

# De Beers

GT and business strategy

# What will we do – where we start

- Cases study
- Commitment (Ghemawat)
- Co - opetition (Brandenburger)

# Old/new

## Industrial Organization

- Old: [SCP](#)=> analysis of regularities cross industry
- New: firms heterogeneity – competition within an industry



## Business strategy

- Old: [Porter](#): competitive strategy– why one industry is profitable and one not?
- New: GT and Cases study

# Old IO => new IO (GT)

- From Public welfare to Private profit
- From average profit to skewness of profits
- from industries similarities to industry differences
- From «structure» (Scp) to endogeneity (sCp)
- From static to dynamic

# Evolution in business strategy

- From focus on products and markets
- To long run firm specific factors that explain differences in products and markets

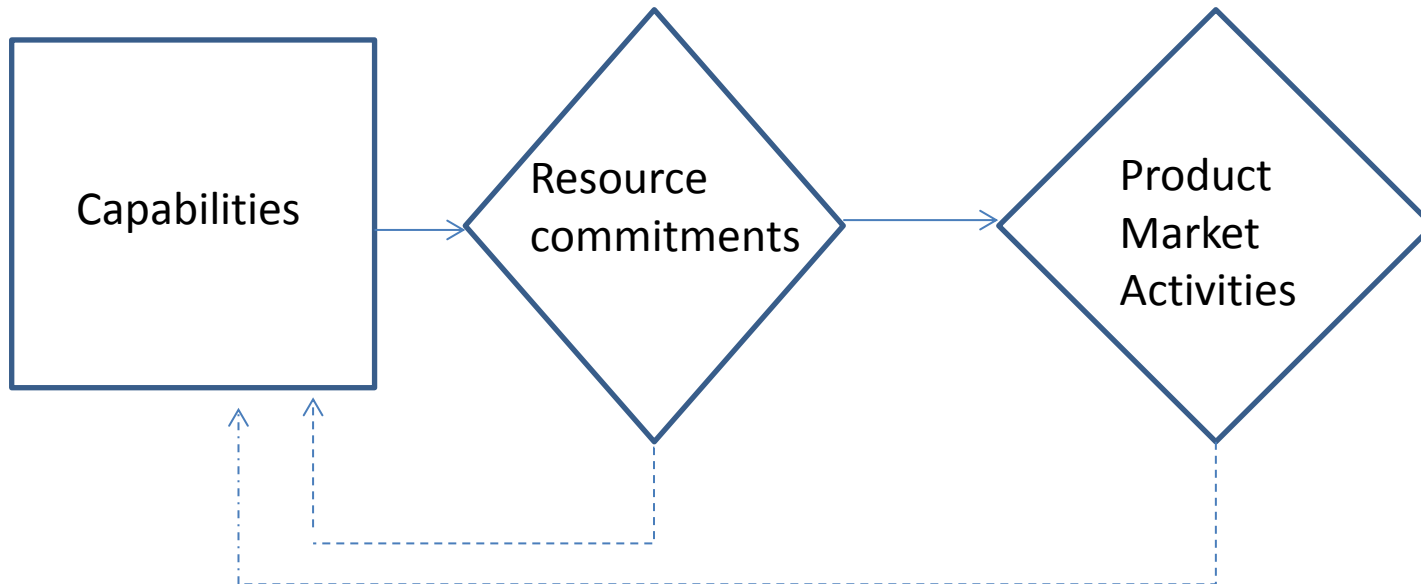
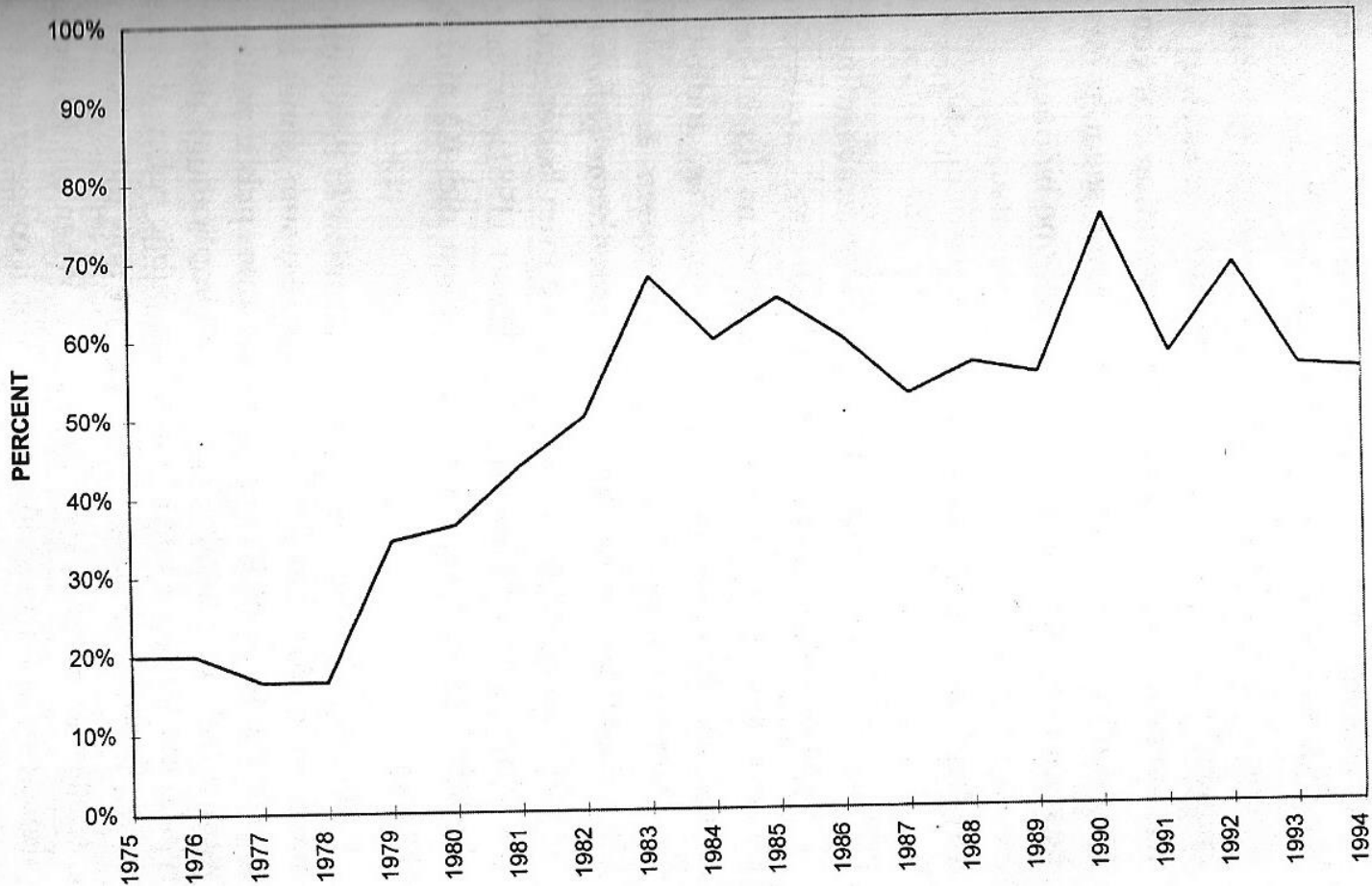


Exhibit 1.1

Game-Theoretic Articles in Industrial Organization



# Why GT not so successful in BS?

- Who was studying GT was not interest in BS (e vice versa)
- GT studies interactions between agents but is less interested in applications
- GT focus on few variables => difficult to test and prove
- GT need a high level of information and rationality that are difficult to have in the real world.
- GT studies mainly interrelation between firms while heterogeneity in performance often depend on how firms are internally organized.

# Cases study

- Research question: what we do want to test? And what is the alternative hypothesis?
- Model formulation: which model we should choose? – coop o non coop? complete Information or incomplete– signaling, etc. (IO=> I choose a model and I try to test it empirically - BS I have a case study (a real world situation) and I have to select the best model that fit this real situation.
- Data generation: qualitative and quantitative
- Data interpretation econometric and stitistical tools have some limits.



# What do we test in the De Beers case study?

- The largest part of the literature on De Beers focus on De Beers reputation not to cut prices of Diamond.
- One model that could fit this industry is one on «durables» (every sale today is in competition with tomorrow sales. Coese's Conjecture: prices go down very fast to marginal costs if you cannot precommit on prices.
- Is it credible?

# Diamond market characteristic that don't fit well with model «durable goods monopoly»

- Sales are quite cyclical (holidays, weddings, etc.)
- Resale market very sticky: emotional ties, risk to loose till 50% of the price.

# De Beers

- Central Selling Organization (CSO) is De Beers's distribution's arm
- CSO buys diamonds also from mines not owned by De Beers
- “Diamonds are forever”

# Moreover...

- In 2005 De Beers undercut nominal prices for some typology of diamonds. (small one and less expensive)
- In real term CSO decreased prices in almost half of the years between the mid-seventies and early nineties.

# We need an alternative hypothesis to test

- CSO /De Beers works like a control valve that increases price when the ratio stock/trade goes higher than a certain level (75%)
- Alternative hypothesis: prices decrease because of Coase's conjecture

# What numbers tell us

- From 1978 to 1993 real prices grew any time that the «average stock-to-sales ratio» was lower or equal to 75%
- The probability that this outcome is casual is 1 over 10.000

# caveat

- Model selection: the «dynamic» can be more complicated than the one we put in the model
- Many things can happen and can change when you test such a long period.
- We don't have many data (quantitative and qualitative)