

**Project Conference Erasmus + Jean Monnet
“Cooperation of Universities and Employers for Quality and Relevance of Education”**

**EMPLOYABILITY as a Teaching Target
Cooperation between Universities and Business World**



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International Analytic Center of

Saint-Petersburg State University of Economics

Saint-Petersburg, Russia

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History

**Universities were originally elite
- just selected clientele**



In Europe = monasteries exclusively education

Vocational training = training on the job

Universities = spiritual science and theology

History

**Up to 18th century education
only related to the past**

University education was useless for economy

**Up to 20th and 21st century:
many professors = no economic contact**

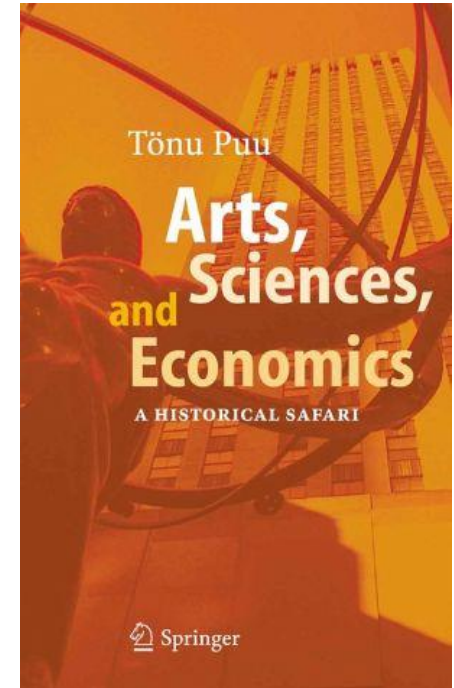


History

**Medicine or veterinary medicine:
academic training at beginning 20th century**

**Technical education:
19th to 20th century**

**Economics and science = separate paths for centuries
Change Process in second half of the 20th century
(still ongoing)**



Bologna Process of the European Union

Agreement signed in Bologna 1999 by 29 countries

European Union = rethinking process in tertiary education

= Transnational university reform

= Single European Higher Education Area

= Harmonizing European courses and diplomas

= Unification left to individual states

= International students mobility



- **Change to the Anglo-American System**
- **A unified 3 stage system with**
 - **Bachelor,**
 - **Master and**
 - **at least three-year doctorate**



Bologna Process: Expansion 2009

- **expansion of university access**
(attention to underrepresented groups)
- **target: graduate rate 20 percent by 2020**
- **lifelong learning,**
- **employability**
- **student-centered learning**

Bologna Process: Employability Targets

Employability = increase employment opportunities of graduates

Employability = major objectives

**The goal: “to create a European space for higher education
employability and **mobility** of citizens and
to increase the **international competitiveness**
of European higher education.”**



Employability: Impact of Bachelor

Bachelor's degree

= approach between university and business

Academic career = doctorate degree

Bachelor and Master = business oriented

2014 Germany:

- **50% a Bachelor's,**
- **21% a master degree and only**
- **6% doctorate.**
- **The rest were still "old" diplomas.**



General Trends in the European Education System

Universities and Universities of Applied Sciences

- **University**
 - = Research
 - = Research Education
 - = PhD
- **University of Applied Sciences**
 - = business oriented
 - = **employability**
 - = no scientific career
 - = development



Special Universities

Bachelor study = existing educational institutions were transformed into higher education institutions

- **health care (physiotherapy, training of midwives, etc),**
- **social work,**
- **military and police academies,**
- **teacher training institutions**
- **others**

Special Universities - Problems

- * **social conflicts:** non-academics became academics
f.e.: health care sector – privilege of medical doctors
- **quality problems among the teachers** - majority not academics
- * **responsibility in different ministries**
 - + advantage = professional competence
 - no uniform educational strategy and organization
 - parallel to ministry of higher education
 - f.e.: health care institution in Ministry of Health

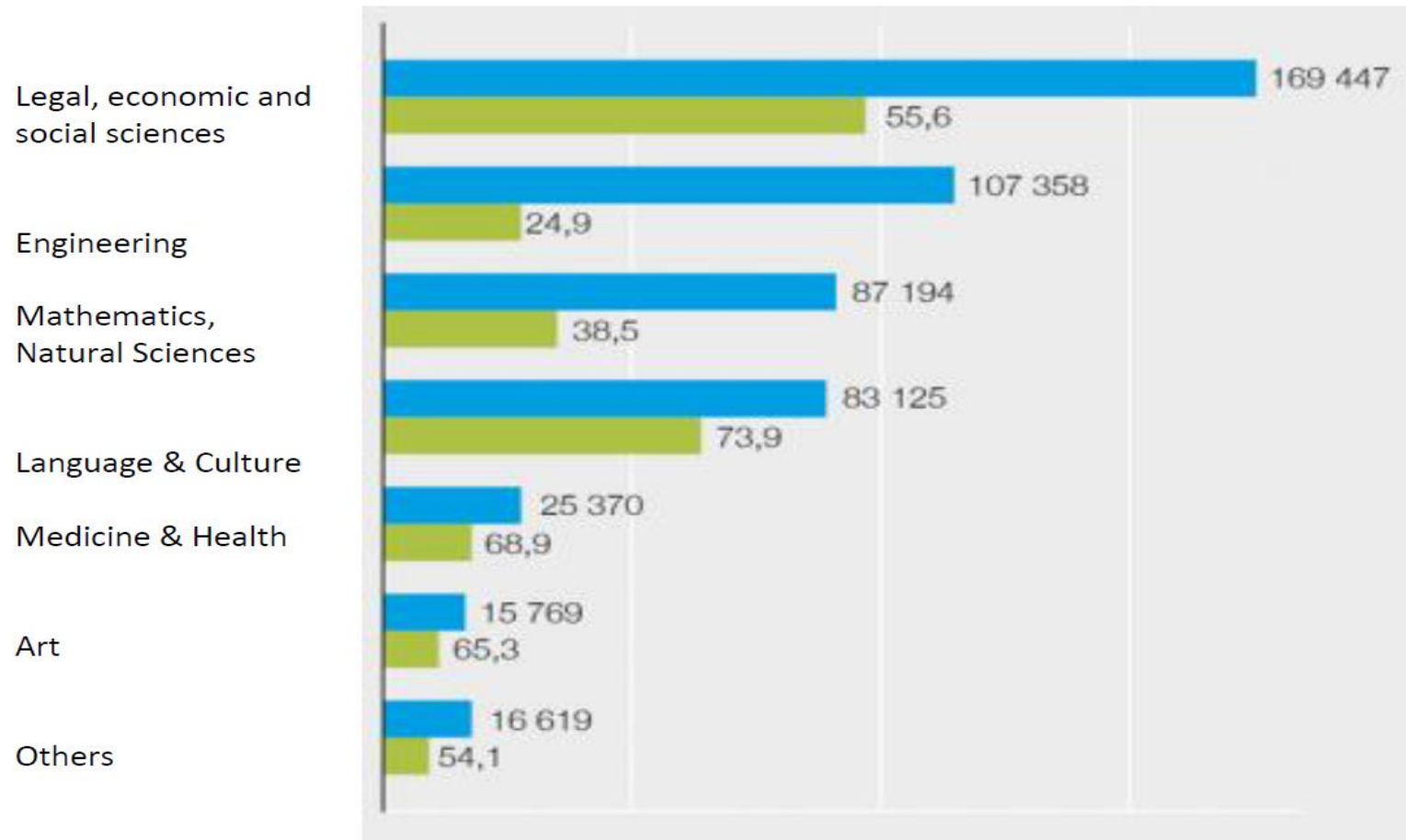
Private Universities

- **Mid-1990s:**
first private universities established in Europe
- **Financed by**
private persons or
public institutions
- **National states = set up regulations**
- Accreditation & Quality Agencies

Private Universities

- **Financing sometimes from abroad: national conflicts**
f.e.: **“Central European University”**
American billionaire George Soros in Budapest
- **Large countries = influence in other countries with universities**
f.e. **United States of America**
- **Often private universities offer only "cheap" subjects**
("pencil studies")
= investment in infrastructure = low

Fresh students by subject group



Fresh students of the first year (first university semester) by subject group in the academic year 2014 <http://www.bpb.de/nachschlagen/datenreport-2016/225443/hochschulen>

Employability Requirements

- **Restrictions on Admission**
- **Regulating the offer of studies**
 - **to prove the chances of future graduates in the labor market**
- **Reports show how many graduates received a job after graduation, how many are unemployed**



Employability Requirements

- **Change for traditional institutions not easy**
- **More easy for new institutions or catchup-countries**
 - = **Universities of Applied Sciences**
 - = **Countries f.e. Oman, Kosovo**



Lifelong Learning

- **Strong link between business and university**
= need continuous further education
- **New subject for universities**

- **Economic world needs a horizontal expansion of knowledge**
Business Career = horizontal expansion
Research Career = vertical expansion



Lifelong Learning

- **Certificates need an expiration date**
Some countries & professional groups have already introduced
f.e.: Medical doctors, lawyers



Student Revolution in 1968

- **1968: major reform of the university system in Europe**
 - due to student demonstrations
 - Access to universities = freely for all
- **2000: further trend reversal:**
 - governments gave universities greater autonomy
 - less influence



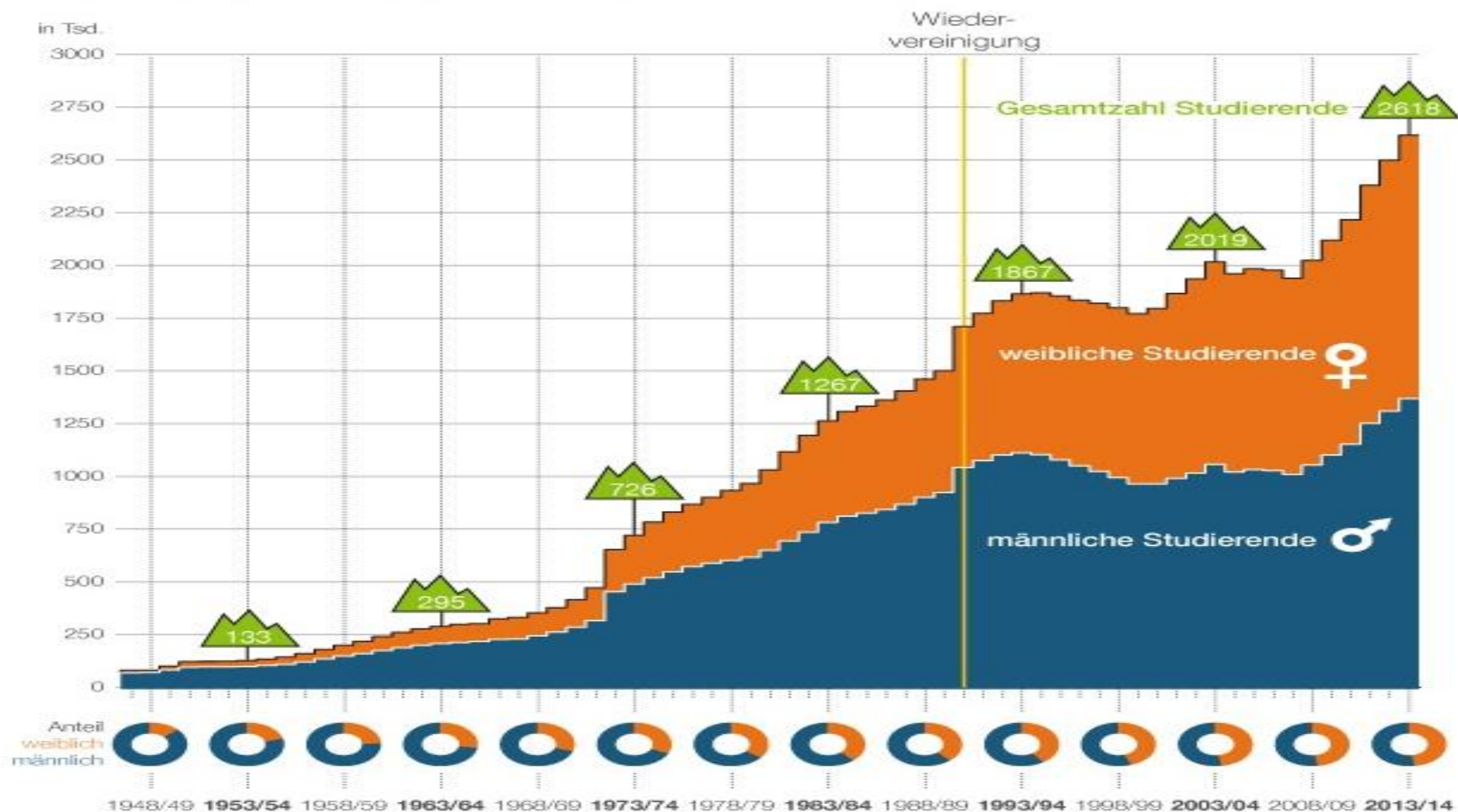
Student Revolution in 1968



- **growth of students (example Germany):**

Academic year	students
1964-65	305,000
1994/95	1.872.000
2003/04	more than 2 million
2014/15	2.7 million

Development of student numbers in Germany



Freedom of Study Choice

- **Some studies have increased enormously**
- **Graduates have no chance to get a job**
 - **Austria 3 x as journalism students as journalists in country**
 - **Viennese veterinary university**
= more students than veterinarians in the country



How students choose a study field

- 1. the place and its "youthful" infrastructure**
- 2. the image of the university**
- 3. the e-learning infrastructure and the Internet**
- 4. the study subject**



Negative Impact of Mobility

Bologna package launched mobility

National students came into minority:

- **Music University in Vienna:**
 - more Asians students as Europeans
 - Self-assessment tests did not help:
graduates from Chinese music colleges winning against fresh local students
- **Veterinary university in Belgium**
 - more French students than Belgians
- **Germany = numerus clausus (an access restriction) for medical students**
no restriction in Austria = German students became majority
= Austria got threat of a doctor's disease
Country quotas not allowed by European Union - Mobility in EU must be open to all students.

Access Restrictions



Access restrictions happen

- results of a recording test
- results of the completion of high school
- nationalities

Access Restrictions

- Recording examinations = focused on the subject
 - Teachers = social characteristics
 - Technical studies = mathematics, physics or chemistry
- China: Entrance tests extremely demanding. 1 or 2 years preparation courses
- High School certificates = less oriented towards the study field
- Example Oman



Output Orientation

Business – University Cooperation

= adoption of economic parameters in universities



- * One of these is output orientation**
- * Move from input orientation to output orientation**
- * Input-Orientation: Workers are paid for their attendance time and not for production.**
- * Output-oriented payment = payment of performance**

Output Orientation

Similar change in education system:

*** Students:**

- **Old Teaching performance**

 - = semester weeks & teaching units

 - = Measurement of hours

- **New: Measurement unit = ECTS - European Transfer Points**

*** Teachers:**

Payment on agreed teaching subjects and projects

(not on time of presence)





Future ?

Calculation from Past to Future ?

Do it personally !

How young people see the future of Education?

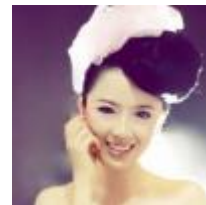
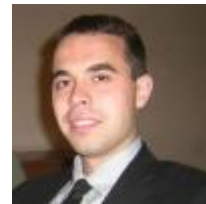
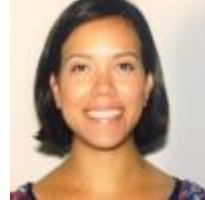
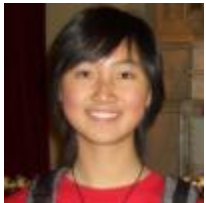
Definition by Students of the Masterprogram "Research and Innovation in Higher Education"

MARIHE (Erasmus Mundus) Master of Science - MSc (Joint Degree) Master of Administrative Sciences - M.Sc.
Department fuer Weiterbildungsforschung und Bildungsmanagement, Danube University Krems

* 19 Students from 14 different countries

Bangladesh, China, Ethopia, Germany, Indonesia, Korea, Mexico, Moldavia, Russia, Serbia, Turkey, UK, US, Vietnam

* Selected out of 400 applications



Johar

Universities in 10 years

Role of Government

- * Government no longer favors only public universities
= increasing of the competition
- * Government = more autonomy to public universities
- * Incentives by the governments to the academic fields
that offer **more business cooperation**

Universities in 10 years Management (1)

- * Professional managers for management positions
(like rectors, deans, etc)
- * Professional managers are:
 - academic background or
 - outsiders
- * Private funds play a more active role

Universities in 10 years Programs

- * Number of programs will increase
- * More traditional subjects being removed
- * Increase in **industry focused subjects**
- * Departments social sciences will be closed down

Universities in 10 years: Internationalisation (2)

- * More mobility and more internationality**
- * Universities focus on own strengths
and complement their weak areas
with exchanging with others**
- * This inter-institutional approach
= a cooperative knowhow hub**

Universities in 10 years

*** more**

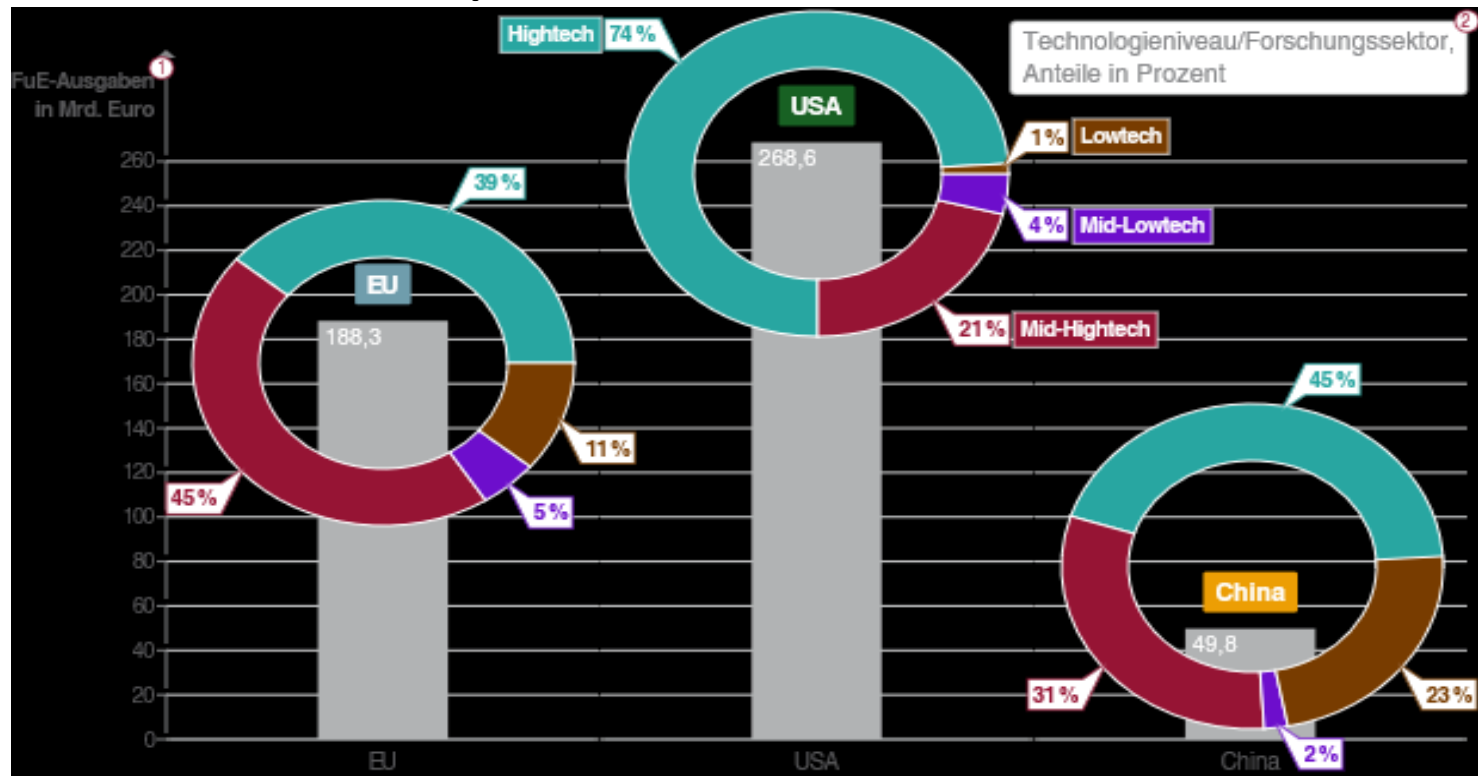
- Globalization

- Liberalization

- Networking

Competition in 3 regions: EU-USA-China

University education is becoming increasingly global and international
Competition is emerging from 3 regions:
America, Europe and the Far East.



EU-USA-China: Hightech, Midtech, Lowtech, Budgets in R&D in different levels of technology, percent in 2015

Source „European Commission, The 2016 EU Industrial R&D Investment Scoreboard