

Does Democratization Promote Competition? Indonesian Manufacturing Pre and Post Suharto

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Motivation

- There is ongoing debate on how democratization promotes growth
 - Acemoglu et al., 2019; Papaioannou and Siourounis, 2008; Persson and Tabellini, 2006; etc.
- Including questions on how political institutions
 - affect incentives and conditions for firms to enter, invest and grow
 - shape the trade-off between protecting the property rights and rents of incumbents and promoting entry and demands for redistribution

Motivation

- Autocracies
 - are more prone to corruption and capture by incumbents (Acemoglu, 2008; Treisman, 2000; Chowdhury, 2004)
- Democracies
 - promote entry by constraining public corruption and reducing regulatory protection for incumbent firms (Acemoglu, 2008; Adserà et al., 2003; Rose-Ackerman, 1999)

Yet evidence on the impact of democratization on competition is limited

Research question

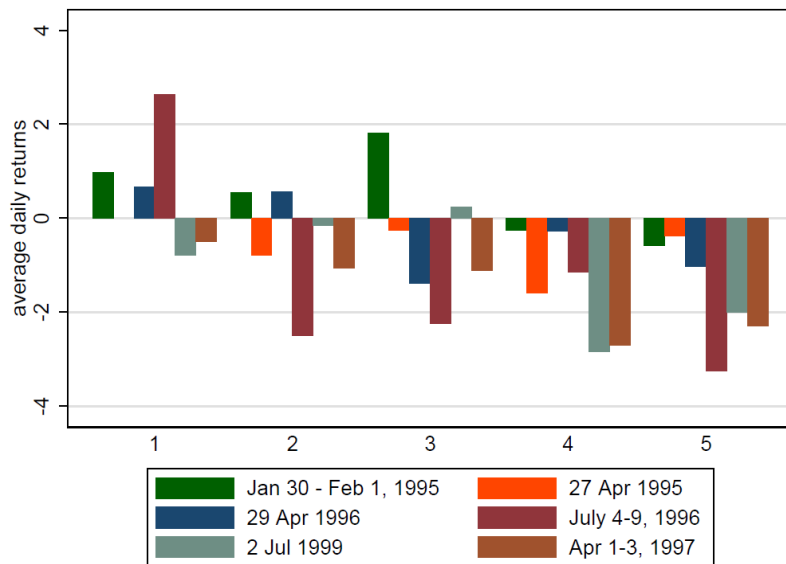
- **Does democratization promote economic competition?**
 - we use the collapse of the President Suharto's regime in 1998 as a quasi-natural experiment
 - does the break of crony ties to Suharto led to enhanced competition in sectors disproportionately exposed to cronyism?
 - we focus on firm-level and industry-level impacts of political turnover
 - to quantify both the distributional and efficiency implications of political connections

Hypothesis and Assumptions

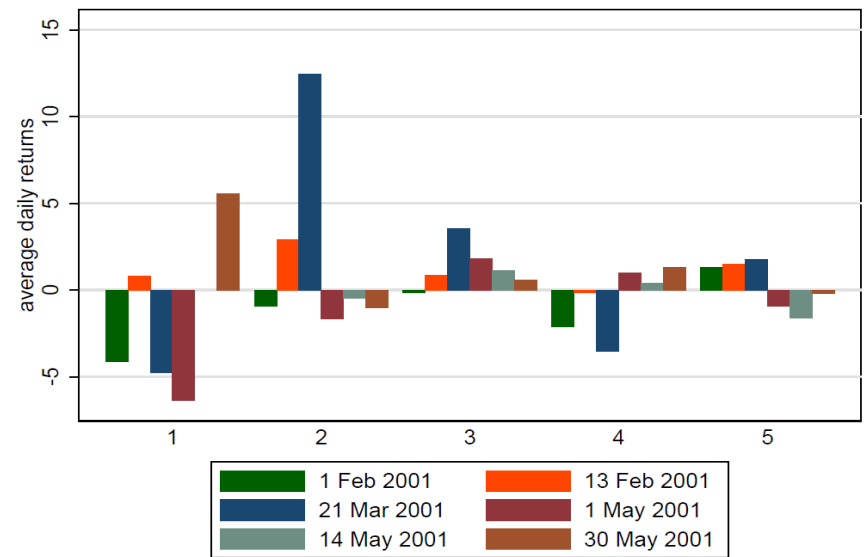
- **Main hypothesis:** disruption in political connections had a pro-competitive impact on Indonesian manufacturing industries
 - companies connected to Suharto lose market shares
 - more competition and firm dynamics in industries where connected firms accounted for a higher market share
- **Identifying assumption:** collapse of the Suharto regime reduced the value of connections to Suharto
 - Fisman (2001) provides strong support for this assumption
 - stock prices do not systematically responses to six events leading up to Wahid's impeachment

Stock price responses by Suharto dependence before and after Suharto's Fall

News about Suharto's Health



News About Wahid's Impeachment



Contribution to the literature

- On politically connected firms
 - Fisman, 2001; Faccio, 2006; Ferguson and Voth, 2008, Johnson and Mitton, 2003; Khwaja and Mian, 2005, etc.
- On the economic consequences of political turnover
 - Londregan and Poole, 1990; Earle and Gehlbach, 2015, Naidu et al., 2017, Acemoglu et al. 2018, Akcigit et al., 2017, etc.
- On the impact of democracy on economic performance

Preview of the results

- Politically connected firms witnessed **statistically significant reductions in their market shares** after Suharto's fall, yet remained large firms
- Suharto's fall had a **modest pro-competitive impact** on industries in which his family had extensive business interests relative to industries in which they had not been important players

Indonesian context: Suharto era

- Crony capitalism
 - Close relationships with a group of Chinese businessmen, military officers, and a few local businessmen
 - Business privileges: protection from disruptions, licensing, access to land and finance, tax breaks and subsidies, public procurement, mandatory partners in foreign ventures
- East Asian Paradox
 - Despite corruption, rapid growth during 1980s and 1990s, until the Asian financial crisis 1997-1998.
- Suharto resigned in May 1998

Indonesian context: post-Suharto era

- After the crisis Indonesia undertook major democratization, deregulation, banking and public sector reform
 - Production and trade monopolies were eliminated
 - Restrictions on FDI were relaxed
 - Competition commission was established (KPPU) in 1999
 - Etc.
- Often, however, these reforms were slow and inefficient (Hardiz, 2004)

Roadmap

- Data
- Descriptive statistics
 - Importance of politically connected firms
 - Connected vs nonconnected firms
 - Characteristics of industries in which politically connected firms tend to operate
- Empirical methodology
- Results
 - Firm-level analysis
 - Industry-level analysis

Data sources

- Plant-level data is from the Annual Manufacturing Survey (Central Bureau of Statistics of the Republic of Indonesia)
 - Virtually all establishments with more than 20 employees, 1993-2009
 - Data on industry, employment, output, value added, etc.
- Identification of politically connected firms comes from Mobarak & Purbasari (2006) - 246 firms
 - Find connected public firms using event study of market reaction on news about Suharto's health during 1994-1997 (similar to Fisman, 2001)
 - Find all subsidiaries of these connected companies
 - Family (86 firm, preferred measure) and cultivated connections
- Information on entry regulations from Presidential Decrees

Importance of politically connected firms

Year	Number of firms	Output	Labor	Import	Export
Panel A: Suharto family firms					
1996	0.38	3.75	1.31	2.87	1.31
2000	0.41	2.92	1.27	3.07	1.26
2009	0.29	3.20	0.98	6.07	1.08
Panel B: Politically connected firms (broad)					
1996	1.07	15.81	4.38	12.73	4.98
2000	1.17	13.41	4.33	14.62	9.24
2009	0.79	12.86	3.61	20.61	5.95

Connected (family firms) vs nonconnected firms

Variable	1993-1996			2000-2009			
	PC	Non-PC	Diff	PC	Non-PC	Diff	Diff-in-diff
	Mean	Mean		Mean	Mean		
Market share	0.07	0.01	0.06	0.05	0.01	0.04**	-0.02*
Log labor	5.84	4.22	1.62	5.82	4.17	1.64**	0.02
Importer	0.56	0.18	0.37	0.52	0.20	0.32**	-0.05
Exporter	0.39	0.18	0.22	0.29	0.17	0.12**	-0.10
Foreign ownership	12.76	3.68	9.09	17.86	6.64	11.25*	2.15
State ownership	5.70	2.71	2.98	14.95	15.81	-3.79*	-6.77***
Log firm age	2.28	2.19	0.08	2.95	2.48	0.46**	0.38***
Observations	310	77143		741	218277		

Association between Political Connectedness and industry characteristics

	Aggregate Market Share Suharto Family Firms		
	1993–96	2000–09	Diff
Log output	4.36**	3.66**	-0.70*
Log labor	1.29	1.13	-0.16
Import	-0.10	0.08	0.18
Export	-0.37***	-0.23***	0.13
Foreign (MS)	-0.19	-0.10	0.09
State (MS)	0.16	0.25	0.09
Entry regulations	0.01	0.11	0.10
Entry	-0.10*	-0.07**	0.03
Exit	-0.06	-0.05*	0.01
PCM	0.09	-0.03	-0.12
PE	1.15*	-0.56	-1.70**
HHI	-0.17	-0.10	0.07
MS4	0.05	0.02	-0.03
Log number of firms	0.20	-0.01	-0.21
Log prices	0.27	-0.07*	-0.34
Z	-2.85	-0.25	2.60*
External finance dependence (EFD)		-0.10	
Natural entry		-1.55***	
Tangibility		0.20**	
Observations		800	
Industries		200	

Econometric challenges

- Key issue: To isolate the impact of political crisis and loss of political connections from other changes associated with recovery from the financial crisis and deregulation reforms
 - difference-in-difference and event study, controlling for industry, year and district fixed effects; Suharto era time-invariant firm and industry characteristics and allow their impact to differ across the years
 - following Martinez-Bravo et al. (2017), we exploit the differential timing of the removal of the last Suharto appointed mayors across districts in triple difference regressions. We compare how the reduction in the premium on being connected to Suharto varies with the tenure of the last Suharto appointed mayor

Firm-level specifications

$$\begin{aligned} \text{Market Share}_{it} = & \sum_{t=1993, \dots, 2009} \beta_t PC_i \times D(\text{Year} = t) + \sum_{t=1993, \dots, 2009} \gamma_t X_{it} \times D(\text{Year} = t) \\ & + \sum_{t=1993, \dots, 2009} \theta_t Z_{it} \times D(\text{Year} = t) + \mu_i + \tau_t + \varepsilon_{it} \end{aligned}$$

$$\begin{aligned} \text{Market Share}_{it} = & \alpha PC_i * \text{Post Suharto}_t + \beta PC_i * \text{Post Suharto Mayor}_{dt} \\ & + \gamma PC_i * \text{Legacy}_d * \text{Post Suharto Mayor}_{dt} \\ & + \delta X_{it} + \theta X_{it} * \text{Post Suharto Mayor}_{dt} + \mu_i + d\tau_{dt} + \pi\tau_{jt} + \varepsilon_{it} \end{aligned}$$

X_{it} – firm age, foreign and state ownership, exporter and importer status

Z_{it} – external finance dependance, asset tangibility and entry regulation

Legacy_d – how long a Suharto appointed mayor remained in office after Suharto's removal (varies from 1 to 4)

Industry-level specification

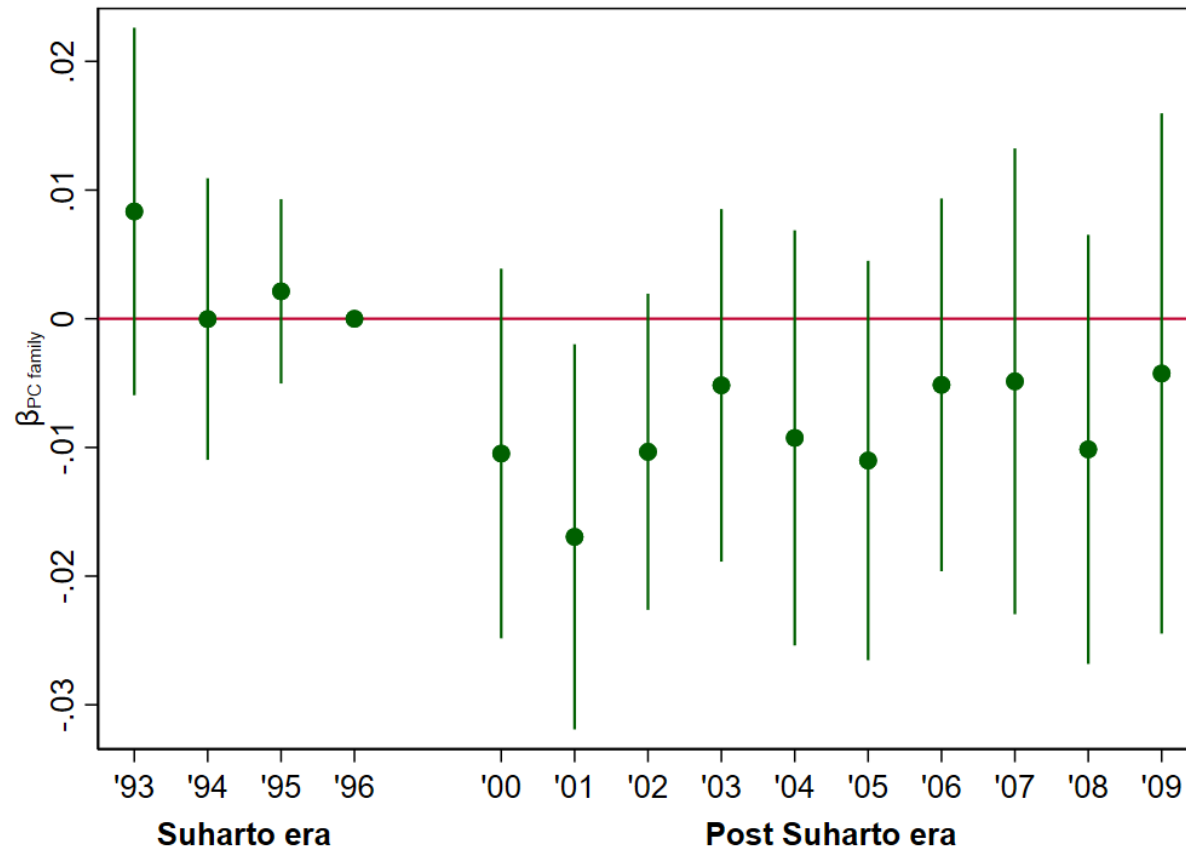
$$Y_{jt} = \sum_{t=1993, \dots, 2009} \alpha_t PC (MS)_j * D(Year = t) \\ + \sum_{t=1993, \dots, 2009} \gamma_t S_{jt} * D(Year = t) + \pi_j + \tau_t + \varepsilon_{jt}$$

Y_{jt} – entry and exit rates; the price–cost margin; profit elasticity; the Herfindahl-Hirschman index and the market share of the four largest companies; the number of firms; and prices; composite competition index Z (Kling et al., 2007)

S_{jt} – the aggregate market shares of firms with majority foreign and state ownership, aggregate import and export shares, a dummy for stringent entry regulation, and measures of dependence on external finance and asset tangibility

Firm-level results

The evolution of the market share premium on Suharto family connections



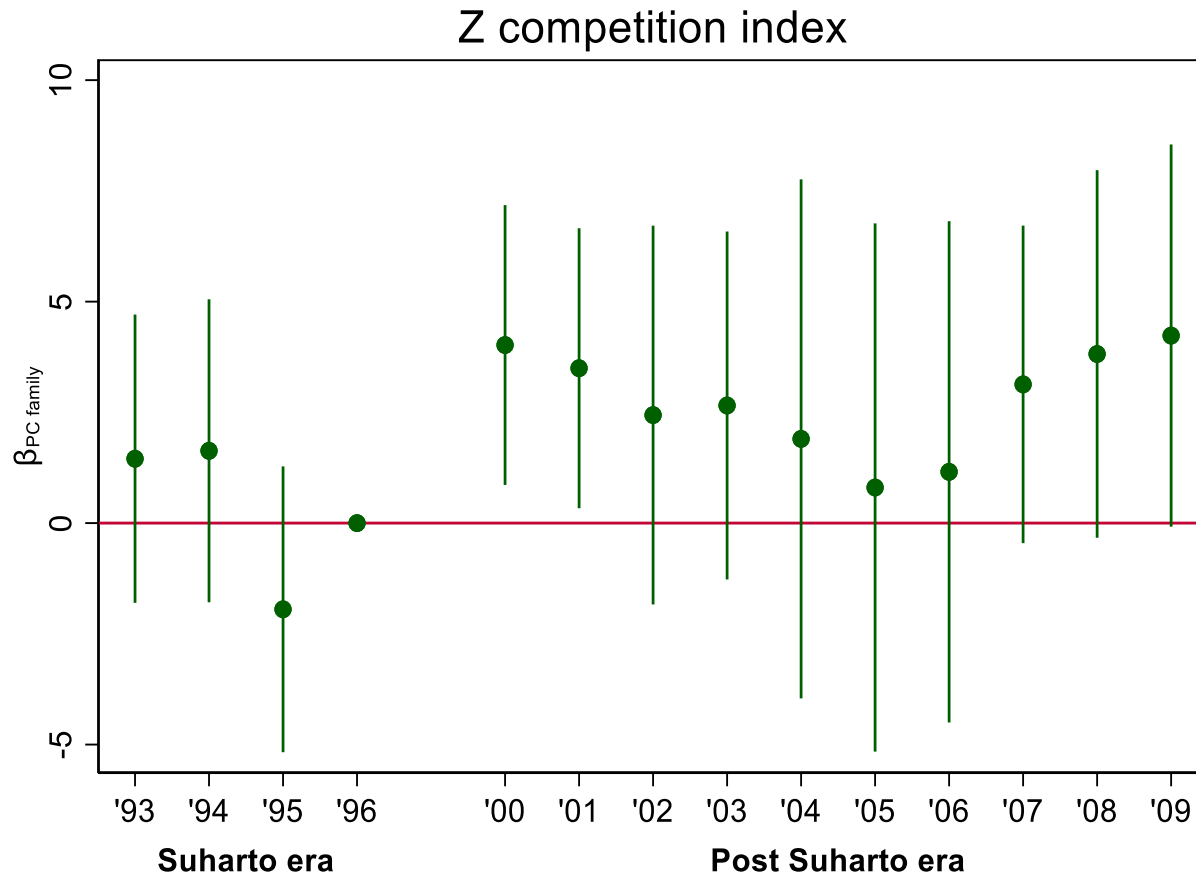
Firm-level results

Impact of political turnover on market share – exploiting variation in the tenure of the last Suharto appointed mayors

	Suharto Family Firms				
	(1)	(2)	(3)	(4)	(5)
PC family*post Suharto	-0.011 (0.007)		-0.014* (0.007)	-0.013* (0.007)	-0.011 (0.008)
PC family*post Suharto mayor		-0.008 (0.007)	0.003 (0.004)	-0.003 (0.018)	-0.012 (0.018)
PC family*legacy				0.003 (0.007)	
PC family*app yr=95*post Suharto mayor					0.020 (0.020)
PC family *app yr=96*post Suharto mayor					0.016 (0.021)
PC family *app yr=97*post Suharto mayor					0.011 (0.020)
Observations	89,484	89,484	89,484	89,484	89,484
Firms	10,641	10,641	10,641	10,641	10,641
R-squared	0.793	0.793	0.793	0.793	0.793

Industry-level results

The evolution of the premium in industry-level Suharto family connectedness – composite competition index



Conclusion

- Suharto's resignation substantially eroded the premium on being connected to him
- Suharto's fall had a modest but significant pro-competitive impact on industries in which his family had extensive business interests relative to industries that did not
- Democratization improved competition

Thank you!

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