

# Markets and Organizations

TSE M1 – Semester 1, Session 3

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## Now let's apply these insights to a problem of firm organization:

- ◆ 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?
- ◆ Ronald Coase (Nobel prizewinner) asked why some transactions take place in markets, and others in hierarchies
- ◆ 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"

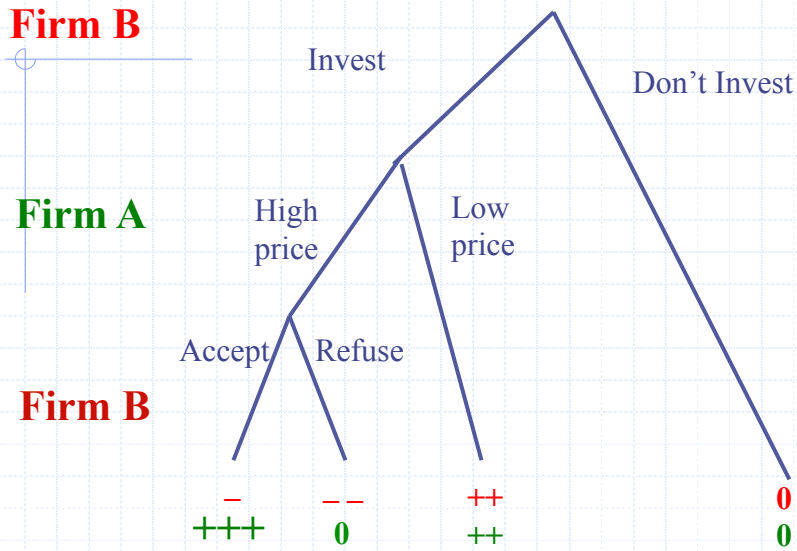
## The advantages of size

- ◆ Economies of scale occur when it is more efficient to produce at large scale than at small scale
- ◆ Economies of scope occur when it is more efficient to operate two different activities together than separately
- ◆ However, markets give the opportunity to coordinate different 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

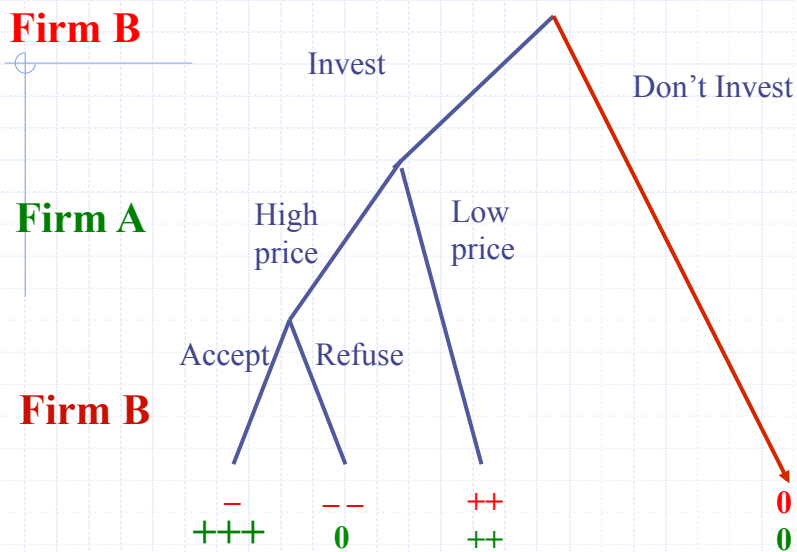
## What is a "hold-up" problem?

- ◆ 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 very high price, knowing that firm B cannot walk away from the deal without losing its investment
- ◆ 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 and so will not hold each other up

# The hold-up problem



# The hold-up problem

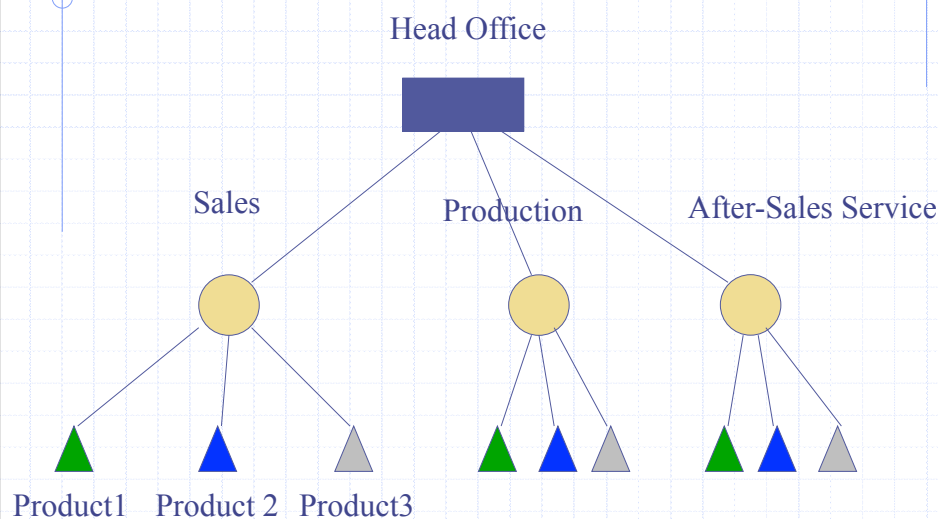


Firm B's only rational strategy is not to invest!

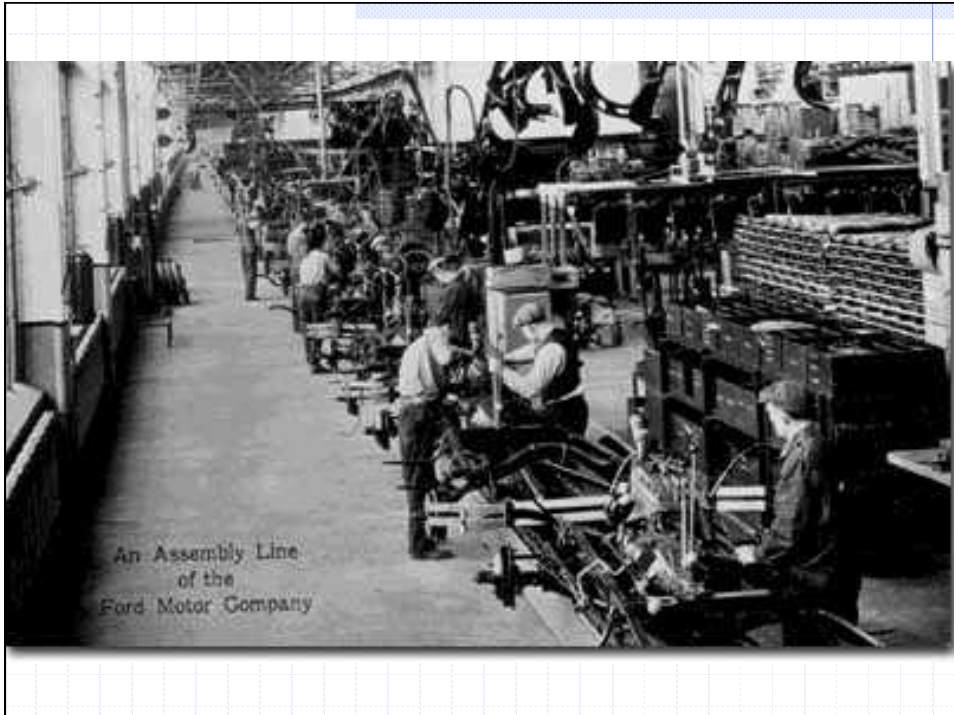
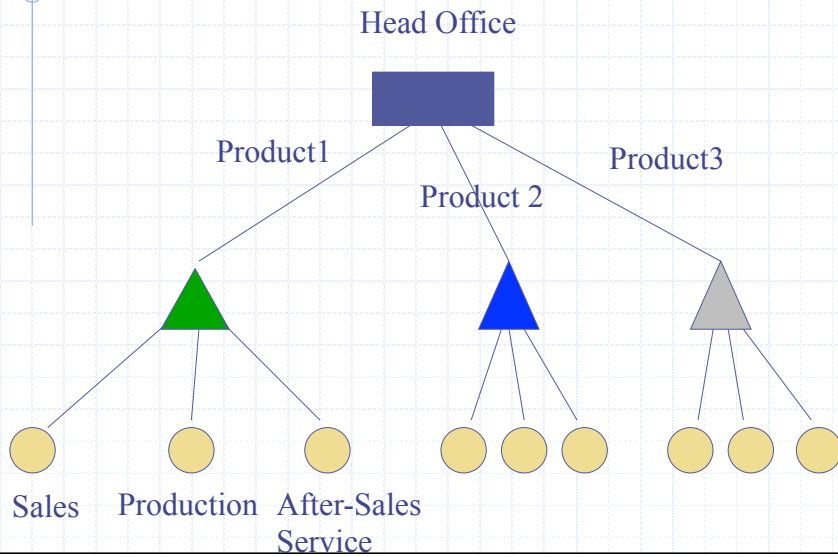
## The costs of size

- ◆ 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



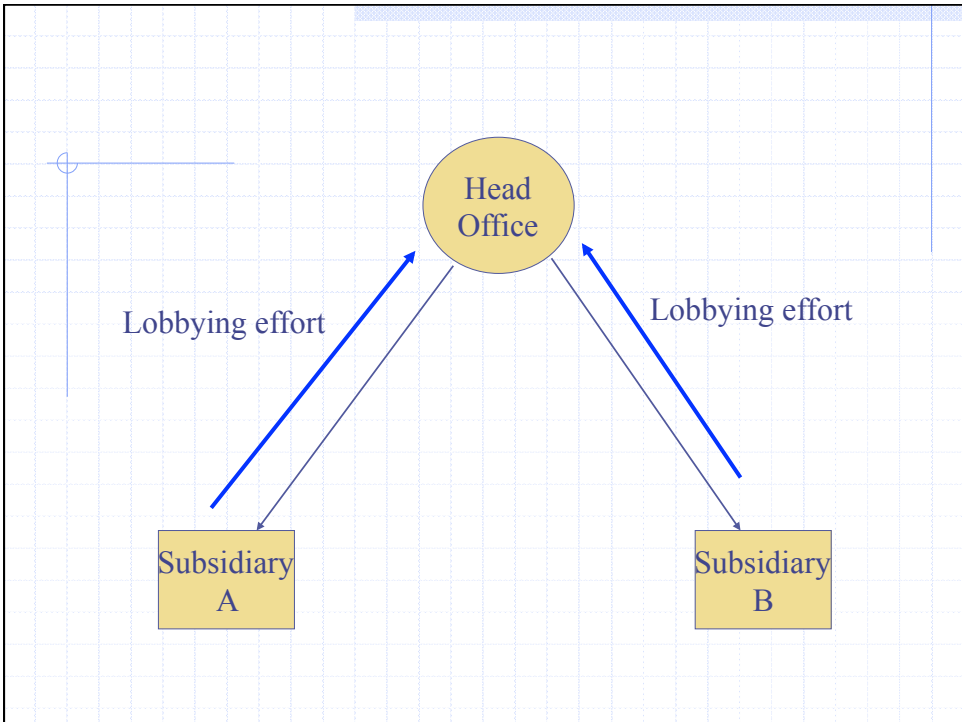
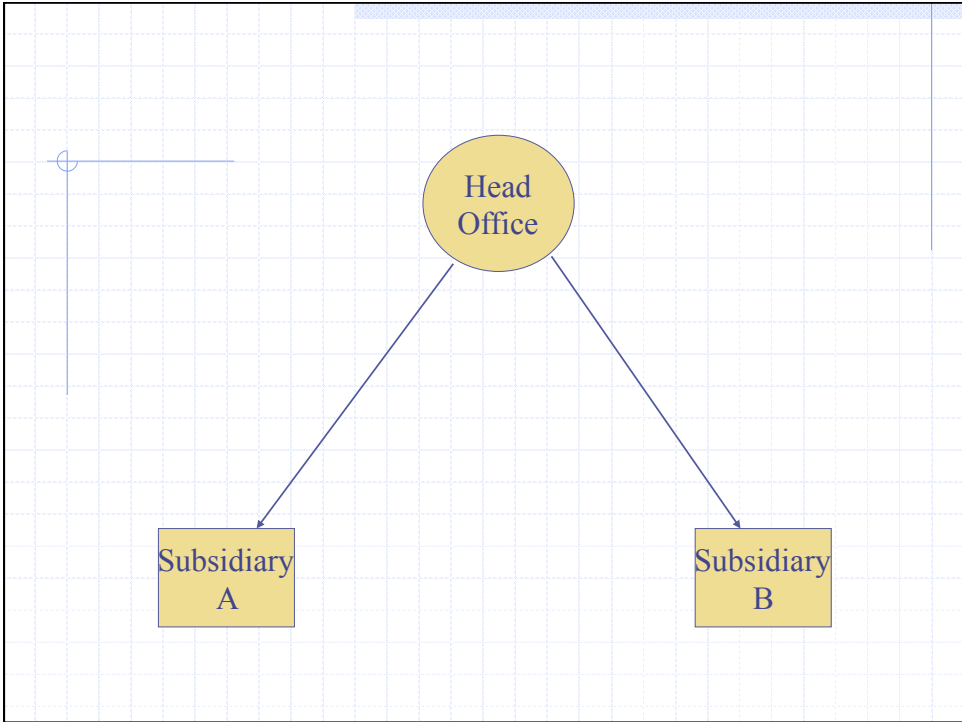
# The Multidivisional (M-form) firm





## Another cost of integration: "influence-seeking"

- ◆ This means energy and time devoted to pressing for redistribution within the firm rather than production by the firm
- ◆ Inefficient divisions may spend too much time lobbying head office for favorable treatment
  - This becomes worse at a time when demand is low – the benefits of influence-seeking rather than production go up!
  - This explains why many firms divest poorly-performing divisions in an economic downturn
  - And maybe also why privatization is popular in recessions
- ◆ Successful projects may be treated as "cash cows" by other divisions, instead of reinvesting resources where they are most productive
  - This explains why many risky activities – like R & D – are often carried out at arms-length from the parent company (eg in research joint ventures)



## Let's apply this to a particular case: IBM

- ◆ In December 2004 IBM sold its last personal computer-making subsidiary to Lenovo, a Chinese firm
- ◆ Why?
- ◆ The great majority of IBM's revenue now comes from selling business services?
- ◆ Why might this give it a comparative disadvantage in the manufacture of PCs?
- ◆ We shall see many more such examples in the future
- ◆ An Airbus that no longer makes aircraft?

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