

TSE M1 – Semester 1 September 2018 Paul Seabright

Understanding Real World Organizations Week 1: Ronald Coase and the nature of the firm

#### "Monsieur Haneda était le supérieur de monsieur Omochi, qui était le supérieur de monsieur Saito, qui était le supérieur de mademoiselle Mori, qui était ma supérieure. Et moi, je n'étais la supérieur de personne.

On pourrait dire les choses autrement. J'étais aux ordres de mademoiselle Mori, qui était aux ordres de monsieur Saito, et ainsi de suite, avec cette précision que les ordres pouvaient, en aval, sauter les échelons hiérarchiques.

Donc, dans la compagnie Yumimoto, j' étais aux ordres de tout le monde."

Amélie Nothomb, Stupeur et Tremblements

#### Ronald Coase, 1908-2013



#### Ronald Coase and the nature of the firm

- The different forms of economic exchange can be summarized as taking place within markets or hierarchies
- Coase asked what circumstances made one form preferable to the other
- A well known advantage of markets is the transparency of information transmission – also a major theme in the work of Hayek
- But the process of price creation can also entail real transactions costs

#### These questions are more pertinent than ever

- After all, what is a firm nowadays?
- It can be defined by the legal form but there are many of these (limited liability corporations, partnerships, single proprietorships)
- And the legal form may not capture the economic reality
- Think of some kinds of firm that are relatively new...

#### What is Uber:

#### A firm? A market?

A service provider? An owner of intellectual property? None of the above? All of the above?

The world's most valuable startup is leading the race to transform the future of transport  $e_{nn_{e}}$ 

Timekeeper

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Sep 3rd 2016 | From the print edition



'LET'S Uber." Few companies offer something so popular that their name becomes a

useh Dut that is and of the many achievements of I that a semmany founded in 2000



#### And AirBnB?



#### FINANCIAL TIMES

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## Isis Inc: how oil fuels the jihadi terrorists

Erika Solomon in Beirut, Guy Chazan and Sam Jones in London



The jihadis run a sprawling oil operation forcing even their enemies to do business with them

## What determines the boundaries of the firm?

- If markets have informational advantages over hierarchies, what advantages can hierarchies have over markets?
- A Fundamental Question: how big (and complex) should a firm become?
- The advantages of size
  - Technical economies of scale or scope?
  - Resolving hold-up problems
- The costs of size
  - Slow diffusion of information
  - Strategic behavior by those who have private information
  - Coase called these "transactions costs"

### The advantages of size

- Economies of scale and scope predict common operation of activities – not common ownership
- Markets allow coordination of activities without integrating them into one firm under common ownership
- So when is integration necessary?
- Coase's answer: when it involves lower transaction costs
- For example: when market relations would involve a "hold-up" problem

# What is a "hold-up" problem?

Suppose firm A has invented a new technology for mobile telephony

- Firm B would like to use it in its handsets, but first has to invest (infrastructure, production facilities etc.)
- These investments are specific to the technology and would be useless for any other: how can firm B be sure of the price it will have to pay?
- After it has invested, firm A will be tempted to demand a high price, knowing firm B cannot easily walk away from the deal
- Two solutions:
  - A contract in advance but sometimes such contracts are hard to write since they depend on factors that are hard to foresee
  - Vertical integration then firm A and firm B have the same interests

# The hold-up problem



# The hold-up problem



Firm B's only rational strategy is not to invest!

#### The costs of size

Information transmitted within hierarchies is sometimes slow to diffuse

- Organizational design can reduce these costs by grouping together the activities whose information sharing is most urgent for the firm
- An example: Du Pont and the move from the U-form to the M-form company in the early 20<sup>th</sup> century
- M-form was also key to combining scale with product differentiation (compare Ford & General Motors in 1920s)
- Sometimes information is used within hierarchies to exploit strategic advantages (eg to work less hard)
- Just-in-time production methods are designed to make this more difficult – what gave Toyota its advantage over GM

# The Unitary (U-form) firm



# The Multidivisional (M-form) firm

