The value of local political connections in Japan
A research note *

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Abstract

The number of municipalities in Japan was almost halved through several hundred municipal mergers spread out over the first decade of the 21st Century. The shocks to local political power from mergers can be used to analyze the value of political connections for firms owned by family members of local politicians.

Japan is perceived as a low-corruption corruption environment with very strong and transparent public institutions. If political connections are also of high value here it becomes difficult to imagine there exists a country in which rent seeking and favoritism does not take place.

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1 Introduction

This paper suggests a research design to evaluate the value of family connections to local politicians for firm-owners in Japan. Most literature on the value of political connections has been studying either Western economies or countries with a very high level of perceived corruption in the public sector. A study of the value of political connections in Japan would first of all fill a gap as little to no litterature has gone in-depth with the value of political connections in Japan or other a low-corruption countries in Asia.

Moreover, the continuous decrease in the number of municipalities as well as their status provides rich variation in the power of reelected local politicians across time that enable difference-in-differences panel regressions.

In section 2 I review the more relevant literature on the value of political connections in general and related to Japan in particular. After touching on the timeline of mergers the necessary data is describes before outlining the empirical strategy for estimation and robustness checks in section 3. Lastly I suggest the expected results in 4 and conclude on the potential contribution of the research design in 5.

2 Background

2.1 Literature on the value of political connections

Peña Miguel and Cuadrado-Ballesteros (2018) use data from 1995-2003 for 25 European countries to conclude that the perceived level of corruption increases with privatizations. However, the impact increase with the economic relevance of the privatization. This could perhaps be a factor in explaining the consistent low level of perceived corruption in Denmark regardless of the evidence of a wide transfer of rent from municipalities to mostly unprofitable firms owned by family members of local politicians (Amore and Bennedsen, 2013).

In Spain, a country in which perceived corruption is significantly higher, Albalate et al. (2017) find clear evidence of favoritism of a certain firm in municipalities where the conservative party is in power. However, this form of rent seeking was successfully reduced by two reforms in 2007, that is, by increasing transparency and use of external referees in bidding processes while banning donations to political parties from firms with public sector contracts. Though these reforms had a clear positive effect Spain still ranked as having one of the highest risks of bribery of any developed country in the TRACE index constructed by RAND Corporation (Stanley et al., 2014). In the the same index Denmark rank as the worst of the Nordic countries while Japan is estimated to have the 8$^{\text{th}}$ lowest business bribery risk score in the World, wherefore it is doubtable how big of a potential there is for similar regulatory reforms in Japan.

2.2 Political institutions and norms in Japan

Taking a closer look at Japan in the TRACE matrix developed by the RAND Corporation (Stanley et al., 2014) the overall risk of business bribery is decomposed into scores in 4 main areas as seen in figure 1. Though the expectation of a bribe transaction in an interaction between businesses and the government is low, the high amount of interactions and regulations are the only real contributors to increasing the overall risk of bribery in Japan, having impressively low risk scores in every other category. The amount and quality of anti-bribery laws are regarded much higher than for Denmark and Spain even more so is Japan regarded the best performing country in the World when it comes to transparency of various government functions while having a very trustworthy and/or oversighted civil service workforce. Lastly, the quality and independence of the media is regarded slightly higher than for Denmark and Spain while all three countries have a relatively well-educated and economically stable population likely to object corruption.

Table 1: TRACE Matrix of business bribery risk

Domain / subdomain	Japan	Denmark	Spain
TRACE Rank	8	21	36
Total risk of business bribery	26	32	41
1.0 Business Interactions with Government	33	24	47
1.1 Contact with Government	36	13	39
1.2 Expectation of Paying Bribes	14	14	39
1.3 Regulatory Burden	51	52	57
2.0 Anti-Bribery Laws and Enforcement	17	52	31
2.1 De Jure Anti-Bribery Laws	24	56	42
2.2 De Facto Anti-Bribery Enforcement	12	48	22
3.0 Government and Civil Service Transparency	6	39	35
3.1 Transparency of Government Regulatory Functions	1	36	31
3.2 Transparency and Health of the Civil Service Sector	23	47	45
4.0 Capacity for Civil Society Oversight	10	20	14
4.1 Quality and Freedom of Media	14	27	17
4.2 Human Capital and Social Development	8	9	12

Source: RAND Corporation (Stanley et al., 2014).

The higher risk scores for Denmark and Spain, especially in terms of anti-bribery laws and enforcement as well as the transparency of government and civil service, are likely to lay the foundation for the significant values of political connections found in studies for both countries (Amore and Bennedsen, 2013; Albalate et al., 2017). The TRACE index suggests a lower risk of business bribery in Japan and can raise the question whether it is at all feasible to consistently extract rent from political connections.

Despite all the parameters that suggest a low risk of bribery (Stanley et al., 2014) figure 2 suggest that the perceived level of corruption of the public in Japan is considerably and persistently higher than the countries at the top like Denmark which consistently have been taking one of the very-top spots of both Transparency International's Corruption Perceptions Index (CPI) and The World Bank's Worldwide Governance Indicators (WGI) (Rohwer, 2009) since both was initiated in the mid 90s. The validity of these indexes have often been criticised for only being able to measure perceived corruption. However homogeneity and comparability is ensured by surveying business people were the finding is that there are minimal differences in perception between nationals and foreigners (Galtung, 2006). While the indexes have little external validation for the opinions of the population of a whole, they clearly show that business people to a larger degree experience openings for political favoritism and rent seeking in Japan than in several other countries. For all that, Japan is still perceived as the least corrupt country in Asia besides from the city-states of Singapore and Hong Kong.

Table 2: Corruption Perceptions Index (CPI) 2017

2017 Rank	Country	2017 Score	2016 Score	2015 Score	2014 Score	2013 Score	2012 Score
13	Australia	77	79	79	80	81	85
13	Hong Kong	77	77	75	74	75	77
13	Iceland	77	78	79	79	78	82
16	Austria	75	75	76	72	69	69
16	Belgium	75	77	77	76	75	75
16	United States	75	74	76	74	73	73
19	Ireland	74	73	75	74	72	69
20	Japan	73	72	75	76	74	74
21	Estonia	71	70	70	69	68	64
21	United Arab Emirates	71	66	70	70	69	68
23	France	70	69	70	69	71	71

Visit www.transparency.org/cpi for more information

Source: Transparency International. A score of 0 is highly corrupt and 100 is very clean.

Analyzing 42 countries Faccio (2006) finds evidence in 35 countries of national politicians at the same time being shareholders or top managers in publicly traded firms. Japan is found to have the most connected politicians together with Malaysia, the UK, Germany and France. She also identifies 28 cases of businessmen entering national politics in Japan, bested only by the number of cases in the UK. However, she finds that rent transfer and tax advantages for connected firms is more evident in high-corruption countries while insignificant for Japan.

2.3 Merging of municipalities

Municipal autonomy was implemented back in 1889 with the merging of around 70,000 cities, towns and villages into about 15,000 municipalities. After World Ward II The Law for Promoting Municipal Mergers lead to the about 10,000 municipalities in 1953 being merged into just under 3,500 municipalities by 1961. A number that was quite stable until a 3rd wave of mergers known as the "Great Heisei Consolidation" where series of incentives including financial support for mergers was initiated April 1, 1999, and terminated by the end of March, 2006 (Michihiro, 2007) with the clear effects shows in table 3[1]. In this 7 year period the number of municipalities was reduced by 44%.[2]

Table 3: Total number of municipalities by year

Month, year Municipalities	Cities	Towns	Villages	Total
April 1975	643	1,974	640	3,257
April 1999	671	1,990	568	3,229
April 2002	675	1,981	562	3,218
May 2004	695	1,872	533	3,100
April 2005	739	1,317	339	2,395
March 2006	777	846	198	1,821
April 2010	786	757	184	1,727
April 2014	790	745	183	1,718

Source: Ministry of Internal Affairs and Communications.

The motivation for encouraging mergers was to decentralize government, utilize economies of scale, and handle challenges arising from demographics and local as well as national fiscal struggle Yokomichi (2007). While the political power per elected politician increases by merging of municipalities the electoral power decreases correspondingly and in the rural municipalities that had merged the level of public services has been perceived to have declined more compared to non-merged rural municipalities (Yamada, 2018).

2.4 Firm accounts and managers

Statistics Bureau conduct the Economic Census[3] in which they cover all firms in Japan in each of two surveys. The Economic Census For Business Activity include sales, expenses, assets, current stock, location, type, startup date and more. In the Economic Census For Business Frame all paid directors, managers, employees, and unpaid family workers are identified. It is also identified whether a firm is single-unit, a head office

[1] Since the The Local Autonomy law (1999 version, in English) in 1947 there has been no difference in the political autonomy of cities, towns and villages respectively, but the terms are still used as an indication of size and degree of urban characteristics though it is not consistent.

[2] The Ministry of Internal Affairs and Communications' overview of the number of municipalities over time (in Japanese)

[3] Statistics Bureau, Economic Census.

or a branch office as well as the industrial classifications of main and other business activities.

By late 2015 both Corporate Numbers and Individual Numbers were fully implemented, allowing for better identification of individuals across different registers.[4]

2.5 Electoral data and family trees

Access to electoral data with party affiliation and ID numbers as well as information on family relations and spouses are necessary to build family trees and establish family-connections to firms. This is what fundamentally enrichens the analysis compared to being limited to a politician herself being directly involved in a firm.

3 Empirical strategy

3.1 Difference-in-differences panel regression

The fundamental assumption is that merging of municipalities cause a positive shock to the power of the individual politician as the ratios of population/politicians and expenditure/politician increase. Thus, the firms being treated are those that are connected through family-ties to a politician that at the beginning of a period t is elected in an unmerged municipality and at the end of the period $t+s$ still is elected but now the municipality has merged.

Several measures of profitability could be tried out for the dependent variable y, especially operating returns on assets (OROA), sales, and gross profits. All measures could be industry-adjusted as further robustness control.

While the administrative reform in Denmark allowed for difference-in-differences evaluation around the all-at-once implementation (Amore and Bennedsen, 2013), the continuous merging of municipalities in Japan through more than a decade gives other opportunities. I suggest a time series regression of separate difference-in-differences specifications of length s as shown in equation 3.1. That it, panels of firms are constructed for each period $t \in 1999, \cdots, 2010$ with the limit that the firms in any panel for both period t and $t+s$ should have a non-negative book value of assets and have family-ties to an elected politician. The latter is to aspire to comparability of treated and counterfactuals.

$$\Delta y_{it} = \beta_1 \cdot T + \eta \cdot \boldsymbol{y}_{i,t-1} + \Delta \gamma_t^c \boldsymbol{x}_i^c + \gamma^v \cdot \Delta \boldsymbol{x}_{it}^v + \Delta u_{it} \tag{3.1}$$

To control for heterogeneity in firms a vector of lagged measures of profitability $\boldsymbol{y}_{i,t-1}$ could be included or left out. $\boldsymbol{x}_i^c$ is the time-invariant characteristics of the firm and municipality for which the effect γ_t^c is allowed to change over time. On the contrary, $\Delta \boldsymbol{x}_i t^v$

[4] Act on the Use of Numbers to Identify a Specific Individual in Administrative Procedures.

is a vector of the differences in time-variant characteristics for the firm and municipality for which the effect γ^v is constant over time. Also, time dummies for each year should be included though suppresse in the equation to control for business cycles.

A core extension would be to look at sample split effects for firms in sectors more dependent on contracting with the public sector.

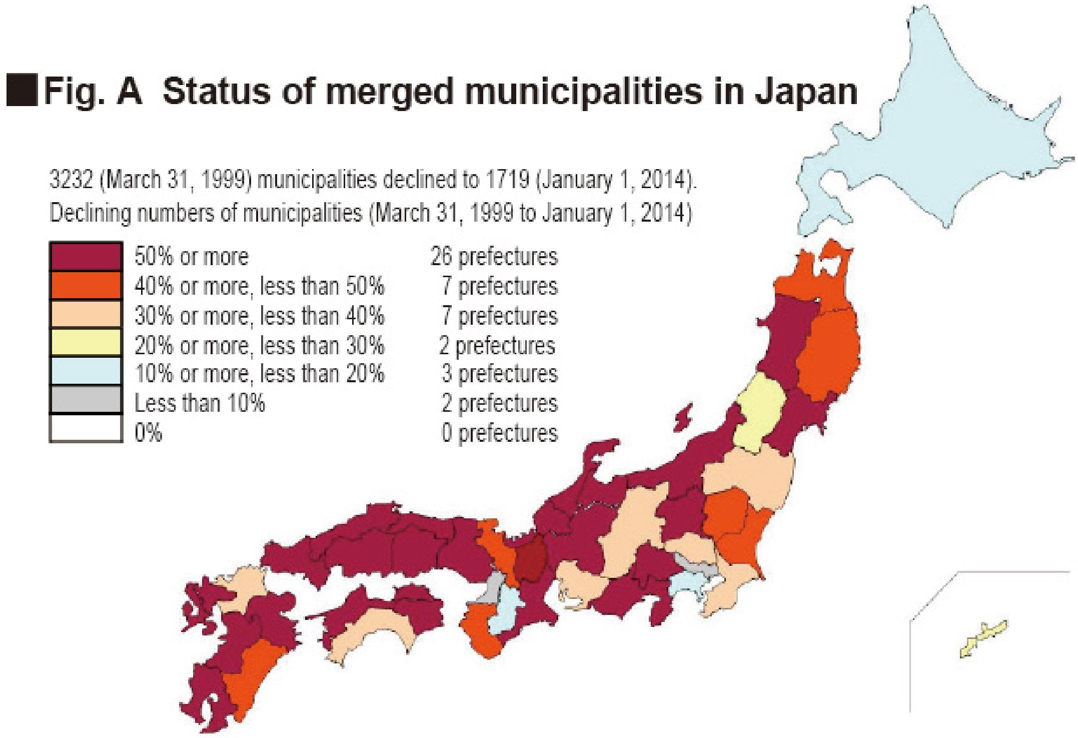
3.2 Robustness checks

A potential endogeneity problems from politicians self-selecting into treatment can possibly be solved using a 2SLS approach where instead of a dummy for treatment, it is constructed as a dummy for being a connected firm times a instrument for a merger. That is, Miyazaki (2014) has shown that is is feasible to obtain quite precise estimates of the probability of merging.

Similar to Amore and Bennedsen (2013) falsification tests and attempts to validate causality should be applied where feasible. First of all testing that trends are similar in the pre-treatment period and also that non-connected firms does not benefit equivalently from merging. A series of sample split results should be conducted as well to look at different effects depending on a) the toughness of electoral competition b) importance of the politician c) size of the firm d) profitability of the firm e) type of municipality.

We are not able to take advantage of a sharp Regression Discontinuity Design, but to ensure that the effect is not biased from mostly comparing rural municipalities with metropolitan municipalities we could try to drop bigger municipalities from the sample or drop all municipalities that are not merged at some point, though the number of contrafactuals will tend to zero if we do not exclude some periods from the estimation. Indeed, the map in figure 1 show that less than 20% of municipalities are merged in the major metropolitan areas of Tokyo and Osaka as well as in their adjacent prefectures of Yokohama and Nara.

Figure 1: Share of municipalities merged by the 47 prefectures



Source: Ministry of Internal Affairs and Communications.

4 Results

Though institutions and transparency appear very strong in Japan, there does not seem to be many obstacles that hinder politicians from also having business connections which, when all is said and done, is the very foundation for investigating whether there are signs of rent extraction from these connections. Even more so there is even less reason to expect that the family members of firms-owners would keep politics at arm's length. It will be up to the empirical analysis to judge If favoritism of family members' economic interests can be one reason that business people after all perceive the public sector in Japan to be mildly corrupt.

While Faccio (2006) did not find favourism to be significant the proposed empirical strategy of this paper is to take advantage of much richer data and variation over time in the political power of individual politicians. Furthermore the identification strategy besides from increasing robustness does also allow for various sample split results to investigate heterogeneity with respect to time and characteristics of municipalities, politicians, and firms.

5 Conclusion

The continuous merging and status changes of Japanese municipalities form the basis for a unique identification strategy where high variety in characteristics of municipalities and in timing of mergers allow for robust estimation of the profitability of political connections for firms in which family members or the politician herself has economic interests.

Purposely choosing to investigate the value of political connections in a country which arguably is the least corrupt non-city-state in Asia logically dampens expectations of finding significant results. However, this exact premise is what would make significant results that much more sensational. In Denmark the performance of a firm has already shown to double when the political power of a family-related politician doubles. If political connections show to be of equally high value for firm-owners in the least corrupt countries at either end of the World which country will then be free of corruption?

References

Albalate, Daniel et al. (2017). “Weakening political connections by means of regulatory reform: Evidence from contracting out water services in Spain.” In: *Journal of Regulatory Economics* 52.2, pp. 211–235.

Amore, Mario Daniele and Morten Bennedsen (2013). “The value of local political connections in a low-corruption environment.” In: *Journal of Financial Economics* 110.2, pp. 387–402.

Faccio, Mara (2006). “Politically connected firms.” In: *American economic review* 96.1, pp. 369–386.

Galtung, Fredrik (2006). “Measuring the immeasurable: boundaries and functions of (macro) corruption indices.” In: *Measuring corruption* 101.

Michihiro, Kayama (2007). *Local Government in Japan*.

Miyazaki, Takeshi (2014). “Municipal consolidation and local government behavior: evidence from japanese voting data on merger referenda.” In: *Economics of Governance* 15.4, pp. 387–410.

Peña Miguel, Noemí and Beatriz Cuadrado-Ballesteros (2018). “Is privatization related to corruption? An empirical analysis of European countries.” In: *Public Management Review*, pp. 1–27.

Rohwer, Anja (2009). “Measuring corruption: a comparison between the transparency international’s corruption perceptions index and the World Bank’s worldwide governance indicators.” In: *CESifo DICE Report* 7.3, pp. 42–52.

Stanley, Karlyn D et al. (2014). *Business bribery risk assessment*. Rand Corporation.

Yamada, Kyohei (2018). “From a majority to a minority: How municipal mergers in Japan changed the distribution of political powers and the allocation of public services within a merged municipality.” In: *Urban Affairs Review* 54.3, pp. 560–592.

Yokomichi, Kiyotaka (2007). *The development of municipal mergers in Japan*. Council of Local Authorities for International Relations (CLAIR).