# Coopetition on Universities and Scientific Institutions

Olga Sobolewska, PhD. Eng.



- Coopetition is a business strategy that uses insights gained from game theory to understand when it is better for competitors to work together
- In the context of global competition, enterprises often engage in relationships that are both competitive and cooperative with their global rivals.
- Through cooperative realtionships they work together to collectively enhance performance by sharing resources and committing to common task goals in chosen domains (e.g. production-market or value-chain activities)
- At the same time they compete by taking independent actions in other domains to improve their own market position
- Coopetition is when competition and cooperation take place at the same time!



- Taking action cooperation, and also to define the scope and intensity of cooperation is derived from a number of factors. These factors may by: external or internal
- External conditions are shaped by the macro and microeconomic environment in which the organization operates (sector-driven factors)
- Determinants of cooperation of an internal nature are shaped by the characteristics of the company itself.
  They consist of terms such as: strategy, market power, business model, previous experiences in the field of competition and cooperation (corporate factors)



- Among the factors of utmost importance for actions of cooperation three key reasons are mentioned: technological advancement, vulnerability to globalization and the intensification of competitive pressure in the market.
- Considering the internal attributes the element that mostly influences decisions and relations of cooperation is complementary of resources (resources both material and intangible)



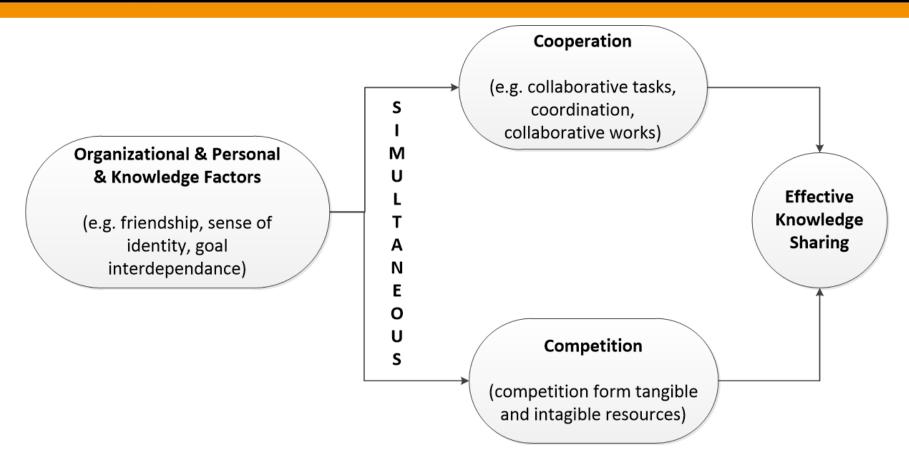


- University's primary goal is not, as in the case of companies, profit but providing educational services and research
- "The mission of the University of Cambridge is to contribute to society trough the pursuit of **education**, **learning and research** at the highest international levels of excellence"
- "The mission of MIT is to **advance knowledge** and **educate** students in science, technology, and other areas of scholarship that will best serve the nation and the world in the 21st century"
- The missions and goals of universities are similar. Universities are competing for customers and for resources
  - well known business partners,
  - research grants,
  - the best possible staff (scientific authorities),
  - position in the rankings,

**–** ...







#### Model of coopetitive knowlegde sharing

Source: Ghodabi S., D'Ambra J., *Coopetitive Knowlegde Sharing: An Anaytical Review of Literature*, Economic Journal of Knowledge Management, Vol. 9, Issue 4, 2011, p. 314



Sector's parameter	Impact on business cooperation			Impact on university's cooperation		
	little	medium	high	little	medium	high
Technological advancement			+			+
Globalization			+	not applicable		
Competitive pressure			+		+	
The structure and level of sector's concentration		+				+
Profitability and sector's growth rate		+			+	
The thread of substitutes	+				+	

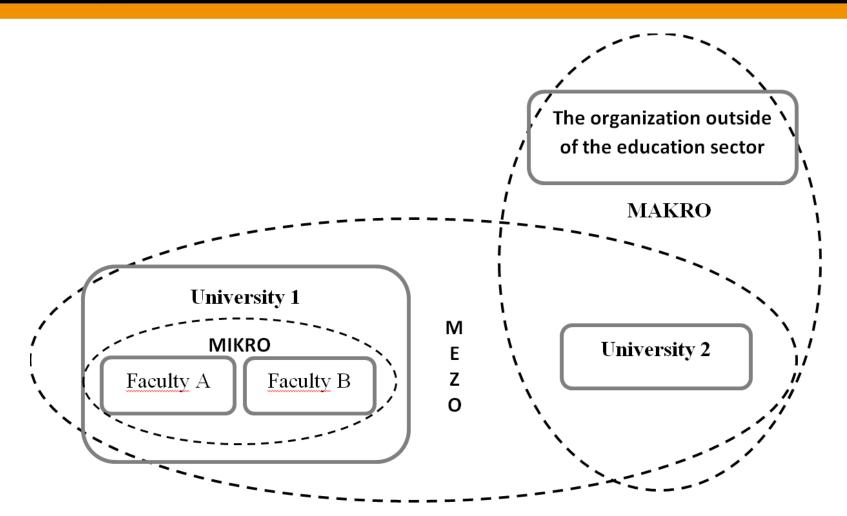
Source: author's own research inspired by: J. Cygler, *Kooperencja przedsiębiorstw. Czynniki sektorowe i korporacyjne,* Oficyna Wydawnicza SGH, Warszawa, 2009, s.97



Company's parameter	Impact on business cooperation			Impact on university's cooperation			
	little	medium	high	little	medium	high	
Complementory of resources			+			+	
Convergence of strategy and goals		+			+		
System of connections with other units	+					+	
Good reputation (good positon in the rankings)		+				+	

Source: author's own research inspired by: J. Cygler, *Kooperencja przedsiębiorstw. Czynniki sektorowe i korporacyjne,* Oficyna Wydawnicza SGH, Warszawa, 2009, s.97



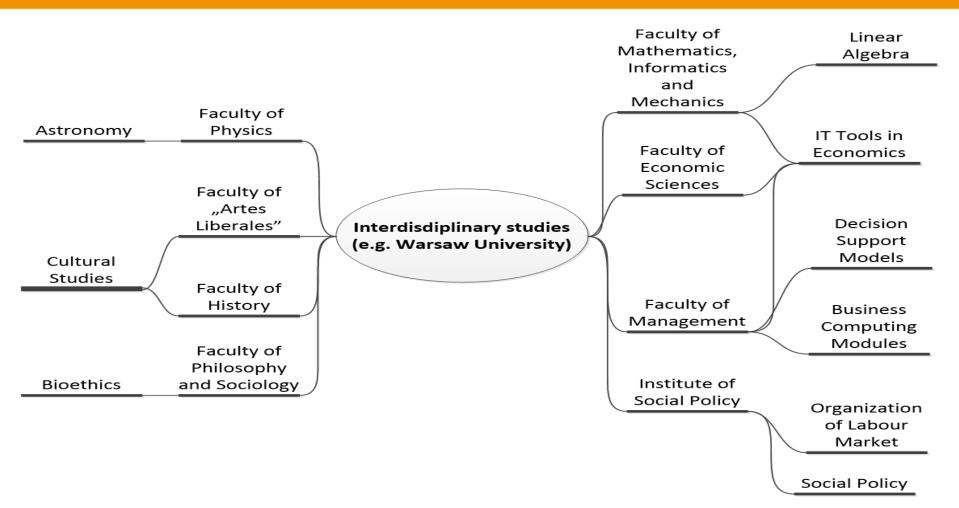


#### University's cooperation models

Source: based on J. Bakonyi, *Kooperencja szkół wyższych*, Zeszyty Naukowe Wyższej Szkoły Humianitas nr 2, 2011, 26







Micro-level of university's cooperation











#### Joint Institute for Nuclear Research

More than 700 research centers and universities from 64 countries are in collaboration with JINR









## **Nuclotron-based Ion Collider fAcility** (NICA)

 Leading accelerator physicists from CERN, BNL and FNAL (USA), GSI (Germany), Budker INP of SB RAS, IHEP and ITEP (Russia), Tokyo Univ.













- There are diffirent motives to cooperation for universities and scientific institutions than for business units
- For a scientific unit taking actions of cooperation may be a decision of far greater importance than for business
- It is necessary to define specific (typical for institutions of science):
  - Culture of cooperation
  - Cooperation factor (stimulating and destimulating)
  - Cooperation models & processes

# Thank you for your attention

In case of questions or future cooperation (especially recommended) my e-mail adress:

O.Sobolewska@wz.pw.edu.pl