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Eclipse of the public corporation

Eumedion Symposium 2013

The eclipse of the public corporation

Back to evolutionary roots: smaller, more agile, more cohesive companies

Public equity weakest governance models of all

Consequently, the eclipse of the public corporation is nearby

Since our separation from other primates, 2 million years ago, on the African savanna, we have lived in groups of 80 - 120 people

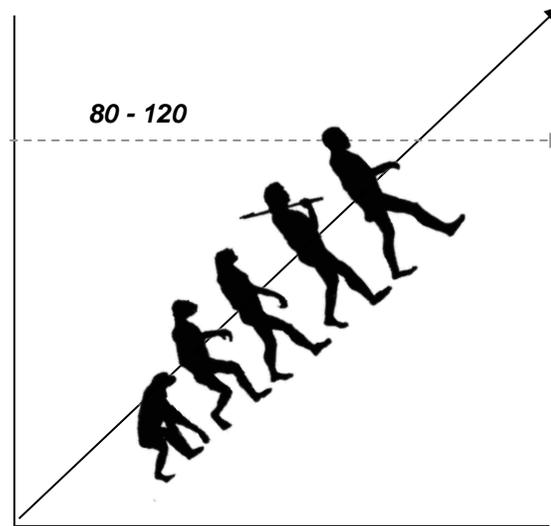


A centurion commanded 100 men



Average size of hunter-gatherer societies 110 persons

Optimal Group Size



Brain Size (Neo-Cortex)

Informal social group control is highly effective to get a job done

- You are motivated by group pressure
- You know where to find expertise
- You are not inclined to game the system:

Smaller groups miss critical benefits

- Specialization
- Critical mass (eg. for defense)
- Risk diversification

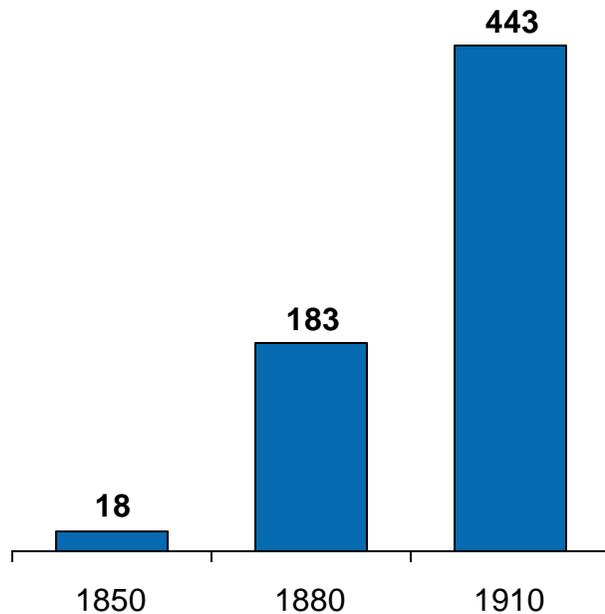
Large groups difficult to coordinate

- Weak personal bonds
- Weak personal loyalties
- Less access to expertise

Since the industrial revolution the iron rules of capitalism and scale pushed us towards much larger, bureaucratic organizations

Example: Increase in company size in metal industry (1850-1910)

North western Europe, # employees per company



Industrial revolution led to huge increase in company size....

- In the industrial revolution, capital became the scarce production factor
- Scale leads to better utilization of capital
- Therefore, company sizes increased dramatically

.... and increasing pressure on non-scarce labor

- Resulting in exploitation and alienation of mainly unskilled labor



So why are we moving to smaller organizations now?

1

Education

- **People are increasingly highly-educated**
 - Percentage highly educated people is seven times as high now as in 1960
 - Throughout the whole EU the level of higher education is still increasing (from an EU average of 19% to 24% between 2000 and 2009)

2

Technology

- **Internet and industry shift facilitate independency of workers**
 - Markets instead of hierarchies
 - E.g. 14% increase of ZZP (50k - 400k), academic entrepreneurship
 - Examples of lowered transactions cost: waarneembemiddeling.nl; freelance.nl; 99designs.com

3

Labor scarcity

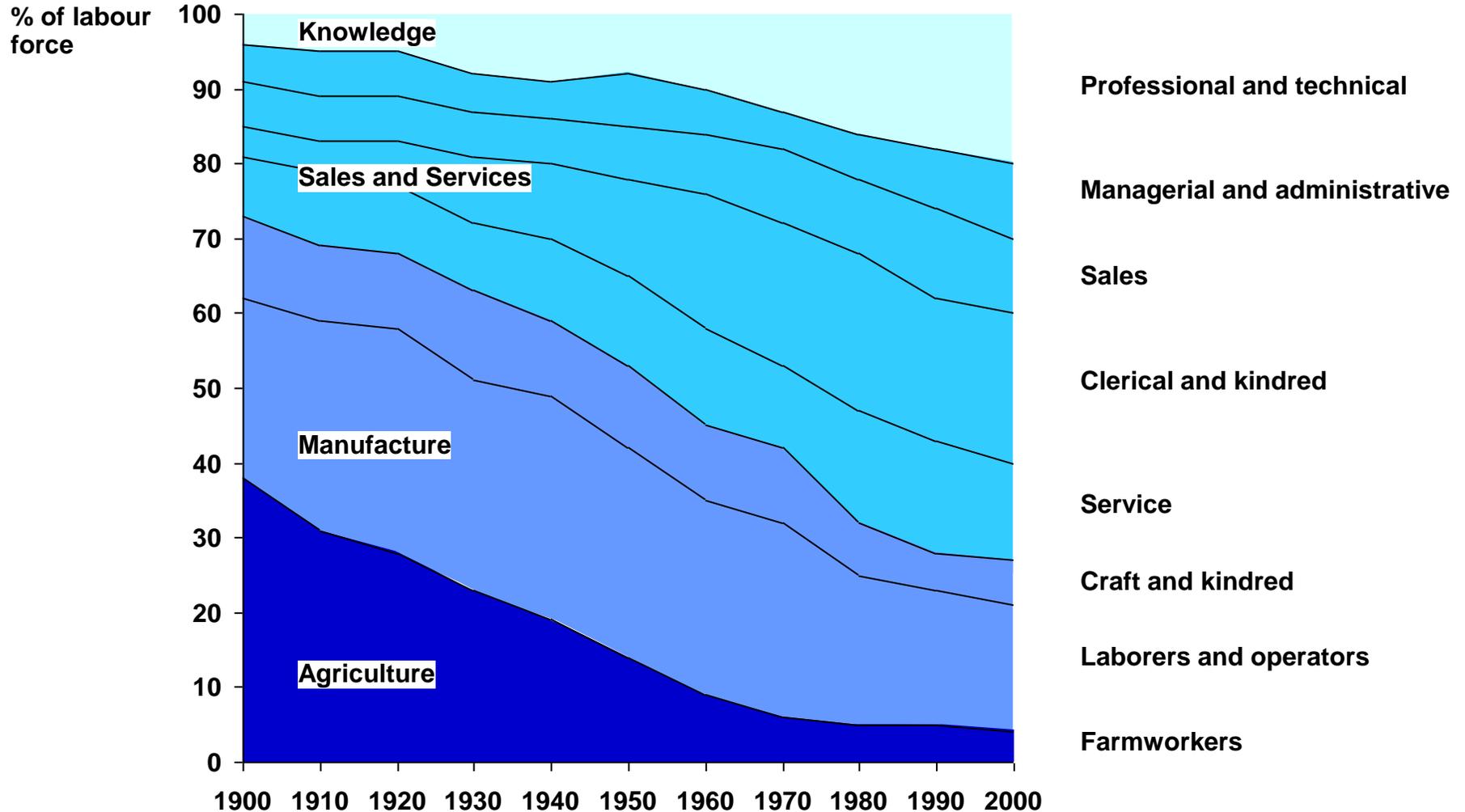
- **The trigger is the scarcity of labor**
 - The employee will dictate the terms
 - Organizations will seek to optimize effectiveness off labor

4

Independency of workplace

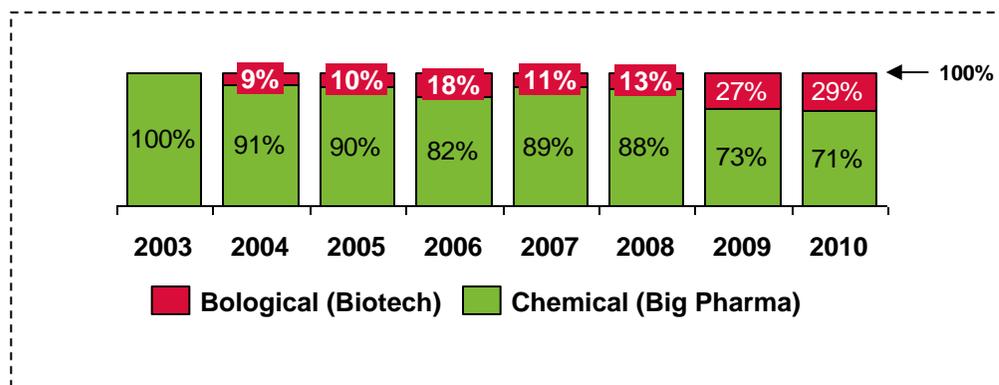
- **Over last century knowledge work and service industry have mushroomed**
 - Knowledge work and service industry has increased from 25% of GDP around 1900 to 75% of GDP today

Strong increase of sales and services and knowledge work creates independency of workers



Pharmaceutical industry: biotech startups have become very successful at innovative drug discovery...

**Drug Development: FDA Approvals
Approvals, 2003-2010**



Biotech Revolution

- Biotech start-ups compete with Big Pharma
- Innovative approach to drug discovery
 - Understand the disease biology
 - Identify targeted biomarkers as drug candidate
 - Develop and modify biological components/molecules
- Focus on niche market segment, with targeted treatments
- Virtual organizations with flat structure and rapid decision making

1) Advance research of +1500 drug development projects of 211 public biotech companies between 2002-2009

2) Article by Kola and Landis in *Nature Reviews Drug Discovery*, 2004

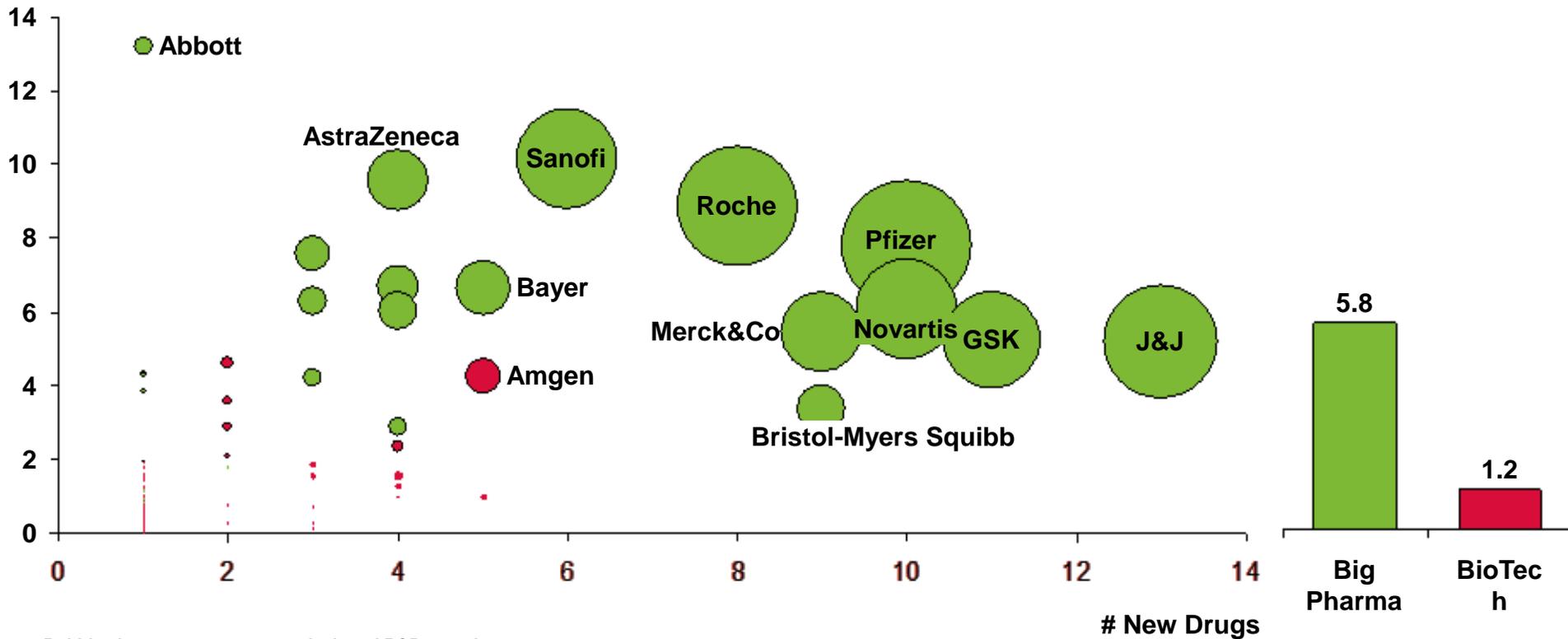
Source: Advance, Nature Publishing Group, Thomson Reuters Integrity, Booz & Company analysis

... with lower R&D spend per drug

NOT EXHAUSTIVE

R&D Spend per Drug by Company Type¹⁾
2002 – 2012, \$Bn

R&D per Drug
\$Bn

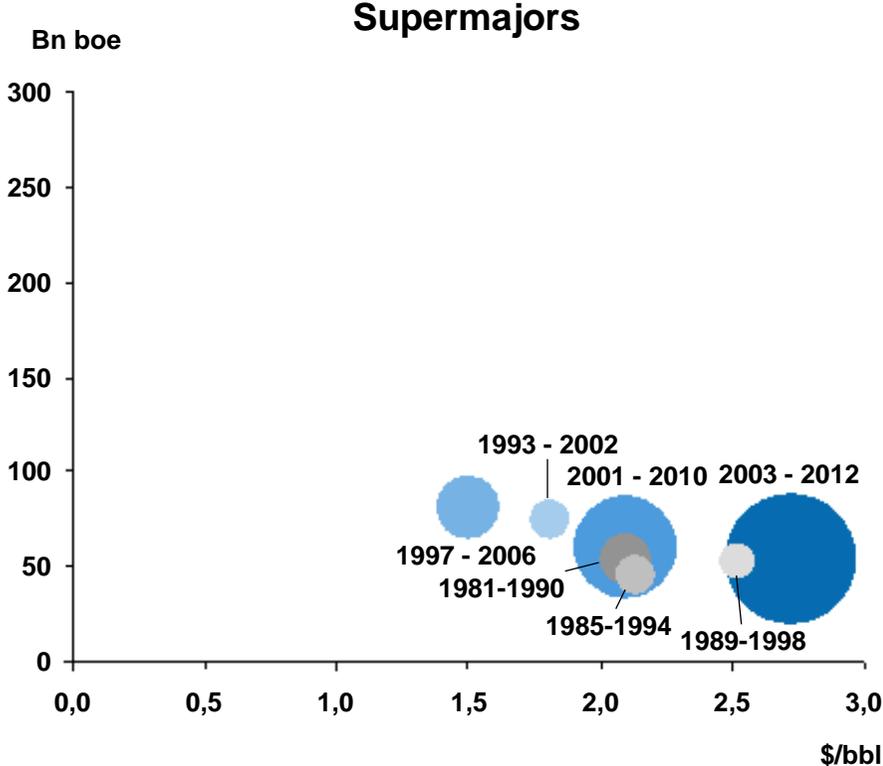
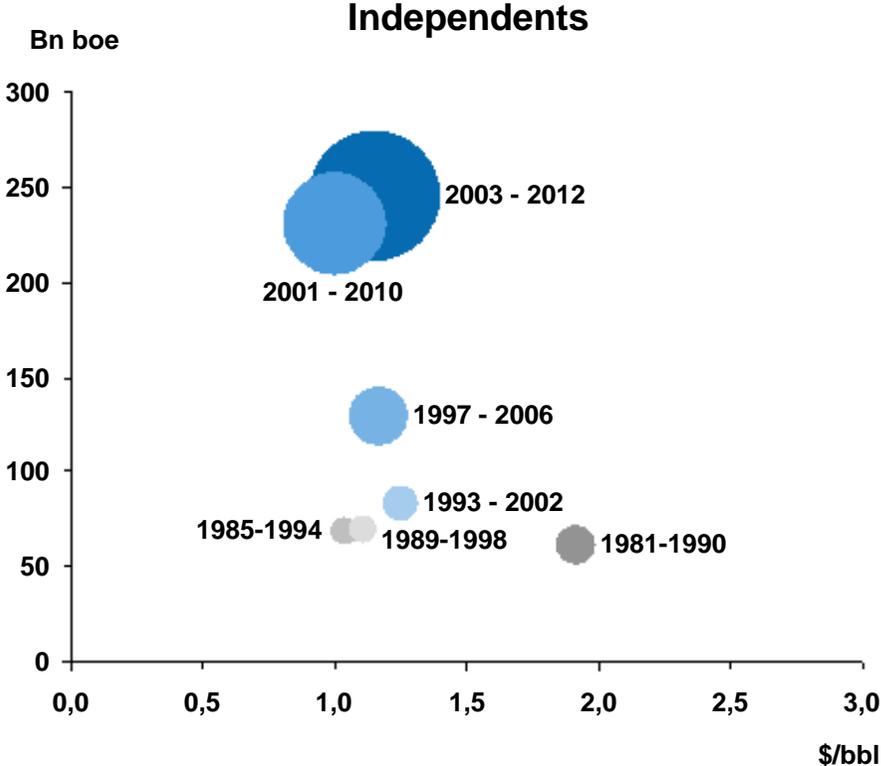


Note: Bubble size represents companies' total R&D spend
 1) Assessment based on database of 100 companies and 227 new drugs (technically new molecular entities)
 Source: Forbes, Booz & Company analysis

Oil industry: supermajors increasingly lag independents in exploration, despite increasing spend

Total Resource Addition vs. Exploration Spend
 Total of all players; real USD (2012); 1981-2012

INCLUDES UNCONVENTIONALS



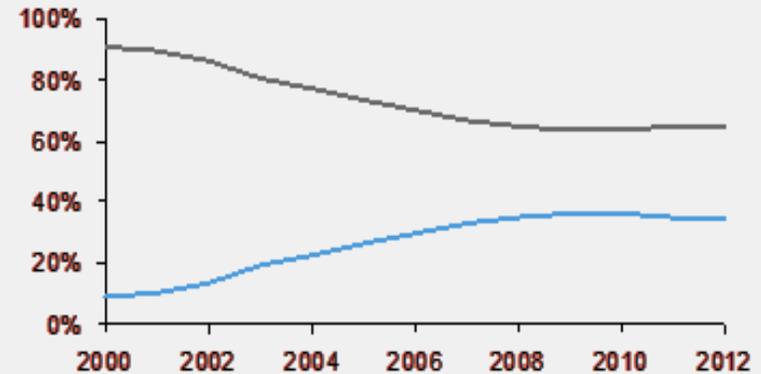
Note: Bubble size represents combined company revenue.
 Includes unconventional, which represent 48% of independent resource additions and 16% of supermajor resource additions
 Exploration CAPEX excludes M&A spend
Source: Rystad Energy UCube; Booz & Company analysis

Airline industry: in Europe, point-to-point carriers grow strongly, gaining market share vis-à-vis incumbent competitors

LCC Route Expansion in Europe
Easyjet and Ryanair, 2000-2012



Market Share by Airline Category¹⁾
European Passenger Flights, 2000-2012



- Strong P2P-carrier growth results from attracting new customers as well as poaching customers from other premium airlines
 - Price-sensitive passengers from other airlines (40%)
 - Additional demand due to the introduction of new routes (40%)
 - Additional demand as passengers shift from other forms of transport (20%)

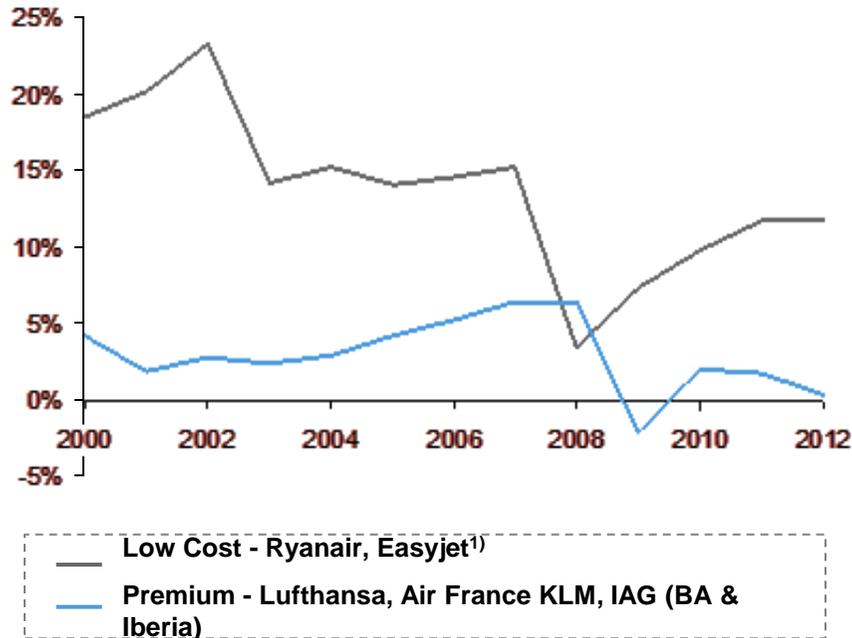
1) Based on available seats
Source: Bloomberg, SRS Analyzer, Booz & Company analysis

The P2P carriers have achieved higher profit margins than the traditional players in the last decade...

Overall profit of legacy carriers is below that of LCC...

... European profits are even worse

EBIT Margin by Airline Category¹⁾
Sample of European Carriers, 2000-2012



Lufthansa CEO says short-haul restructuring is essential

“The entire European Lufthansa business has been operating at a loss for years.” said Lufthansa Group chairman and CEO Christoph Franz

Air Transport World: November 1st, 2012

Air France-KLM: over half way through 'Transform 2015' plan

Air France-KLM reported its first positive second quarter operating result for five years as its Passenger segment enjoyed a return to the black, although medium-haul is still loss-making.

Centre for Aviation: July 27th 2013

1) Average EBIT margin Easyjet 7%; average EBIT margin Ryanair 19%
 Source: Booz & Company analysis

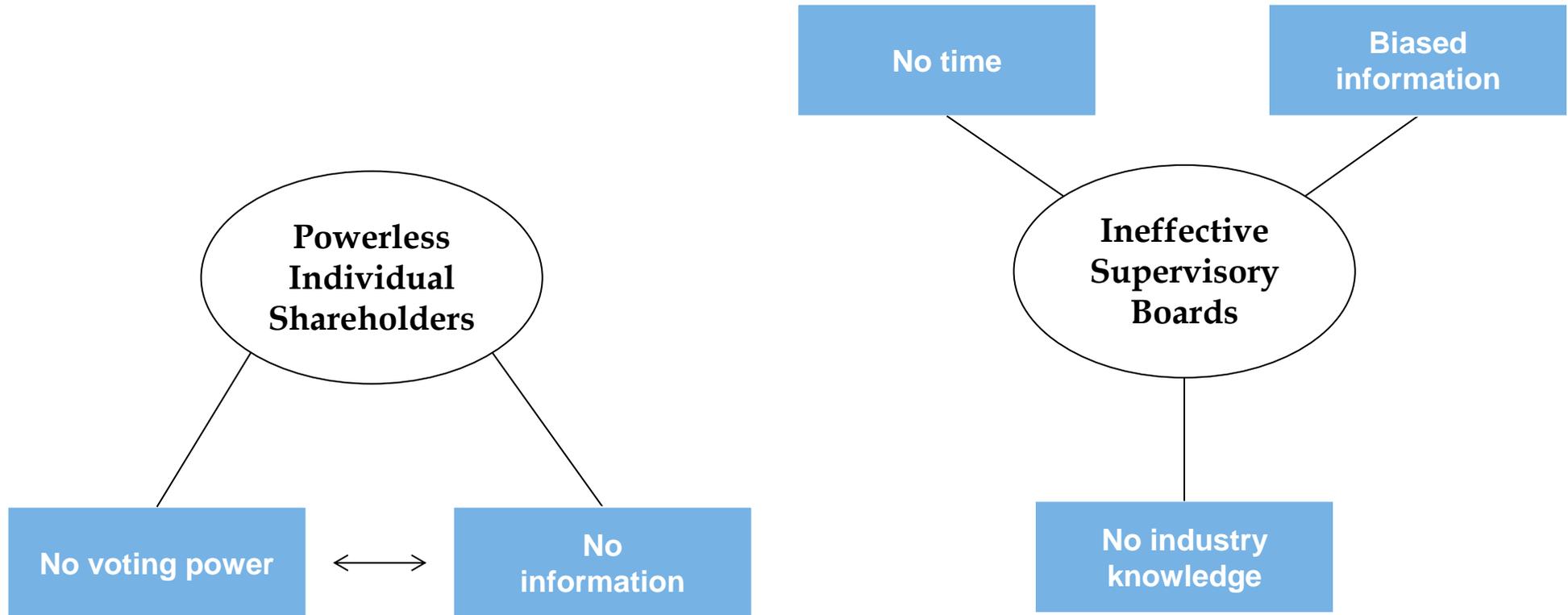
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Public equity is the weakest governance model of all – vis a vis private equity, family business, cooperatives



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Evolutionary powers will turn listed companies into dinosaurs



AkzoNobel Art Foundation