Management Practices in Europe, the US and Emerging Markets

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Lecture 4: Power & Decentralization in Firms
• What is decentralization?

• Alibaba Case

• Decentralization & learning

• Measuring real authority

• Factors affecting decentralization
What is decentralization?

• One aspect of firm organization - how power and decision making are distributed

• Unlike basic management practices no typical “good” and “bad” – just different styles which tend to vary by country

• Why should you care:
  – Key in designing your business or advising others
  – Changing over time, generating broader economic effects, like increased inequality and worker empowerment
Formal vs. Real Authority

• Formal authority in the organization chart ("organogram")
  – E.g. Profit centers vs. cost/sales centers

• Real authority
  – How things actually get done. Power
  – http://www.youtube.com/watch?v=5FRVvjGL2C0

• Can be different across different types of decisions
  – e.g. Investment, pricing, products
Real authority models: Centralized

http://www.youtube.com/watch?v=wBl0v_CSqyl&feature=related
Real authority models: Decentralized

e.g. Universities
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Jack Ma to step down as boss of Alibaba

One of China's best-known businessmen, Jack Ma, will step down as chief executive of Alibaba, the hugely successful e-commerce firm he founded.

In a letter to employees, Mr Ma said he would appoint a successor and act only as an executive chairman from 10 May.

The move comes just days after Alibaba said it was breaking up its business into 25 different units that will be led by different executives.

Alibaba, founded in 1999, is one of the world's biggest online companies.

"I see that Alibaba's young people have better, more brilliant, dreams than mine, and they are more capable of building a future that belongs to them," Mr Ma said in the letter, adding that the decision had been a difficult one.
Questions on the Alibaba case

• *What does Alibaba do?*
Questions on the Alibaba case

- Is the current degree of competition/decentralization among the business units appropriate?
Questions on the Alibaba case

• *Do you think that Jack Ma should encourage more cooperation? If so, how?*
Questions on the Alibaba case

• *Where should the new business initiatives (mobile platforms and financing small businesses) reside organizationally? At corporate or within the individual business units?*
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Decentralization (into profit centers like Alibaba)

- **Learning Theory**: CEO decentralizes when knowledge of local managers very important. Decentralize when:
  1. Firm is young (less experience to draw on)
  2. Firm uses more advanced technology
  3. Industries are more volatile & changing quickly (heterogeneous – harder to learn from others)

- **Evidence**
  - Consistent with Alibaba
  - Acemoglu, Aghion, Lelarge, Van Reenen, Zilibotti (2007) look at 1000s of French and British firms. Ran econometric models with many controls
Younger firms are more decentralized

Figure 3: Age and decentralization
Decentralization to Profit Centres (COI)
More technologically advanced firms more likely to be decentralized
Firms in more volatile sectors (bigger variance of productivity shocks) are more likely to be decentralized
• What is decentralization?

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• **Measuring real authority**

• Factors affecting decentralization
Example A:
Domestic Firm
2 Sites, Single Plant

Central HQ
(New York Site)

Plant
(Albany Site)

D, Decentralization
Example B:
US Domestic Firm
Multi-Site, Multi-Plants

Central HQ
(New York Site)

Plant 1
(Buffalo Site)

Plant 2
(Albany Site)

Plant 3
(Scranton Site)

D1
D2
D3
## The Decentralization Survey Page

**Company Name**

**WUZHI LVYU CHEMICAL & ELECTRIC CO.LTD.**

### Scoring

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>3</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>To hire a FULL-TIME PERMANENT SHOPFLOOR worker</strong></td>
<td>No authority - even for replacement hires</td>
<td>Requires sign-off from CHQ based on the business case. Typically agreed (i.e. about 80 or 90% of the time).</td>
<td>Complete authority - it is my decision entirely</td>
</tr>
</tbody>
</table>

### Questions

1. **Where are decisions taken on new product introductions - at the plant, at the CHQ or at both?**
   - **Score:** [ ]
   - Options:
     - All new product introduction decisions taken at the CHQ
     - New product introductions are jointly determined by the plant and CHQ
     - All new product introduction decisions take at the plant level

2. **How much of sales and marketing is carried out at the plant level (rather than at CHQ)?**
   - **Score:** [ ]
   - Options:
     - None - sales and marketing is all run by CHQ
     - Sales and marketing decisions are split between the plant and CHQ
     - The plant runs all sales and marketing

Nick Bloom and John Van Reenen, 591, 2013
Our empirical decentralization measure

• Main measure averages the z-score (scores normalized to mean 0, standard-deviation 1) of each variable:
  - Hiring senior employees (discrete, 1 to 5)
  - Maximum Capital expenditure (continuous, in $)
  - Introduction of new products (discrete, 1 to 5)
  - Sales and marketing (discrete, 1 to 5)
Decentralization varies a lot across countries

Most centralized
- Asia
- Southern Europe

Least centralized
- Scandinavian countries
- Anglo-Saxon countries
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Larger Firms: More or less decentralized?

100-200  200-500  500-1000  1000+

Number of employees in the firm
Larger Firms are more decentralized

Number of employees in the firm:
- 100-200
- 200-500
- 500-1000
- 1000+

The graph shows the mean of decentralization across different size categories of firms. Larger firms (1000+ employees) exhibit higher decentralization compared to smaller firms (100-200 employees).
Firms with more skilled workers?

Under 20%  20%-40%  0%-60%  60%-80%  80%-100%

Proportion of employees with a college degree
Firms with more skilled workers are more decentralized (complements)

Proportion of employees with a college degree
Legal and Cultural Factors affecting Decentralization

• Trust
  – Alibaba’s key competitive advantage was building trust with customers.
  – But trust more important generally?
  – In high trust areas (e.g. Sweden, US) managers likely to be trusted to carry out more activities than low trust (e.g. Southern Italy, parts of India)

• Rule of Law
  – In strong rule of law areas (e.g. US) top management less worried about theft by middle management
Trust and decentralization

• How to measure trust? World Value Survey (10,000s of individuals from different countries) asks question:

  “Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people?”

  Trust by region of the country defined as % of people answering “yes” to first part of the trust question

• Experiments show this question linked with trust/trusting behavior
## Trust, rule of law and decentralization

<table>
<thead>
<tr>
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<th>Trust (region)</th>
<th>Rule of law (country)</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.196***</td>
<td>0.473***</td>
<td>3549</td>
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<tr>
<td></td>
<td>(0.429)</td>
<td>(0.102)</td>
<td></td>
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<tr>
<td></td>
<td>0.825***</td>
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<td>3549</td>
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<tr>
<td></td>
<td>(0.290)</td>
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<tr>
<td></td>
<td>0.732**</td>
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<td>3549</td>
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<td></td>
<td>(0.298)</td>
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<thead>
<tr>
<th></th>
<th>Observations</th>
<th>Country dummies</th>
<th>Other controls</th>
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<tr>
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<tr>
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<tr>
<td></td>
<td>3549</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

**Notes:** Other controls are SIC3 dummies, noise controls (interviewer dummies Interviewee tenure and seniority, etc.), public listing, CEO onsite, plant size, competition
Also look at multinationals as another test of trust

- Could worry about bias due to trust proxying for other country/regional variables

- So look at affiliates of foreign multinationals and investigate whether trust in their **home country** also matters

- **Bilateral trust**: (on average) how much do people in the multinational’s home country trust people in the country where the subsidiary is located (Eurobarometer Survey)
## Decentralization and trust in multinational firms

<table>
<thead>
<tr>
<th></th>
<th>Value 1</th>
<th>Value 2</th>
<th>(Standard Error) 1</th>
<th>(Standard Error) 2</th>
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</thead>
<tbody>
<tr>
<td>Trust (region of location)</td>
<td>0.563</td>
<td>0.446</td>
<td>(0.843)</td>
<td>(1.908)</td>
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<tr>
<td>Trust (country of origin)</td>
<td>0.749***</td>
<td>0.152</td>
<td>(0.301)</td>
<td>(0.152)</td>
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<tr>
<td>Trust (bilateral from origin cty to location cty)</td>
<td>1.809***</td>
<td></td>
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<tr>
<td>Full set of controls</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
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<tr>
<td>Regional dummies</td>
<td>No</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Country origin dummies</td>
<td>No</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clustering</td>
<td>Region</td>
<td>Origin country</td>
<td></td>
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<tr>
<td>Observations</td>
<td>867</td>
<td>280</td>
<td></td>
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</table>
Does decentralization matter for economic performance?

- **Short run**: generally depends on firms circumstances (e.g. country, industry and technology).

- **Long run**: to be large you need some decentralization, so key for growth (Penrose 1959 and Chandler 1962)
Wrap-up

• Alibaba shows the benefits of decentralization, but also costs
  – Initiative/incentives vs. co-ordination

• Complementarity of organization with strategy (people, pay) and circumstances (high growth China, volatile technology)

• Decentralization
  – Varies a lot within and between countries
  – Varies systematically technologically, economic and cultural factors
  – More general importance for economics growth
Back-up
Decentralization also varies across ownership types – with founder and government firms centralized
The graph shows median level of trust. The vertical bars denote minimum and maximum levels.
Decentralization also varies across firms

Decentralization measure (higher number is more decentralized)
Are things really changing?

"Globalization and the arrival of the information economy have rapidly demolished all the old precepts. The management of global companies, which must innovate simultaneously and speed information through horizontal globe-spanning networks, has become a daunting challenge. Old, rigid hierarchies are out ...."

Evidence is limited, but appears yes, firms are decentralizing

Delaying – Number of positions reporting to CEO

Source: Rajan and Wulf, 2006, 300+ large US corporations
External validation – decentralization over time

• Only prior firm decentralization measure to cross-check against we are aware of is from Hofstede
  – Surveyed c.100,000 IBM employees across 50 countries during the 1970s & 1980s
  – Questions on management style (autocratic/paternalistic or consultative) and preferences for delegation
  – Combined into Power Distance index (1-100), low means limited (preference for) delegation
‘Power distance’ measures from 1970s & 1980s matches our 2000s decentralization data quite well

Correlation = 0.80
Fiscal decentralization (whether Governments are centrally run) looks similar – so something cultural?

Fiscal Decentralization

Correlation = 0.83

Firm Decentralization

(Arzaghi and Henderson, 2005)

Nick Bloom and Joh
ICT has a mixed impact on decentralization

<table>
<thead>
<tr>
<th></th>
<th>Coefficient (SE)</th>
<th>Coefficient (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise Resource Planning</td>
<td>0.104* (0.054)</td>
<td>0.116** (0.054)</td>
</tr>
<tr>
<td>Information technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NETWORK</td>
<td>-0.098* (0.053)</td>
<td>-0.110** (0.053)</td>
</tr>
<tr>
<td>Communication technology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computers/Employee</td>
<td>-0.041 (0.031)</td>
<td>-0.021 (0.031)</td>
</tr>
</tbody>
</table>

- Information technology (IT) increase decentralization
- Communications technology (CT) decreases decentralization

**Notes:** Controls are SIC3 dummies, country dummies, noise controls (interviewer dummies, Interviewee tenure and seniority, etc.), public listing, CEO onsite, plant size,
Example A:
Domestic Firm
2 Sites, Single Plant

Central HQ
(New York Site)

D, Decentralization

Plant
(Phoenix Site)
Example D
Japanese MNE

Global HQ
(Tokyo Site)

French CHQ
(Paris Site)

Swedish CHQ
(Stockholm Site)

Plant 2
(Lyon Site)

Plant 1
(Lund Site)

Do not observe D

Observe D

Observe D

Observe D