Financialization’s Global Infrastructure: Transformation of the Securities Trading Industry

Conference “Financialization and Labor”
February 27-28, 2014

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Wissenschaftszentrum Berlin | Projektgruppe “Modes of Economic Governance” (MEG)
Outline

I. Introduction:
   Past and present – images of markets and trading

II. Conceptual background: exchanges and financialization

III. Transformations in securities trading:
   i. Technological innovation
   ii. Deregulation and competition
   iii. Organizational reform

IV. Reinterpreting the global exchange industry

V. Conclusion: Financialization and inter-organizational relations
1. Introduction

• Rapid and profound change for traders, firms and society at large
• Industry perspective to capture blurring boundaries of securities trading
• Cross-border securities trading as mode of market based governance (short termism, redistribution of risk and ownership)
• Inter-organizational focus to grasp embeddedness and change in securities trading; and pointing to financialization of exchanges themselves
• Increasing global harmonization, but local varieties of securities trading remain
2. Images: NYSE, 1963
2. Images: Zurich, 1988
2. Images: CBOT, 1993
2. Images: UBS trading room, 1996
2. Images: Deutsche Börse, 2011
2. Images: Twitter IPO on NYSE, 2013
2. Images: Börse im Ersten (prime time TV)
2. Images: Börse im Ersten (Switch Reloaded)
3. Financialization and securities trading

• Securities trading
  – Provision of capital (Weber 1896, Lee 1998)
  – Market-based financial system (Hall/Soskice 2001)
  – Organization follows function (Lee, 2001)

• Financialization
  – Rise of securities and securities trading (Epstein et al. 2005)
  – Accumulation of regime: 'where profits are generated' (Krippner 2005)

→ inter-organizational relations: account for change, analyze how profits are generated and by whom
4. Economic Development

![Graph showing growth in Market Capitalization and World GDP from 1988 to 2012 in trillion US dollars.](image)
4. Economic Development
## 5. World's 15 largest exchanges

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Tokyo SE</td>
<td>2,928,533,7</td>
<td>11,534,612,9</td>
<td>13,632,303,0</td>
<td>15,650,832,5</td>
<td>9,208,934,1</td>
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<td>NYSE</td>
<td>2,692,123,0</td>
<td>3,597,085,9</td>
<td>4,572,901,0</td>
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<td>3,115,803,7</td>
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<td>Deutsche B</td>
<td>355,310,8</td>
<td>3,157,221,8</td>
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<td>850,011,8</td>
<td>2,612,230,2</td>
<td>3,058,182,4</td>
<td>4,013,650,3</td>
<td>2,101,745,9</td>
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<td>Nasdaq</td>
<td>310,800,0</td>
<td>2,271,727,5</td>
<td>2,706,803,5</td>
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<td>1,868,153,0</td>
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<td>TSX Group</td>
<td>241,924,1</td>
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<td>Shanghai SE 3,694,348,0</td>
<td>Shanghai SE 1,425,354,0</td>
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<td>Deutsche B 1,221,106,1</td>
<td>Hong Kong EX 2,654,416,1</td>
<td>Hong Kong EX 1,328,768,5</td>
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<td>Bombay SE 1,819,100,5</td>
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<td>JSE 549,310,3</td>
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<td>NASDAQ OMX 563,099,6</td>
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<td>Singapore EX 155,125,6</td>
<td>Nat SE India 515,972,5</td>
<td>Korea EX 1,122,606,3</td>
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<td>Borsa IT 1,072,534,7</td>
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<td>Bursa Malay</td>
<td>47,868,8</td>
<td>JSE 131,321,0</td>
<td>Sao Paulo SE 474,646,9</td>
<td>JSE 828,185,3</td>
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<td>Wiener B</td>
<td>26,319,8</td>
<td>Mexican EX 125,203,9</td>
<td>Shanghai SE 286,190,3</td>
<td>Shenzhen SE 784,518,6</td>
<td>Taiwan SE 356,710,6</td>
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6. Transformations in securities trading

• Increase in trading (speed and volume)
• Internationalization of investors (foreign investment)
• Diversification of securities, services and products
• Horizontal and vertical reconfiguration of industry

• Drivers of change
  – Technology
  – Regulation
  – Organizational reform
7. Technological change

• Computerization/Digitalization (of all elements of the value chain)
• Market integration: Electronic cross border trading (Nordic countries)
• Algo Trading / High frequency trading
• Speed: Low latency as a business
• Establishment of electronic trading networks (markets)
  – Europe: Multilateral Trading Facilities (MTF)
  – US: Alternative Trading System (ATS)
8. Regulatory change

• Liberalization, deregulation and 'privatization' of trading
  – Competition, Consolidation

• Europe: Financial Services Action Plan
  – Lamfalussy procedure, MIFID 2004

• US: Financial innovations (Clinton era)
  – Securitization, derivatives, clearing

• Limiting self-regulation, introducing oversight
### 9. Organizational change

<table>
<thead>
<tr>
<th>Mutuals</th>
<th>Joint stock companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>member-owned</td>
<td>Separation: membership vs. control</td>
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<tr>
<td>Not-for-profit operation</td>
<td>Profit-driven</td>
</tr>
<tr>
<td>Risk sharing</td>
<td>Risk externalization (to owners and public)</td>
</tr>
<tr>
<td>(members are owners)</td>
<td></td>
</tr>
</tbody>
</table>

- Demutualizations
- International mergers and acquisitions
- Vertical integration

'old model' -> 'new model'
10. Organizational change: ownership structure

- N = 67;

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11. Taking stock of transformations

• ‘Success’ in deregulating trading
  – Increased competition in trading, market consolidation

• But: deregulation only necessary condition
  – Markets for trading need to be harmonized/standardized

• Exchanges are profit-driven and run by financial service providers

• Diversification in business models: Diversity within the ‘new model’ remains
12. Case study: NASDAQ OMX Group

- Company presentation: „from a U.S. equity exchange to a diversified portfolio of global businesses“
- Market operator: 6 US markets, 18 European markets (8 equity), 5 Central securities depositories, 3 clearing houses
- IT service provider: supplying trading technology to 70 exchanges in 50 countries
- Related trading services: 2000 indexes that provide coverage across asset classes, countries and sectors
- Separation from NASD in 2006, acquisition of OMX in 2007
13. NASADQ OMX: acquiring markets
14. NASDAQ revenue

NASDAQ OMX Group revenue 2013: 1.895 US $ Million (operating income: 688 US $ Million)

- Total net derivative revenues: 12%
- Total net cash equity trading revenues: 16%
- Total net fixed income trading revenues: 10%
- Access and Broker Services Revenues: 12%
- Total Listing Services revenues: 4%
- Total Market Data Products revenues: 19%
- Index Licensing and Services Revenues: 12%
- Total Corporate Solutions revenues: 2%
- Total Market Technology revenues: 2%
### 15. Nasdaq's ownership today

<table>
<thead>
<tr>
<th>Owner name</th>
<th>Shares</th>
<th>% of ownership</th>
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<tbody>
<tr>
<td>Investment Corp. of Dubai (Investment Management)</td>
<td>29.780.515</td>
<td>17,77</td>
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<tr>
<td>Investor AB</td>
<td>19.394.142</td>
<td>11,40</td>
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<tr>
<td>FMR LLC</td>
<td>8.545.384</td>
<td>5,00</td>
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<tr>
<td>The Vanguard Group, Inc.</td>
<td>7.664.191</td>
<td>4,57</td>
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<tr>
<td>MFS Investment Management, Inc.</td>
<td>7.330.469</td>
<td>4,37</td>
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<tr>
<td>MASSACHUSETTS FINANCIAL SERVICES CO/MA/</td>
<td>7.322.209</td>
<td>4,30</td>
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<td>Fidelity Management &amp; Research Co.</td>
<td>6.915.673</td>
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<td>BlackRock Fund Advisors</td>
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<td>GOLDFMAN SACHS GROUP INC</td>
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<td>STATE STREET CORP</td>
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<td>Goldman Sachs Asset Management LP</td>
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<td>BARCLAYS GLOBAL INVESTORS UK HOLDINGS LTD</td>
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<td>Vulcan Value Partners LLC</td>
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<td>INVESCO LTD.</td>
<td>3.759.336</td>
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<td>BlackRock Advisors LLC</td>
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<td>Invesco Advisers, Inc.</td>
<td>3.374.887</td>
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<td>Dimensional Fund Advisors LP</td>
<td>3.303.102</td>
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<td>BANK OF NEW YORK MELLON CORP</td>
<td>2.481.204</td>
<td>1,34</td>
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<tr>
<td>BLACKROCK ADVISORS LLC</td>
<td>2.438.527</td>
<td>1,34</td>
</tr>
</tbody>
</table>

III. Transformations
16. European equities: trade classification
17. Swiss equity trading: venues
18. UK equities trading: venues

- LSE Group: 38.27%
- Markit BOAT: 34.53%
- BATS Chi-X Europe: 16.88%
- Turquoise: 2.16%
- Johannesburg: 1.83%
- Euronext: 0.44%
- UBS MTF: 3.77%
19. Swedish equities trading: venues
21. Beyond equity trading

• Equity trading is not limited to ‘home’ exchanges anymore
  – Internationalization of trading
  – Trading off-market
• Revenue generated with additional services and products
• Clearing becomes more important as trading is fragmented
• Emergence of large global conglomerates in trading
• Large institutional investors (including pension funds)
22. Trading services value chain

Trading
Clearing
Settlement
Depositing

Exchanges: increased competition international acquisitions

NASDAQ OMX

Central Counterparties (CCPs)

Central Securities Depositories (CSDs)
23. Conclusion: Financialization and inter-organizational relations

- Global infrastructure (‘underlying structure’)
  - Organizing capital flows for equity, bonds and derivatives
  - Privately owned and operated

- Profit generation:
  - Equities trading highly competitive: profit through volume
  - Profits elsewhere: derivatives, services, clearing

- Financial Services Firms driving system (operators and others)

- Contradictions
  - Private infrastructure as common good
  - Investor culture but: large players dominating the field
Thank you!
17. European equities: Volume and venues (4/2013)
1. **Substantial change in equity trading**

- Internationalization of trading
- Diversification of services

- Regulatory policies
  - Deregulation, privatization, market consolidation

- Technological innovations
  - Digitalization, Algo-trading, electronic trading networks

- Organizational strategy
  - ‘Modernizing’ corporate governance
  - Extending business
    - Along the value chain (trading, clearing, settlement)
    - Additional services: data provision, trading infrastructure
3. Gestaltbarkeit globaler Regeln?

• Notwendigkeit einer Demokratieperspektive auf globale Finanzen

• Demokratie als de-jure und de-fakto Einfluss

• Transparenz: Für Mechanismen und Prozesse

• Verlegerung von Entscheidungskompetenzen weg von
3. Economic development

[Graph showing the relationship between Market capitalization and World GDP from 1988 to 2012.]
7. Transformation: Technological

**NASDAQ OMX Group revenue 2013: 1.895 US $ Million**

- **Total net derivative revenues**: 16%
- **Total net cash equity trading revenues**: 12%
- **Total net fixed income trading revenues**: 10%
- **Access and Broker Services Revenues**: 13%
- **Total Listing Services revenues**: 12%
- **Other revenues**: 4%

III. Transformations

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IV. Fazit
8. Fazit