Economics, organization and Management (IE&P)

- **Lecturer**: Paolo Bertoletti – Dipartimento di Scienze economiche e aziendali. Office time availability: Monday, 2-4 p.m.
- **Textbook**: Economics, organization and Management, by P. Milgrom & J. Roberts Prentice-Hall, 1992: Chapters 1-6?
- The final assessment will be by a written and (optional) oral exam.
What this course is about:

• In 1992 the textbook (also a research monograph by two leading scholars) offered a unified **economic** approach to the analysis of the way organizations work.

• 20 years later, in the middle of the most serious economic crisis since 1929, times are far less optimistic (the main historical events at that time were the rise of Japan economy and the end of Soviet Union), but even more interesting for the principles of economic organization.
What this course is about:

• The book is particularly rich of applications and examples which speak directly to our period (e.g., the S&L financial crisis of the 80s in the USA banking system tells a story possibly more interesting for today audience than in the 90s).

• Essentially, the course will try to provide answers to questions concerning the why and the way organizations exist and evolve.
Course outline

• Part I: Introduction
  • Ch. 1: Organization does matter!
  • Ch. 2: Economic tools.

• Part II: Coordination
  • Ch. 3: the price system; Ch. 4: alternatives.

• Part III: Contracting
  • Ch. 5: bounded rationality and informational asymmetries;
  • [Ch. 6: moral hazard and other ex-post problems. ?]
Chapter 1: Does Organization Matter?

• Once upon a time at the General Motors (GM): the coming of Alfreed Sloan (1921) during a recession.

• GM (with a market share of 11%) was simply losing its confrontation with Ford’s T-Model (which had cut its prices by 25% and had a market share equal to 55%).

• Moreover, its accounting system was even unable to stop the accumulation of inventories in the middle of a recession. And the GM models (from Chevrolet to Cadillac) were mainly competing each others.
Sloan:

- Did introduced a lot of **product diversity** and **design coordination** (common components).
- In particular, he introduced a *multidivisional structure* with a large division autonomy but a centralised office in charge of assessing the performances and coordinating the overall strategy (internal pricing, research, legal and financial decisions).
- From a branch of (competing) companies to a winning competitor. 40s: GM 45%, Ford 16%.
Toyota

• In the early 50s Toyota was a small local producer enjoying a low labour cost, but suffering in its competition to the USA giants from a lack of capital and a small production size.

• The Kanban (of *Just-In-Time*) innovation: dispensing from a system of buffer inventory subject to large economies of scale. This required closer communication and stronger coordination between successive production stages.
This, in particular:

• Also required to improve the reliability of plants (and products): maintenance and reparations made by the same equipment operators, and tight links with the suppliers.

• Where GM used common components to exploit scale economies, Toyota resorted to flexibility, employing robots and making its plants able to produce different models (major re-designs each 6 years).
Toyota

• Toyota chose to rely on outside partners also for complex components and systems (differently from GM).

• This was realized by establishing long-term relationship (facilitating communication and “risk-sharing”) with a relatively small group of suppliers.

• By the end of 70s Toyota was an established (and aggressive) world competitor.
The Hudson’s Bay Company

• May 2, 1670: the Governor & Company of Adventurers of England Trading into Hudson’s Bay (HBC) was established as a monopolistic joint stock company by King Charles II of England into the business of trading European manufactures to the native peoples for animal furs.

• The HBC still exists, but it had a very hard time during the late 18th and early 19th century.
HBC’s organization

• Owners were rich aristocrats in UK, and the management was provided by them, usually under a monumental ignorance of the field conditions.

• Many fine decisions were taken centrally, and local operators were payed a flat salary. These established in a few trading post along the shores of Hudson’s bay (an immense area), employing independent middlemen receiving a significant mark up (double marginalisation).
The North West Company

• The NWC, established by the Canadian British Government in 1779, inherited the competition role of the French Canadian *coureurs de bois*.

• They operated violating the royal monopoly and under an immense “technological disadvantage”: they had to bring back to Montreal the furs in fragile canoes for around additional 1500 miles!

• It took 24 months for the NWC to “transform” the European goods into furs sold in Europe (against 6 months for the HBC).
The NWC success I

• By the beginning of the 19th century NWC seized the 80% of the trade, and was immensely profitable.
• NWC used to establish trading posts within the fur lands, but more important was its organizational structure.
• NWC was a partnership, sharing profits between two classes of partners: the Senior, Montreal based, financing the trade and marketing the fur, and the Wintering, trading in the field.
The NWC success II

• Partners used to meet once per year to divide, profit, exchange information and discuss policies.

• Operating decisions were left to the *winterings*, granting them large autonomy.

• The latter also employed aggressive *agents*, chosen for their entrepreneurial style and given a performance-related pay plus a good chance to become partners.
The HBC reorganization

• Ultimately, the HBC responded to the NWC by reorganizing along lines similar to the ones of the competitor.

• In particular, by building inland trading posts, recruiting a new class of employee, granting officers in the field more freedom of action and incentives to perform (establishing a profit-sharing scheme which left to them half of the profit).
The end of the story

- NWC try to react by attempting a hostile takeover, but for once being based in London was an advantage for the HBC.
- HBC managed to transform itself into an effective commercial competitor, and by 1820 NWC was beaten.
- The story ended with a merge which gave control to HBC, but the entrepreneurial spirit of NWC survived in the new firm (today a real estate one also running a chain of department stores).
Salomon Brothers and the USA Investment Banking Industry

• The modern investment banking industry in USA was created by the 1934 Glass-Stegall Act that (similarly to the 1936 Italian “Legge Bancaria”) separated the commercial and investment banks.

• This separation was weakened during the 90s all around the world, a decision that it is now considered by many authors a possible major fact which contributed to the financial crisis started in 2007.
Investment Banking

• Investment banking involves two main activities:

1. **Corporate finance**: underwriting new securities, advising and organizing financing for mergers, acquisitions and divestures.

2. **Sales and trading** of financial instruments, both for the firm’s own account and to individual investors and institutions.
Salomon Brothers Story I

Salomon Brothers (SB), originally a partnership, became a publicly traded corporation in 1981 when it was sold to Phibro Corporation.

It has been guided by John Gutfreund in the period 1984-1991, when it was the most profitable corporation in the world (per employee basis).
Salomon Brothers Story II

- Gutfreund left after a financial scandal (an attempt to purchase more Treasury bonds than permitted): he was barred from serving as a chief executive of a brokerage firm.
- SB became part of Citigroup in 1998, and in 2003 changed its name after another scandal (inappropriate spinning of “hot” IPO's and issuing of fraudulent research reports).
Salomon Brothers Story III

• During the 80s the major financial action was in bonds, due to the rise of sovereign and private debts both in USA and in the rest of the world which increased rate of interest volatility.

• Even a few fixed rate of interest % change means a huge change of bonds and securities prices, involving large opportunities (and risks) of profit for traders.
Salomon Brothers Story IV

• SB was highly involved also in the development of new securities that packaged together home mortgages to form tradable financial instruments (one type of the so-called derivatives which were instrumental to the 2007 mortgage crisis).

• A single trader can exchange hundreds of million of dollars worth in a day, acting on a very limited information and extreme time pressure.

• Risks are monumental, but profits are commensurate.
SB performance-pay system I

- People attracted to this work are especially individualistic, risk-taking and competitive (Gutfreund himself was formerly a bond trader).
- At SB, profit was the measure of everything: in particular, employees were paid with a base salary plus an annual bonus (equal to 2/3 of overall compensation). Transactions were separately priced, profits credited to individuals or departments, and the bonus approximated an individual piece-rate system.
SB performance-pay system II

• At SB bonus of millions were not uncommon!
• Such a performance-pay system has encouraged people to work very hard and take great risks to increase their own and their departments’ profit.
• It has also encouraged frauds and misbehaviours, as we know by now.
In an effort to give incentives to a) more cooperation (and in particular information disclosure) among people from different departments; b) more concern to the long-term firm profit; and c) ultimately a change of its corporate culture: in May 1990 SB created a stock ownership scheme (a share of bonus was used to buy firm’s stock, to be hold in a trust for at least 5 years), under the advice of Myron Scholes (Nobel prize, 1997; founder of LTCM hedge fund, 1994-8).

Apparently, it did not work.
The Changing Economies of Eastern Europe

• 30 years after Sputnik success (1957, the first space satellite), Communism (“Real Socialism”, actually) was rejected as an economic failure in Eastern Europe.

• Shortages of most products (luck, influence and patience as rationing mechanisms, with almost no role for prices and money), often of bad quality or very expensive, with flat or even falling living standards, not to speak of the state of freedom and liberal rights.
The Communism collapse I

• In Soviet Union, agricultural output had stagnated (while growing in the rest of the world), and industry was technologically backward and inefficient, while Eastern Europe faced the world most serious pollution problems.

• The system established by Stalin replaced private ownership of the means of production with state ownership. Private business ceased to exist.

• A system of central planning (and vertical information flows) replaced the market decentralized decision making guided by prices. All investments were centralized, and capital allocated by the State.
The Communism collapse II

• Perhaps, the initial intent of the socialist system was to replaced economic incentives with political and moral appeals.

• However, this never actually worked (“we pretend to work, they pretend to pay us”), since individual self-interest intervened.

• In particular, many “incentive problems” arose. For example, since the central planners were never as well informed about the productive capability of factories, the system of targets provided perverse incentives.
The Ratchet Effect

- Since by meeting his target a plant manager could expect to receive a higher target in the successive period, as performance expectation were “ratched up”, they were actually given incentive to meet the quota barely, never transmitting to planners correct information (managers who responded to incentives by increasing production were sometimes accused of having previously defrauded the state).
1989-1992

- The collapse was extremely rapid, but it took much a longer period to make the transition to a new system of economic organization (establishing properties rights, capital markets, banking, financial, legal, monetary, educational and social security systems).
- The process is not yet over, and possibly is far from complete in the political side (think of the present state of affairs in Russia).
Organizational Success and Failure

• Organization is about how people are *coordinated* and *motivated* to get things done.
• Organization and business strategy can be as important as market fundamentals.
• Incentives matters, both in economies at large than inside organizations.
• It pays to place authority for decisions in the hands of those with the relevant information, if they have the right incentives.
• Evaluating complementarities (e.g., incentives and delegated authority) is crucial.