



Financing Knowledge Economy

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Capacity building

The WSIS: *"each person should have the opportunity to acquire the necessary skills and knowledge in order to understand, participate actively in, and benefit fully from, the Information Society and the knowledge economy."*

- ⇒ The **means** of capacity building strongly depend on **capacity level** in a society
- ⇒ The fundamental question concerns the role of **knowledge economy**:
 - **subsidiary, or**
 - **leading**

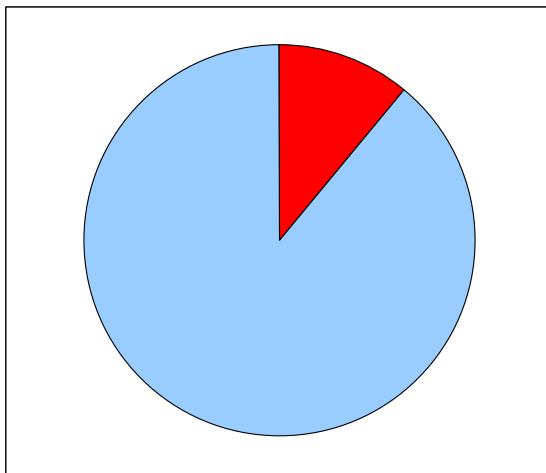


Generation change

Education in Poland

Governing generation

People of age 45-60

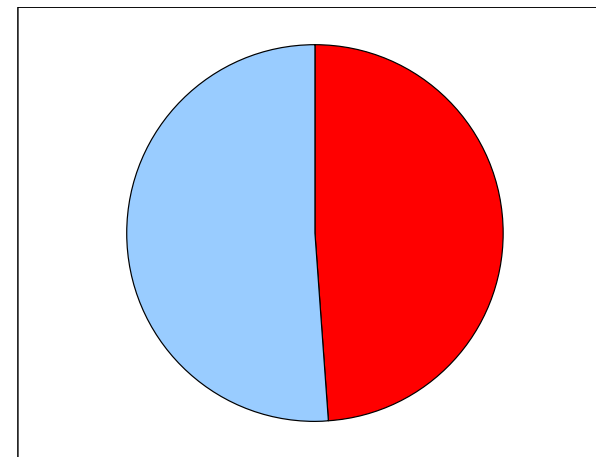


11%

has university education

Future generation

People of age 19-24



49%

is studying at universities



Why do people study?

**People study to work in
knowledge-based economy**

Provision of knowledge-based services

- ⇒ **Discovering knowledge**
 - research
- ⇒ **Applying knowledge**
 - creating (products, services, processes)
 - deploying
 - reengineering
- ⇒ **Conveying knowledge**
 - teaching
 - consulting
 - advising

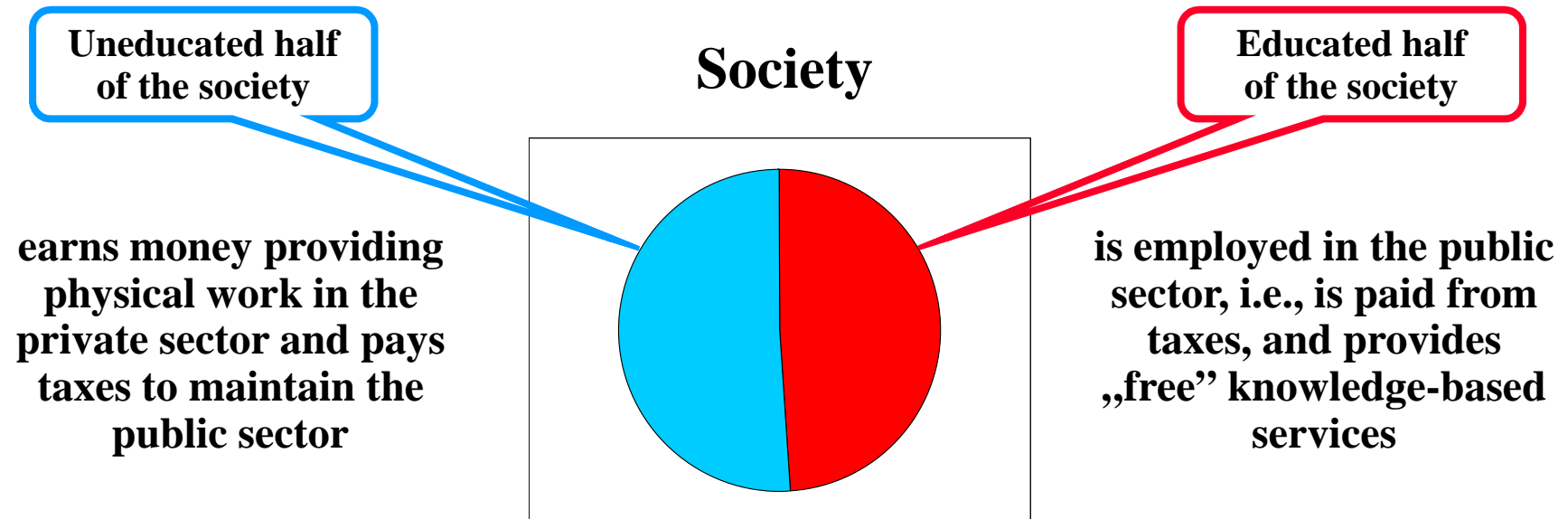


Knowledge-based services

⇒ If after natural generation replacement, **half** of the society will want to **subsist** by providing knowledge-based services then:

Provision of knowledge-based services must be economic activity

Warning



Such economical model is completely unrealistic



Knowledge sector

Therefore,

Knowledge sector must be first of all economic

- ⇒ **Buying/selling knowledge-based goods and services**
- ⇒ **Generating income for the state budget from the sale of knowledge**
- ⇒ **Generating profit by enterprises producing, applying and conveying knowledge**

Knowledge economy



The role of the public sector

The necessity of developing knowledge economy does not exclude some public help or realization of a part of knowledge sector in the public sector

However, a question arises:

What can be realized in the public sector without spoiling knowledge economy?



What spoils the market?

Monopoly

⇒ High prices (or high taxes)

⇒ Lack of growth

**If a monopoly is established,
then eliminating it using economical methods
(„the invisible hand of free market“)
is almost impossible**



Example

Free educational resources dilemma

- ⇒ **Idea**: The state **pays** the best academic teachers from the most modern fields (e.g., IT) for **preparing lectures** for students and transferring copyrights, and afterwards **make these lectures available** on the Internet free of charge
- ⇒ On the basis of **old philosophy**, before knowledge-based economy emergence, this idea looks brilliant
- **Not every** academic teacher is a world class expert
 - In case of **many** students, and **shortage** of teachers, unfortunately, many of them teach the subjects that they are not entirely familiar with
 - For such teachers **ready-to-use lectures** provided by real experts are priceless, because they improve quality of their lectures



Example (cont.)

Free educational resources dilemma

- ⇒ From the viewpoint of the knowledge-based economy such approach should be classified as **unfair competition** and **illegal government interference** with free market
- ⇒ When ready-to use lectures are available for free, no company (teacher, author) that operates on the educational market, **will invest** in preparation of new **original** lectures, because it cannot expect revenues
- ⇒ In addition, if abovementioned ready-to-use lectures would be approved by some state accreditation commission, no company operating on the educational market would invest in preparation of new original lectures due to **risk** involved
- ⇒ **Why to risk** and **to be in jeopardy** that the state accreditation commission will not approve the new original lectures, when without any risk a free of charge, ready-to-use lectures available on the Internet may be applied?



Example (cont.)

Free educational resources dilemma

- ⇒ As a consequence, a country encounters **cease of growth**
- ⇒ As **nobody will develop** new original lectures, finally all students will be taught **using the same teaching material with the same content**, which shortly will become **obsolete**
- ⇒ Furthermore, researchers making research and teaching students, i.e., true academics, will be reduced to teachers of a profession

The above consequences are in contradiction to the knowledge economy, where originality and innovativeness are of the key importance



What can be subsidized from taxes?

⇒ **Social Motivation**

- Knowledge necessary for good social coexistence

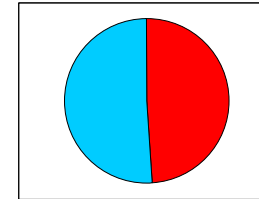
⇒ **Economic Motivation**

- Broadening of the knowledge sector market (because people without certain knowledge are not participants of the knowledge market)
- Stimulation of economic growth (selective)

What can be subsidized from taxes?

⇒ Uneducated people

- Children
- Youth
- Excluded people



⇒ Sector of „knowledge without growth“

- Basic knowledge (ex. Ohm's law on electricity)

⇒ Social knowledge, without direct economic consequences

- People are not ready to pay for this kind of knowledge, but in common social interest everyone should have it:
 - First-aid
 - Traffic code



Conclusions

There is no economy without finance

SO

**There is no knowledge economy
without a right financial model**



Conclusions

**In knowledge economy,
money have to flow
from knowledge buyers
to knowledge sellers
on a free market
to stimulate growth**



Thank you

Wojciech Cellary