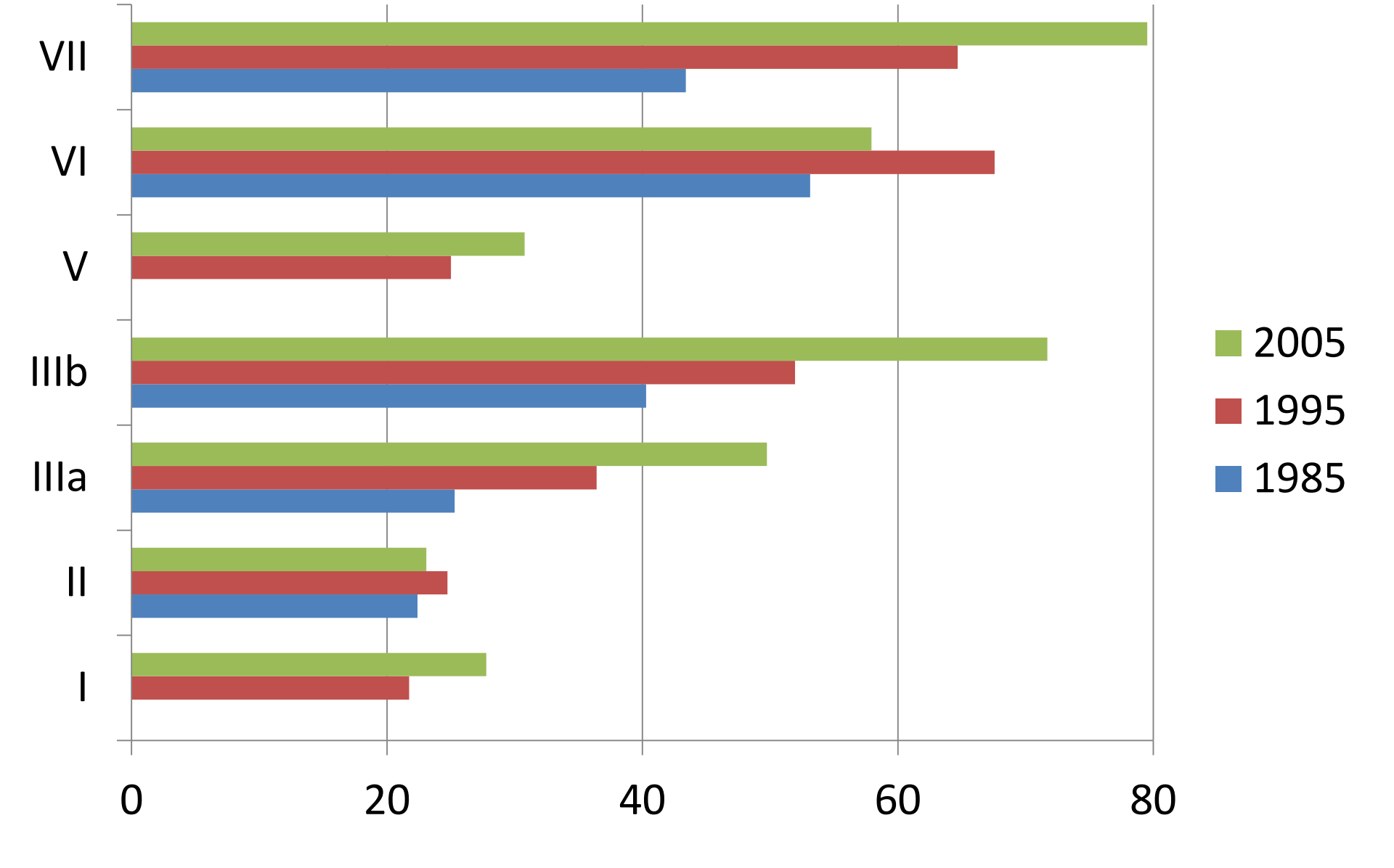
Data, method and variables

- Data: Social stratification and mobility surveys from 1985 to 2005
- Method: Log-linear models with design matrices.
- Variables: Gender, time, social class, employment relationship

The share of non-standard employment by social class (Men)



The share of non-standard employment by social class (women)



Findings from descriptive statistics

- Large gender difference
- Men: Regardless of social class, all workers seem to be regular workers in 1985.
- Among clerical workers, skilled and unskilled workers, there is an increase in the share of non-standard employment.
- Women: In 1985, many workers are non-regular workers, regardless of social class.
- Among skilled and unskilled workers, there is further growth in the share of non-regular workers.

Log-linear modelling

- Testing gender difference of the association between social class and non-standard employment

$$\log F_{fijk} = \lambda + \lambda_f^G + \lambda_i^T + \lambda_j^C + \lambda_k^E + \lambda_{fi}^{GT} + \lambda_{fj}^{GC} + \lambda_{fk}^{GE} + \lambda_{ij}^{TC} + \lambda_{ik}^{TE} + \lambda_{jk}^{CE} + \lambda_{fij}^{GTC} + \lambda_{fjk}^{GCE} + \lambda_{ijk}^{TCE} \quad (1)$$

- Testing the Goldthorpe model in the context of Japanese employment relationship separately for men and women

$$\log F_{ijk} = \lambda + \lambda_i^T + \lambda_j^C + \lambda_k^E + \lambda_{ij}^{TC} + \lambda_{ik}^{TE} + \lambda_{a(j,k)}^{MX} + \lambda_{b(j,k)}^{LC} \quad (2)$$

The design matrices of MX and LC

		MX(a(j,k)) Employment		LC(b(j,k)) Employment	
		Standard	Non-standard	Standard	Non-standard
Class	I+II	0	0	0	0
	IIIa	0	1	0	0
	IIIb	0	0	0	1
	V	0	1	0	0
	VI	0	0	0	1
	VII	0	0	0	1

Log-linear analyses examining gender differences in the association between social class and non-standard employment

Model	L^2	P	df	BIC	D. I.
GTC	4944.4	0	36	4621	31.94
GTC, GCE	337.7	0	24	122	6.00
GTC, TCE	1338.9	0	18	1177	14.33
GTC, GCE, TCE	61.6	0	12	−46	2.07

G: Gender, T: Time, C: Class, E: Employment relationship
D.I.: Dissimilarity Index

Log-linear analyses of temporal changes in social class and employment relations among men

	Model	L^2	df	P	BIC	D. I.
1	Conditional independence(TC, TN)	254.3	15	0	127	5.51
2	No change in class structure (TC, TN, CN)	13.2	10	0.21	−71	0.86
3	Goldthorpe model	56.9	13	0	−53	2.33
4	Revised model	16.8	12	0.16	−85	1.06
	Selective contrast					
	Model 2 vs Model 1	241.1	5	0.00		
	Model 3 vs Model 2	43.7	3	0.00		
	Model 4 vs Model 2	3.5	2	0.17		

An equation and design matrices of the revised model and its parameters

$$\log F_{ijk} = \lambda + \lambda_i^T + \lambda_j^C + \lambda_k^E + \lambda_{ij}^{TC} + \lambda_{ik}^{TE} + \lambda_{a(j,k)}^{MX1m} + \lambda_{b(j,k)}^{LC1m} + \lambda_{c(j,k)}^{LC2m} \quad (3)$$

		MX1m(a(i,j)) Employment		LC1m(b(i,j)) Employment		LC2m(c(i,j)) Employment	
		Standard	Non-standard	Standard	Non-standard	Standard	Non-standard
Class	I+II	0	0	0	0	0	0
	IIIa	0	0	0	1	0	0
	IIIb	0	0	0	1	0	0
	V	0	1	0	0	0	0
	VI	0	0	0	1	0	0
	VII	0	0	0	0	0	1

MX1m=0.857** LC1m=1.741** LC2m=2.351**

TE 1985=-0.406 1995=-0.105 2005=0.510

Log-linear analyses of temporal changes in social class and employment relations among women

Model	L2	df	P	BIC	D. I.
1 Conditional independence(TC, TN)	448.0	15	0	327	15.87
2 No change in class structure (TC, TN, TC)	36.1	10	0.0	−45	3.9
3 Goldthorpe model	49.3	13	0	−56	4.33
4 Revised model	38.3	12	0.0001	−59	4.06
5 Temporal change model 1	16.5	6	0.0111	−32	1.66
6 Temporal change model 2	27.6	11	0.0037	−61	3.49
Selective contrast					
Model 2 vs Model 1	411.9	5	0.000		
Model 3 vs Model 2	13.2	3	0.004		
Model 4 vs Model 2	2.2	2	0.335		
Model 5 vs Model 4	21.8	6	0.001		
Model 6 vs Model 4	10.7	1	0.001		

An equation and design matrices of the revised model and its parameters

$$\log F_{ijk} = \lambda + \lambda_i^T + \lambda_j^C + \lambda_k^N + \lambda_{ij}^{TC} + \lambda_{ik}^{TN} + \lambda_{a(i,j)}^{MX} + \lambda_{b(i,j)}^{LC1f} + \lambda_{c(i,j,k)}^{T(LC2f)} \quad (4)$$

		MX(a(i,j)) Employment		LC1f(b(i,j)) Employment		LC2f(c(i,j)) Employment	
		Standard	Non-standard	Standard	Non-standard	Standard	Non-standard
Class	I+II	0	0	0	0	0	0
	IIIa	0	1	0	0	0	0
	IIIb	0	0	0	1	0	0
	V	0	1	0	0	0	0
	VI	0	0	0	1	0	0
	VII	0	0	0	0	0	1

MX=0.837** LC1f=1.661** 1985,1995(LC2f)=1.784** 2005(LC2f)=2.352**
TN 1985=-0.247 1995=0.054 2005=0.194

Findings: changes in class structure over time

- Men: no changes over time in the association between class and employment relations
- Significant growth in the overall distribution in non-standard employment
- Women: Changes in the association between class and employment relations
- Overall growth in non-standard employment
- The growing disparity across social class

There is significant increase in the share of non-standard employment among unskilled workers.

Gender variation in employment relationship

- Large gender variation in the association between class and employment relations
- Japanese women might be increasingly similar to the situation of the class structure assumed under the Goldthorpe model.
- Among the Japanese women, we see the growing class inequality in terms of employment relations.
- However, the class structure of Japanese men seems to be still deviant from the Goldthorpe model.

Japanese men and class structure

- Despite the forces of globalisation, the share of non-regular workers among Japanese men remain substantially lower than among Japanese women.
- Regardless of class positions, more than 70% of Japanese men remained in standard employment.
- Globalization has increased the gender disparity in employment relationship.
- Among men, middle classes have not declined significantly in Japan, whereas the class disparity in employment increased over time among women.