On the Design of Public Institutions: Evidence from Financial Supervision

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Motivation

o growing interest in institutional design of financial supervision

  ▪ policy-makers: set up, structure and monitor prudential supervision as key priority

  ▪ economists: mandate, organization and effects of new authorities; adds to optimal design of central banks

Motivation, Part 2

o   previous work:

   ▪ examine the effect of financial supervision on outcome
      (e.g., stability of the banking sector)

   ▪ examine the determinants of a country's supervisory
      structure (macro & institutional; ad hoc)

o   here: focus on organizational structure of institutions

A Quiz

"Economic growth appears to have slowed recently, partly reflecting a softening of household spending. Tight credit conditions, the ongoing housing contraction, and some slowing in export growth are likely to weigh on economic growth over the next few quarters. Over time, the substantial easing of monetary policy, combined with ongoing measures to foster market liquidity, should help to promote moderate economic growth. Inflation has been high, spurred by the earlier increases in the prices of energy and some other commodities. The Committee expects inflation to moderate later this year and next year, but the inflation outlook remains highly uncertain. The downside risks to growth and the upside risks to inflation are both of significant concern to the Committee."

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Federal Open Market Committee Statement, September 16, 2008.

Organizing Prudential Supervision

o within/outside the central bank

o merged/separate authorities for banking, insurance and securities supervision

o many other design dimensions:

- chairman

- meeting rules

- government involvement

UK Experience

o new Labour government came into power in 1997

o fundamental reform: BoE → FSA as integrated financial regulator

o in May 2010, Conservative-Liberal Democrat coalition government elected

o FSA is abolished; BoE put back in charge (PRA, CPMA)

Literature

- o Role of institutions (Coase, North)

- o Design of central banks

- o Architecture of prudential supervision (Goodhart & Schoenmaker, 1995)

- o Empirics of organizational economics (Bloom, Van Reenen)

Data

o Financial supervision classification from World Bank

- 98 Countries

- 1999-2010

- Annual

o Merge with data from various other sources

- Specialization, subordination, delegation, and
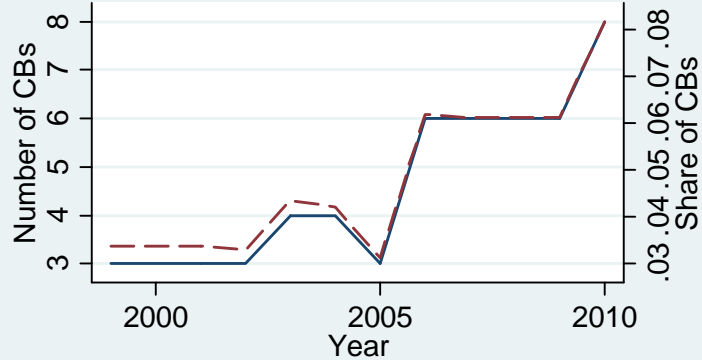 coordination

Methodology

$$\text{FinSupervision}_{it} = \alpha + \beta \, \text{OrgStructure}_{it} + Z_{it} + \varepsilon_{it}$$

- FinSupervision:

  - Central bank as sole supervisor (0/1)

  - Central bank with some supervisory functions (0/1)

  - \# Central bank tasks in supervision (index, 1-4)

  - Decentralization of supervision (index, 1-5)

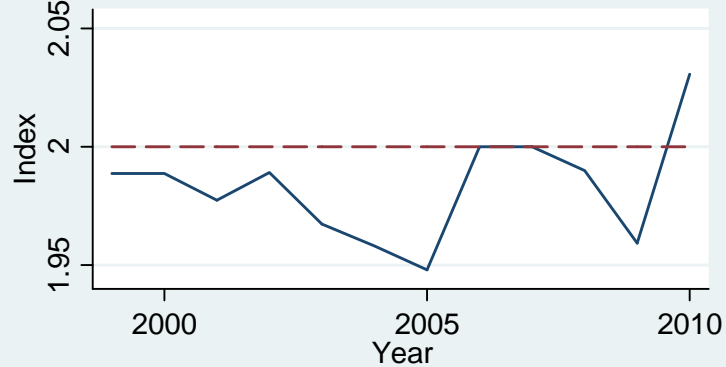# Measures of the Structure of Financial Supervision

Central Bank as Supervisor

number-solid; share-dashed
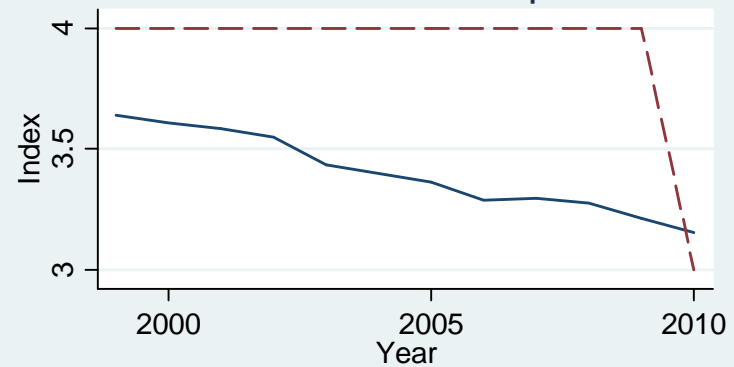
Central Bank as Co-Supervisor

number-solid; share-dashed

Central Bank Tasks

mean-solid; media-dashed

Decentralization of Supervision

mean-solid; media-dashed

Correlation matrix

	Central Bank as Supervisor	Central Bank as Co-Superv'r	Central Bank Tasks	Decentralization of Supervision
Central Bank as Supervisor	1.00			
Central Bank as Co-Supervisor	0.17	1.00		
Central Bank Tasks	0.59	0.68	1.00	
Decentralization of Supervision	-0.53	0.18	-0.17	1.00

Baseline

Dependent variable	CB as Supervisor	CB as Co-Supervisor	CB Tasks	Decentrali-zation of Supervision
Estimation method	Logit	Logit	Ordered Probit	Ordered Probit
GDP per Capita	-2.53**	-1.98**	-0.42**	0.02
Past Inflation	0.01	-0.00	-0.00	0.01
Legal Origin UK	-2.19**	4.80**	1.11**	0.04
Legal Origin Germany	-0.05	0.04	-0.12	0.11
Voice and Accountability	-1.56**	0.47*	-0.26**	0.07
Political Stability	4.80**	1.49**	0.71**	-0.49**
Government Effectiveness	1.27	1.07#	0.47*	-0.53**
Regulatory Quality	3.17**	-1.36**	0.52**	-0.16
Rule of Law	-3.65**	0.50	-1.02**	0.25
Control of Corruption	1.90*	-1.71*	-0.15	0.10
Number of Observations	790	790	790	790
Pseudo R^2	0.34	0.39	0.15	0.11

Central Bank Design (Dincer & Eichengreen, IJCB 2014)

Dependent variable	CB as Supervisor	CB as Co-Superv'r	CB Tasks	Decentrali-zation
Estimation method	Logit	Logit	Ordered Prob	Ordered Prob
Without Additional Controls (# Obs=678)				
Central Bank Independence	-1.57#	-1.92**	-1.12**	0.90**
Central Bank Transparency	-0.03	-0.31**	-0.12**	-0.10**
With Macroeconomic Controls (612)				
Central Bank Independence	-0.70	-3.09**	-1.16**	0.06
Central Bank Transparency	-0.06	-0.15**	-0.09**	-0.01
With Institutional Controls (670)				
Central Bank Independence	0.52	0.77	0.58*	0.62*
Central Bank Transparency	-0.07	-0.39**	-0.15**	-0.09**
With Governance Controls (678)				
Central Bank Independence	-2.64	-3.87**	-1.89**	0.80**
Central Bank Transparency	0.85**	-0.12**	-0.06**	-0.02
With Macro, Institutional & Governance Controls (612)				
Central Bank Independence	-34.7#	-2.02*	-0.76*	0.74*
Central Bank Transparency	2.86*	-0.27**	-0.07**	-0.01

Firm Organization (Bloom, Sadun & Van Reenen, QJE 2012)

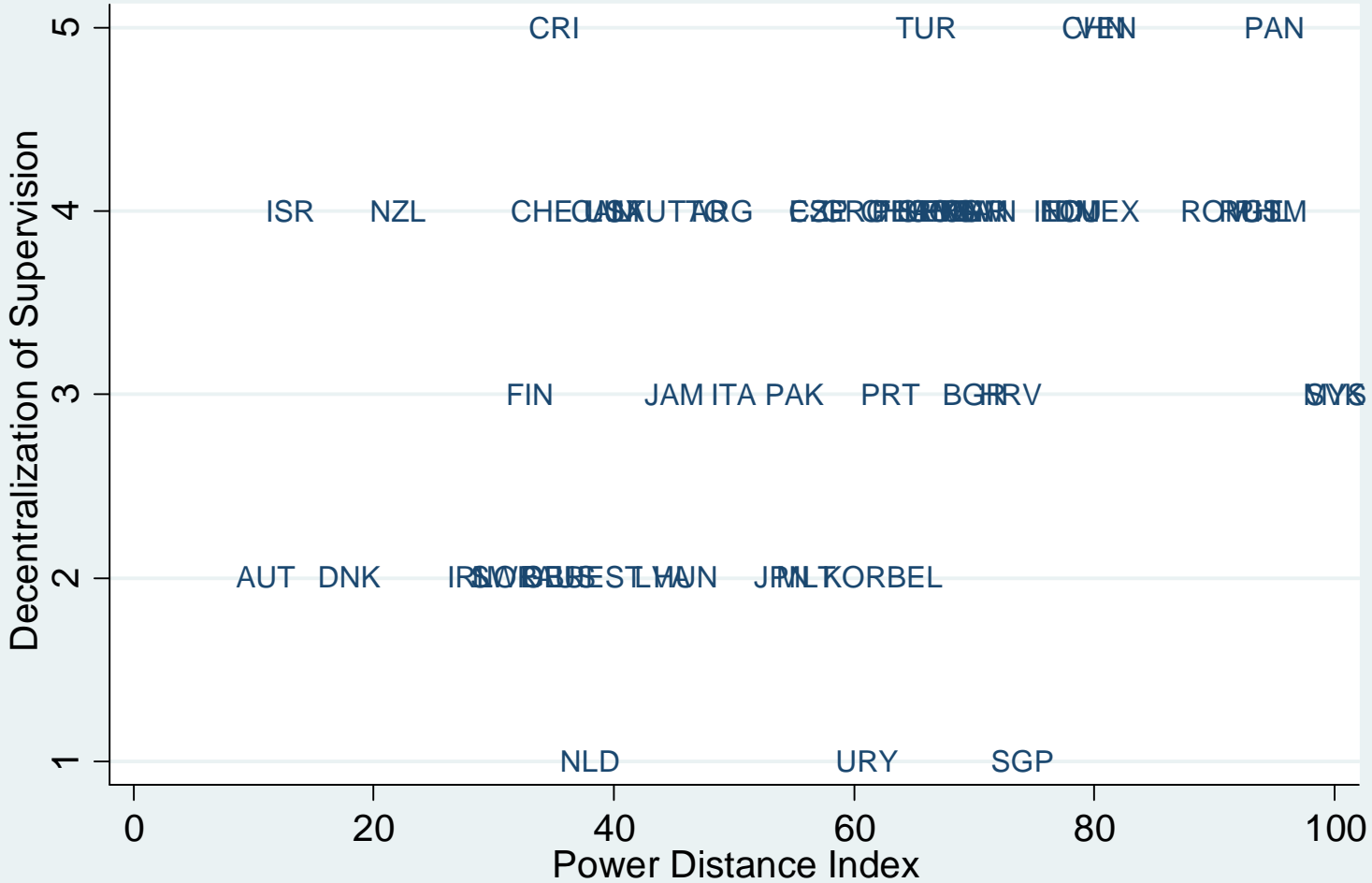| Dependent variable	CB as Supervisor	CB as Co-Supervisor	CB Tasks	Decentrali-zation of Supervision
Estimation method	Logit	Logit	Ordered Probit	Ordered Probit
Without Additional Controls (# Obs=144)				
Firm Decentralization	–	-1.99**	-0.82**	-1.21**
With Macroeconomic Controls (144)				
Firm Decentralization	–	-2.16**	-0.94**	-0.62*
With Institutional Controls (144)				
Firm Decentralization	–	-6.29**	-1.46**	-1.40**
With Governance Controls (144)				
Firm Decentralization	–	2.75*	1.03**	-0.19
With Macro, Institutional & Governance Controls (144)				
Firm Decentralization	–	9.19	1.11	-0.45

Financial Supervision and Firm Structure

Hierarchical Structures (Hofstede, 2001)

| Dependent variable	CB as Supervisor	CB as Co-Supervisor	CB Tasks	Decentrali-zation of Supervision
Estimation method	Logit	Logit	Ordered Probit	Ordered Probit
Without Additional Controls (# Obs=765)				
Power Distance Index	0.015*	0.022**	0.012**	0.013**
With Macroeconomic Controls (765)				
Power Distance Index	0.043**	0.018**	0.015**	0.001
With Institutional Controls (765)				
Power Distance Index	0.018*	0.031**	0.014**	0.012**
With Governance Controls (765)				
Power Distance Index	0.076**	0.011*	0.012**	0.001
With Macroeconomic, Institutional and Governance Controls (720)				
Power Distance Index	0.091**	0.027**	0.015**	-0.004

Financial Supervision and Hierarchies

Fiscal Decentralization (Arzaghi & Henderson, JPubE 2005)

Dependent variable	CB as Supervisor	CB as Co-Supervisor	CB Tasks	Decentrali-zation of Supervision
Estimation method	Logit	Logit	Ordered Probit	Ordered Probit
Without Additional Controls (# Obs=456)				
Fiscal Decentralization	0.60	-0.31**	-0.13*	-0.28**
With Macroeconomic Controls (420)				
Fiscal Decentralization	-0.22	-0.02	-0.03	-0.15*
With Institutional Controls (336/456)				
Fiscal Decentralization	0.59	-0.22*	-0.06	-0.22**
With Governance Controls (456)				
Fiscal Decentralization	-0.54	0.13	-0.21**	-0.10
With Macroeconomic, Institutional and Governance Controls (300/420)				
Fiscal Decentralization	2.49	1.11**	0.38	-0.03

Financial Supervision and Fiscal Decentralization

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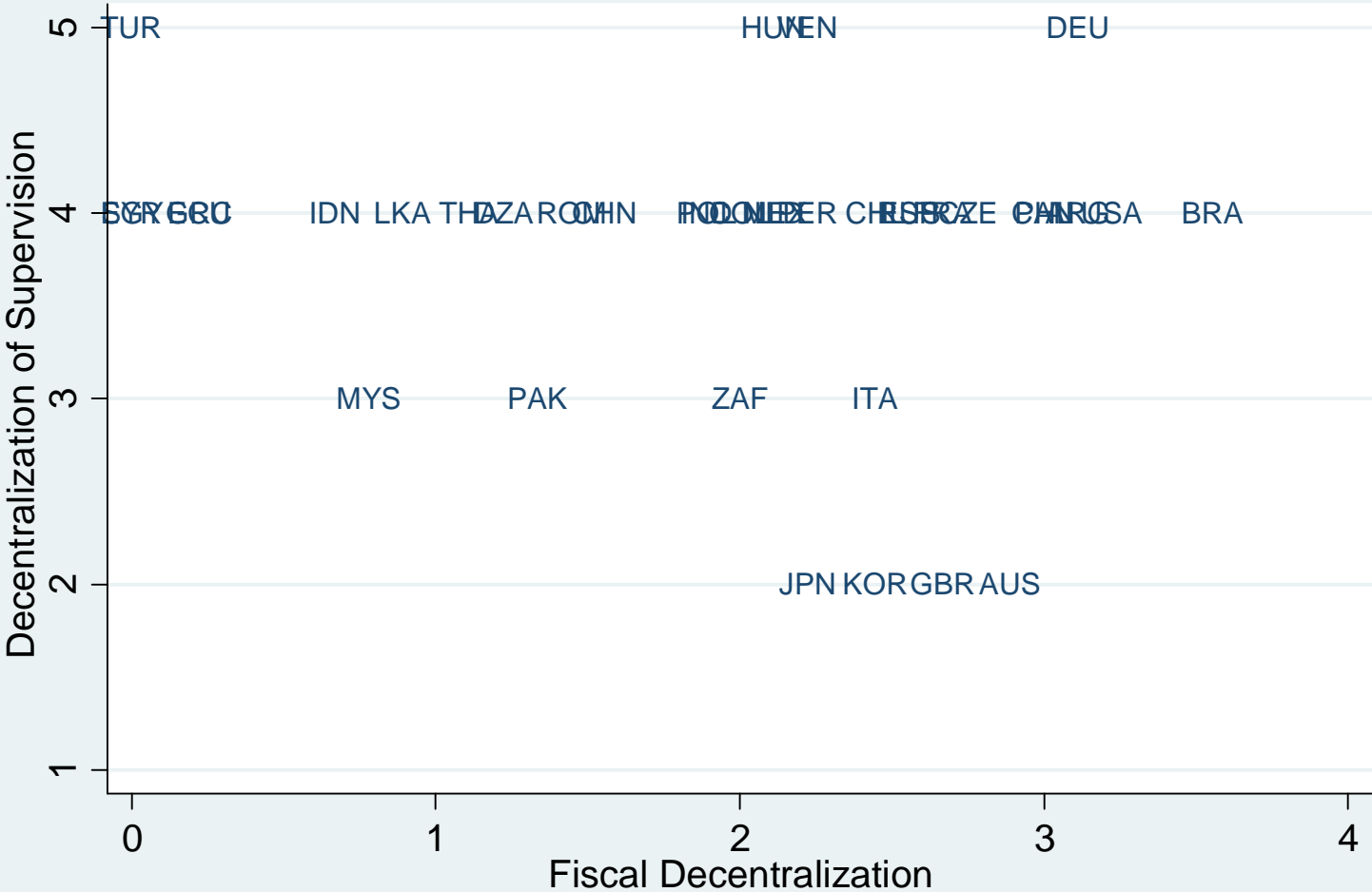
Summary

- Explore the allocation of functions & responsibilities of prudential supervision on public authorities, including CB

    - interdependencies in the design of institutions; political decisions on superv'ry structure not taken in isolation

- CBs play smaller role and tasks more decentralized if the central bank is independent and transparent

- Firm & fiscal decentralization are associated with greater centralization of superv'ry functions outside of the CB