

Education and Scientific Development in OIC Countries 2016

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Outline

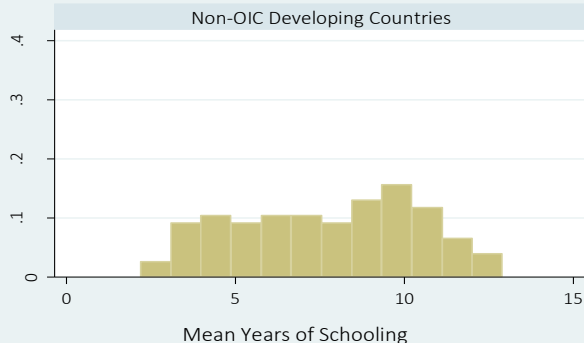
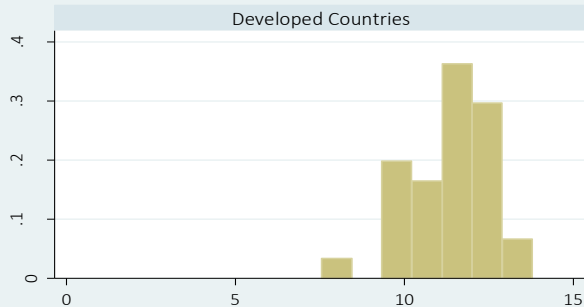
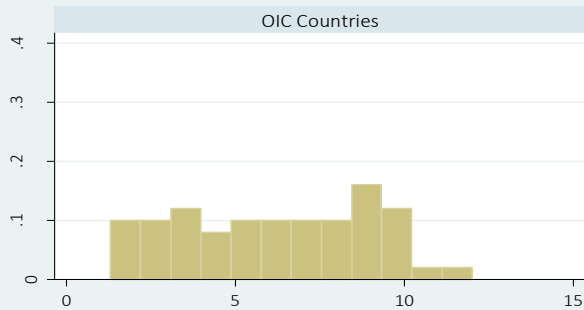
1. Basics
2. Participation in Education
3. Progression and Completion in Education
4. Education Resources and Teaching Conditions
5. Research and Scientific Development

BASICS

- Average Years of Schooling
- Compulsary Education
- Literacy Rates

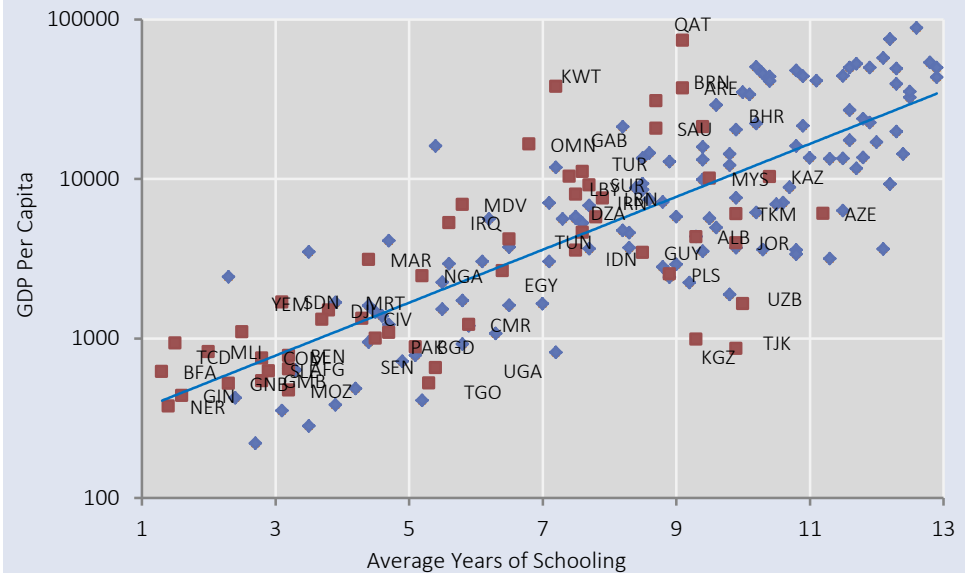
Average Years of Schooling

Average Years of Schooling (2013)



Source: UNDP

Per Capita Income vs Average Years of Schooling (2013)*



Source: World Bank, WDI and UNDP HDI Databases.

- Overall performance of OIC MCs remains well behind the performances of other country groups
- Income growth is strongly correlated with school attendance

Compulsary Education

Figure: Duration of Compulsary Education

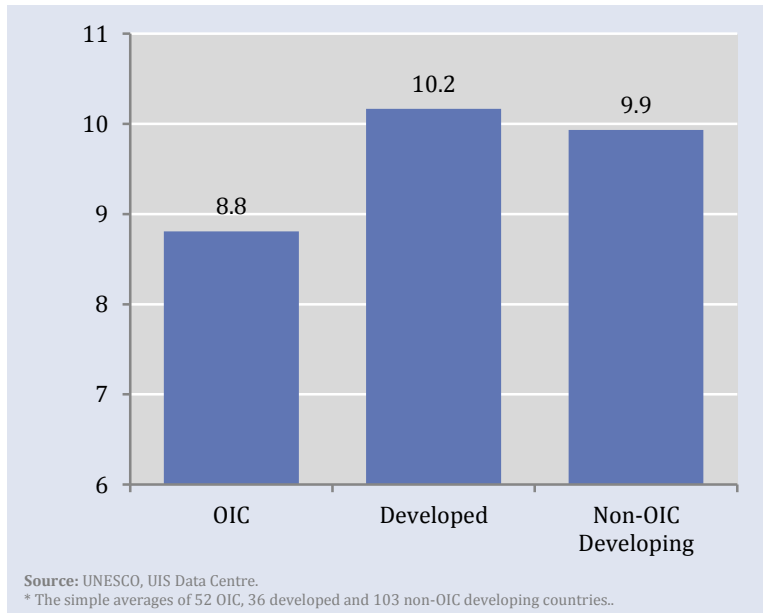
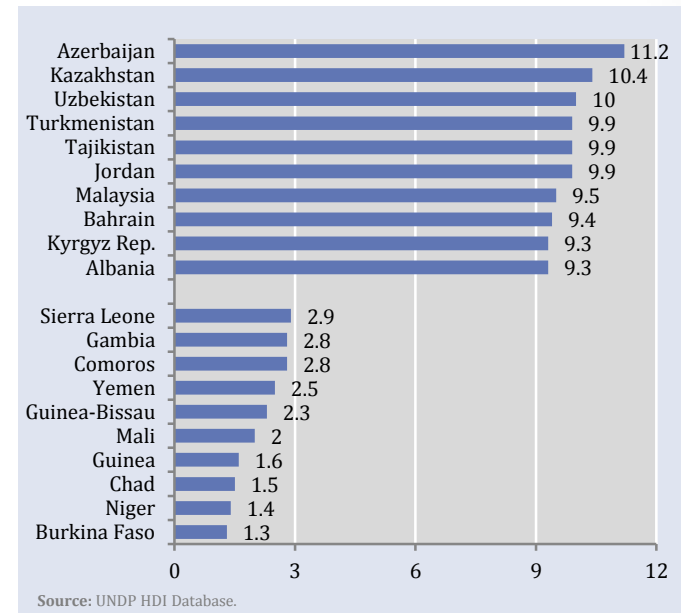


Figure: OIC MCs with Highest and Lowest Average Years of Schooling (2013)



- With an average of 8.8 years of compulsory education, OIC MCs as a group lag behind the averages of developed (10.2) and non-OIC developing countries (9.9).

Adult Literacy Rates

Figure: Adult Literacy Rates in Comparison

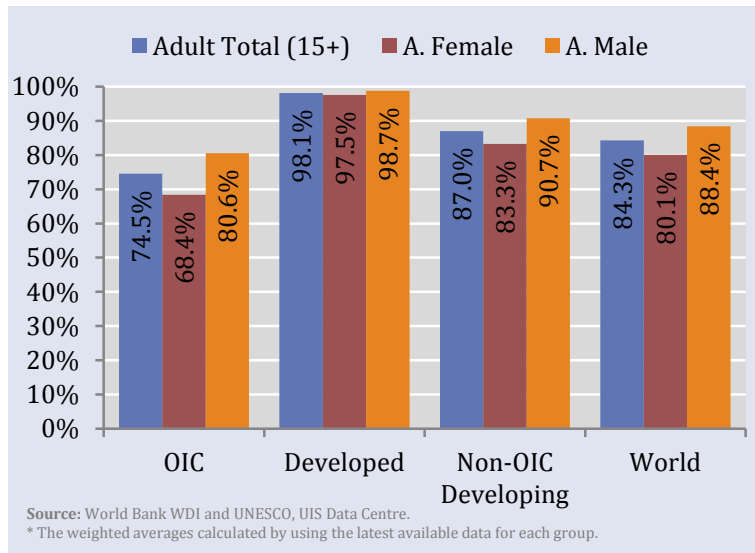
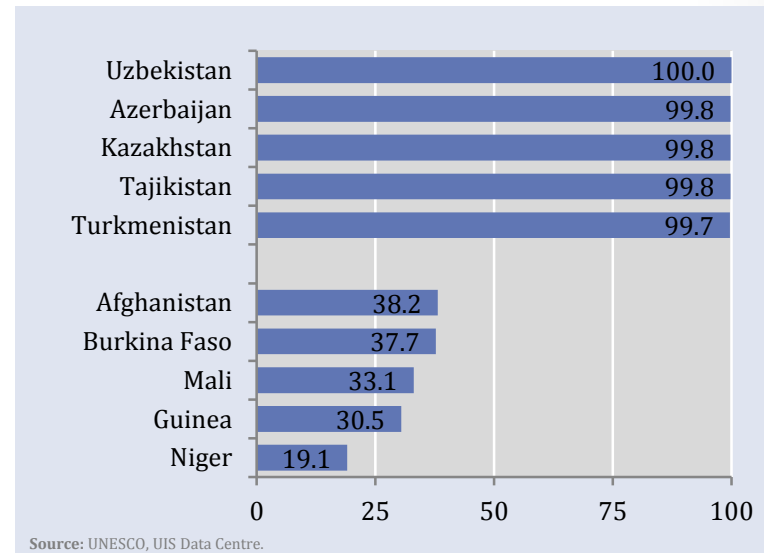


Figure: Highest and Lowest Performing OIC MCs in Adult Literacy Rates



- With an average adult literacy rate of 74.5% in 2015, OIC countries as a group lagged well behind the world average of 84.3% and also the non-OIC developing countries' average of 87%

Youth Literacy Rates

Figure 1.13: Youth Literacy Rates in Comparison

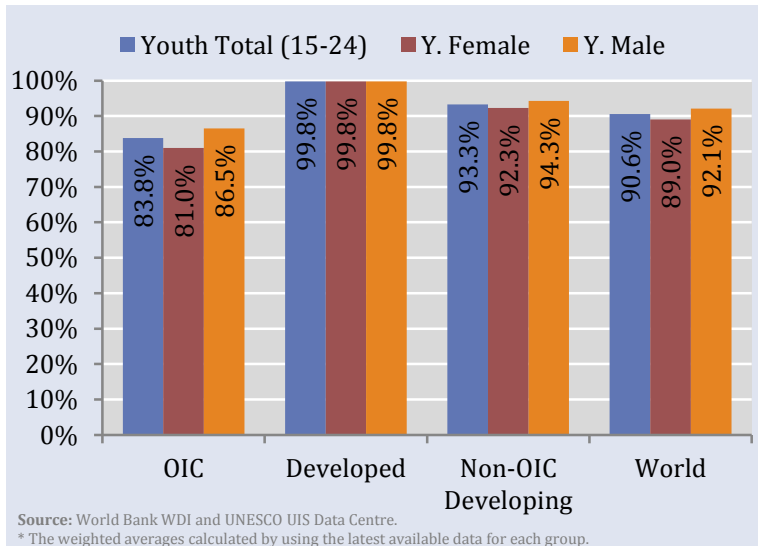
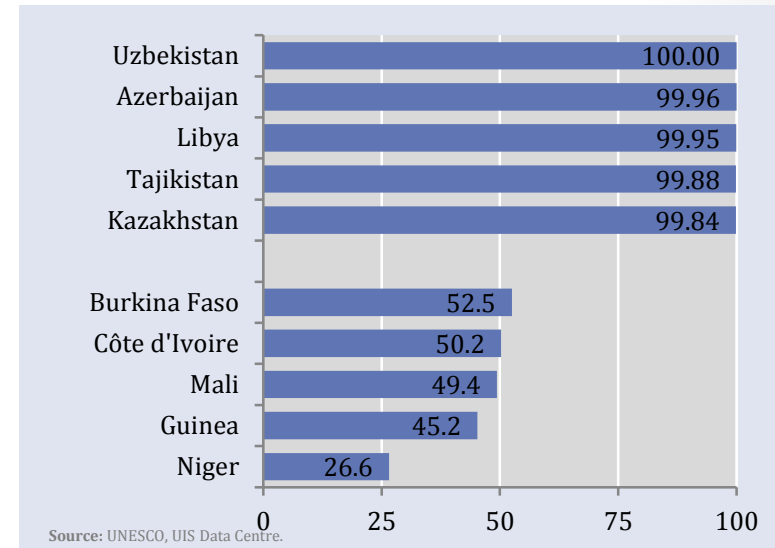


Figure 1.14: Highest and Lowest Performing OIC MCs in Youth Literacy Rates

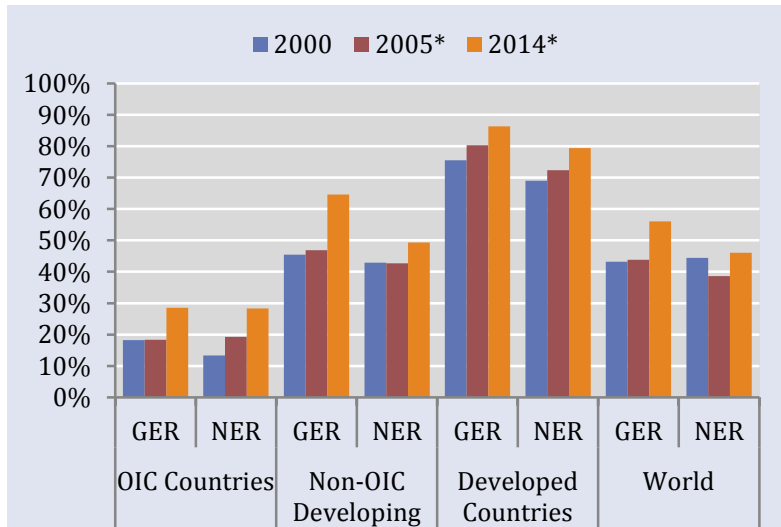


- On average, 83.8% of youth are literate in OIC MCs, which is once again below the world average (90.6%) and average of non-OIC developing countries (93.3%).

PARTICIPATION IN EDUCATION

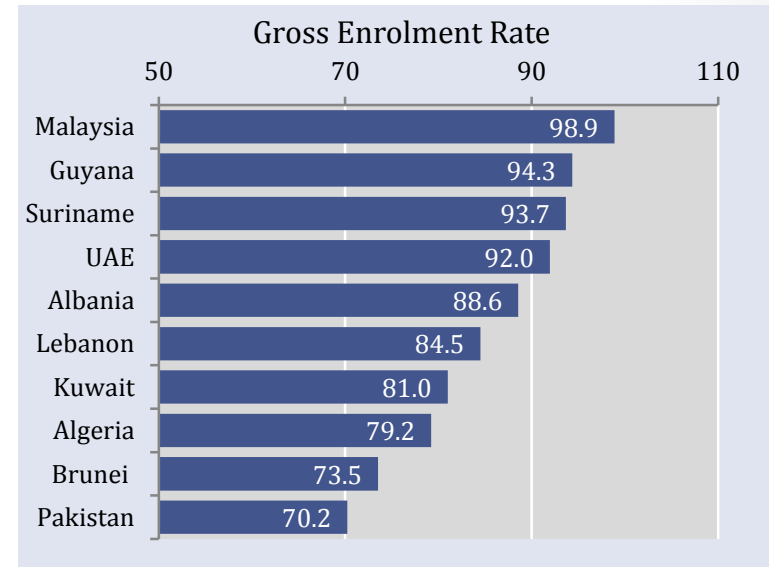
Pre-Primary School Enrolment

Figure: Pre-primary School Enrolment Rates



Source: SESRIC; UNESCO; World Bank WDI and World Bank Education Statistics. * Or latest year

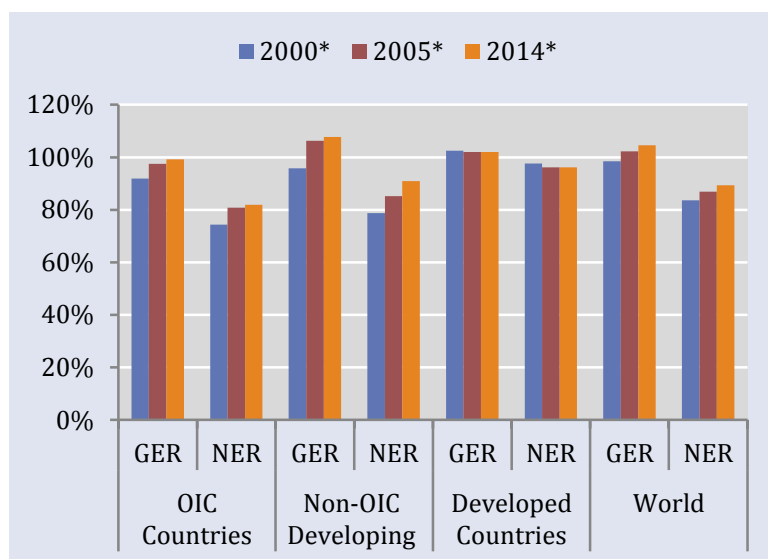
Figure: OIC MCs with Highest Pre-primary School Enrolment Rates (2015)



- Average GER and NER in OIC countries improved significantly during the 2005-2014 period, reaching 28.5% and 28.3%, respectively
- Yet, the current enrolment levels in OIC countries compare poorly to non-OIC developing as well as developed countries.

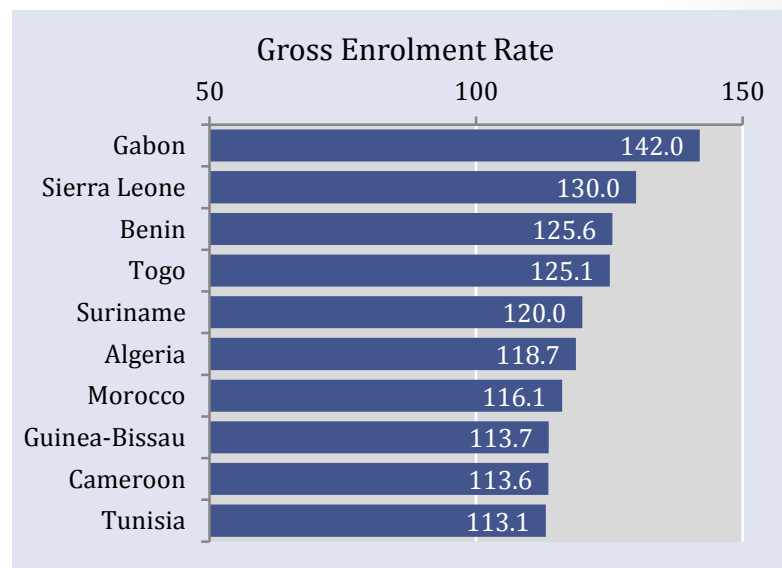
Primary School Enrolment

Figure: Primary School Enrolment Rates



Source: SESRIC; UNESCO; World Bank WDI and World Bank Education Statistics. * Or latest year

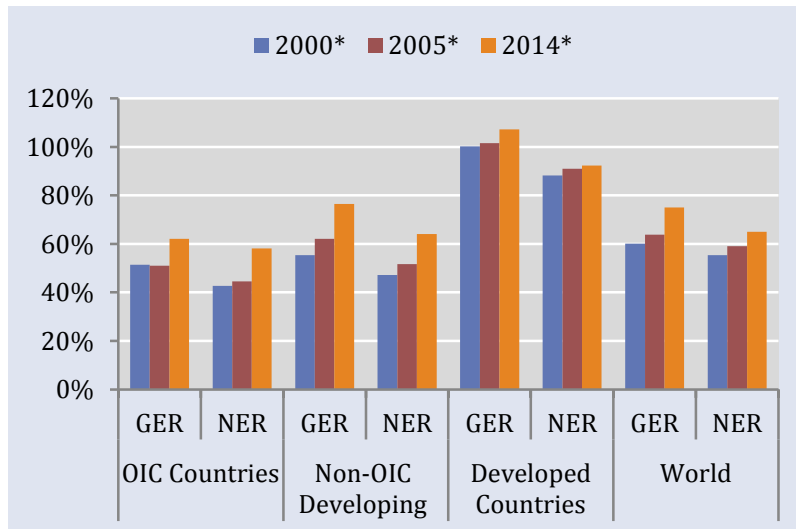
Figure: OIC MCs with Highest Primary School Enrolment Rates (2015*)



- Average GER in OIC MCs has improved from 91.9% in 2000 to as high as 99.3% in 2014.
- Average NER in OIC MCs was recorded only at 82.0%, indicating around 1/5 of the children at their primary school age have not registered in primary schools

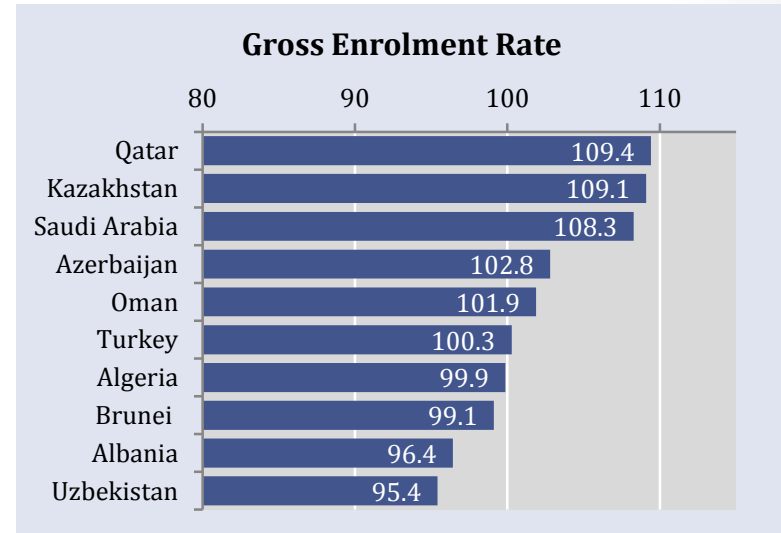
Secondary School Enrolment

Figure: Secondary School Enrolment Rates



Source: SESRIC; UNESCO; World Bank WDI and World Bank Education Statistics. * Or latest year

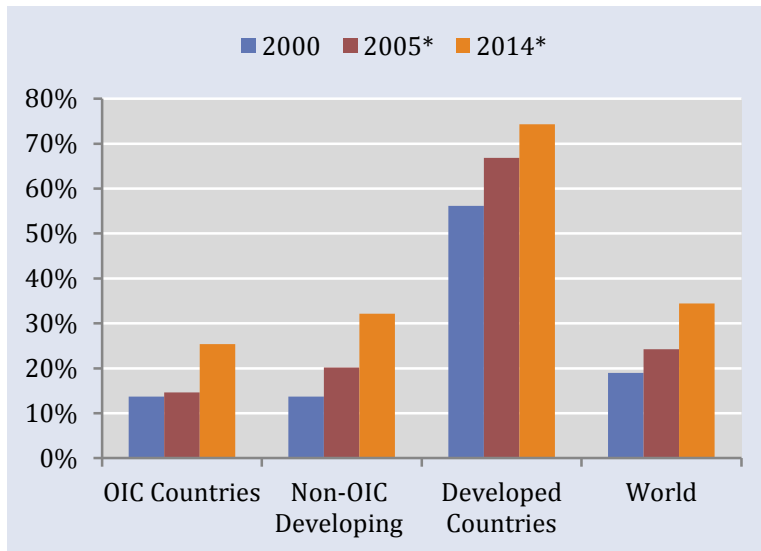
Figure: OIC MCs with Highest Secondary School Enrolment Rates (2015)



- In OIC countries, the average secondary school GER has increased from 51.4% in 2000 to 62.1% in 2014.
- Average NER in OIC countries was recorded at 58.1% in 2014, below the average NER in non-OIC developing countries (64.1%).

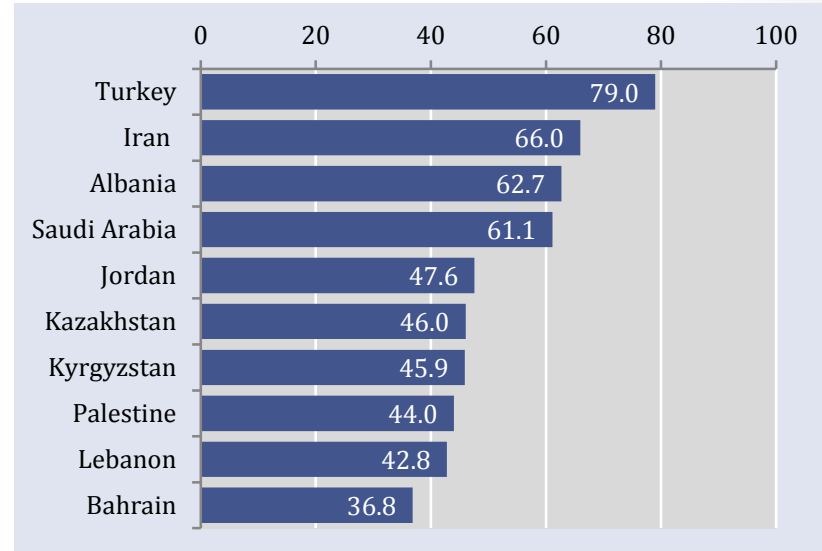
Tertiary School Enrolment

Figure: Tertiary School Enrolment Rates (GER only)



Source: SESRIC; UNESCO; World Bank WDI and World Bank Education Statistics. * Or latest year

Figure: OIC MCs with Highest Tertiary School Enrolment Rates (% GER only, 2013)



Source: SESRIC; UNESCO; World Bank WDI and World Bank Education Statistics. * Or latest year

- OIC countries, with an average enrolment rate of 25.4% as of 2014, lagged behind non-OIC developing countries (32.1%) and far behind the developed countries (74.3%). In the same year, the world average GER was 34.4%.

COMPLETION AND PROGRESSION

Completion Ratios in Primary School

Figure 3.1: Completion Ratios in Primary School

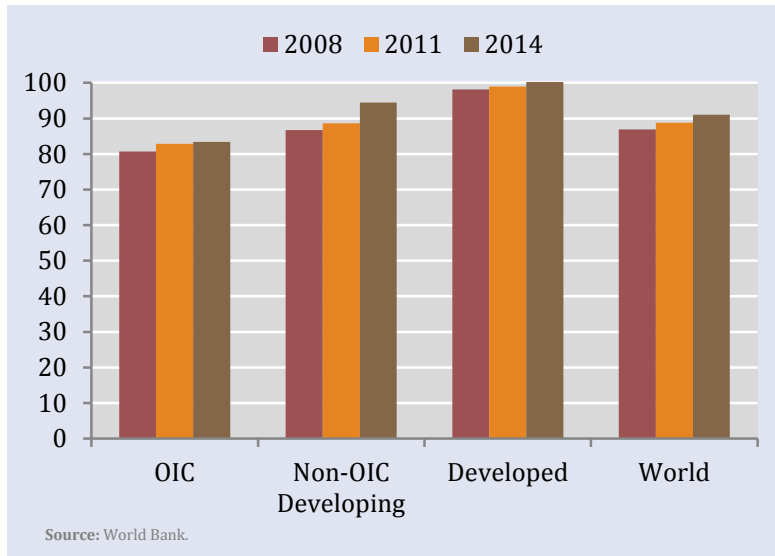
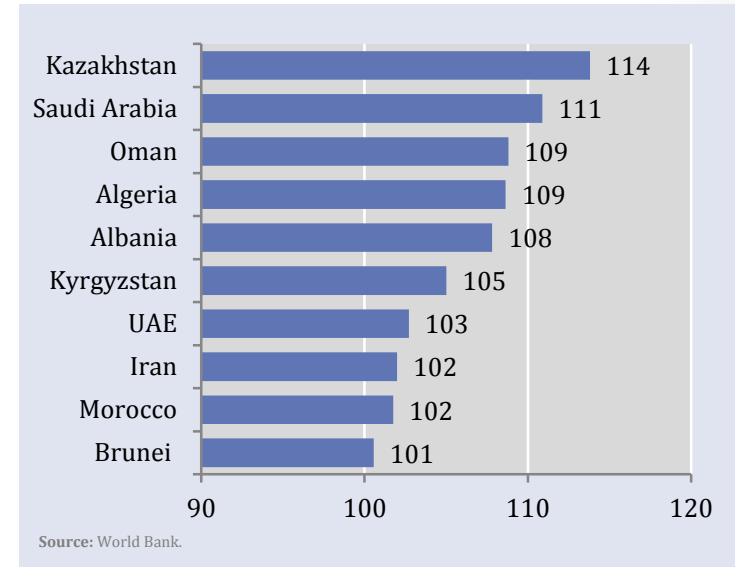


Figure 3.2: OIC MCs in with Highest Completion Rates, 2014



- OIC MCs, on average, achieved to increase their completion rates from 80.8% in 2008 to 83.4% in 2014.
- Despite this improvement, its average still lags behind the averages of non-OIC developing countries, developed countries and the world.

Repetition Rates in Primary School

Figure: Repetition Rates in Primary School (% of Total Enrolment)

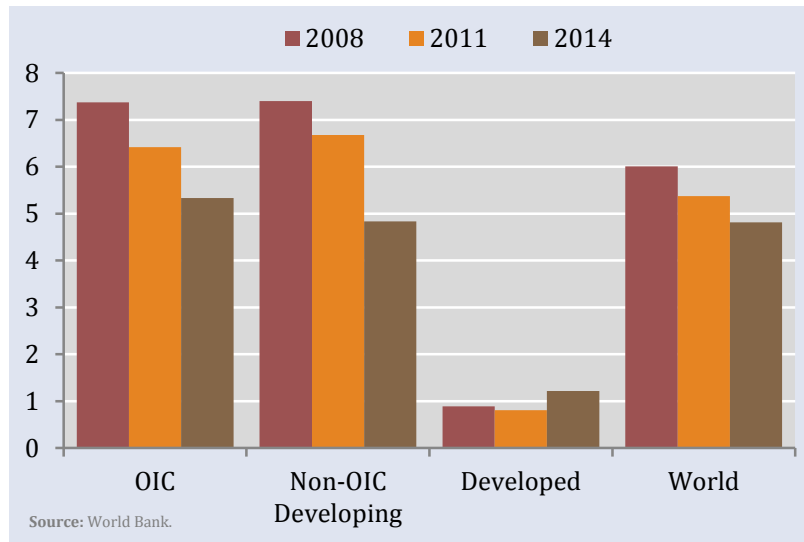
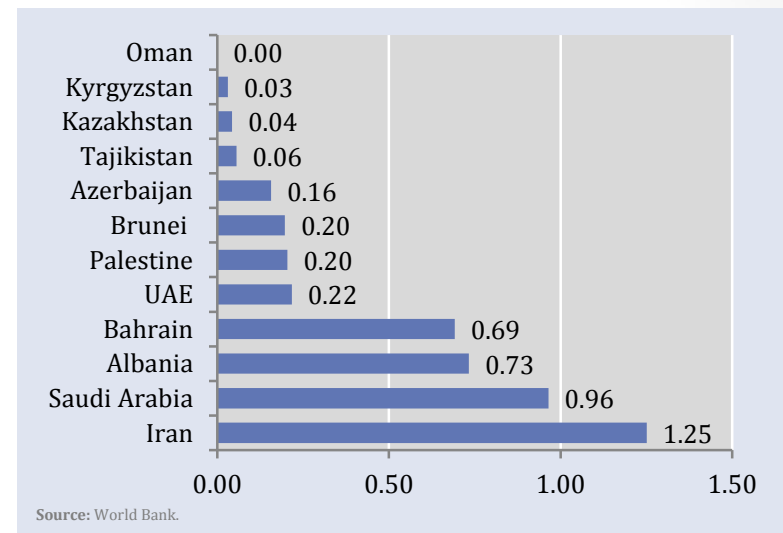


Figure: OIC MCs with Lowest Repetition Rates in Primary School (% of Total Enrolment)



- The OIC group successfully reduced the rate from 7.4% in 2008 to 5.3% in 2014, which was above the world average of 4.8% in 2014.
- 19 OIC member countries achieved lower repetition rates in primary schools than the world average of 4.8% in 2014.

Repetition Rates in Secondary School

Figure: Repetition Rates in Secondary School (% of Total Enrolment)

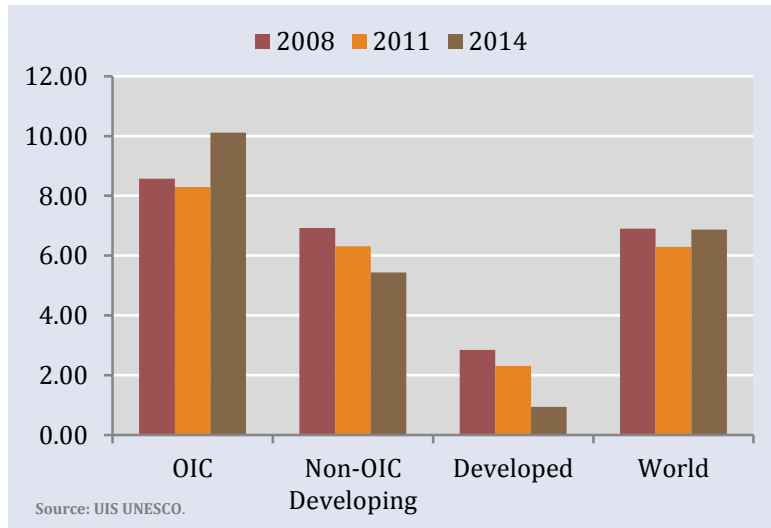
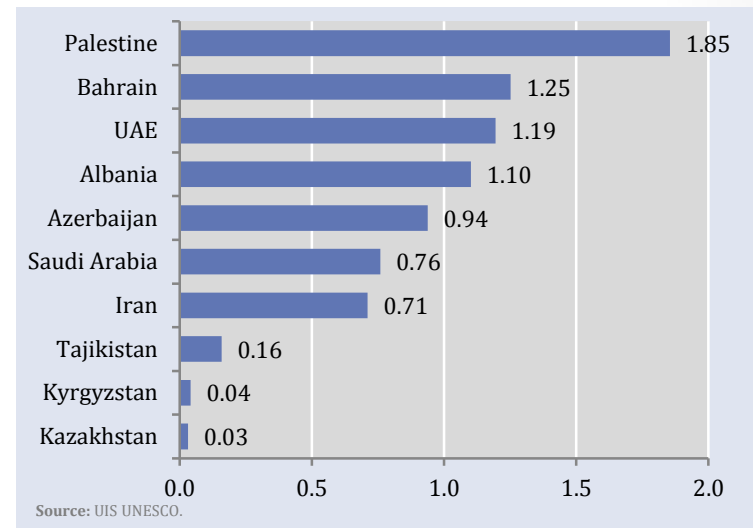


Figure: OIC MCs with Lowest Repetition Rates in Secondary School (% of Total Enrolment)



- An increasing trend was observed in the secondary school repetition rates, which went up from 8.6 % in 2008 to 10.1% in 2014.
- 15 OIC member countries achieved lower repetition rates in secondary schools than the world average of 6.87% in 2014.

Transition Rates

Figure: Transition Rate from Primary to Secondary School

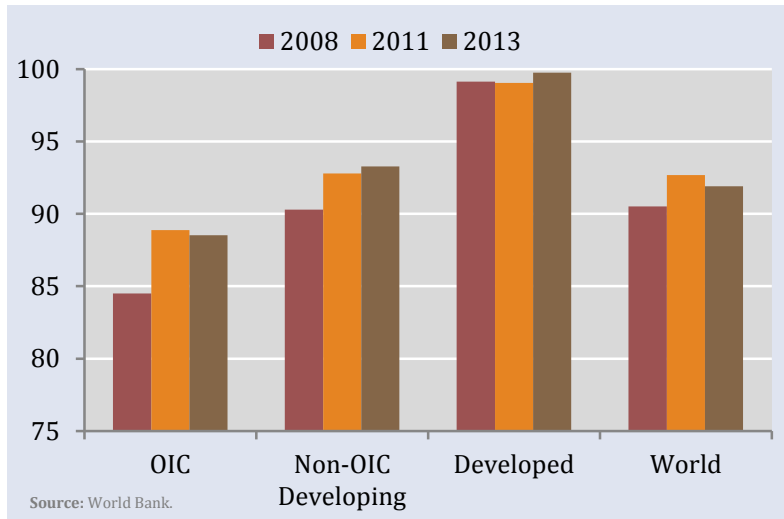
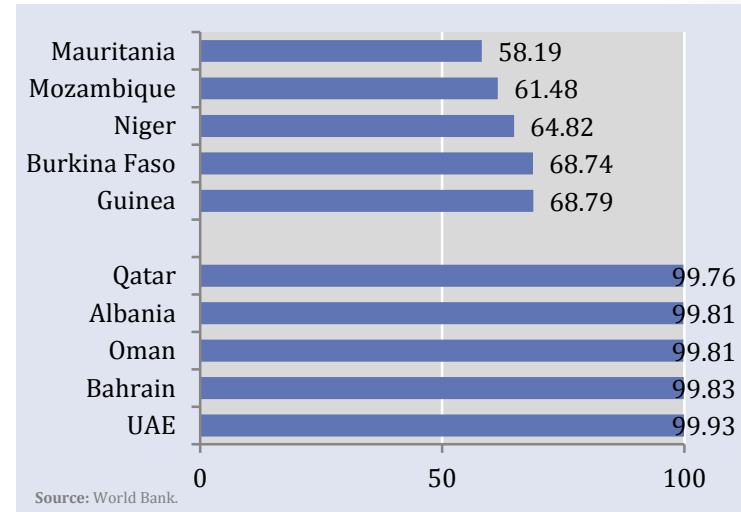


Figure: OIC MCs with Highest and Lowest Transition Rates

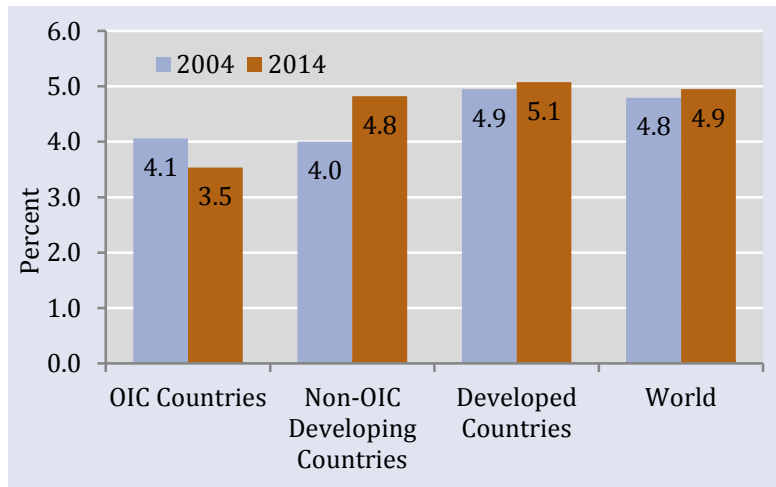


- OIC member countries, on average also successfully increased their average transition rate from 84.5% in 2008 to 88.5% in 2013.
- Yet, the average of the OIC group still lags behind the world average of 91.9%.

EDUCATIONAL RESOURCES AND TEACHING CONDITIONS

Government Expenditures on Education

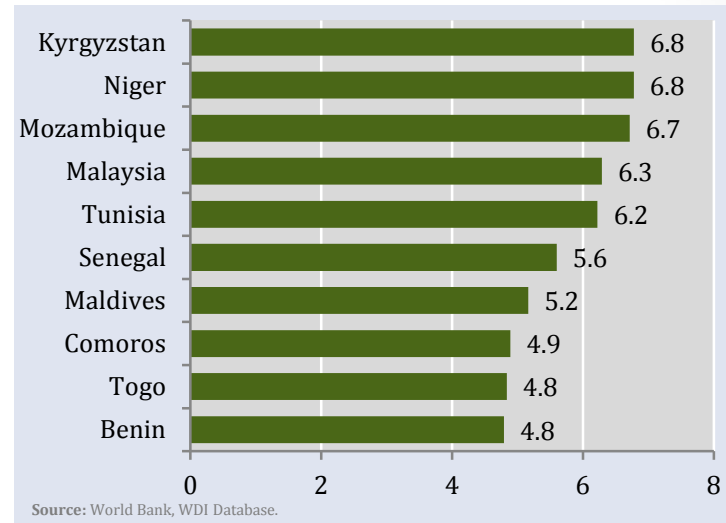
Figure: Government Expenditures on Education as Percentage of GDP



Source: SESRIC staff calculation, World Bank, WDI Database.

* Data for 2004 is the latest year available between 2000 and 2004 and data for 2014 is the latest year available between 2010 and 2014.

Figure: Top OIC MCs by Government Expenditures on Education as Percentage of GDP

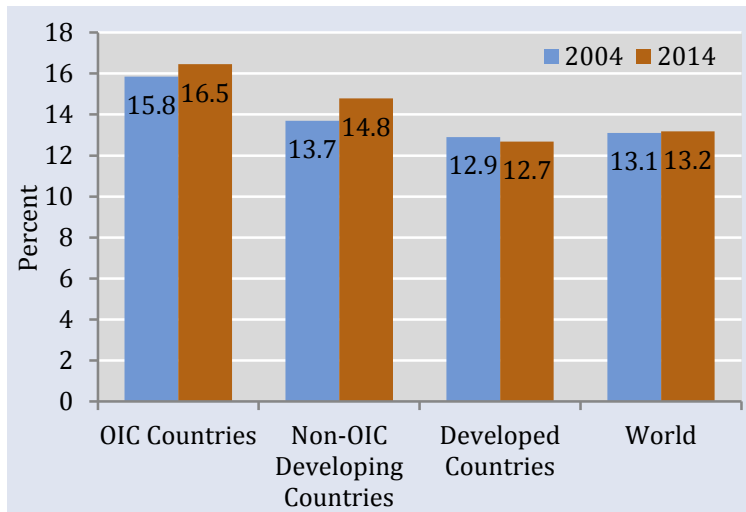


Source: World Bank, WDI Database.

- Average government spending on education accounted for 4.1% of their GDP in 2004, but it decreased by 0.6 percentage points to 3.5% in 2014.
- In other country groups, this share increased during the same period.

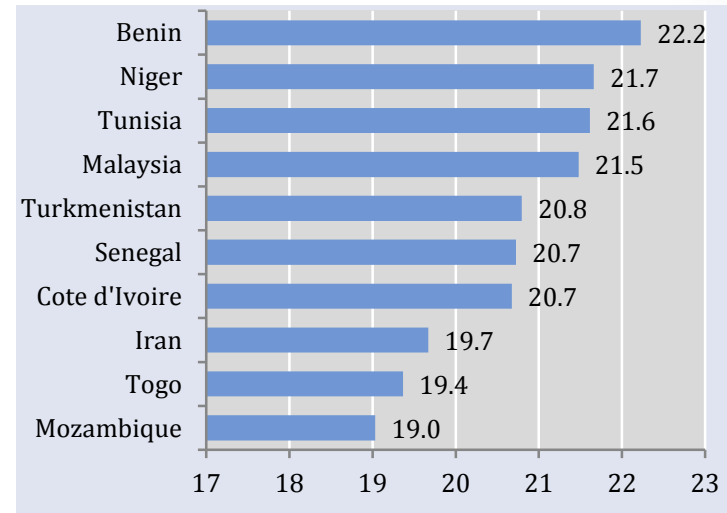
Government Expenditures on Education

Figure 4.3: Government Expenditures on Education as Percentage of Total Government Expenditures



Source: SESRIC staff calculation, World Bank, WDI Database.

Figure 4.4: Top OIC MCs by Government Expenditures on Education as Percentage of Total Government Expenditures

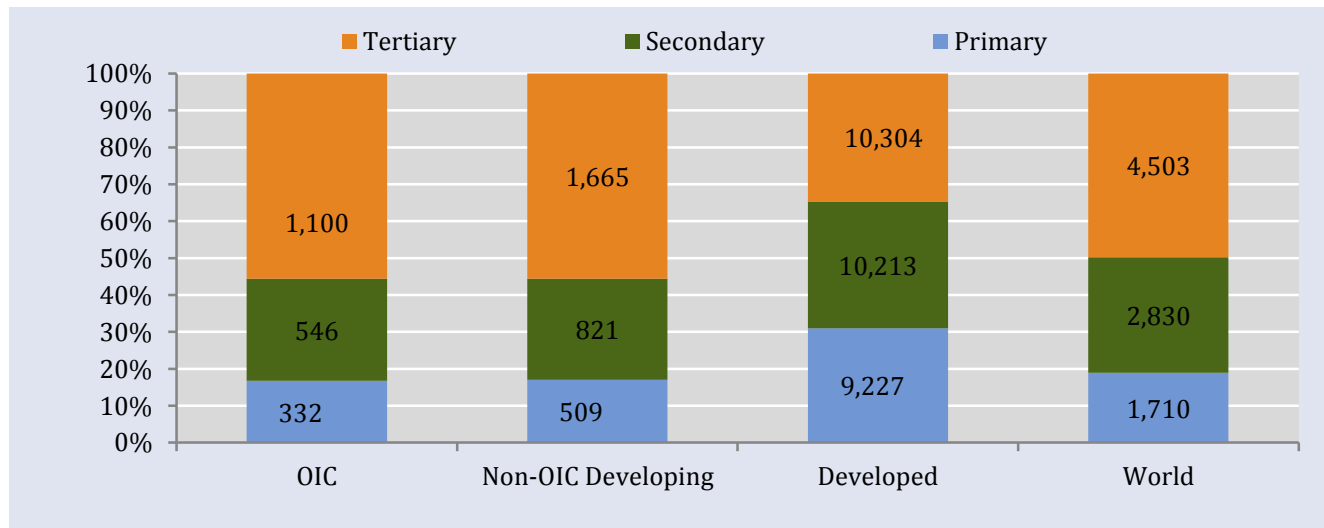


Source: World Bank, WDI Database.

- The share of government expenditures on education in total government expenditures was higher in OIC member countries than in both developed and developing countries in the period under consideration.

Government Expenditures on Education

Figure: Distribution of Government Expenditures on Education per Student



Source: SESRIC staff calculation, World Bank, WDI Database.

- On average, while developed countries spend almost equal amounts for students at all levels, OIC and non-OIC developing countries spend greater amounts for students at tertiary levels and lower amount for students at primary level.

Student-Teacher Ratios – Primary Schools

Figure: Student – Teacher Ratios at Primary Schools

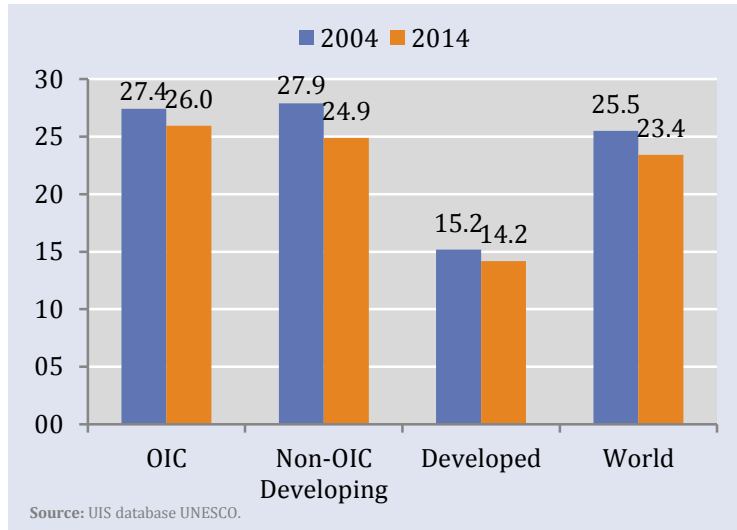
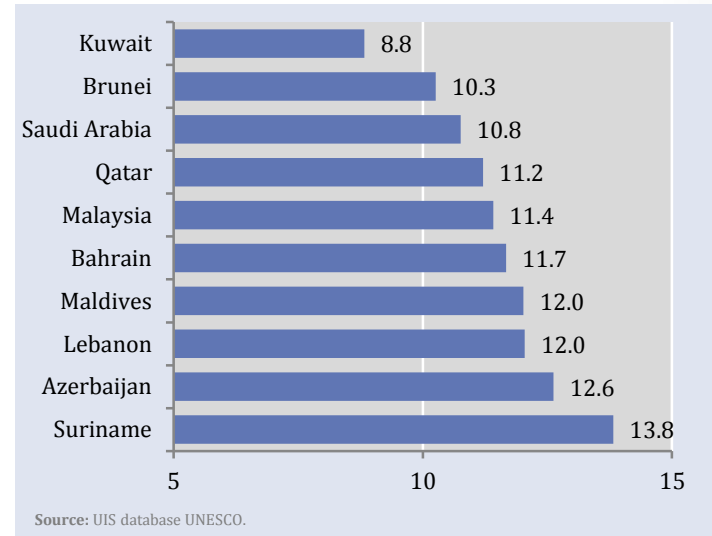


Figure: OIC MCs with the Lowest Student – Teacher Ratios in Primary Schools



- In 2014, the OIC average was 26 students per teacher at primary level, whereas the non-OIC developing countries group has an average ratio of 24.9.
- In the same year, the world average scored as 23.4 students per teacher.

Student-Teacher Ratios – Secondary Schools

Figure: Student – Teacher Ratios at Secondary Schools

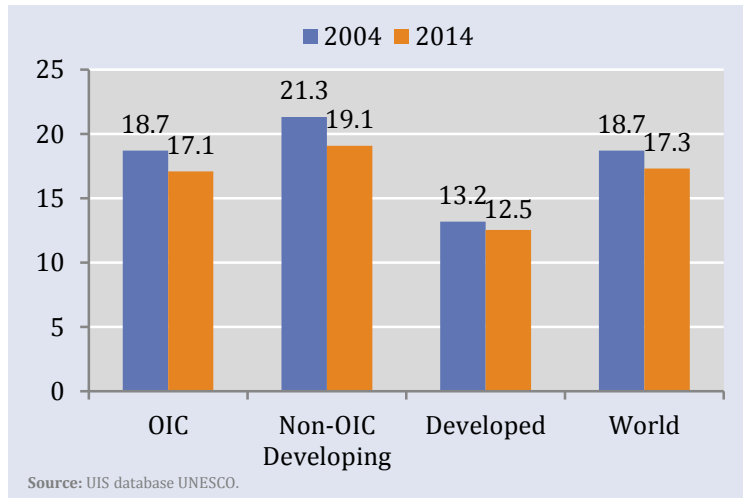
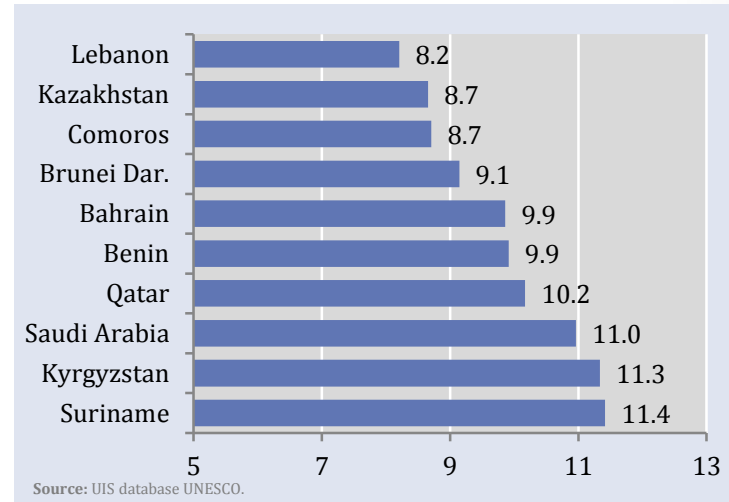


Figure: OIC MCs with the Lowest Student – Teacher Ratios in Secondary Schools



- During the period 2004-2014, OIC group reduced the ratio from 18.7 to 17.1 and continued to have a lower ratio than the group of non-OIC developing countries.

Student-Teacher Ratios – Tertiary Schools

Figure: Student – Teacher Ratios at Tertiary Schools

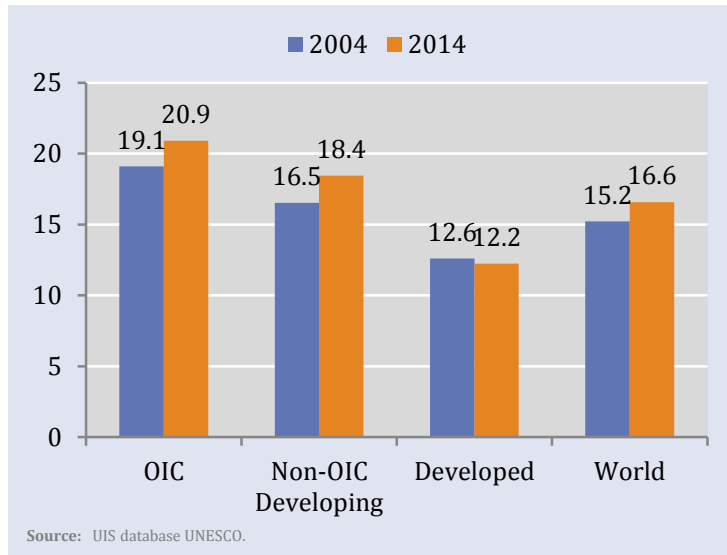
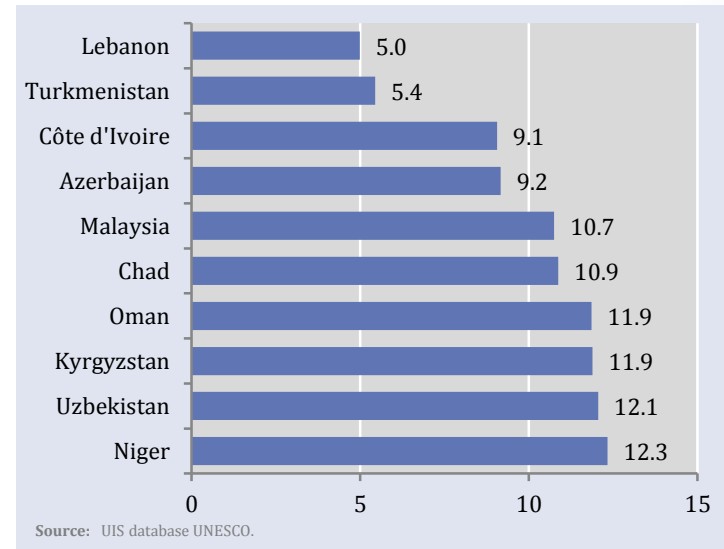


Figure: OIC MCs with the Lowest Student – Teacher Ratios in Tertiary Schools



- The student-teacher ratio in the OIC group increased from 19.1 in 2004 to 20.9 in 2014.
- Overall, OIC countries continued to have the highest ratio in student-instructor ratio at tertiary level.

International Student Mobility

Figure: Outbound Students Mobility in OIC, Total

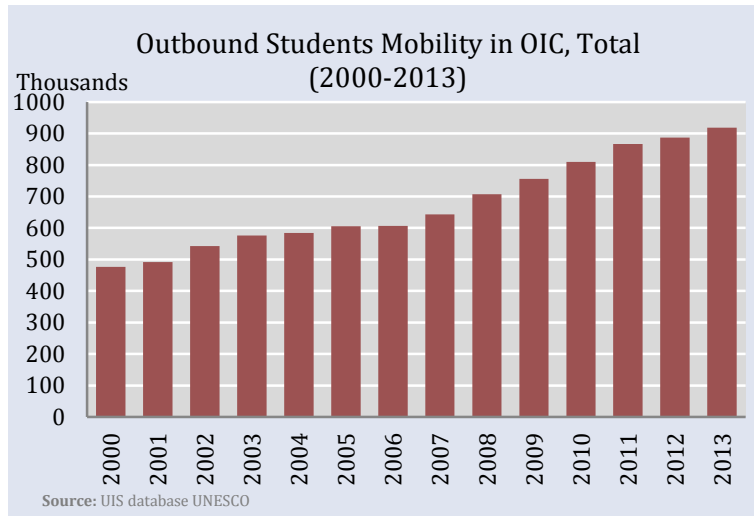
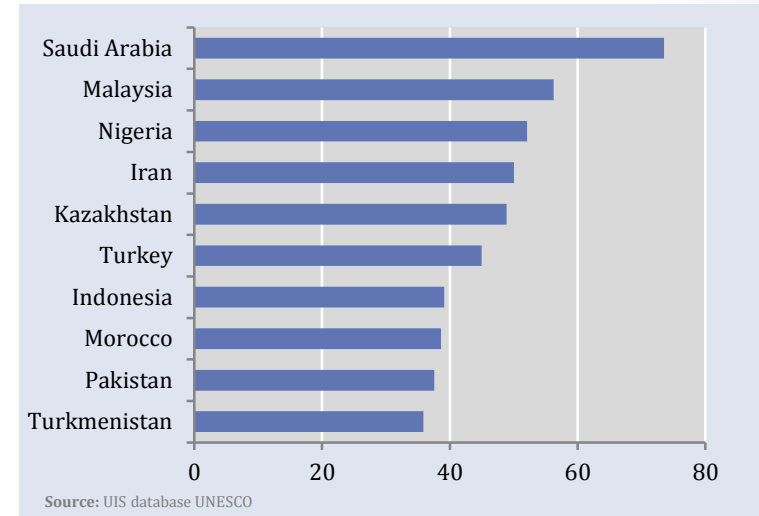


Figure: Top OIC Countries by Outbound Students Mobility (Thousands)

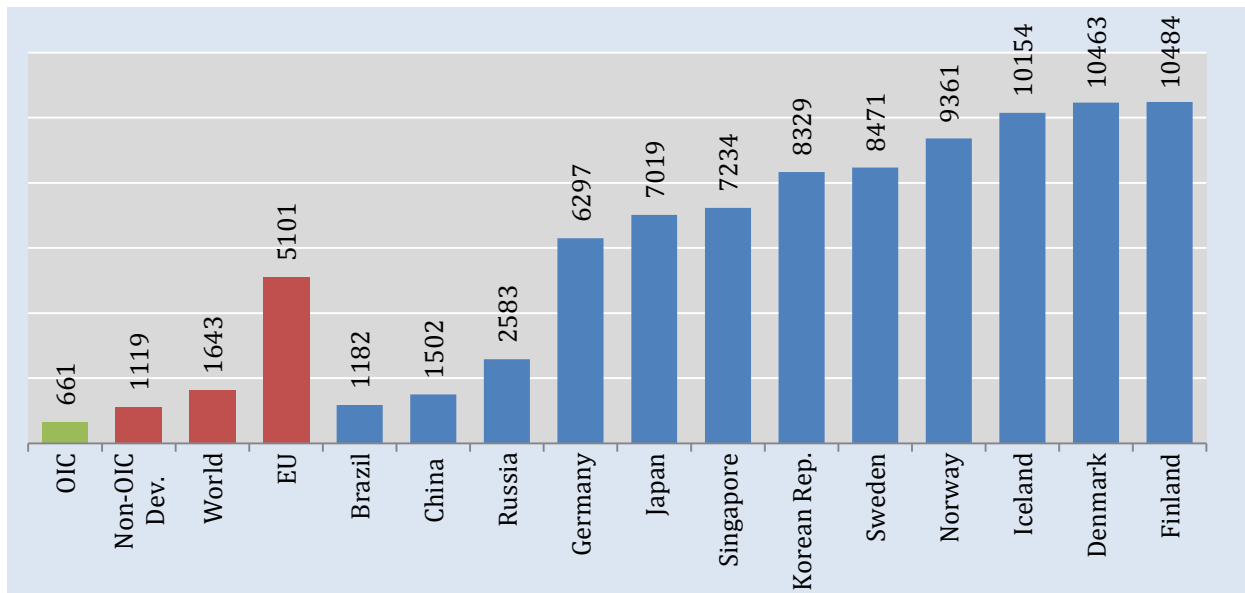


- The number of students studying abroad almost doubled and reached over 920,000 in 2013.
- The share of OIC countries in total outbound student mobility remained stable around 26% during 2000-2013.

RESEARCH AND SCIENTIFIC DEVELOPMENT

Researchers

Figure: Researchers per Million People



Source: UNESCO, UIS Data Centre, 2016. * Headcount data for the most recent year available.

- OIC MCs, on average, fall well behind the world average in terms of researchers per million people, which are 661 in OIC countries and 1,643 in the world.
- Even in non-OIC developing countries, average number of researchers exceeds 1,100 per million people.

Expenditure on R&D

Figure: GERD, % of World Total

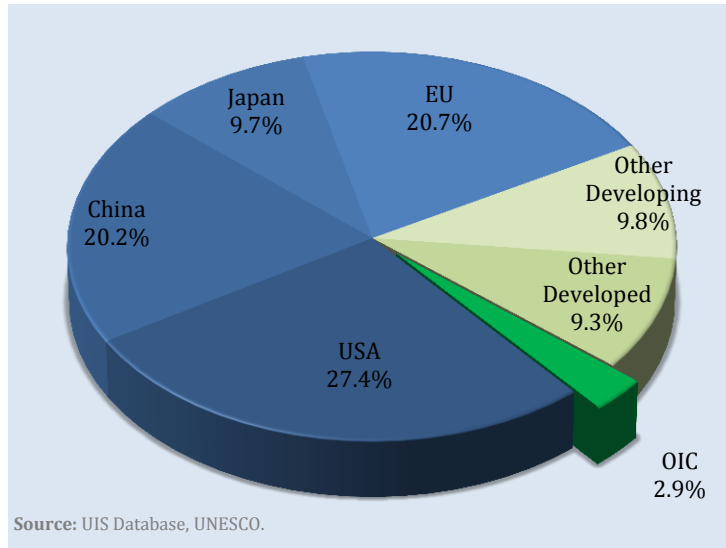
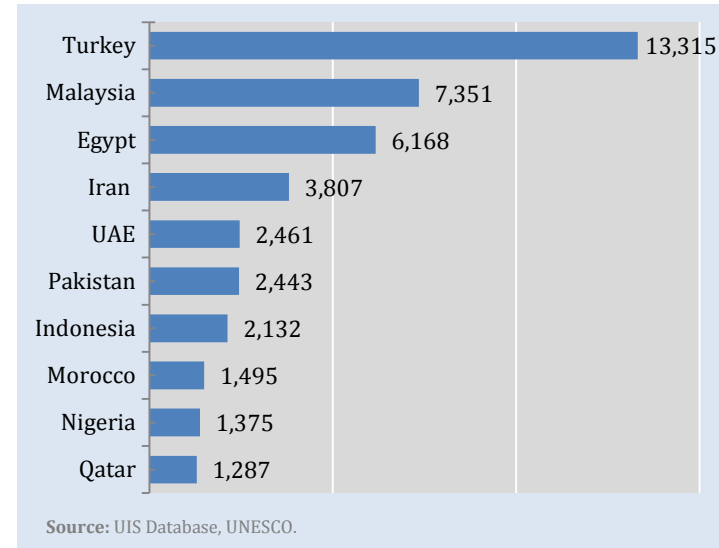


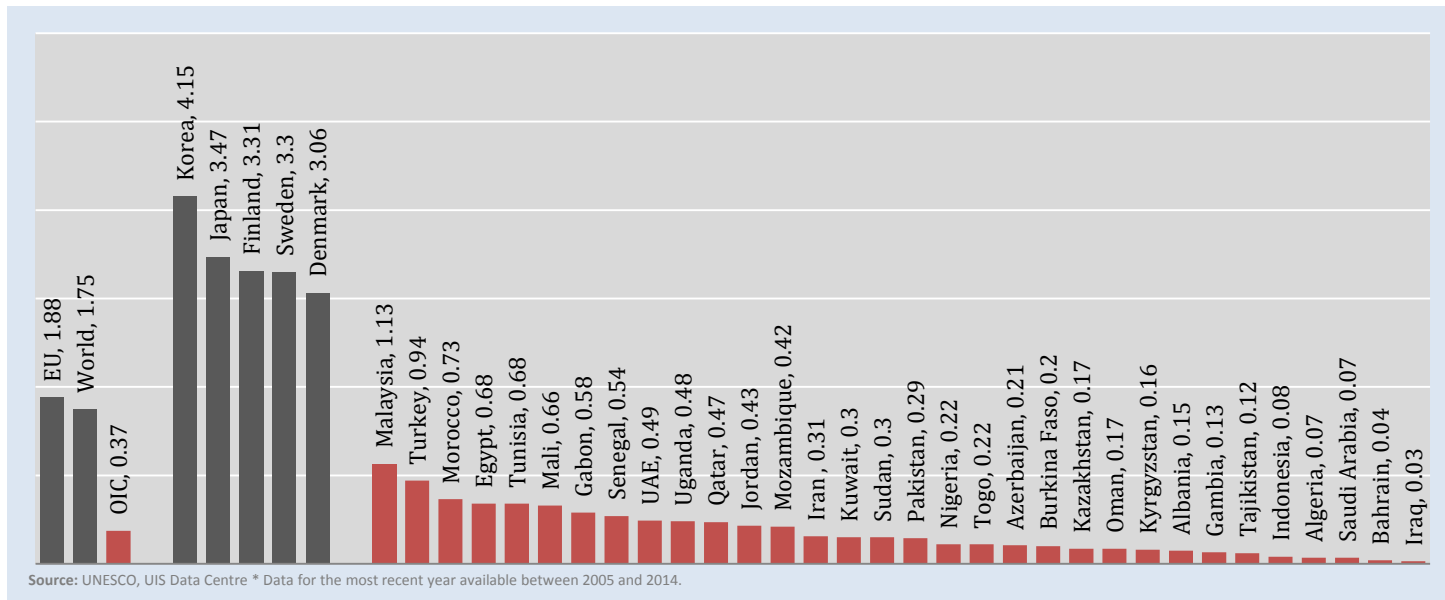
Figure: Top OIC Countries by GERD
(current million USD in PPP)



- Nearly 86% of the global R&D expenditures are spent by developed countries.
- The OIC countries account for only 2.9% of the world total Gross Domestic Expenditures on R&D (GERD).
- More strikingly, the GERD in China alone is almost 7 times higher than the OIC total.

R&D Intensity

Figure: R&D Intensity (%)



- R&D intensity for the OIC member countries averages 0.37%, which is quite lower than the EU average of 1.88% and the world average of 1.75%.

Patent Applications

Figure 5.13: Distribution of World Total Patent Applications by Office

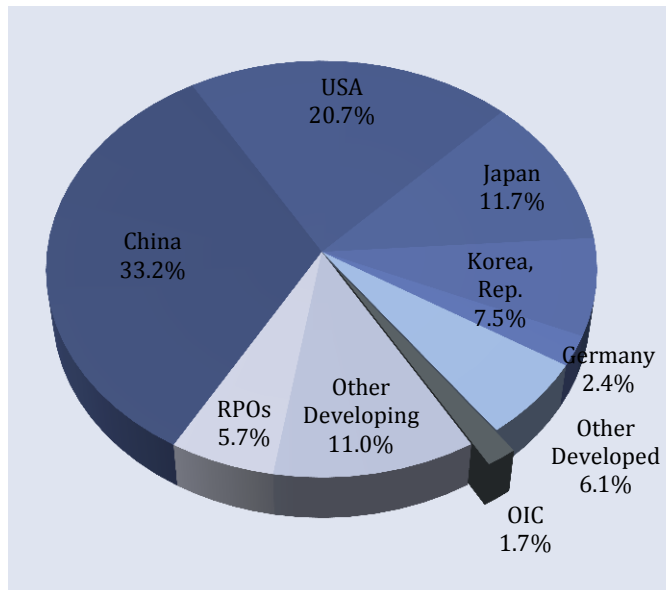
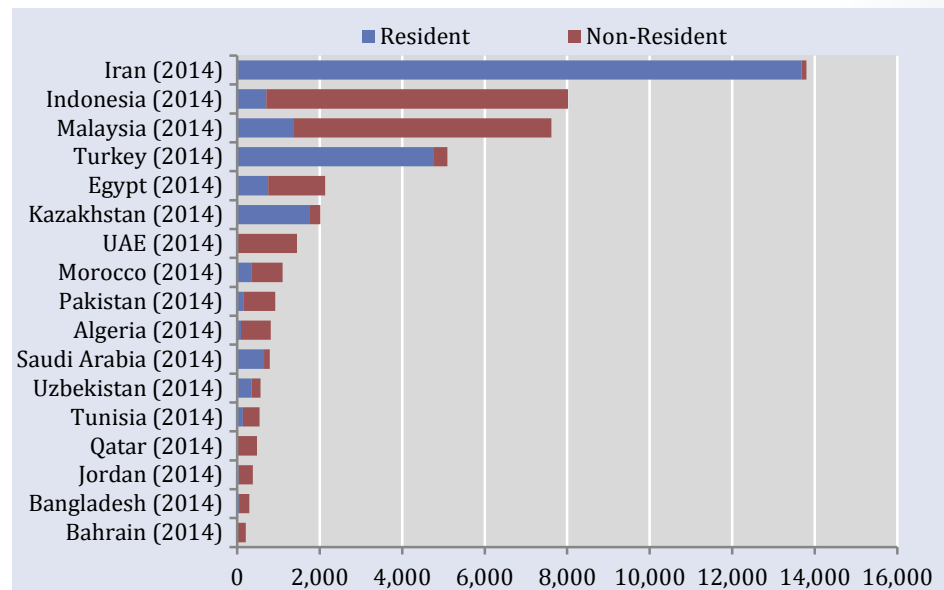


Figure 5.14: Patent Applications by Residents and Non-residents in OIC Member Countries (2014)



- Total number of patent applications around the world in 2014 is estimated to be 2.68 million.
- With 46,781 patents overall, OIC MCs accounted for nearly 1.74% of total patent applications.

Scientific Publications

Figure: Total Number of Articles Published in 2015

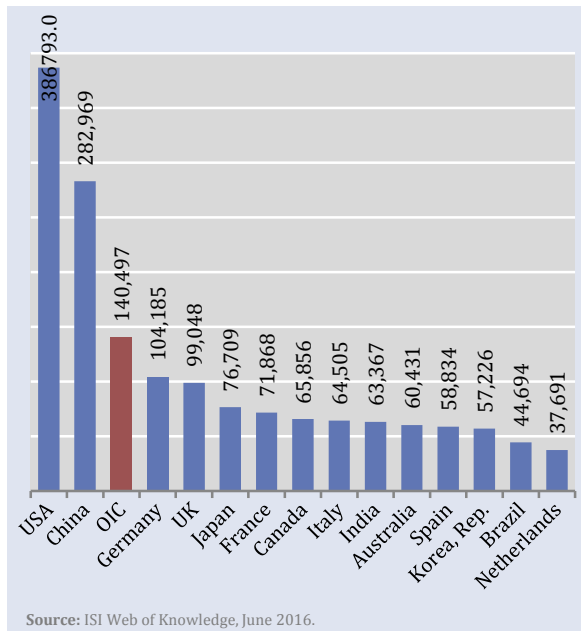
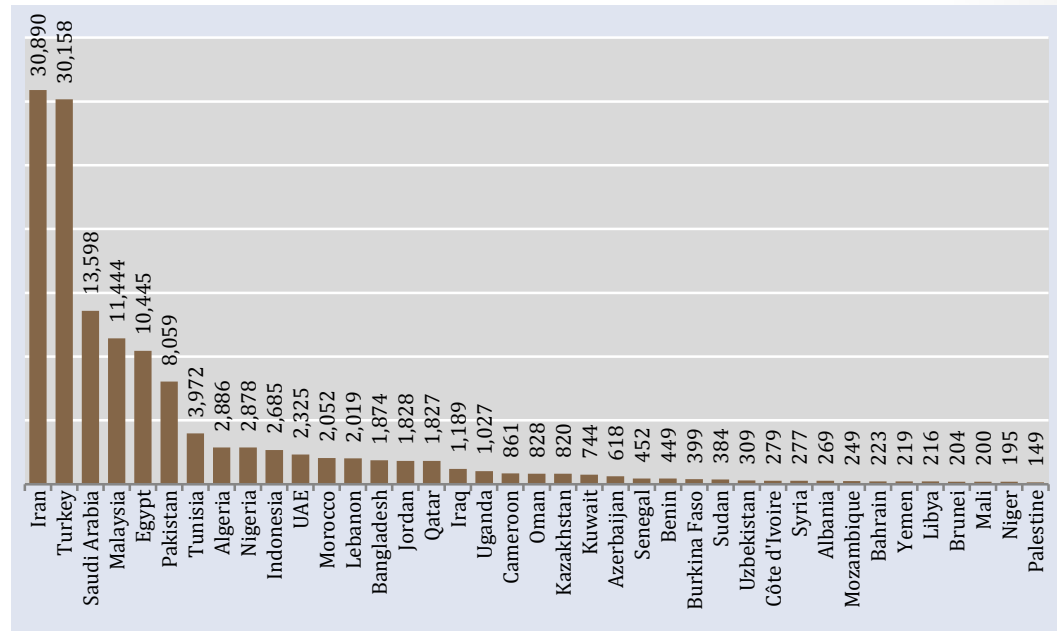


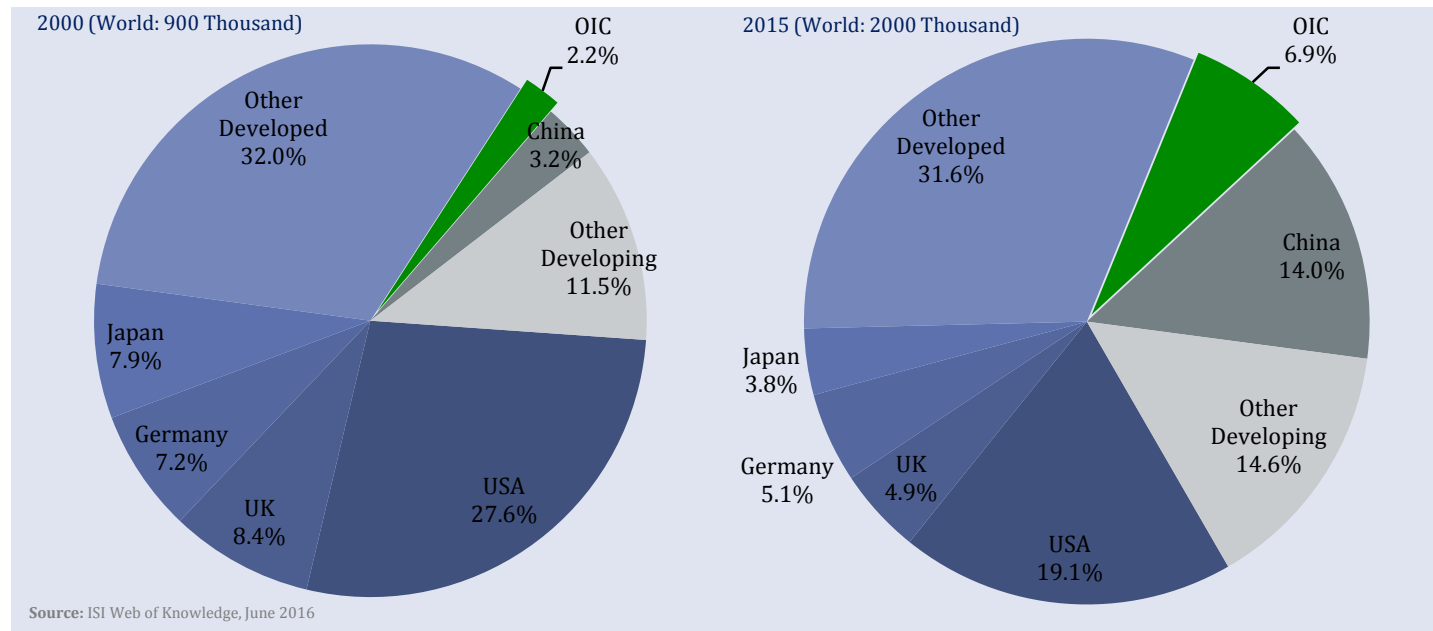
Figure: Total Number of Articles Published in OIC Member Countries, 2015



- In 2015, OIC MCs as a whole published 140,497 scientific articles.
- Although this represents more than a four-fold increase compared to 20,242 articles published in 2000, the total amount reached is still below those of some individual countries in the world, including the USA and China.

Scientific Publications

Figure 5.16: Distribution of Global Articles Published (2000 vs. 2015)



- Articles published in the world more than doubled from 924,000 to 2.07 million in 2015, while the OIC countries, as a group, experienced more than 594.1% increase in the same period.
- The OIC's share of global publications steadily grew, from just 2.2% in 2000 to 6.9% in 2015.

Capacity for Innovation

Figure: Capacity for Innovation , 2015

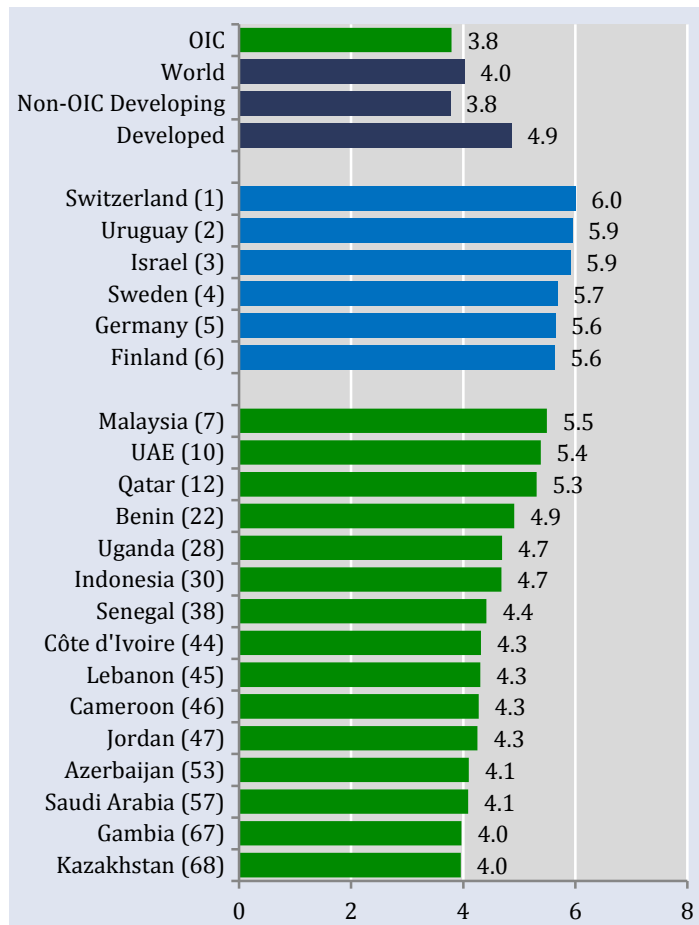
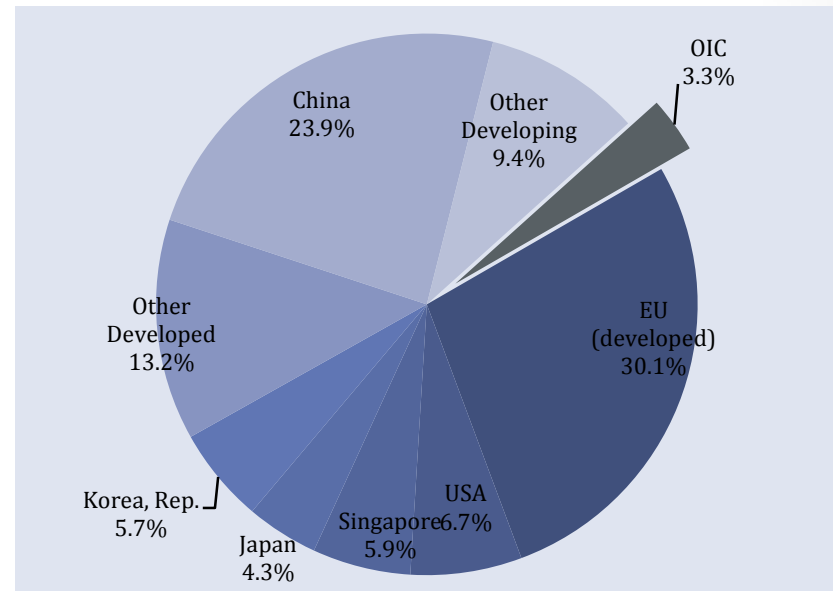


Figure: HTE, % of World Total, 2014



- Average value of Capacity for Innovation in OIC was 3.79, which is below the world average (4.02) but close to the average of non-OIC developing countries (3.77).
- Confirming the lack of adequate infrastructure and technological sophistication in most of OIC countries, all the member countries accounted for only 3.3% of the world total HTE

Thank you for your attention

THANK YOU FOR YOUR ATTENTION

