

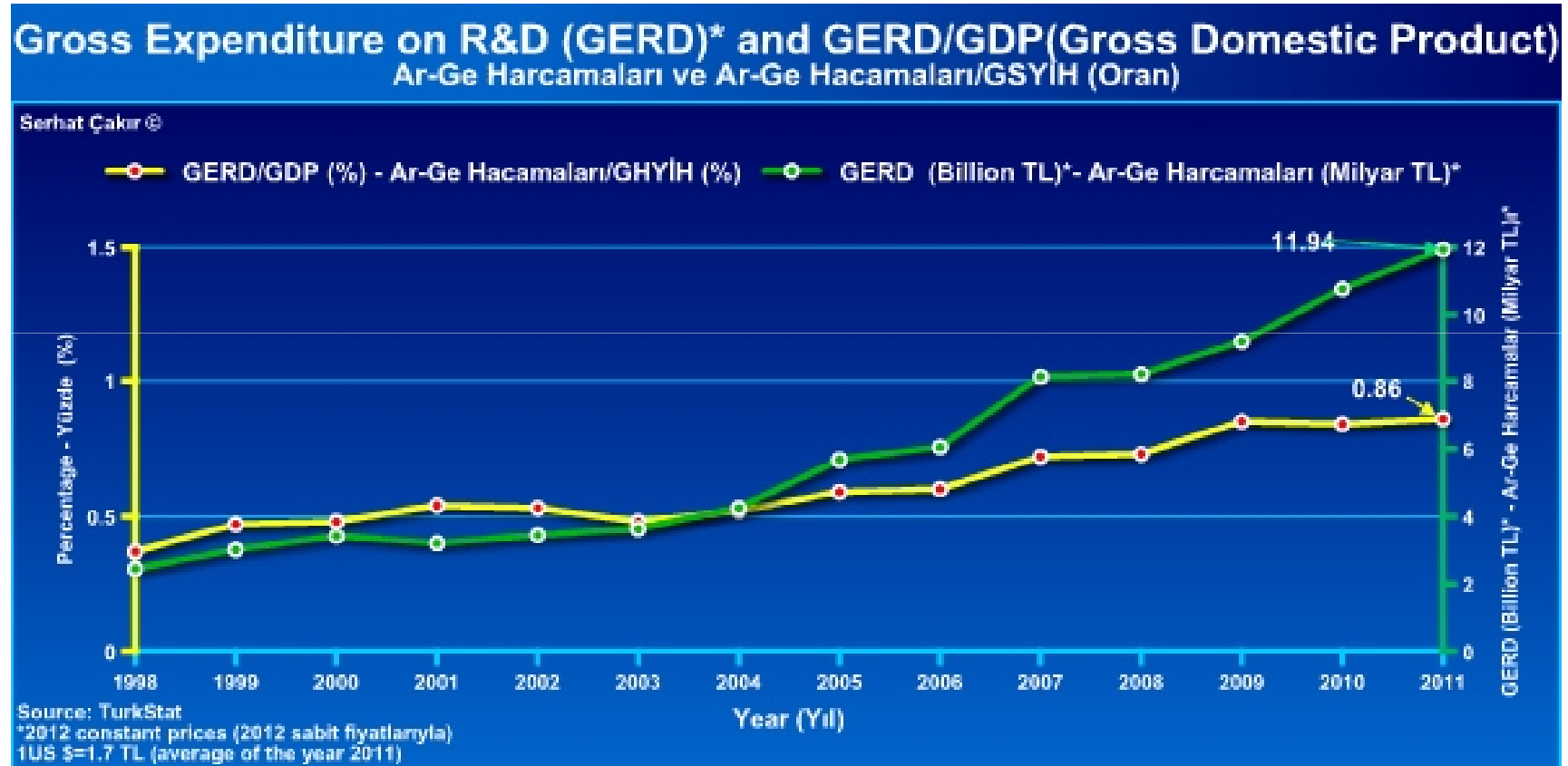
# Academics in Turkey Science, Technology and Innovation System in Turkey and some funding issues

Paola Menapace

Welcome Centre – University of Bielefeld  
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## Some data

from the website <http://www.physics.metu.edu.tr/~serhat/nis.html>



## Science, Technology and Innovation System in Turkey

### Main actors:

- Supreme Council for Science and Technology (SCST/BTYK)
  - Vision 2023: Science and Technology Strategy
- Ministry of Science, Industry and Technology (MSIT)
  - Scientific and Technological Research Council of Turkey (TÜBİTAK)
  - Small and Medium Enterprises Development Organisation (KOSGEB)
    - Technology Development Centers (TEKMER)
  - Turkish Patent Institute (TPE)
  - Turkish Accreditation Agency (TÜRKAK)
  - Turkish Standards Institute (TSE)
- Ministry of National Education (MEB)
- Council of Higher Education (YÖK)
  - Universities and public research centers
- Ministry of Defense (MoD)
  - Technology Development Foundation of Turkey (TTGV)
- Ministry of Development (MoDev)
  - State Planning Organization (SPO/DPT)
    - Five - Years Development Plans
- Ministry of Economy
  - Undersecretariat of Foreign Trade (DTM)
    - Free Zones Law n.3218/1985
- Other Ministries (Finance, Industry and Trade)
- Turkish Statistics Institute (TÜİK)
- Technology Development Regions (Law n. 4691/2001)
- Chamber of Industry under the Union of Chambers of Commodity, Industry, Maritime, Trade and Commodity Exchanges (TOBB)
- Research centers (Law n. 5746/2008)
- NGOs and other local organizations

## Geographical location of the universities in Turkey

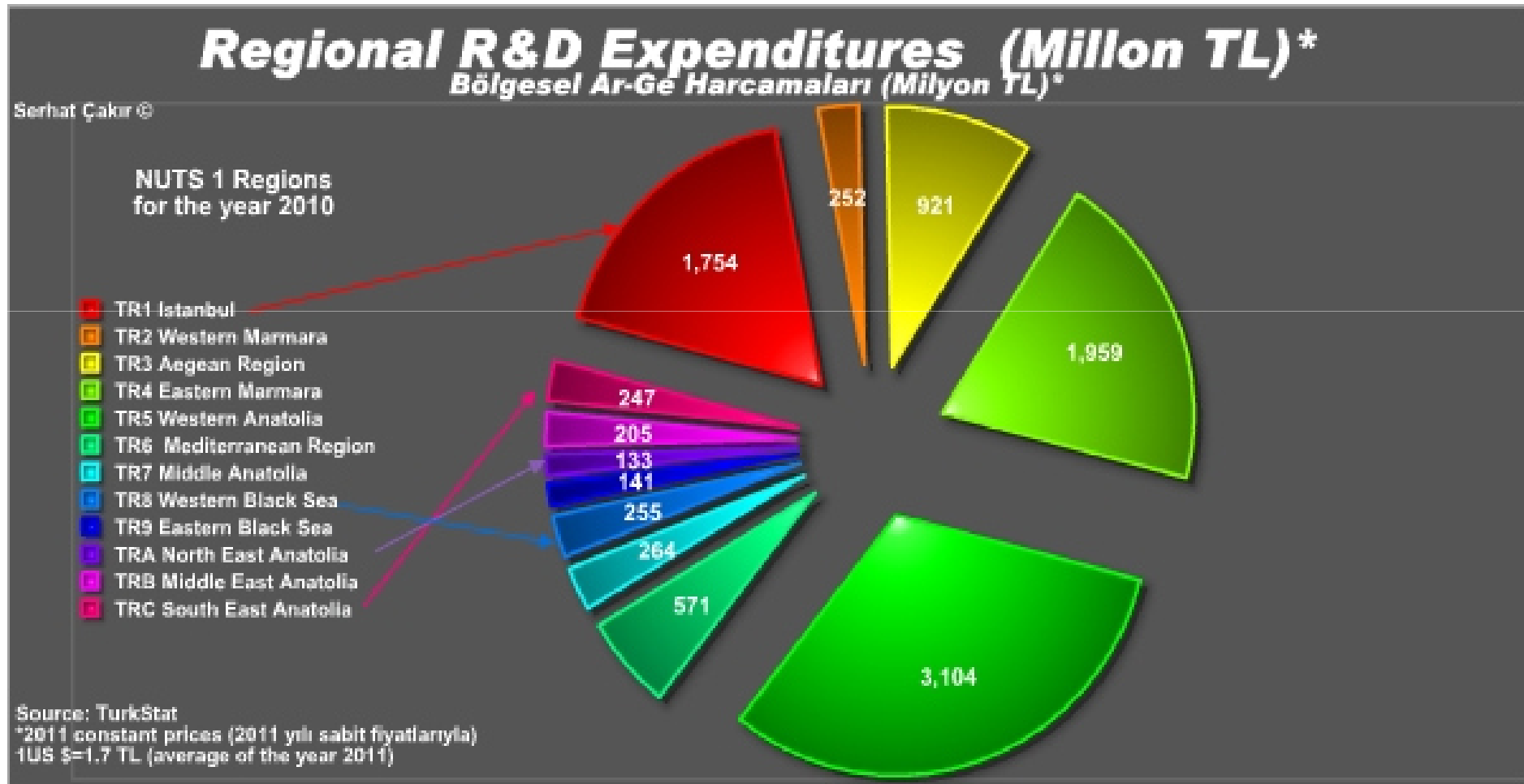


Universities and academies in Turkey are 180:

- 104 State universities:
  - 5 technical universities
  - 2 institutes of technology
  - 1 fine arts university
- 71 private universities
- 4 military academies
- 1 police academy

## Regional differences in R&D systems

from the website <http://www.physics.metu.edu.tr/~serhat/nis.html>



## Research Funding in Turkey

From the website <http://euraxess.tubitak.gov.tr/research-funding-in-turkey>

### Academic Research Support Programmes

1001 – The Support Programme for Scientific and Technological Research Projects

1002 – Short-Term R&D Funding Programme

3501 – National Young Researchers Career Development Programme (Career Programme)

ERC - European Research Council

Marie Curie Vacancies

### Support Programmes for Cooperation

1301 – The Support Programme for the Initiative to Build Scientific and Technological Cooperation Networks and Platforms

1509 – International Industry R&D Network Support (including EUREKA)

European Cooperation in Science and Technology Programme (COST)

Bilateral Cooperation Programmes with 20 countries (Belarus, Bulgaria, China, France, Germany, Greece, Hungary, India, Italy, Korea, Macedonia, Mongolia, Pakistan, Romania, Russia, Slovakia, Slovenia, Tunisia, Ukraine, USA)

7th Framework Programme Cooperation Programme (TUBITAK EU FP National Coordination Office)

International Research Staff Exchange Scheme-IRSES

Industry-Academia Partnership Pathways- IAPP

1503 – Project Brokerage Events Funding Programme

1505 – Technology Transfer Programme for SMEs

### Industrial R&D Support Programmes in Turkey

1501 – Industrial R&D Funding Program

1505 – Technology Transfer Programme for SMEs

1507 – SME Funding Programme

1508 – Techno-entrepreneurship Funding Programme



### **Scholarship Programmes**

- 2232 - Postdoctoral Reintegration Fellowship Program
- 2228 – MSc/PhD Fellowship Programme for Senior Undergraduate Students
- 2210 – National Scholarship Programme for MSc Students
- 2211 – National Scholarship Programme for PhD Student
- 2218 – National Postdoctoral Research Scholarship Programme
- 2215 - PhD Fellowship for Foreign Citizens
- 2216 - Research Fellowship for Foreign Citizens

### **Programmes that are held under International Scientific Agreements**

- 2225 - TUBITAK - Germany (Detailed information is only available in Turkish)
- 2227 - TUBITAK - Hungary (Detailed information is only available in Turkish)
- 2231 - TUBITAK - Lindau (Detailed information is only available in Turkish)

### **7th Framework Programme**

- Career Integration Grants- CIG (former International Reintegration Grants-IRG)
- International Incoming Fellowships-IIF
- Intra-European Fellowships-IEF

### **Short-term Visit Programmes**

- 1010 – Global Researcher Programme (EVRENA)
- 2221 - Visiting Scientists Fellowship Programme and Scientists on Sabbatical Leave

### **Others**

- 2236 – Co-funded Brain Circulation Scheme
- 1008 – Patent Application Promotion and Funding Programm

## Weaknesses observed in 2006/2007

- Lack of coordination between different institutions at different levels (local/regional/national)
- Limited local/regional actions because of the lack of power and capability of the implementing local authorities
- Need to build new universities (young population)
- Need to construct networks between central and peripheral universities
- Limited cooperation with local business
- Impedances in accessing information for researchers
- Bureaucratic procedures complicate accessing the funding
- Brain drain tendency



## Some final reflexions from one interview to a turkish PhD Student in 2006/2007

*„...in Turkey there is not a sufficient number of universities considering the size of our youth population. Turkey's population is about 70 million and most of them are between 15-25 years old. One and a half million students sit for the university entrance exams each year but only 200,000/300,000 of them are accepted by the university.“*

*„...The government has started two programmes to give achieving students some incentives to return to Turkey: the government will pay for their PhD studies in foreign countries but they have to come back at the completion of their studies and work in a Turkish university; the students may complete their PhDs fully funded in technical universities in Ankara or Istanbul (METU, Istanbul Technical University) but then they must agree to work in a peripheral university.“*

*„...the only institution providing money for research is TÜBİTAK, but in order to receive financial assistance from TÜBİTAK once again the person asking for it has to be a member of university or of an institution and they are more interested in financing big projects. TÜBİTAK does not provide money for these small projects, which might actually be the best channels to build external networks with other universities.“*



## Where to find the relevant information

- The Supreme Council for Science and Technology (SCST/BTYK in Turkish)  
[www.tubitak.gov.tr/politikalar](http://www.tubitak.gov.tr/politikalar)
- The Scientific and Technological Research Council of Turkey (TÜBİTAK in Turkish)  
[www.tubitak.gov.tr](http://www.tubitak.gov.tr)
- State Planning Organization (DPT in Turkish)  
[www.dpt.gov.tr/ing](http://www.dpt.gov.tr/ing)
- The Council of Higher Education (YÖK in Turkish)  
[www.yok.gov.tr](http://www.yok.gov.tr)
- Ministry of National Education (MEB in Turkish)  
[www.meb.gov.tr](http://www.meb.gov.tr)
- Ministry of Industry and Trade (MoIT/ STB in Turkish)  
[www.sanayi.gov.tr](http://www.sanayi.gov.tr)
- Under secretariat of Foreign Trade (DTM in Turkish)  
[www.dtm.gov.tr](http://www.dtm.gov.tr)
- Turkish Statistical Institute (TurkStat/ TÜİK in Turkish)  
[www.tuik.gov.tr](http://www.tuik.gov.tr)
- Turkish Patent Institute (TPI/ TPE in Turkish)  
[www.turkpatent.gov.tr](http://www.turkpatent.gov.tr)
- Turkish Standards Institute (TSI/ TSE in Turkish)  
[www.tse.org.tr](http://www.tse.org.tr)
- Small and Medium Enterprises Development Organization (KOSGEB in Turkish)  
[www.kosgeb.gov.tr/English/index.aspx](http://www.kosgeb.gov.tr/English/index.aspx)
- Union of Chambers and Commodity Exchanges of Turkey (TOBB in Turkish)  
[www.tobb.org.tr](http://www.tobb.org.tr)
- Technology Development Foundation of Turkey (TTGV in Turkish)  
[www.ttgv.org.tr](http://www.ttgv.org.tr)

## Bibliography and interesting websites

TÜBİTAK (2010). Science, Technology and Innovation in Turkey.

Under

[http://www.tubitak.gov.tr/tubitak\\_content\\_files/BTYPD/arsiv/STI\\_in\\_Turkey\\_2010.pdf](http://www.tubitak.gov.tr/tubitak_content_files/BTYPD/arsiv/STI_in_Turkey_2010.pdf)

Prof. Dr. Namik Kemal Pak, Altan Kucukcinar: Turkish Science, Technology and Innovation Policy. A historical Perspective.

Under

<http://www.issp.uottawa.ca/eng/pdf/TURKEY.pdf>

Paola Menapace (2012). Ankara's local academic labour market: how a regional focus on R&D system and industry collaborations could offer better employment opportunities for young researchers in Turkey. In: Christa Larsen, Ruth Hasberg, Alfons Schmid, Eugenia Atin, Jan Brzozowski (Eds.): *Skills Monitoring in European Regions and Localities. State of the Art and Perspectives*. Rainer Hampp Verlag, München u. Mering 2012

Other interesting websites:

<https://innovationpolicyplatform.org/content/turkey>

<http://www.physics.metu.edu.tr/~serhat/nis.html>

<http://euraxess.tubitak.gov.tr/research-policies-in-turkey>

Thank you!  
Teşekkür ederim!  
Vielen Dank!