

The market of scientific publishing and the transition to (gold) open access

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Plan of the presentation

- Foreword
- Supply, demand and incentives
- The market of library services for research

An economist's approach

- Economics studies the optimal allocation of scarce resources among alternative uses
- As an economist I think in terms of incentives, supply and demand, market equilibrium
- To define a market, the first step is to **define the good that is traded**
- In the case of **library services** for research the good that is produced and exchanged is **knowledge**:
 - scientific knowledge, that is the **product of research**
 - **bibliographic knowledge** of the existence of a scientific result

Supply

- **Researchers** originate new knowledge, guided by the desire to:
 - **disseminate** the results of their research
 - have a good **evaluation**
- Other important players, with profit maximization incentives, are:
 - “**publishers**” (commercial publishers, managers of open archives, social networks like ResearchGate, search engines like Google Scholar), because “**unknown**” **scientific knowledge is useless**
 - **discovery tool producers** (and libraries), because scientific knowledge is easy to access, but it is an **experience good** and researchers only want to read only what is relevant to them

Demand

- Demand for scientific knowledge mainly comes from researchers, although not only
- **Demand** for scientific knowledge is **completely inelastic**: if you need a specific publication you can not replace it with another
- This gives strong **monopoly power** to the **holders of publishing rights**, primarily publishers
- **Awareness of the existence** of scientific **knowledge** is becoming a very important asset for researchers, and it is offered less and less by libraries and more and more commercial enterprises

The current equilibrium

- **Researchers** would like a **perfect diffusion** of all the scientific knowledge...
... but they are not yet willing to give up the **certification** provided by the publication in prestigious scientific journals
- The ability to provide certification is a **reputational good**, that publishers and scientific societies have gained through the centuries
- Publishers and scientific societies (at times as greedy as publishers) **sell** their certification to researchers at **monopoly prices**

The impact of green open access

- **Green open access** (and document delivery) raised the **pressure** on publishers for a **reduction of the costs** of access to scientific knowledge:
 - making it easier for universities to give up the signing of subscriptions at a cost too high for download
 - causing a reduction in the market power of the publishers which favored a reduction of prices towards the production costs
- But green open access has had **no effect** on the **demand** for the quality of research **certification** provided by scientific journals, fostering the emergence of publishers' policies towards **gold open access**

The road to gold open access (1)

- At present, the gold open access is a cost to the scientific community, due to **double dipping** (i.e., universities pay APCs and also subscriptions)
- Recently, the Max Planck Gesellschaft has proposed to **transform** the market for scientific publishing:
 - from one based on costly journal **subscriptions**...
... to one based on APCs, with open access to journal content to all readers (**gold open access**)
- The document of the Max Planck emphasizes that this transformation can take place at **no additional costs** for the research and university system...
- ... not an exceptional result (and not even that surprising)!

The road to gold open access (2)

- Currently, researchers do not take into account the costs of the certification provided by prestigious journals, that were included in unjustifiably high subscription prices (a negative externality)
- The moment researchers had to pay for publishing, they would automatically start considering these costs (internalizing the externalities), causing a reduction of the market power of the publishers
- However, other problems may arise in the distribution of the publication costs:
 - between universities
 - within universities
- Unfair cost distribution may affect the ability of researchers to publish the results of their scientific activity in journals certifying their quality