



Global Trends Response from Turkish Higher Education Ecosystem



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Council of Higher Education



Outline

- ▶ *Global Trends*
- ▶ *Position of Turkey in Global Innovation Ecosystem*
- ▶ *Turkish Research Ecosystem*
- ▶ *Turkish Higher Education Ecosystem*
- ▶ *Internationalisation Strategies and Opportunities for Collaboration*



Grand Global Challenges

- **Food supply**
- **Clean water**
- **Affordable healthcare**
- **Security**
- **Cleaner energy**
- **Cleaner environment**
- **Changing demographics**
- **Improve the quality of life**
- **Climate change**
- **Sustainable development**



Societal challenges



Population

+50% by 2050

+

Food

+70%
by 2050



Energy

+100% by 2050

Climate

+2° by 2050





Confidence Crisis in Science and Education

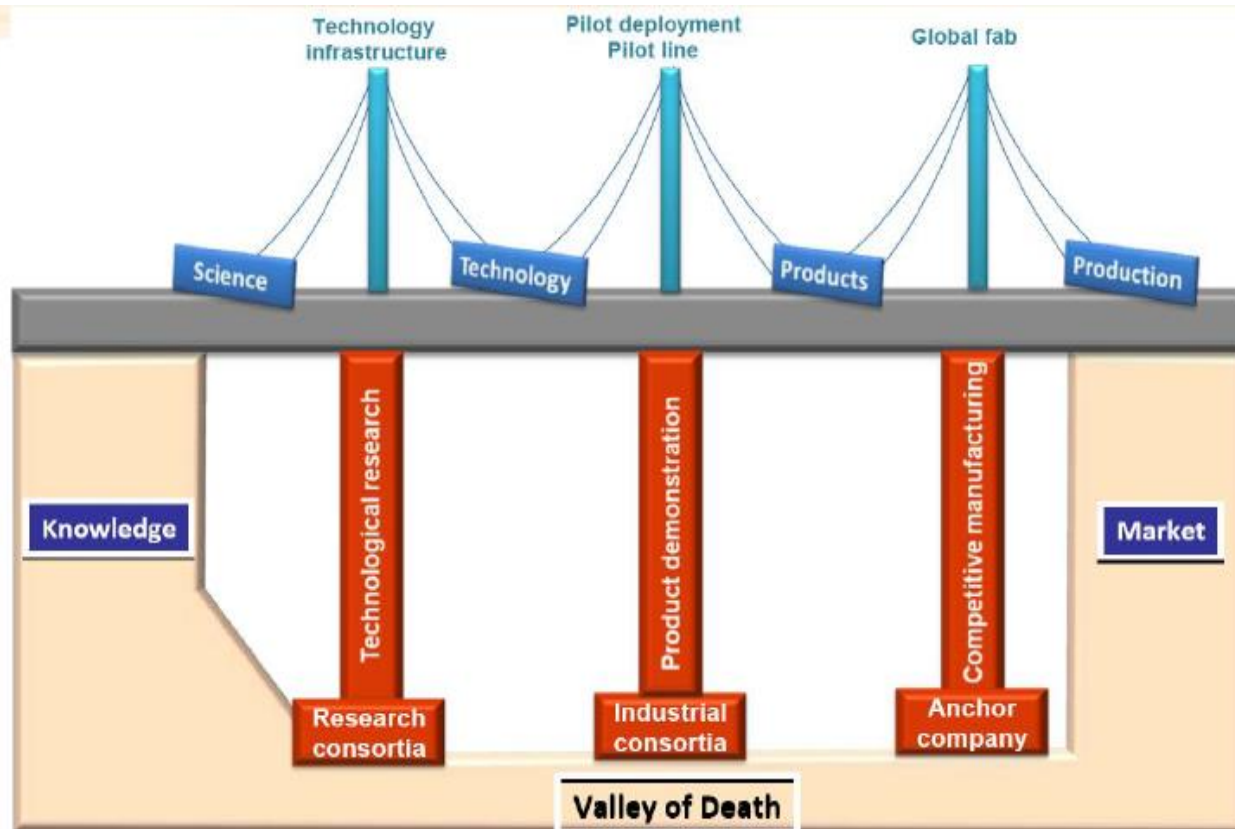
“On the one hand, science and education are somehow expected by many to solve most of the major problems of our society.

On the other hand, there is growing doubt, suspicion, or dissatisfaction about their capacity to do so effectively, science and education institutions are gradually losing their social and moral aura.”



EU PERSPECTIVE

The 3-Pillar << Bridge to Hope >>the cross the Valley of Death



Source: HLG KET Report, Brussels, 09/02/2011





Trends in Higher Education

- Decrease in the Public Funds
- Internationalisation
- Importance of Societal Outreach
- Quality Assurance and Accreditation
- Rankings

Globalization (Collaboration)

- Demand in Higher Education
- Change in Learning Environments by Information Technologies
- Diversity of HEIs (Mission Differentiation)

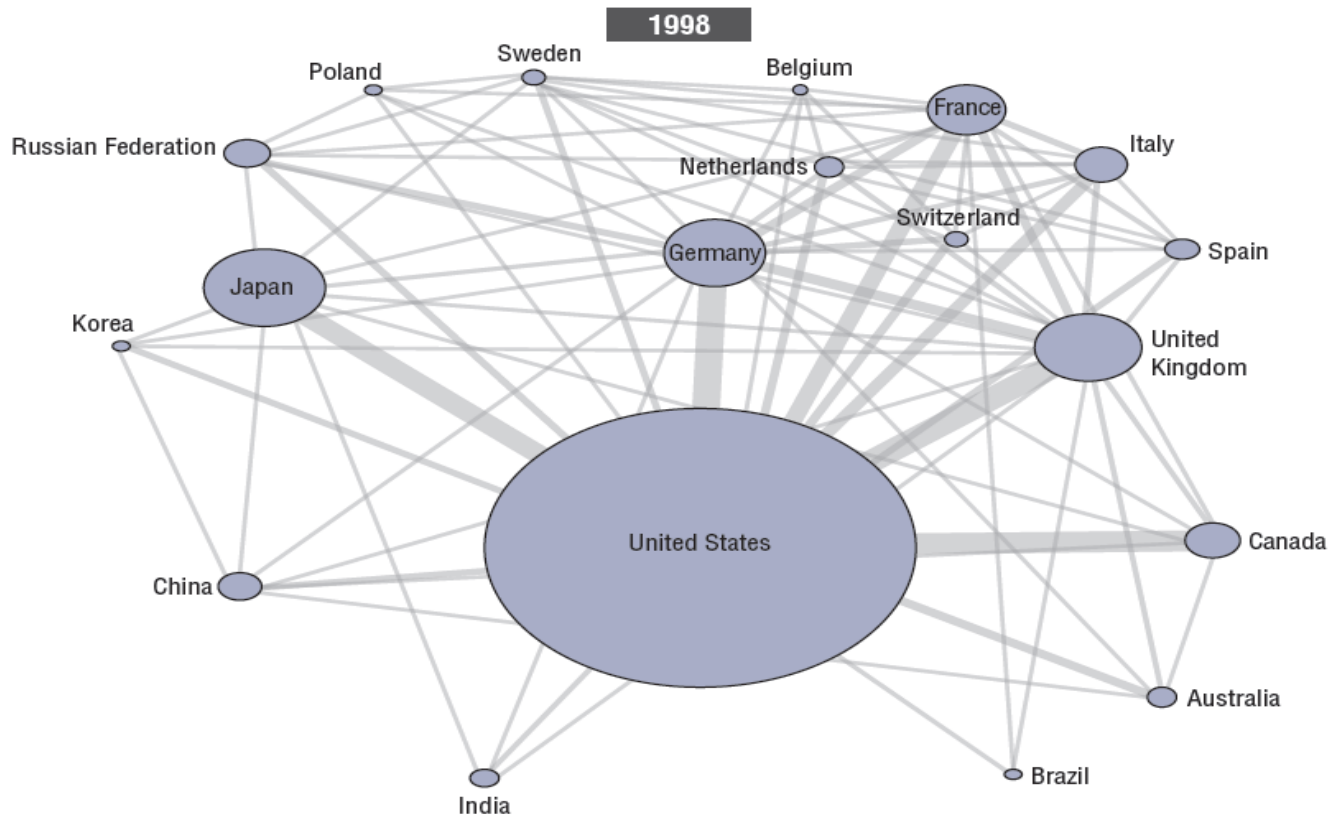


Competitiveness Evolution for Business Enterprises

- 1960's Competition with **MANUFACTURING** advantage
 - 1970's Competition with **COST** advantage
 - 1980's Competition with **QUALITY** advantage
 - 1990's Competition with **SPEED** advantage
 - 2000's Competition with **KNOWLEDGE** advantage
 - **2010's ???**
 - **2010's Competition with COLLABORATION BASED KNOWLEDGE advantage (OPEN INNOVATION)**
-

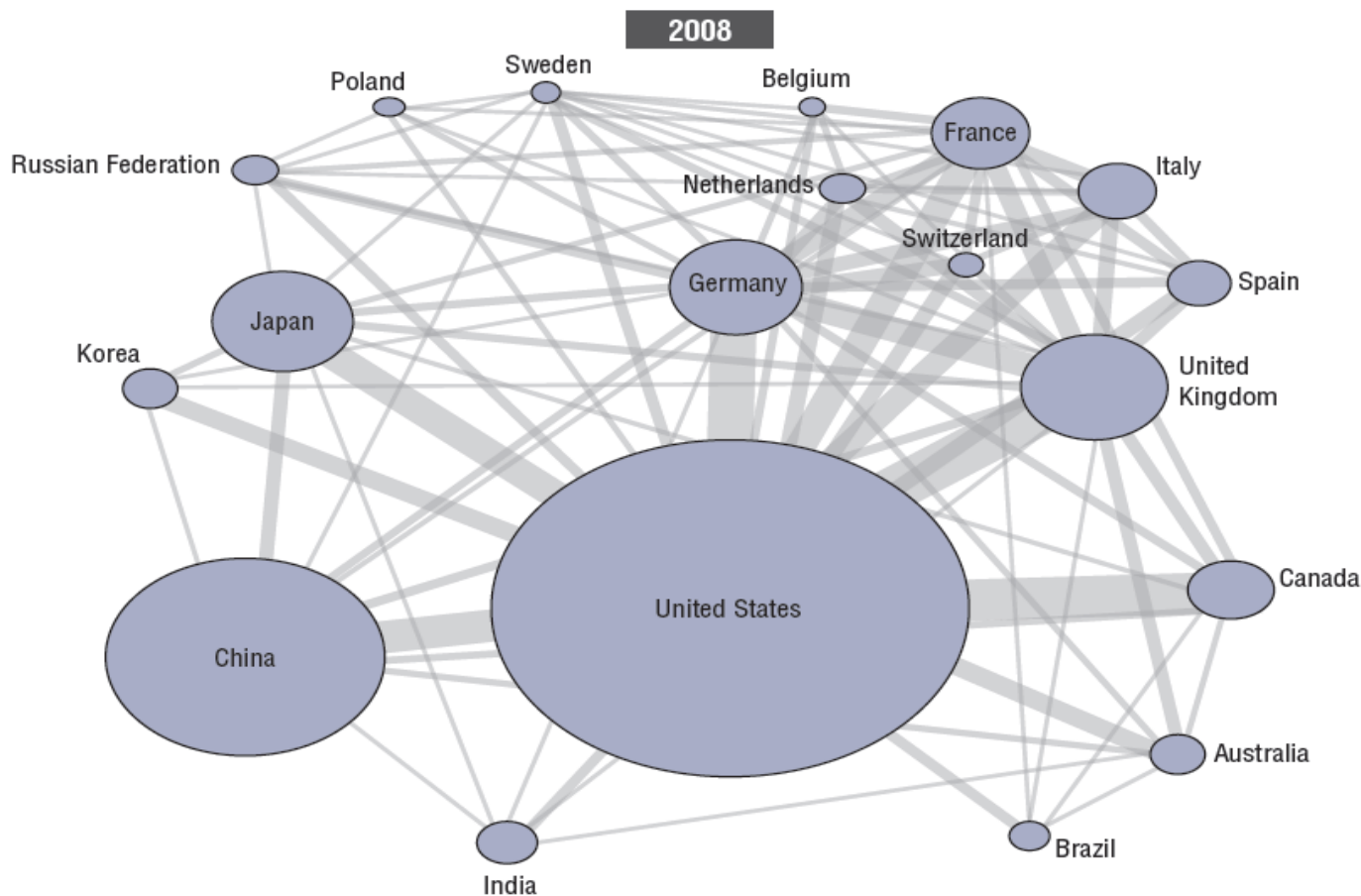
Networking and Collaborations -1-

Scientific articles and co-authorship, 1998 and 2008
 Numbers based on whole counts





Networking and Collaborations – 2-



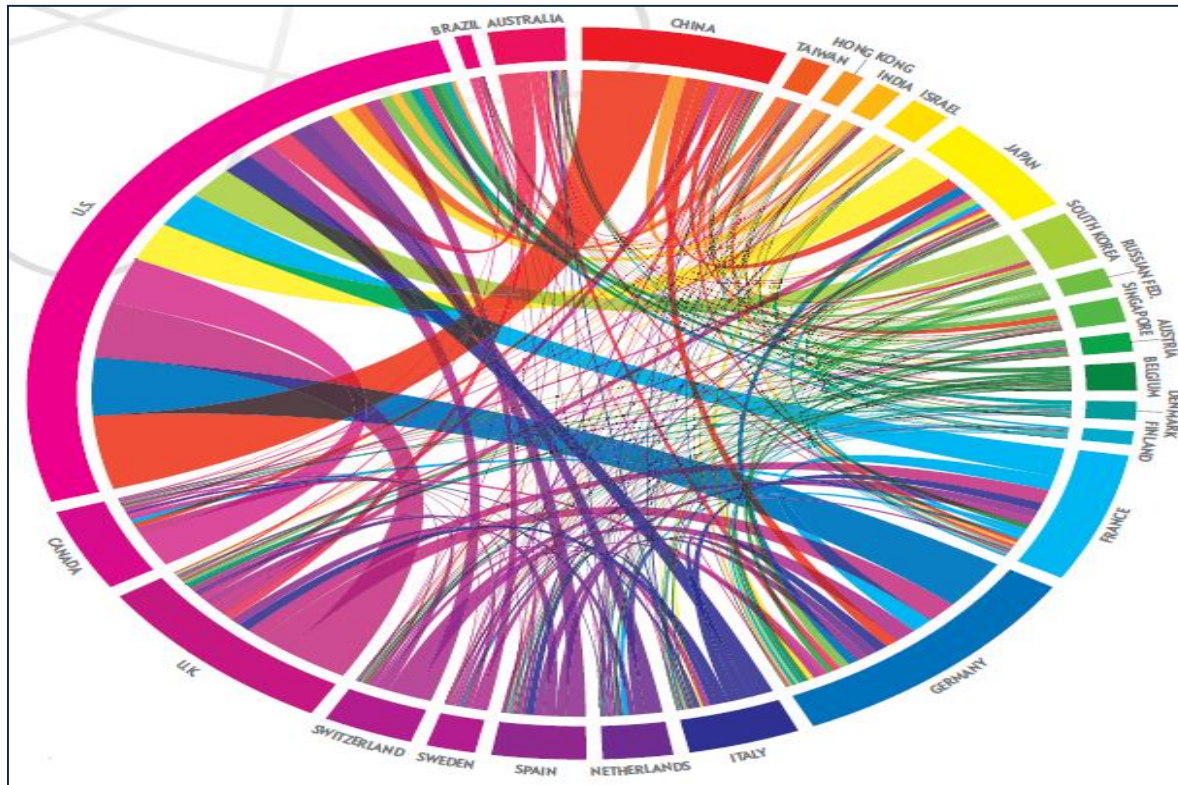
How to read this figure

The size of the bubbles reflects the number of scientific publications and the thickness of the link indicates the intensity of collaboration, i.e. co-authorship.

Source: OECD calculations, based on Scopus Custom Data, Elsevier, December 2009. See chapter notes.

StatLink  <http://dx.doi.org/10.1787/835027386353>

COLLABORATIONS (25 NATIONSWITH THE LARGEST SCIENCE OUTPUT)



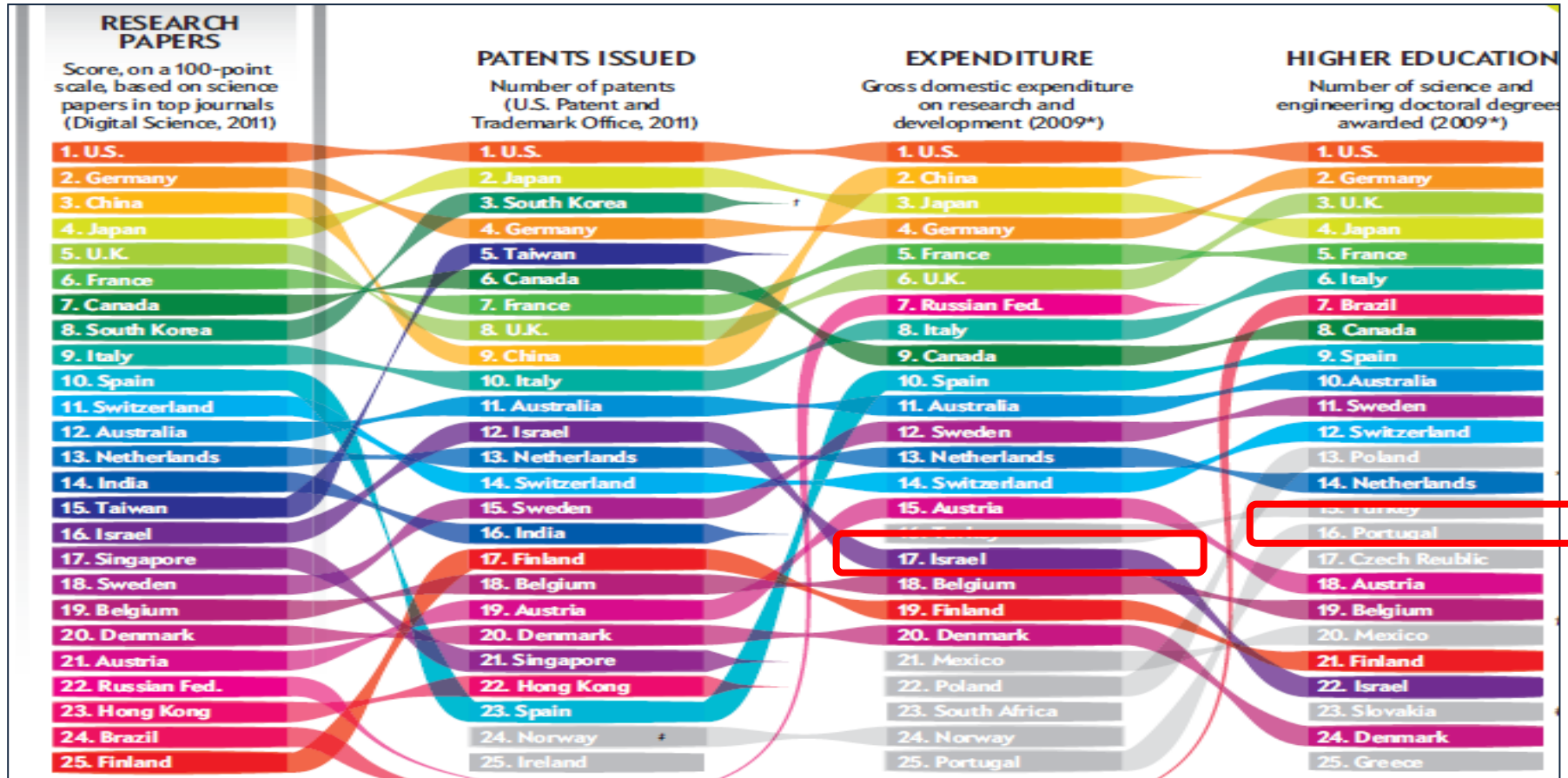
This circular graph shows collaboration among the 25 nations with the largest science output, as measured in scientific papers that appeared in 2011 in a select group of journals. Not included are collaborations that took place inside each country.



POSITION OF TURKEY IN GLOBAL INNOVATION ECOSYSTEM



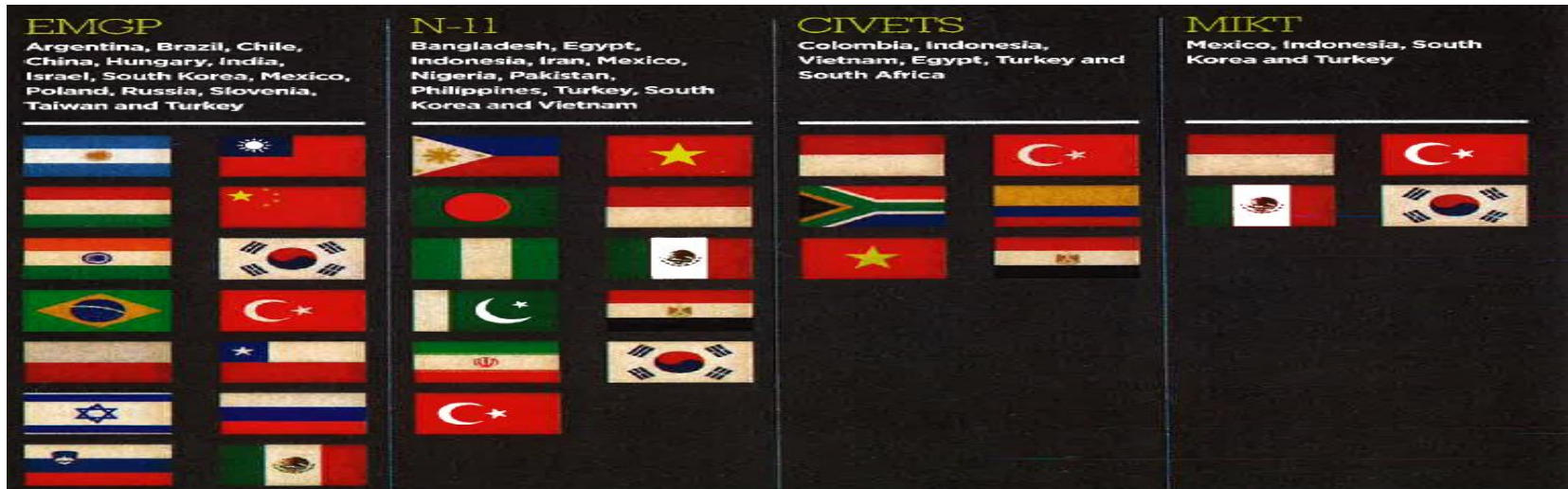
LEADING COUNTRIES IN SCIENCE AND TECHNOLOGY



Source: October 2012, ScientificAmerican.com



ECONOMIST LOOK AHEAD TO THE NEXT HOT AND EMERGING MARKETS



Columbia University created a list of Emerging Market Global Players (EMGP) this year that its economists believe to be up-and-coming.

Goldman Sachs economist Jim O'Neill, who coined the term BRIC to identify the four countries (Brazil, Russia, India and China) whose emerging economies should be watched, then identified the Next 11 or N-11 in 2005.

In 2009, economist Robert Ward drew attention to these countries as the next group of emerging markets (the acronym coincidentally links to a nocturnal mammal, the civet, native to several of the CIVETS countries).

O'Neill narrowed his picks for promising markets for investors in 2007.



THE MOST DYNAMIC CITIES OF 2025

Rank	City	Country	Population (millions)		GDP (billions of U.S. dollars)			Total Growth
			2010	2025	2010	2025		
1	Shanghai	China	22.3	30.9	\$250.7	\$1,112.2	\$861.5	344%
2	Beijing	China	18.8	29.6	206.2	1,027.9	821.7	398%
3	Tianjin	China	11.1	15.2	128.8	624.4	495.7	385%
4	São Paulo	Brazil	19.7	23.2	437.3	912.9	475.7	109%
5	Guangzhou	China	11.1	14.9	146.1	573.0	426.9	292%
6	Shenzhen	China	10.4	13.7	141.5	523.6	382.1	270%
7	New York	United States	18.9	19.7	1,180.3	1,553.1	372.7	32%
8	Chongqing	China	15.7	19.4	88.6	458.6	370.0	418%
9	Moscow	Russia	11.6	12.7	325.8	688.5	362.7	111%
10	Tokyo	Japan	36.4	36.7	1,874.7	2,218.6	343.9	18%
11	Wuhan	China	9.8	13.1	82.2	414.4	332.2	404%
12	Los Angeles	United States	12.9	15.0	731.8	1,051.5	319.7	44%
13	Foshan	China	7.2	10.8	83.5	383.6	300.1	360%
14	Istanbul	Turkey	11.0	14.9	188.2	479.7	291.5	155%
15	Nanjing	China	7.2	9.9	68.5	343.9	275.4	402%
16	Chengdu	China	7.7	11.2	57.8	309.6	251.7	435%
17	Hangzhou	China	6.2	8.8	70.5	307.0	236.5	335%

Ranked by projected absolute GDP growth 2012-2025 at predicted real exchange rates.



TOP 20 COUNTRIES BY GDP

(Current Price GDP; Billion \$)

		2012		2013		2014
1	ABD	16.244.575	ABD	16.724.272	ABD	17.437.856
2	Çin	8.221.015	Çin	8.939.327	Çin	9.761.201
3	Japonya	5.960.269	Japonya	5.007.203	Japonya	5.228.495
4	Almanya	3.429.519	Almanya	3.593.238	Almanya	3.747.066
5	Fransa	2.613.936	Fransa	2.738.676	Fransa	2.862.508
6	İngiltere	2.476.665	İngiltere	2.489.674	İngiltere	2.627.351
7	Brezilya	2.253.090	Brezilya	2.190.218	Rusya	2.215.373
8	Rusya	2.029.813	Rusya	2.117.831	Brezilya	2.169.802
9	İtalya	2.014.078	İtalya	2.068.366	İtalya	2.147.968
10	Hindistan	1.841.717	Kanada	1.825.062	Kanada	1.886.679
11	Kanada	1.821.445	Hindistan	1.758.216	Hindistan	1.749.965
12	Avustralya	1.541.700	Avustralya	1.487.971	Avustralya	1.458.907
13	İspanya	1.323.500	İspanya	1.355.660	Meksika	1.395.563
14	Meksika	1.177.398	Meksika	1.327.021	İspanya	1.394.371
15	G. Kore	1.129.536	G. Kore	1.197.506	G. Kore	1.271.252
16	Endonezya	878.536	Endonezya	867.468	Türkiye	867.325
17	Türkiye (*)	785.753	Türkiye	822.763	Endonezya	863.208
18	Hollanda	770.867	Hollanda	800.535	Hollanda	830.006
19	S. Arabistan	711.050	S. Arabistan	718.472	S. Arabistan	746.819
20	İsviçre	631.183	İsviçre	646.199	İsviçre	671.899

Kaynak: Türkiye için OVP hedefleri, diğer ülkeler için IMF veri tabanı.

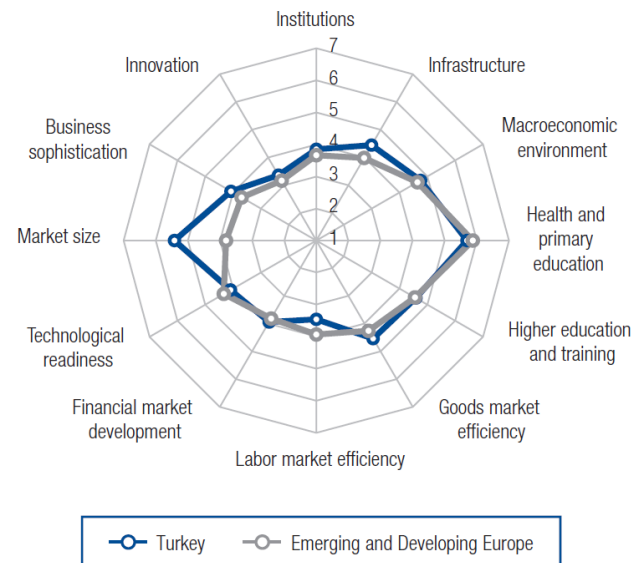
(*): IMF veri tabanında Türkiye için 2013'te 821.8 milyar, 2014'te 851.4 milyar dolarlık GSYH öngörülüyor.



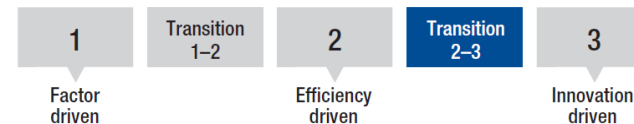
THE WORLD ECONOMIC FORUM GLOBAL COMPETITIVENESS REPORT 2015–2016

Global Competitiveness Index

	Rank (out of 140)	Score (1–7)
GCI 2015–2016	51	4.4
GCI 2014–2015 (out of 144).....	45	4.5
GCI 2013–2014 (out of 148).....	44	4.5
GCI 2012–2013 (out of 144).....	43	4.5
Basic requirements (36.3%)	57	4.7
1st pillar: Institutions	75	3.8
2nd pillar: Infrastructure.....	53	4.4
3rd pillar: Macroeconomic environment	68	4.7
4th pillar: Health and primary education	73	5.7
Efficiency enhancers (50.0%)	48	4.3
5th pillar: Higher education and training	55	4.6
6th pillar: Goods market efficiency.....	45	4.5
7th pillar: Labor market efficiency	127	3.5
8th pillar: Financial market development.....	64	3.9
9th pillar: Technological readiness	64	4.1
10th pillar: Market size.....	16	5.4
Innovation and sophistication factors (13.7%)	56	3.7
11th pillar: Business sophistication	58	4.1
12th pillar: Innovation	60	3.4



Stage of development





TURKISH UNIVERSITIES IN INTERNATIONAL RANKING LISTS

The Times Higher Education World University Rankings 2014

- 6 Turkish universities in the top 400 university list, and 4 of them are in the top 200

Quacquarelli Symonds (QS) World University Ranking 2014

- 10 Turkish universities took place among the top 800 world universities, and 5 of them in the top 500

URAP World University Ranking 2014

- 19 Turkish universities took place among the top 1000 world universities



THE MAIN TARGET FOR TURKEY TO BE ONE OF THE WORLD'S TOP TEN ECONOMIES IN 2023!

- Achieving an R&D intensity of 3% by 2023 : **%3 (%0.95*)**
- Business enterprise expenditure on R&D (BERD) as %3 of GDP : **%2 (%0.45*)**
- R&D Personnel (FTE) : **300.000 (113.000*)**
- R&D Personnel (FTE) by business enterprise sector : **%60 (%52*)**

*End of 2013



STRATEGIES & POLICIES

- *Development and Improvement of Knowledge Transfer Ecosystem*
 - **Development and Improvement of Higher Education System**
-



TURKISH HIGHER EDUCATION SYSTEM

The Council of Higher Education (CoHE)



- ▶ CoHE is responsible for the planning, coordination, governance and supervision of higher education.
- ▶ CoHE is composed of 21 members
- ▶ Since 11 November 2014; Prof. Dr. M. A. Yekta SARAÇ is the new President of CoHE.
- ▶ Two Vice Presidents of CoHE are; Prof. Dr. Yavuz ATAR and Prof. Dr. M. İ. Safa KAPICIOĞLU
- ▶ In addition to President and 2 Vice Presidents, there are 6 Executive Council Members



Council of Higher Education

<http://www.yok.gov.tr/>

- The President of CoHE is appointed by the President of the Republic of Turkey
- CoHE is responsible for the planning, coordination, governance and supervision of higher education within the provisions set forth in the Constitution (Articles 130 and 131) and the Higher Education Law (Law No. 2547).
- Both state and non-profit foundation universities are founded by law and subjected to the Higher Education Law and to the regulations enacted in accordance with it.



Council of Higher Education

<http://www.yok.gov.tr/>

- CoHe is the member of

ENQA (The European Association for Quality Assurance in HE)

EQAR (The European Quality Assurance Register for HE)

OECD/IMHE (Programme on Institutional Management in HE)

EUA (European University Association)

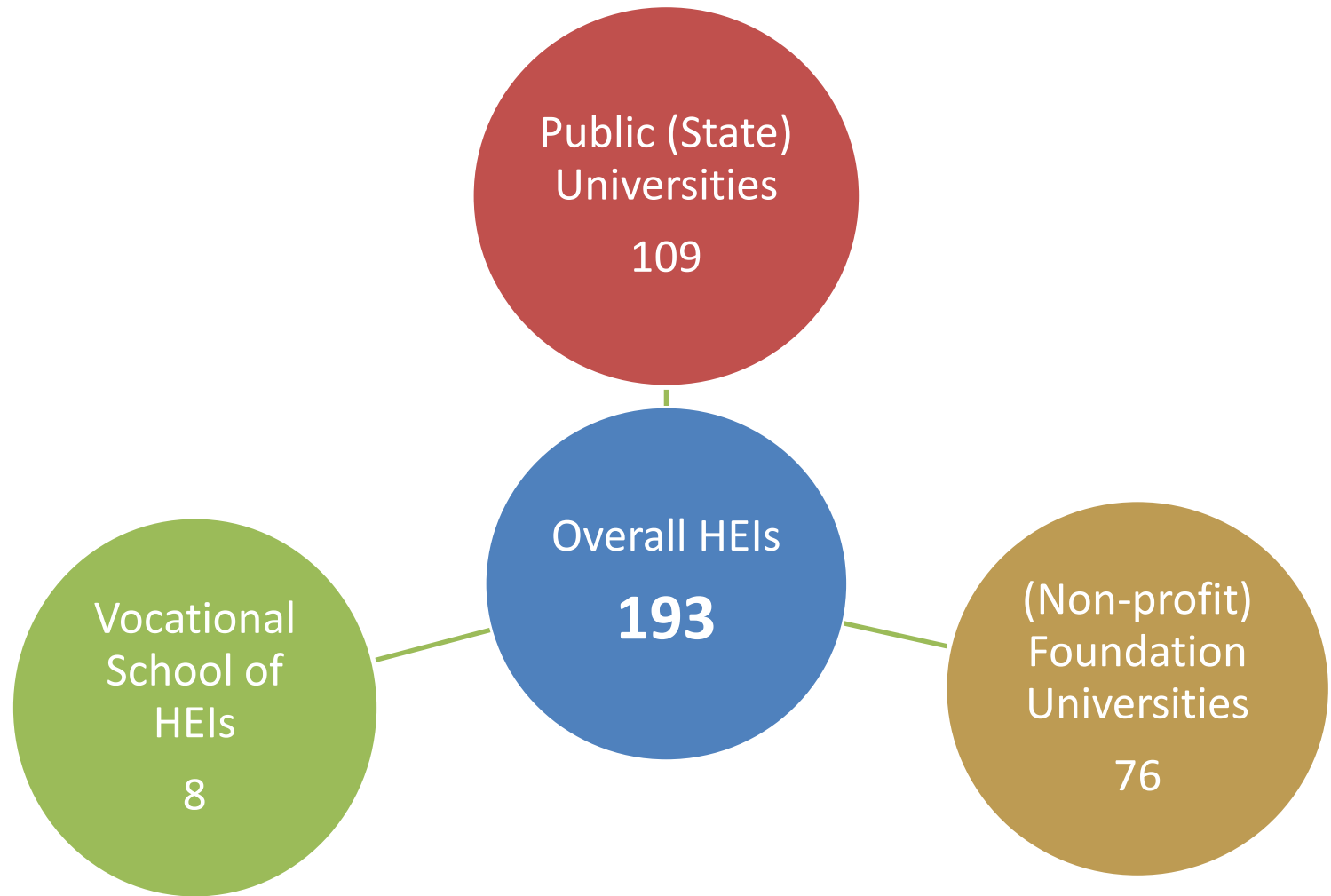
Structure of the Higher Education System

- ▶ Higher education system includes all post-secondary programs
- ▶ It embodies
 - State (Public) Universities
 - Foundation (Non-profit) HEIs (Universities and Vocational Schools)
- ▶ Four different degrees
 - Associate (2 year)
 - Undergraduate
 - Master
 - Doctorate



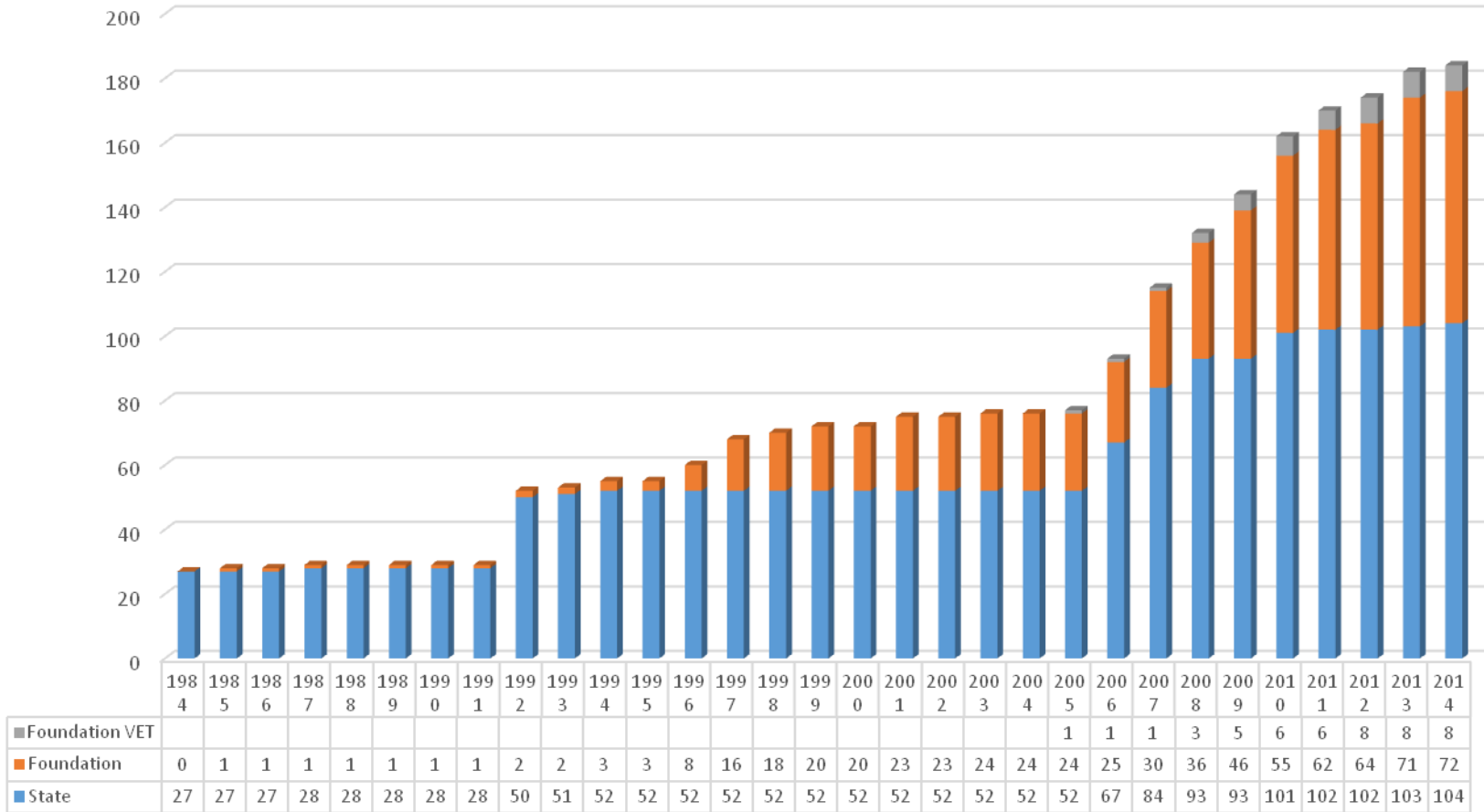


Numbers of Higher Education Institutions



Information On The Higher Education in Turkey

NUMBERS OF HIGHER EDUCATION INSTITUTIONS BY YEARS
(YÜKSEKÖĞRETİM KURUMLARININ YILLARA GÖRE SAYILARI)



■ State ■ Foundation ■ Foundation VET



Total Number of Students (2014-2015)

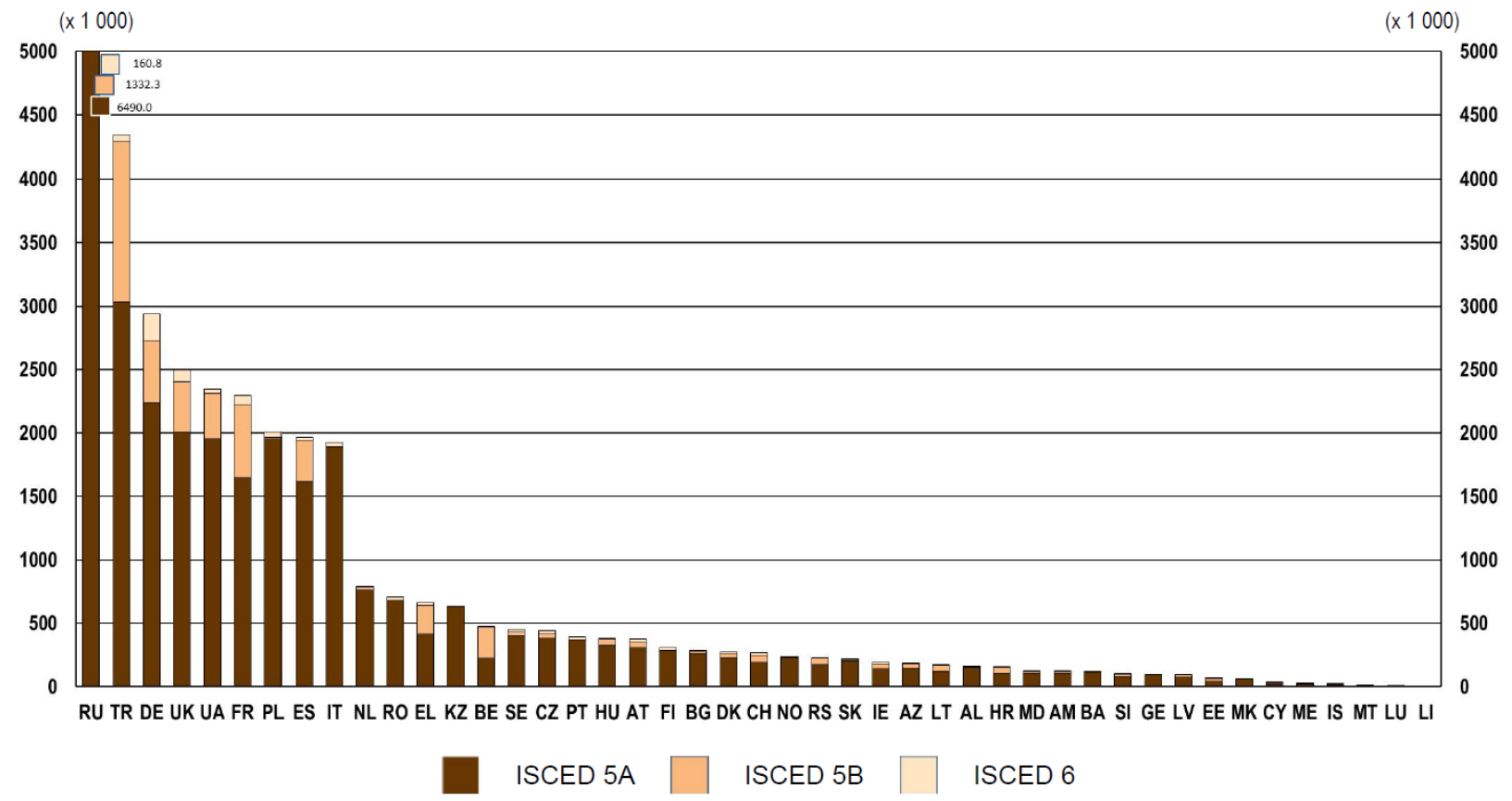
Total	6.063.680
Short Cycle (Associate)	2.013.078
First Cycle (Bachelor)	3.628.871
Second Cycle (Master)	343.979
Third Cycle (Ph.D.)	77.752



Information On The Higher Education in Turkey

The European Higher Education Area in 2015: Bologna Process Implementation Report

Figure 1.1: Number of students enrolled in tertiary education by ISCED level, 2011/12





Numbers of Academic Staff (2014-15)

TOTAL	149.584
Professor	21.407
Associate Professor	14.350
Assistant Professor	33.851
Research Assistants	44.568
Instructor	21.075
Language Instructor	10.447
Experts and Others	3.886



Enrollment to the Universities

For Turkish Students:



Secondary School Diploma



Composite score required to enroll in a given program evaluated by the centralized Evaluation, Selection and Placement Center (ÖSYM) Exams (YGS+LYS)



Information On The Higher Education in Turkey

Enrollment to the Graduate Programs

- Admission to graduate programs is carried out by the Higher Education institutions.
 - Admission depends on composite scores which generally take into account the Graduate Education Entrance Examination (ALES), the undergraduate grade point average, and interview results.
-



Enrollment to the Universities

For International Students:

Universities determine their **own criteria**

National and international exams, secondary education degree, grade point average and the exams prepared by the universities

Minimum and maximum amounts of tuition fees of state universities are decided by the Council of Ministers annually

Then, universities determine their tuition fees for each faculty.

In foundation universities, tuition fees are determined by their authorized councils.



Internationalization of Turkish Higher Education System

- ▶ Internationalization Strategies
 - ▶ International Degree Students
 - ▶ International Exchange Programs
 - ▶ Joint/Double/Dual Degree Programs
-

EUROPEAN HIGHER EDUCATION AREA (EHEA) PROCESS IS A TOOL IN THE INTERNATIONALISATION OF TURKISH HIGHER EDUCATION SYSTEM

QUALIFICATIONS FRAMEWORK

- Cycles
- Diploma
- Profile

- Descriptors
- Learning Outcomes

- Work Load
- Credits (ECTS)

Purposes: Transparency, Recognition, Mobility

QUALITY ASSURANCE



Performance of Turkish HEIs in EHEA Process

2013 ECTS & DS Labels

	New Applications		Renewals	
	Europe in Total	Turkey	Europe in Total	Turkey
ECTS	25	15	22	1
DS	90	29	79	7

Total ECTS Label Holders in Turkish HEIs : 31

Total DS Label Holders in Turkish HEIs : 73

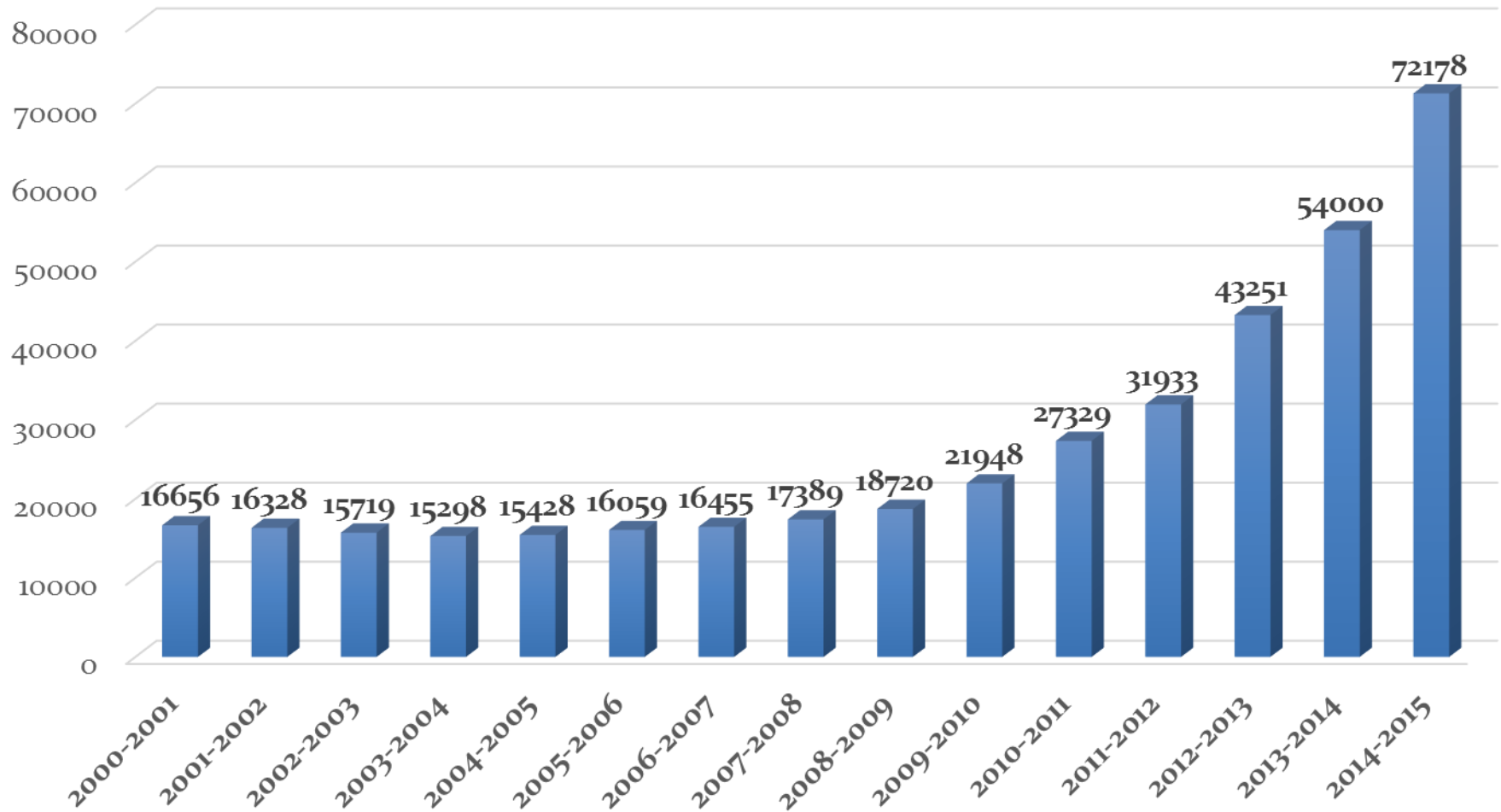


International Degree Students in Turkish HEIs

Information On The Higher Education in Turkey

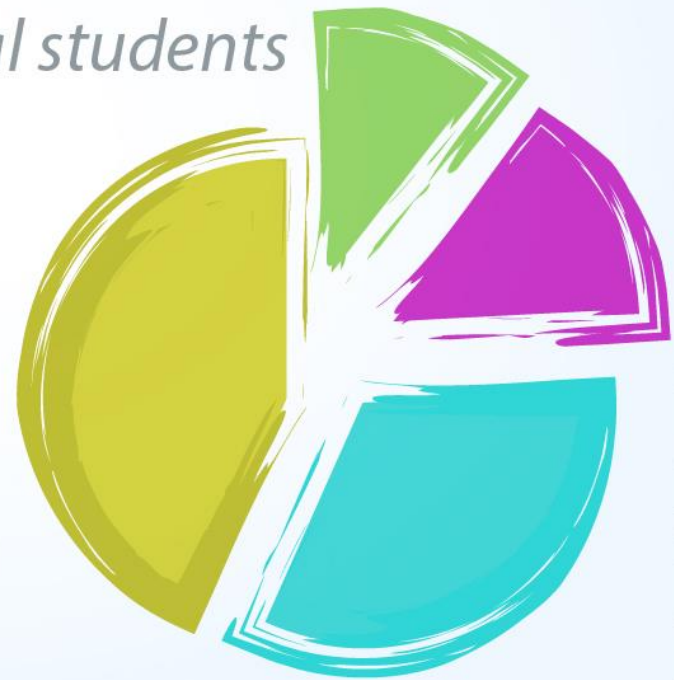
Numbers of International Students in Turkey

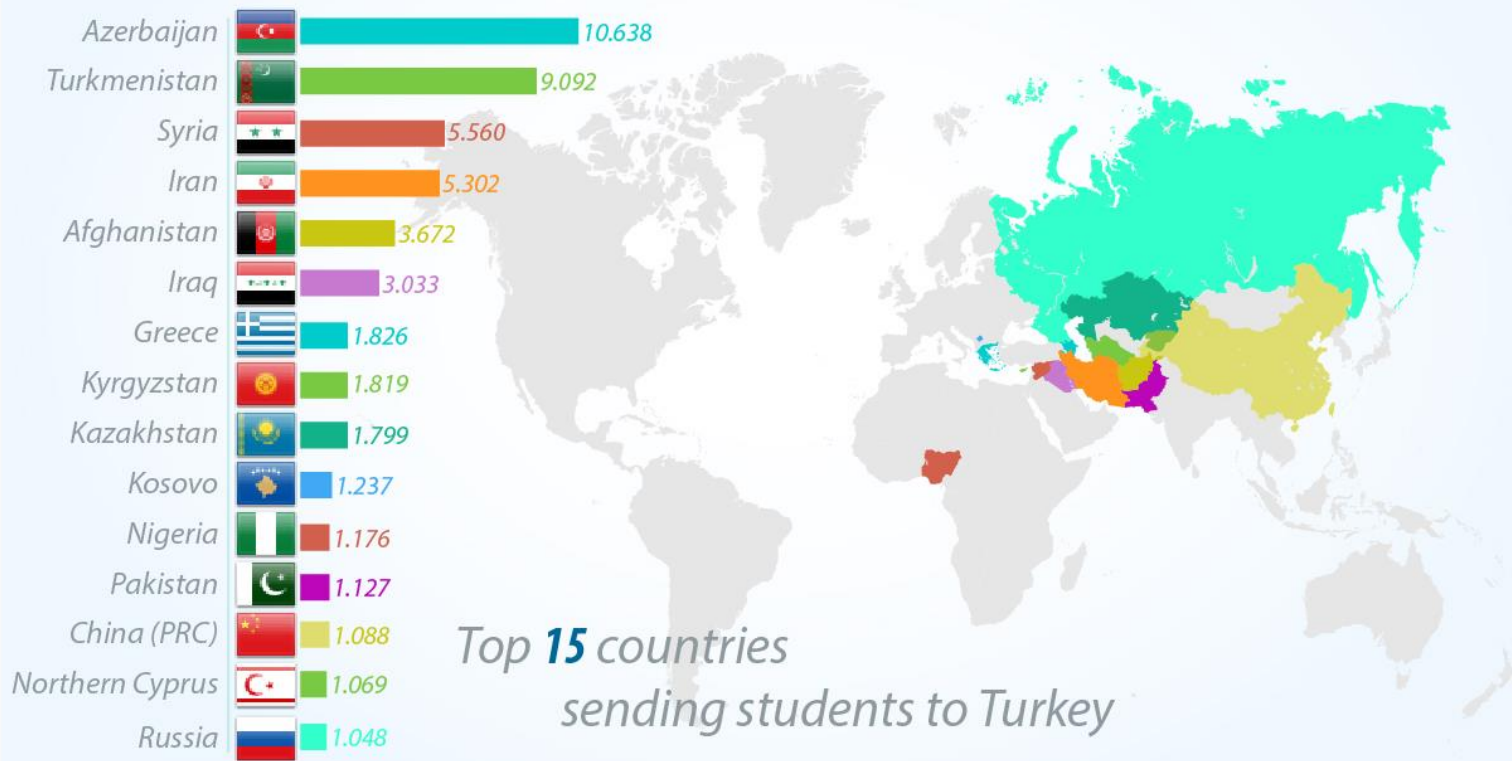
(<https://istatistik.yok.gov.tr/>)



In total, **193** higher education institutions
72.178 international students

- 1st Cycle (50.080 - 69,5%)
- 2nd Cycle (12.690 - 17,5%)
- 3rd Cycle (5.068 - 7%)
- Short Cycle (4.340 - 6%)





source: <https://istatistik.yok.gov.tr>



Top 10 countries with
the highest academic staff number in Turkey

source: <https://istatistik.yok.gov.tr>



Scholarships provided by:



- For international students from all around the world
- Non-refundable
- Provided for international students in all of the higher education levels
- The main aim is to improve the mutual understanding with other countries.
- Candidates' academic success is the top selection criteria
- For application: www.trscholarships.org



- Provides both scholarship and admission of university
 - Number of international students who will be placed in a scholarship program are decided by the International Students Assessment Board
 - Since the academic year of 2012-2013, 14.015 students from 176 countries have been placed in HEIs
 - For 2015-2016 academic year, 4,810 students will study in Turkish Higher Education Institutions
-



- Under this scholarship program; monthly scholarships, flight ticket, accommodation, health insurance and one-year Turkish language course are provided
- For 2015:
 - Undergraduate: 600 TL
 - Master: 850 TL
 - Doctorate: 1.200 TL
 - Research: 2.500 TL are paid as monthly scholarship amount.
- For application: www.trscholarships.org



International Exchange Programmes



Erasmus Exchange Programme

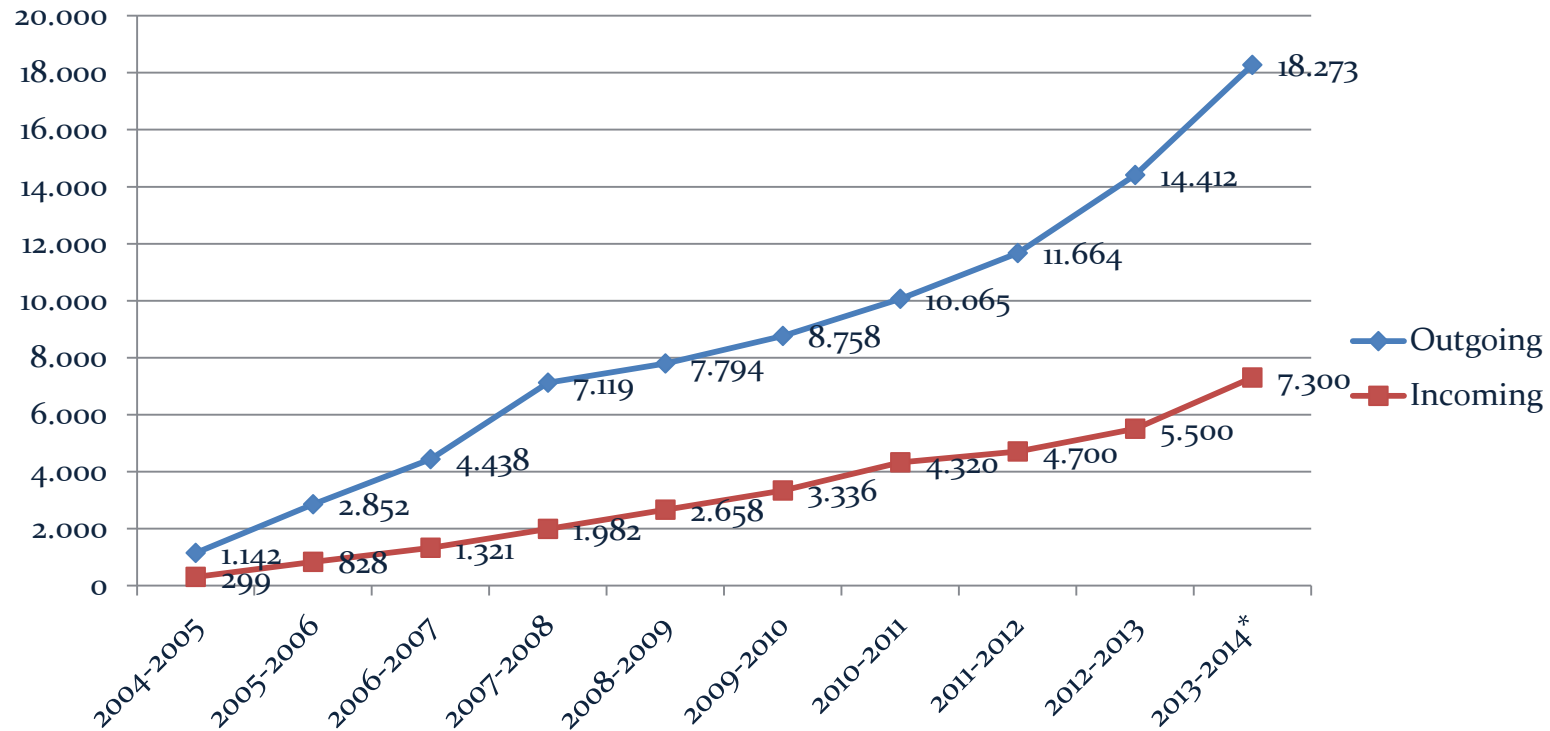
- Within the scope of EU Education, Youth and Lifelong Learning Programmes, Turkey has been a successful partner in Erasmus programme for higher education.
 - Among 184 Turkish Higher Education Institutions, 164 of them have signed Erasmus Charter for Higher Education (ECHE)
-



Education and Culture

Lifelong Learning Programme

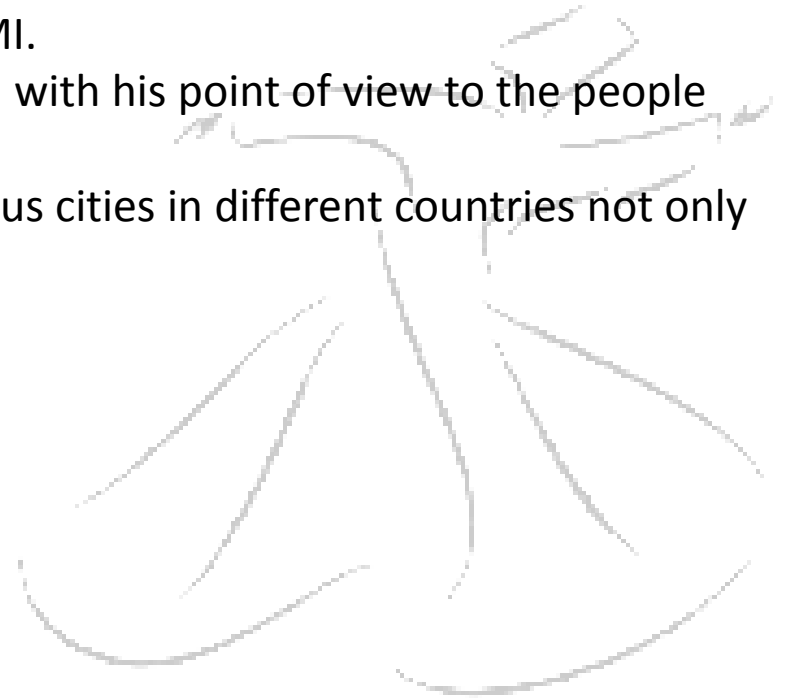
Erasmus Student Mobility in Turkey (2004-2014)

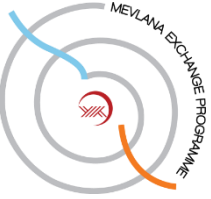


Information On The Higher Education in Turkey

Mevlana Exchange Programme

- The real name of Mevlana, from whom the name of the programme is inspired, is Muhammed Celaledin also known as RUMI.
- He is accepted worldwide as an intellectual with his point of view to the people and life.
- Visited the educational institutions of various cities in different countries not only as a student but also a scholar





Information On The Higher Education in Turkey Mevlana Exchange Programme

- Aims the exchange of students and academic staff between the Turkish higher education institutions and higher education institutions of other countries.
- With the regulation published in August 23, 2011 (num: 28034), students and academic staff exchange between Turkish higher education institutions and higher education institutions of other countries has been possible.

Aims of the Programme

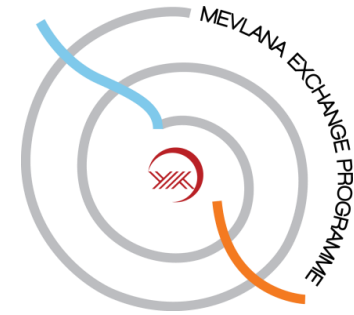
- To contribute to the internationalization of higher education
- To increase the academic capacity of higher education institutions
- To share the rich historical and cultural mutual heritages
- To enrich the culture of respect and understanding to differences while increasing the intercultural interaction



Information On The Higher Education in Turkey

Difference from other Exchange Programmes

- It is in conformity with “Internationalization of Higher Education” approach of the Council of Higher Education.
- It is not limited with a region, area or certain part of the world.
- Scholarship
- The students, who benefited from Mevlana Exchange Programme, can also benefit from other exchange programmes before/after participating in this programme.



Information On The Higher Education in Turkey

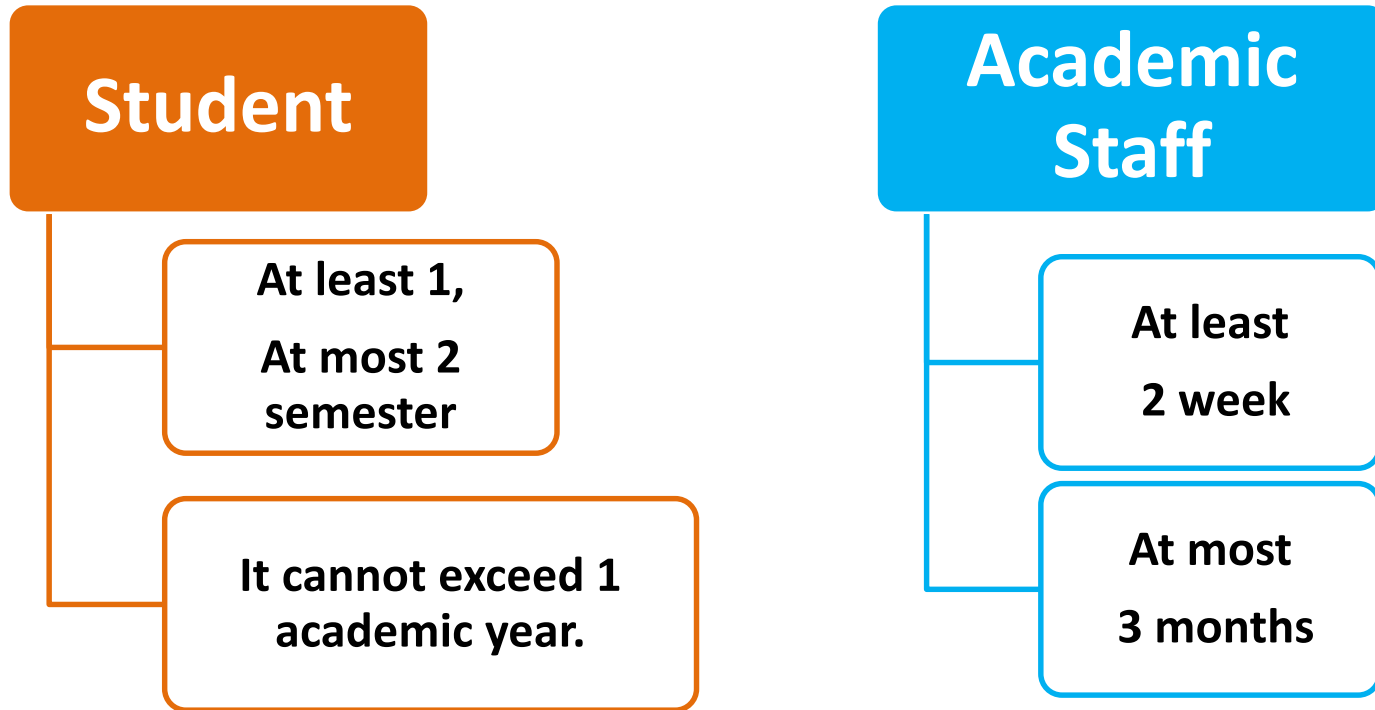
Who can benefit from Mevlana Exchange Programme?

- Any student who is enrolled in a higher education institution in terms of formal education.
- The Programme is for all students in all degrees (Associate Degree, Bachelor Degree, Master Degree, PhD Degree) of higher education.
- Students who are enrolled in open education, non-formal education or distance education cannot benefit from the Programme.
- Academic staff, who works in a Turkish or international higher education institution, can benefit from Mevlana Exchange Programme.



Information On The Higher Education in Turkey

Duration in Mevlana Exchange Programme





Information On The Higher Education in Turkey

Tuition Fee in Mevlana Exchange Programme

- Students do not pay any tuition fees to the host institution during the programme, but they continue to pay the obligatory tuition fees to their home institutions.
- They **do not pay** any extra fee to the host institution within the scope of the Mevlana Exchange Programme.



Information On The Higher Education in Turkey

Scholarships in Mevlana Exchange Programme

For students:

- Mevlana Exchange Programme students continue to take their other scholarships and grants in their home countries.
- The scholarship amount to be paid to the Mevlana Exchange students differs according to the life standards of the country of the host institution.
- Within the context of Mevlana Exchange Programme, both incoming and outgoing students can be paid up to ratios which determined by Council of Higher Education Executive Board.

Incoming Student: 750 TL

Outgoing Student: 750- 850- 950 TL

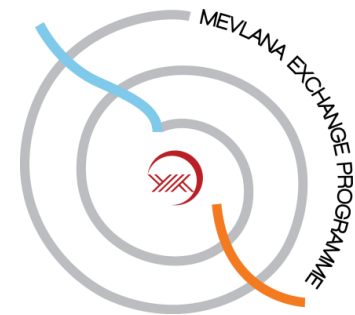
Information On The Higher Education in Turkey Scholarships in Mevlana Exchange Programme

For academic staff:

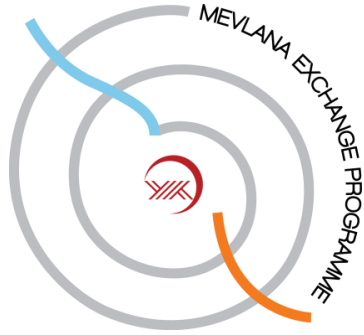
- Within the scope of Mevlana Exchange Programme, travel allowance stated in the Travel Expense Law no.6245 may be paid to incoming and outgoing academic staff while travel allowance and additional course fees may be paid as stated in Travel Expense Law no.6245 and article 10 of the Law no.2547. CoHE Executive Board is authorized to determine additional course fees due to the countries and titles.

1.500 TL per month

2.250 TL for travel expenses



Information On The Higher Education in Turkey



- More than 1.000 Mevlana Protocols signed
6 Continent
56 Different Countries

Academic Year	Incoming Student	Outgoing Student	Incoming Academic Staff	Outgoing Academic Staff
2013-2014	319	126	131	316
2014-2015	1611	1364	1132	1985



Joint/Double/Dual Degree Programs

- Possible for all degrees (Assoc./Bachelors/Master's/Doctorate)
- Recognition is obligatory in order to sign a protocol
- Content of the protocol is under Universities' consideration
- No need for approval of CoHE for cooperation protocols
- Approval of CoHE is needed for joint/double/dual degree programs

		Total Numbers	
BSc,BA: 80	Joint/Double/Dual Degree Programs	205	UK:53
MSc,MA: 52			USA:49
PhD: 39	Turkish Universities	59	France:32
Associate:24	Countries	14	Germany: 30
			NL: 8

Students studying by their own means:

- Besides scholarship programs, Turkey targets to increase the number of international students who will study at Turkish Universities by their own means.
- Pursue to CoHE's "internationalization" strategy, Turkey has developed a new project called "**Study in Turkey**" to attract international students.



Information On The Higher Education in Turkey



- **“Study in Turkey”** targets to present and promote the Turkish Higher Education system worldwide.
- All the necessary information about Turkey, life in Turkey, higher education system, scholarships, opportunities are included in the web site: <http://www.studyinturkey.gov.tr/>
- On the website, all Turkish Universities have a profile introducing their faculties, departments, programmes, social, cultural, sportive facilities, etc.
- International students can choose city, university and program by using “edu finder” search engine.



Recognition and Equivalency of Foreign Qualifications

- CoHE is responsible for the assessment, recognition and equivalency processes of foreign qualifications in degrees of Associate's, Bachelor's and Master's
- The Equivalency Unit of CoHE deals with recognition queries in these degrees
- The Inter-University Council evaluates Ph.D. Degrees from abroad
- The Ministry of National Education is responsible for the equivalency process of primary and secondary education.

- Issues concerning the recognition of qualifications have increased considerably over the past years
- In 2014, CoHE evaluated a total number of 9110 recognition queries received from abroad
- CoHE received most of the applications from Azerbaijan, Asian Countries, Balkan States and the USA.



Further Steps & Challenges Beyond 2015

What is Next?

1. Mission Differentiation in HEIs
 2. Qualifications and Employability
 3. Mobility in all Levels
 4. Focused Internationalisation Strategies
 5. Quality Assurance and Accreditation
 6. Coordination between Higher Education and Research Policies
-



THANK YOU!

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